Smart Pharma
CONSULTING

Solving – Serving – Sharing with Passion

2016 – 2024
Publications

Market Insights

Strategy – Market Access

Medical Affairs – Marketing

Sales Force Effectiveness

Management

Insights – Concepts – Methods – Tools

COLLECTION January 2025

38, avenue Félix Faure – 75015 Paris – France – +33 6 11 96 33 78
jmpeny@smart-pharma.com – www.smart-pharma.com

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[1] *Excerpts from reports on sale*

This e-book is the complete collection of our position papers, in line with our commitment to share knowledge and thoughts

Presentation of the 2016 – 2024 Publications

- Smart Pharma Consulting has compiled in a single electronic document a selection of:
  - 66 position papers published since 2016
  - 2 recent articles published in French in 2024
- These publications propose effective and practical solutions to help pharma companies improve their performance
- For so doing, we share openly:
  - Business insights
  - Concepts
  - Methods
  - Tools

  } The majority of which have been developed by Smart Pharma Consulting

- They have been grouped into seven chapters:
  1. Market Insights
  2. Strategy
  3. Market Access
  4. Medical Affairs
  5. Marketing
  6. Sales Force Effectiveness
  7. Management
- We have added to these position papers:
  - A presentation of Smart Pharma Consulting capabilities and experience
  - The catalog of our 2025 training programs and conferences for management teams
  - A link to our “Children of Kathmandu” project
- Hoping this collection will be of high value to you

Jean-Michel Peny

Smart Pharma
CONSULTING

Smart Pharma
Expertise

Capabilities & Experience

What makes us so unique?

SERVICE OFFERING January 2025

Smart Pharma Consulting has been created in 2001 to deliver pharma and MedTech companies high-end services in strategy, management and organization; and to redistribute opportunities

Smart Pharma Consulting in a nutshell

Key Facts & Figures

- 24th anniversary
- 151 clients, of which 112 pharma / MedTech companies
- ~1,300 missions (i.e., 54 p.a.)
- ~40% of international projects
- 1,150 executives trained
- 2,100 students having been taught strategy & marketing
- More than 100 publications
- Since 2005, € 5.5 M donation to humanitarian projects

Core priorities to deliver unmatched services

- Dedicated to the pharma and MedTech sectors, Smart Pharma Consulting strives to:
  - Generate and disseminate high quality insights
  - Develop and apply innovative concepts, methods and tools to solve our clients' issues
  - Share second to none knowledge and thoughts…
  - … through consulting, training, teaching and publishing activities

Corporate societal engagement to redistribute opportunities

- Solving, Serving & Sharing is in our DNA
- Smart Pharma Consulting is engaged to "Protect & Raise" the most vulnerable children
- Since 2005, we partner through our department "Smart Pharma Care" with 4 reputable NGOs in Africa
- In 2006, we have started our own program in Nepal, which today supports more than 170 disadvantaged children[1]

Source: Smart Pharma Consulting

[1] *https://smart-pharma.com/wp-content/uploads/2021/04/Smart-Pharma-Care-2021.pdf*

Smart Pharma Consulting has an in-depth knowledge and understanding of the pharma and MedTech markets based on three decades of specialization and experience of its consultants

Experiences & competencies

- Smart Pharma consultants have an in-depth knowledge and understanding of the pharma and MedTech markets as shown by:
  - More than 35 years of experience
  - A dedication to strategic, management and organizational issues for pharma and MedTech companies
  - A list of 151 clients (of which 112 pharma and MedTech companies)
  - More than 100 publications[1] (e.g., reports, position papers, articles and books)
  - Operational experience in pharma companies:
    - In various countries: Africa, France, India, Middle-East, Pakistan, Turkey, Sri Lanka
    - At positions such as: country manager, product manager, sales manager, business intelligence manager, portfolio and operation manager
- Smart Pharma Consulting is also strongly involved in sharing experiences and competencies through:
  - Trainings of executives and teaching of students
  - Regular publications of “position papers” including innovative concepts, methodologies and tools

Source: Smart Pharma Consulting

[1] *https://smart-pharma.com/library/*

Our triple expertise provides us with a unique positioning on the consulting market and enables us to create synergies to deliver our clients Smarter Services

Smart Pharma Consulting unique positioning

- As we carry out our own studies, we ensure a direct quality control on the data we collect which is key to develop fact-based analyses and recommendations
- Our market research expertise allows us to take a critical look at third party studies

- Our research activities in pharma business and management have led to >100 publications (articles, reports, books and position papers available on our website[1])
- Our teaching method, based on educative challenges[2], is acclaimed by executives[3] and students[4] since 1992

Our recommendations are supported by:

- Our strong academic background
- Our experience in pharma companies and in several of the best consulting firms in the world
- The reliability of the data that we collect
- The robustness of our analyses to draw up solutions
- Our innovative viewpoints, methods and tools (several of them having been published in peer-reviewed journals)
- Our ability to explain and convince with clear, precise and concise messages

Smart Pharma Consulting is officially registered as a training organization by the French government since 2002

Source: Smart Pharma Consulting

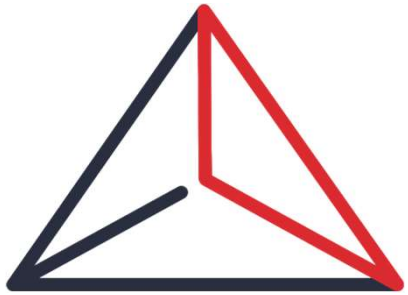
[1] www.smart-pharma.com – [2] Challenge of participants (e.g., analytical rigor, relevance of recommendations, quality of the oral presentations, etc.) – [3] ~1,150 executives trained since 2002 – [4] ~2,100 students trained

Dedicated to the pharmaceutical sector, Smart Pharma Consulting operates in the three complementary domains of Strategy, Management and Organization since 2001

Smart Pharma Consulting core capabilities

1 Strategy

- Corporate (partnerships – distribution)
- Affiliate (local alliances)
- Portfolio (resource optimization)
- Franchises (development)
- Products (life cycle management)



3 Organization

- Activities and competencies definition
- Structure redesign
- Key processes improvement
- Cultural alignment
- Affiliates and operational units' audits (Marketing – Sales – Medical – Support functions, etc.)

2 Management

- Strategic thinking process
- Excellence in strategy execution (tactics)
- Sales forecasting
- 1st and 2nd lines management techniques
- In-field best practices (medico-marketing & sales)
- Lectures at conferences
- Training of executives & Teaching students[1]

Source: Smart Pharma Consulting

[1] Through our department: Smart Pharma Institute of Management which has been registered as a professional training center since 2002

The following recent examples of consulting assignments illustrate the diversity of issues addressed by Smart Pharma Consulting at national and international levels

Examples of consulting assignments

1 Strategy

- Due diligences in various market segments (distribution, mature brands, generics, biosimilars, OTCs, food supplements)
- Support to the development of affiliates and mid-sized companies' business plans
- Comparative study re. countries' attractiveness for pharma companies
- Assessment of pharma market segments' attractiveness in various countries
- Complex market research studies through key stakeholders' interviews over the world
- Benchmarking studies carried out in various pharma market segments and countries
- Crafting and execution of go-to-market strategies for innovative products
- Design and support to the implementation of a "customer preference" strategy
- Management of mature brand portfolios
- Opportunities assessment of Digital Therapeutics (DTx) for pharma companies
- Impact and strategic implications of health authorities measures on pharma companies' performance
- KOL engagement strategy in oncology

2 Management

- Support to the development of brand plans at affiliate and global levels
- Support to the development of medical affair strategic plans
- Development of patient support programs
- Development of shared key account plans for the hospital market segment
- MSL best practices studies in France
- Omnichannel best practices in France
- Training programs on sales forecasting for European and national teams
- Seminar on innovative marketing and sales concepts and tools developed for pharma companies

3 Organization

- Activities, roles, responsibilities and sizing of in-field collaborators (i.e., med reps, MSLs, KAMs)
- Monitoring of operational activities based on a process of continuing improvement
- Evaluation of various commercial models
- Review of affiliates' leadership team governance
- Introduction of excellence in execution culture

Source: Smart Pharma Consulting

Beyond its excellent pharma market insights, Smart Pharma Consulting is known and recognized for its methodological skills, the rigor of its analyses and the quality of its advice

Specific expertise

- **In-depth knowledge and understanding of the pharma market as shown by our most recent reports**
  - **French healthcare system** and **pharmaceutical market** (2023, 2021, 2019, 2017, 2015, 2014)
  - **Generics** market (2024, 2022, 2017, 2016, 2014)
  - **Biosimilars** drugs market (2024, 2019, 2017, 2015)
  - **Drug value** & **Market access** optimization (2016)
  - **Best pharma performers** (2021, 2019, 2015)
  - **Pharma distribution** (2015)

- **Development of innovative and practical concepts, methodologies and tools to improve the relevance of strategies and tactics, and the quality of their execution**
  - **Publication** of 43 articles, 7 books (of which 3 on Marketing), ~10 position papers p.a.
  - Participation in **conferences**
  - Development of several **innovative concepts**

1 2

Smart Pharma Competitive Advantages

4 3

- **Knowledge of and access to stakeholders**
  - Pharma & MedTech companies: missions carried out for 151 companies since 2001
  - Interviews of:
    - ~35 companies (benchmarking studies) p.a.
    - ~40 KOLs p.a.
    - ~100 physicians (specialists & GPs) p.a.
    - ~100 retail and hospital pharmacists p.a.
    - ~200 patients p.a.
    - ~15 health authorities, payers, PAGs[1] p.a.

- **Experience in multiple strategic segments, including:**
  - **Rx-bound drugs** (R&D-based, biologics, generics and biosimilars) in **16 therapeutic areas**
  - **Vaccines**
  - **OTCs** and **food supplements**
  - **Medical devices**

  for various companies **across the world**

Source: Smart Pharma Consulting

[1] *Patient Advocacy Groups*

We partner with companies wishing to optimize their current and future business based on best-of-class consulting services

Key clients (2001-2024) – (1/2)

Pharma & MedTech companies				
• Abbott	• Bioprojet	• Grünenthal	• Menarini	• Recordati
• AbbVie	• BMS	• GSK	• Merck AG	• Roche
• Actelion (J&J)	• Boehringer Ingelheim	• Hartmann	• MSD	• Sanofi
• Aga Linde	• Chiesi	• HRA Pharma	• Mundipharma	• Schwabe
• AJ Pharma	• Daiichi-Sankyo	• IBSA	• Nemera	• Servier
• Alfasigma	• Delbert	• Indivior	• Nobel Biocare	• Sinclair Pharma
• ALK	• Diaxonhit	• Innothera	• Nordic Pharma	• Sintetica
• Allergan (AbbVie)	• Diepharmex (Cooper)	• Insulet	• Norgine	• SOBI
• Almirall	• Dynavie	• Invacare	• Novartis	• Takeda
• Arkopharma	• Effik	• IPRAD (Biocodex)	• Novo-Nordisk	• The Medicine Co.
• Aspen	• Eisai	• IPSEN	• Nuvamid	• Therabel
• Astellas	• Esteve	• J&J Innovative Medicine[1]	• Polidis	• Tillotts Pharma
• AstraZeneca	• Ethypharm	• Leo Pharma	• Organon	• UCB pharma
• B. Braun	• Expanscience	• Lilly	• Otsuka	• UPSA
• Bayer	• Fresenius Kabi	• LFB	• Pfizer	• Urgo
• Becton Dickinson	• Galderma	• Lundbeck	• Pierre Fabre	• Vifor Fresenius
	• Gilead		• Reckitt-Benckiser	• Zambon
				• Wellspect

Source: Smart Pharma Consulting

[1] *Formerly named Janssen*

We partner with companies wishing to optimize their current and future business based on best-of-class consulting services

Key clients (2001-2024) – (2/2)

Biotech companies

- Alexion (AstraZeneca)
- Amgen
- Amylyx
- BeiGene
- Biogen
- Celgene (BMS)
- Genzyme (Sanofi)
- GSK Biologicals
- Innavirvax
- Incyte
- Sanofi-Pasteur

Generics companies

- Accord Healthcare
- Arrow (Aurobindo)
- Biogaran (Servier)
- Dr Reddy's
- EG Labo (Stada)
- Gedeon Richter
- Glenmark
- Hospira (Pfizer)
- Polymedic
- Sandoz
- Sothema
- Substipharm
- Teva
- Viatris
- Wockhardt
- Zentiva
- Zydus

Distributors

- Alliance Healthcare
- Apothera
- Ceido
- Collectif des groupements (CNGPO)
- FM Logistic
- Giphar
- Pharma Référence
- PharmaVie (Phoenix)

Lawyers

- Jones Day
- Simmons & Simmons
- Véron & Associés

Investors

- Alma Capital
- Astorg
- BC Partners
- Cinven
- Exane
- Keensight Capital
- M80
- PAI Partners
- Rothschild
- Sagard
- Valpre
- Weinberg Capital

Miscellaneous

- CEGEDIM
- CRIP
- Datapharm
- DDB health
- Fondation Deniker
- GEMME
- GSA Healthcare
- L'Oréal[1]
- MedToMed
- NAOS
- Nuvamid
- Osalia
- PMC-Isochem
- Preciphar
- Unilever
- Zoetis

Source: Smart Pharma Consulting

[1] *L'Oréal Dermatological Beauty subsidiary*

We have published 43 articles in national and international specialized magazines, addressing key pharmaceutical market issues

Published articles[1]

Strategy: Ethical products

1. La réputation d'entreprise – Un nouvel enjeu stratégique (2008)[2]
2. Le BPS, pour la "justesse de voix" (2008)[2]
3. Les marques sont-elles condamnées à mourir ? (2007)[2]
4. Nosocomial Rotavirus infection in European countries (2006)[3]
5. Financial requirements of immunisation programmes in developing countries: 2004-2014 perspective (2005)[4]
6. The end of the back-up brands? (2005)
7. Making the most of maturity (2003)
8. Winning strategies in the French hospital market (1996)
9. Are generic defense strategies worth the effort? (1996)
10. ACE-inhibitors - an analysis of marketing strategy (1994)
11. Building prescriber loyalty (1993)

Effectiveness and Operational organization

1. Optimisez votre marque personnelle (2024)[6]
2. La visite médicale haute performance (2024)[7]
3. How can customer-centricity increase brand preference? (2009)[6]
4. Talking up sales (2002)
5. The brave new world of corporate marketing (2000)
6. Counting the cost of purchase (1997)
7. Heading for change: marketing and sales trends in France (1995)

Environment (international)

1. The Evolution of the global pharma industry (2012)[6]
2. Working with the authorities (2002)
3. Drug reimbursement harmonization in Europe (1994)

Strategy: Generics

1. What future for the French retail generics market? (2015)[5]
2. Les génériques, ce n'est plus automatique (2011)[6]
3. Quelles perspectives pour les génériques ? (2007)[2]
4. Princeps-génériques: Faut-il pactiser avec l'ennemi ? (2007)[2]
5. What is the value of authorized generic agreements? (2006)[5]
6. Barriers to substitution (2005)
7. How bright is the future for generics? (2003)
8. Lighting fire from wet timber in French generics market (2001)
9. Can generics really help to curb French healthcare costs? (1999)
10. Is the sun rising for Japanese generics? (1998)
11. Entering the French generics market (1997)

Strategy: OTC & Food Supplements

1. Les médicaments en libre accès: la grande illusion (2007)[8]
2. Le switch: solution ou danger (2006)[2]
3. Des stratégies opposées pour les « big pharma » (2006)[2]
4. Automédication: Quel attrait pour le marché mondial ? (2006)[2]
5. Should big pharma sell their OTC business? (2004)
6. Thin pickings in dietary supplements (1999)
7. How bright are the prospects for self-medication in France? (1999)
8. Assessing the OTC market in France (1997)

Environment (national)

1. Changes at the French pharmacy (2004)
2. Survival strategies in contract sales organizations (2002)
3. Disease management opportunities in France (1997)

Source: Smart Pharma Consulting

[1] Articles published in SCRIP Magazine, excepting: [2] published in Pharmaceutiques, [3] The Pediatric Infectious Disease Journal – [4] Vaccine, [5] The Journal of Generic Medicines, [6] Smart Pharma Insights, [7] Visite Actuelle, [8] Le Quotidien du Pharmacien

Consultants working at Smart Pharma Consulting benefit from a double experience, in pharmaceutical companies and specialized consulting firms

Management Team

Jean-Michel Peny

- **President**
- **Pharm. D.**
- **MBA –** HEC Business School
- **Postgraduate in International Business –** IAE Lyon
- **1-year experience at Begin hospital**
- **7-year experience as General Manager for pharma companies** (Servier – Novartis)
- **32-year experience in Strategy and Management consulting for the pharmaceutical sector**
  (Bain & Co, Arthur D. Little, AT Kearney, ISO Health Care Consulting)
- **33-year teaching experience**
  Lecturer (ESCP & ESSEC B-schools - Paris Pharmaceutical and Medical Universities)
  Former affiliate Professor (HEC B-school)

Laurent Chesnel

- **Senior Manager**
- **MSc. in Management** – KEDGE Business School (Bordeaux) – **Specialization in audit, law and management control**
- **10-year operational experience in Financial Audit at KPMG**
  - 3 years as a Manager
  - Audit of statutory and consolidated financial statements (French GAAP, IFRS, US GAAP)
  - Specialization in the Technology Media & Telecommunication (TMT) practice
  - Key clients: Capgemini, SFR, TF1, Vivendi
- **10-year consulting experience with Smart Pharma Consulting and specific fields of expertise:**
  - Gathering of quantitative and qualitative insights (e.g., desk research, market survey, KOLs interviews)
  - Economic analysis of markets / companies
  - Forecasting models

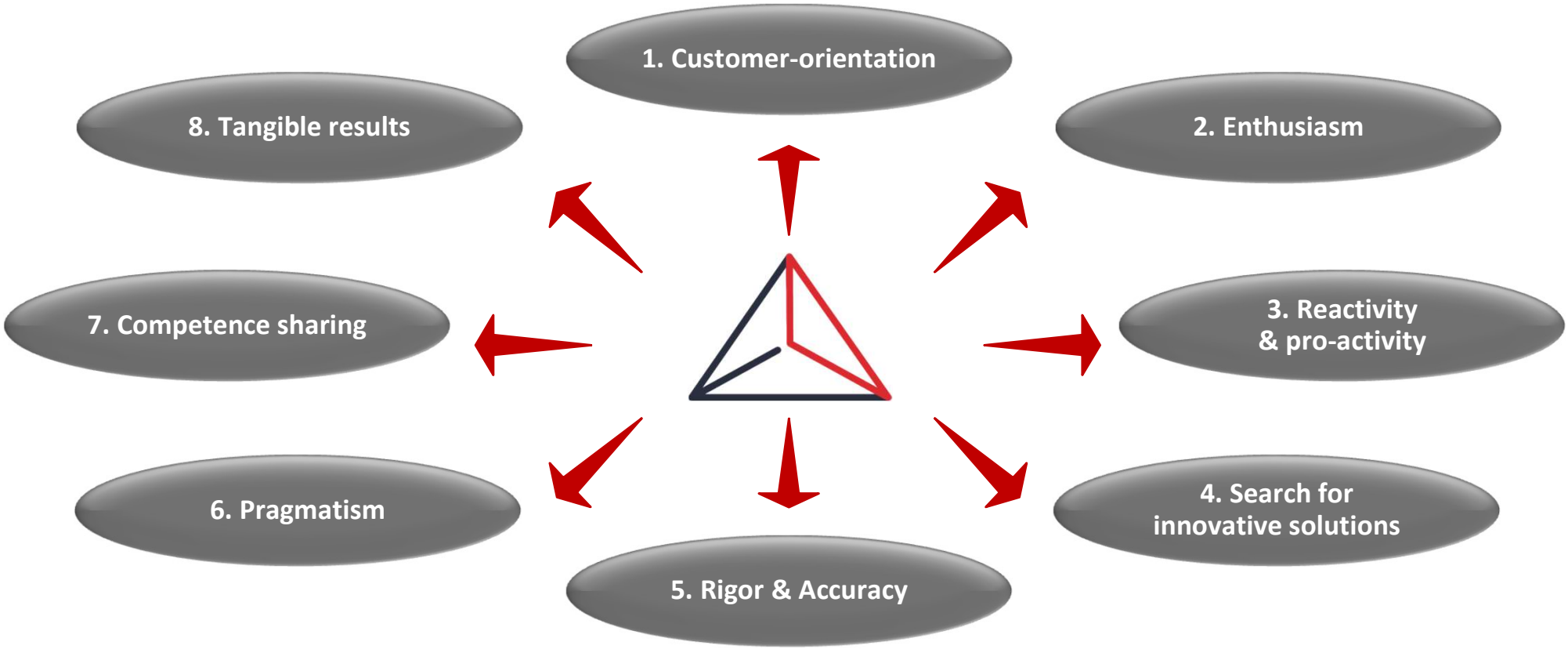
Marie Spinner

- **Senior Business Analyst**
- **MSc. in Management** – ESSEC Business School **– "Innovation in Health" Chair**
- **2-year experience in e-Health & MedTech**
  - 6 months at Wilco (innovation accelerator) as Start-up Manager
  - 6 months at AuxaSphere (formerly Temma Care) as Strategy & Marketing Project Manager with a specific benchmarking project carried out over 25 companies to improve strategic marketing and communication supports
  - 6 months at Sysnav Healthcare as Corporate & Client Communication Officer during which benchmarking studies at Patient Advocacy Groups (PAGs) have been carried out in France, the UK and the USA to define a communication process
- **1-year consulting experience with Smart Pharma Consulting**

Source: Smart Pharma Consulting

Smart Pharma Consulting delivers a unique service based on eight commitments which are determinant to ensure a service delivery, second to none

The eight commitments of Smart Pharma Consulting



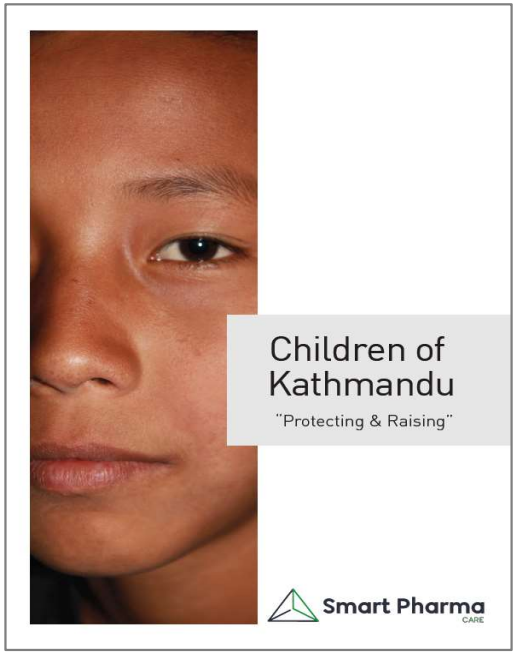
Source: Smart Pharma Consulting

Smart Pharma Consulting runs its own project in Nepal to protect and raise the most disadvantaged children, and partners with four reputable NGOs on projects located in Africa

Smart Pharma Consulting's engagement in humanitarian actions

- We are strongly engaged, through our "Smart Pharma Care" department, to help the world's most vulnerable children
- This engagement is a pillar of our societal commitment to redistribute wealth and create opportunities

Nepalese Program



- In 2006, we started our own program in Nepal to protect and educate children at risk
- The project is funded and managed by Smart Pharma, with FSNB Health & Care[1]
- The Nepalese NGO Saathi ensures the operational activities of this project including ~180 children

African Programs

We partner, since 2005, with 4 NGOs
to protect children against violence, diseases;
and to secure their access to water and food

MEDECINS SANS FRONTIERES

handicap international
humanité & inclusion

SOLIDARITÉS INTERNATIONAL

ACTION AGAINST HUNGER

"We are engaged to protect children at risk and help them build a better future"

Source: Smart Pharma Consulting

[1] *https://smart-pharma.com/wp-content/uploads/2021/04/Smart-Pharma-Care-UK-2021-1.pdf–*
[2] *A consulting firm founded and directed by François Sarkozy*

Smart Pharma
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1. Market Insights

[1] *Excerpts from reports on sale*

Smart Pharma
CONSULTING

Pharma Market
Insight Studies

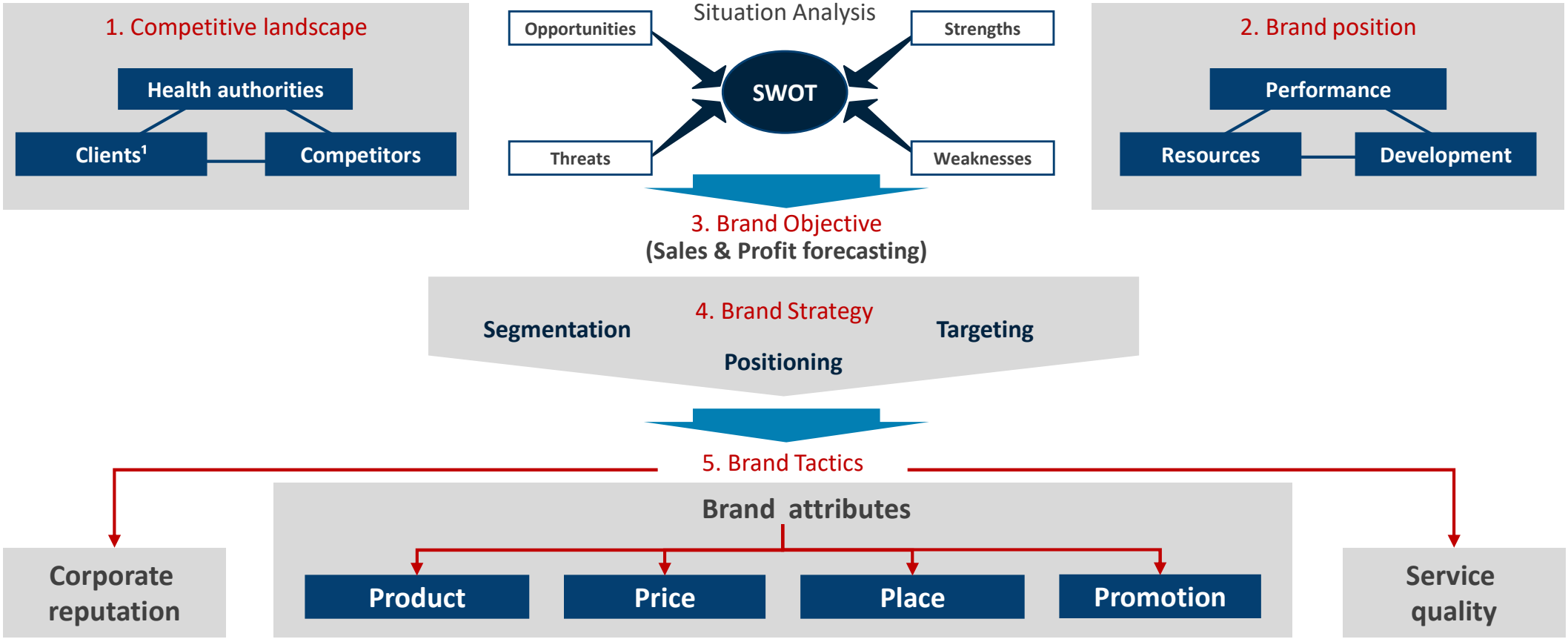
Smart Pharma Expertise
– Methods & Tools –

POSITION PAPER February 2019

Smart Pharma Consulting carries out Market Insight Studies, at the 5 steps of the marketing thinking process, to help pharma companies improve their performance

Introduction

Marketing thinking process



Sources: Smart Pharma Consulting

[1] *Including payers, physicians, pharmacists, patients, patient advocacy groups, hospitals, distributors, etc.*

Our ability to collect insights from all market stakeholders and our robust analytical skills allow us to deliver high value-added recommendations

1. Competitive landscape

Methodological approach

Health authorities

- EMA
- ANSM
- HAS
- CEPS
- …

- **Marketing authorization**
- **Market access** (price and reimbursement)
- **Therapeutic guidelines**
- **Advertising and promotion regulations**

Clients

- Physicians
- Pharmacists
- Patients
- Hospitals
- Distributors
- Payers
- Learned societies
- Unions
- …

- **Therapeutic needs**
- **Prescription patterns**
- **Preference drivers**
- **Delivery standards**
- **Purchasing habits**

Competitors

- Innovators
- Generics Cos
- Biotech Cos
- OTC Cos
- …

- **Benchmarking**
- **Differentiating factors**
- **Growth drivers / orientations**

Sources: Smart Pharma Consulting

Smart Pharma Consulting is used to carrying out studies to better know and understand healthcare systems through in-depth desk researches and individual interviews

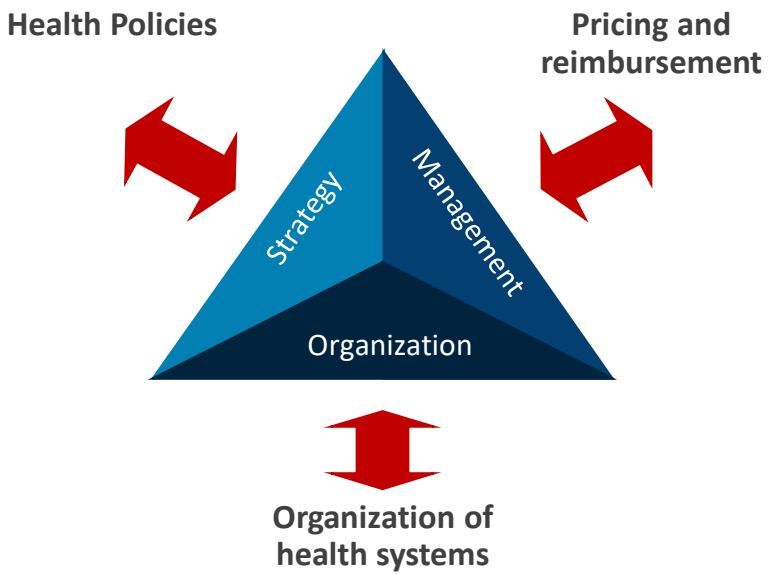
1. Competitive landscape

Health authorities

Market studies targeted at health authorities

Illustration

Health authorities & Payers



Types of studies recently undertaken

- **Organization of health systems**
  - Research on health systems across the world
  - Market access systems by country
  - Study of the organization, the composition and the strategic priorities of regional health bodies
- **Health Policies**
  - Analysis of healthcare reforms across Europe
  - Study of healthcare expenditure containment policies
  - Comparison of health policies regarding Rx-to OTC switches in Europe
- **Pricing and reimbursement**
  - Analysis of decision-making processes and key decision criteria re. pricing and reimbursement
  - Study of the copayment policies of supplementary health insurance funds re. drugs according to the reimbursed level by the Social Insurance

Sources: Smart Pharma Consulting

Smart Pharma Consulting has interviewed hospitals and regional health authorities' collaborators to evaluate the impact of a new measure on drug performance

1. Competitive landscape

Health authorities

Example: Measure to enhance drug prescription quality and efficiency

The French health authorities have recently introduced contracts between hospitals, regional health agencies and regional health insurance through which physicians are encouraged to prescribe more generics and biosimilars

Objective	Action plan	KPIs
▪ Development of **generics** and **biosimilars** prescription at **hospital** level to enhance drugs cost containment	▪ Promotion of **generics** prescription in the reference list	▪ % of generics in the reference list prescribed at hospital level and delivered in retail pharmacies ▪ **National target: 45.5%**
	▪ Promotion of **biosimilars** prescription in the reference list	▪ % of hospital biosimilars prescriptions in the reference list ▪ **National target: 70%**
	▪ **Increase** in the **share** of **generics** and **biosimilars** in hospital purchases	▪ **% of hospital generics and biosimilars purchased in units**

Sources: Smart Pharma Consulting

[1] Regional Health Agency (Agence Régionale de Santé) – [2] Hospital medical commission (Commission médicale d'établissement) – [3] Contract for healthcare quality and efficiency enhancement (Contrat d'amélioration de la qualité des soins)

Smart Pharma Consulting is used to collecting and analyzing information about all pharma companies' clients involved on the retail and the hospital markets

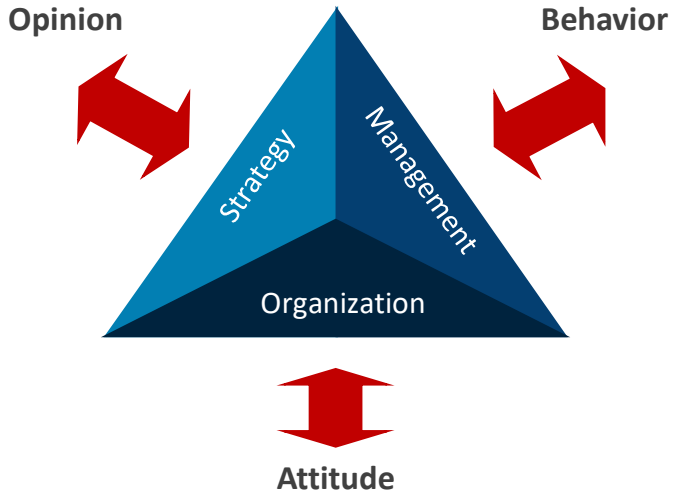
1. Competitive landscape

Clients

Market studies targeted at clients

Illustration

Clients
(payers, physicians, pharmacists, patients, PAGs[1], hospitals, distributors, etc.)



Types of studies recently undertaken

- **New launches**
  - Impact assessment of new product launches
  - Brand positioning studies and market segmentation
- **Generics / Biosimilars**
  - Attitudes and behavior of key stakeholders regarding generics and biosimilars
- **Reimbursement rate changes / Rx-to-OTC switches**
  - Impact assessment of changes in reimbursement rate or Rx-to-OTC switches on clients' attitude
- **Commercial policy**
  - Discounts and associated services offered to pharmacists
  - Analysis of pharmacists' expectations regarding direct sales offers
  - Price sensitivity studies
- **Decision-making process in hospitals**
  - Listing / purchasing in hospitals
  - Conditions of introduction and deployment of new care practices in hospitals
  - Physicians prescribing trends in oncology

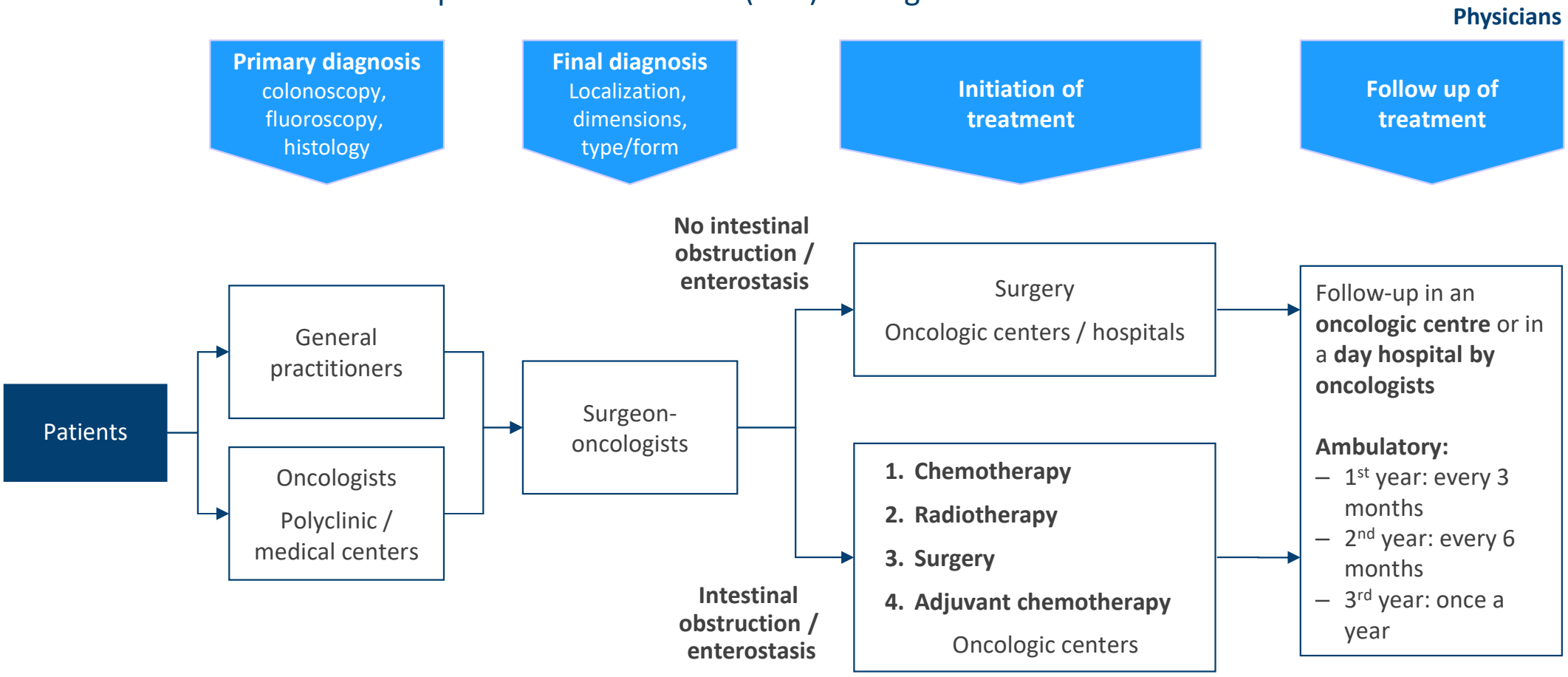
Sources: Smart Pharma Consulting

Smart Pharma Consulting is able to figure out protocols and disease management in countries where there is little data published, by interviewing stakeholders

1. Competitive landscape

Clients

Example: Colorectal cancer (CRC) management in Kazakhstan



Sources: Smart Pharma Consulting

Smart Pharma Consulting assesses regularly the degree of physicians' preference for competing brands with the help of the " Brand Preference Mix" concept[1]

1. Competitive landscape

Clients

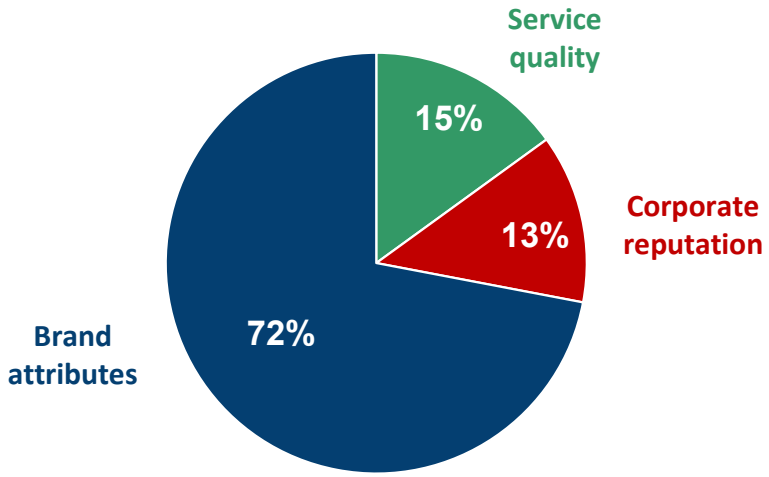
Example: Assessment of brand preference in the respiratory market

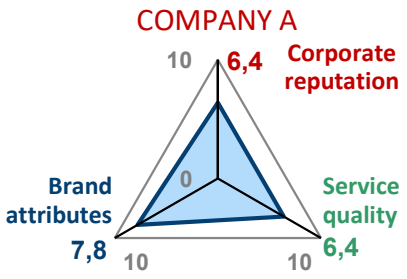
Physicians

The Brand Preference Mix (BPM) helps determine the key prescribing drivers that can be activated to enhance prescribers' preference for a brand, and thus increase its market share

General Practitioners

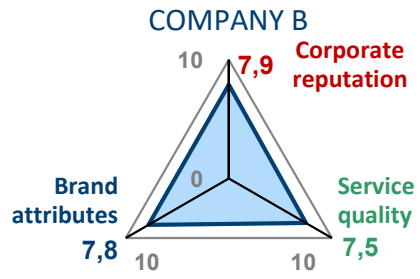
"When you decide to prescribe a maintenance treatment in COPD over another one, what is the relative weight in your decision of the three following components?"





BPM Index calculation:

(72% x 7.8) + (15% x 6.4) + (13% x 6.4) = 7.4



BPM Index calculation:

(72% x 7.8) + (15% x 7.5) + (13% x 7.9) = 7.8

Sources: Smart Pharma Consulting

[1] Developed by Smart Pharma Consulting (see position paper "How to get physicians prefer your brand?" on: www.smart-pharma.com)

The in-depth knowledge and understanding of the market, through regular studies, enables Smart Pharma Consulting to produce complex and insightful analyses

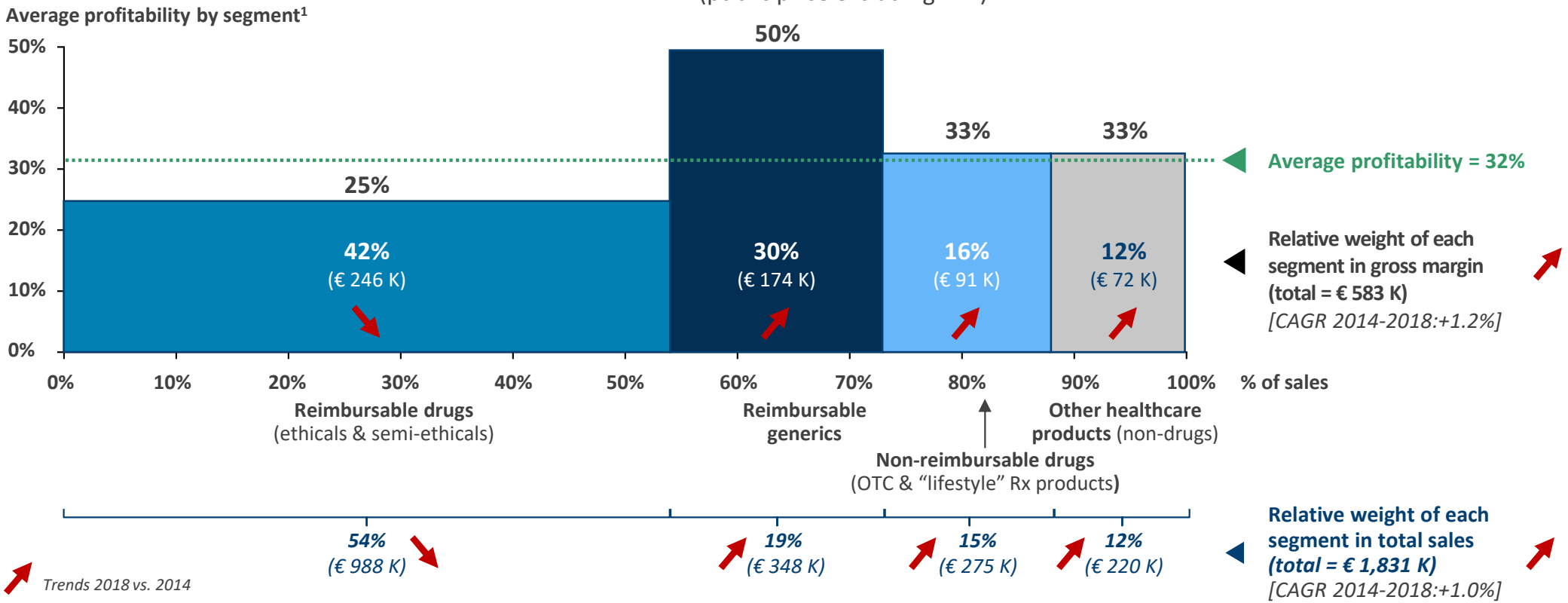
1. Competitive landscape

Clients

Marketing thinking process

Pharmacists

Average annual turnover of a retail pharmacy in 2018: € 1,831 K
(public price excluding VAT)



Sources: CGP Experts Comptables – KPMG – Smart Pharma Consulting estimates

[1] Inclusive of legal margin, rebates, commercial agreements and remuneration for pharmaceutical services, notably those corresponding to the public health objectives (e.g., generics substitution objectives, pharmaceutical interviews with patients, etc.)

Smart Pharma Consulting is used to carrying out patient surveys to understand patients' behaviors and motivations

1. Competitive landscape

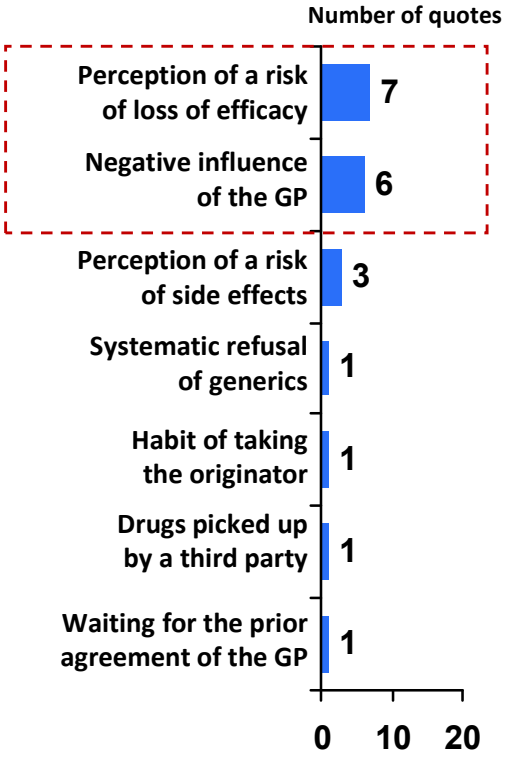
Clients

Example: Generics substitution refusal by patients

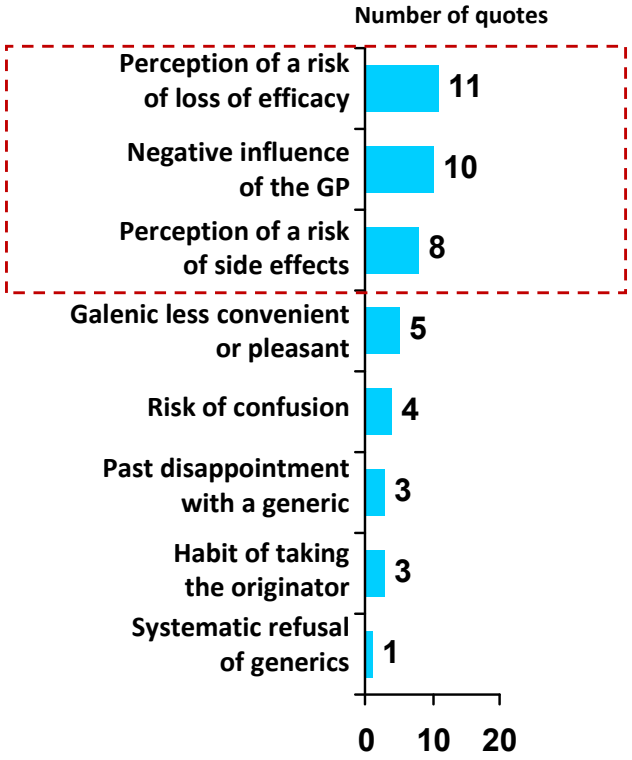
Patients

"Why do you refuse generics substitution?"

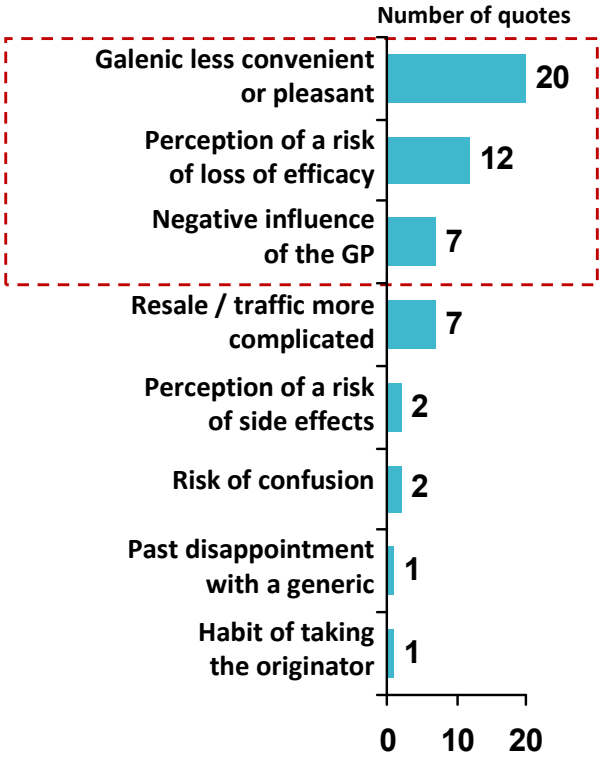
DUROGESIC



RISPERDAL



SUBUTEX



Sources: Smart Pharma Consulting

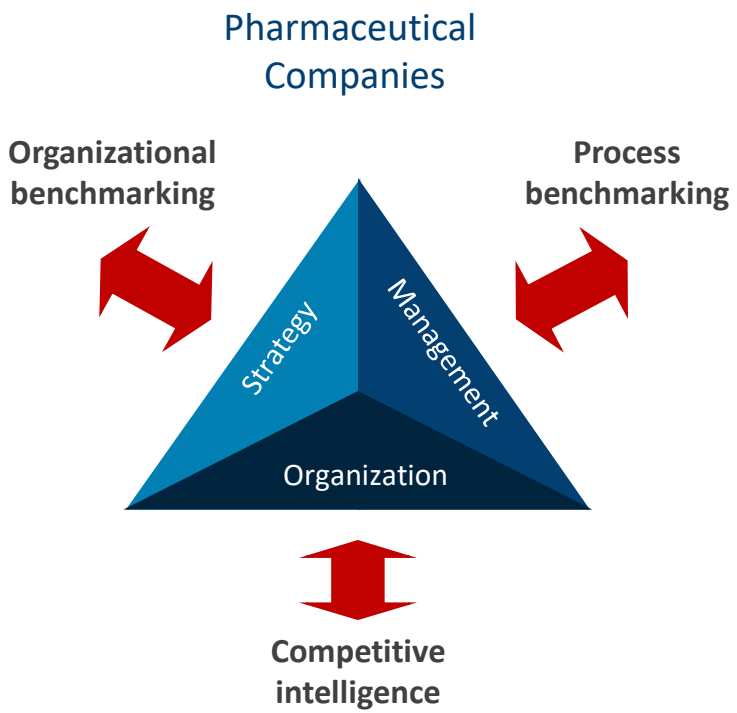
Smart Pharma Consulting carries out various types of benchmarking and competitive intelligence studies in the pharmaceutical sector, following a strict code of ethics

1. Competitive landscape

Competitors

Market studies on competitors

Illustration



Types of studies recently undertaken

- **Organizational benchmarking**
  - Surveys on organizational models
  - Surveys on different jobs in the pharmaceutical industry
  - Investigation of headcounts and the resources allocation
- **Process benchmarking**
  - Best practices identification
  - Surveys on adoption of new sales and marketing tools (CRM, trigger marketing, digital media, etc.)
- **Competitive intelligence**
  - Identification of future entrants and impact assessment
  - Investigation of product launches (dates and conditions)
  - Promotional investments assessment
  - Pricing policy at hospital

Sources: Smart Pharma Consulting

As shown in this example, Smart Pharma Consulting can realize organizational benchmarking such as detailed headcount surveys

1. Competitive landscape

Competitors

Example: Headcount survey in small to mid-sized pharma companies

Organizational benchmarking

	Pharma company A	Pharma company B	Pharma company C	Pharma company D	Pharma company E	Pharma company F	Pharma company G	Average
Sales	50 to 79 €M	20 to 49 €M	20 to 49 €M	50 to 79 €M	50 to 79 €M	80 to 120 €M	20 to 49 €M	
General management	2	2	1.5	1.5	1.5	2	2	2
Marketing	6	7	3	5	6	10	5	6
Sales management	5	1	4	3	2	7	9	4
Medical	3	0	2.5	2.5	3.5	8	5	4
Finance	8	5	3	3	2.5	13	4	6
Regulatory affairs	2	12	2	0.5	8	12	4	6
Legal	0	0	0	0	0	2	2	1
Human Resources	2.5	2	1	3	1	6	4.5	3
Public affairs / Communication	0	0	0	0	0	0	0	0
Commercial excellence	0	0	0	0	0	8	0	1
Training department	0	0	0	1	0	0.5	0	0
Business Development	0	1	0	0	0	1	0	0
Market access	0	0	0	1	0	2	0	0
General services	1	1	0	0	0	3	0.5	1
Logistic / IT	0	0	2	0	0	7	0	1
R&D / Clinical studies	0	0	0	0	4	12	0	2
Total headquarters	29.5	31.0	19.0	20.5	28.5	93.5	36.0	37
Sales Reps – GPs	66	8	48	160	20	111	33	64
First line managers – GPs	6	1	0	16	3	13	4	6
Second line managers	0	0	4	2	0	2	0	1
Sales Reps – Specialists & hospital	11	10	0	10	0	6	0	5
First line managers – Specialists & hospital	0	0	0	1	0	1	0	0
KAM & others	0	0.5	0	0	0	0	3	1
Total field forces	83.0	19.5	52.0	189.0	23.0	133.0	40.0	77
Grand total	112.5	50.5	71.0	209.5	51.5	226.5	76.0	114
Number of therapeutic areas	8	5	5	7	1	9	4	6
Number of products	18	7	16	17	1	32	16	15

Sources: Smart Pharma Consulting

Smart Pharma Consulting interviewed service providers and pharma companies to survey the remote e-detailing adoption, identify best practices and assess the impact

1. Competitive landscape

Competitors

Example: Benchmarking of remote e-detailing practices

Process benchmarking

Context

- Specific needs to strengthen detailing:
  - Inform physicians about new indications and side effects of non-promoted products
  - Vacancies
  - Campaigns with temporary increase of targeted physicians
  - Geographic dispersion of physicians (Russia)
  - Limited access to physicians (Sweden, Turkey)

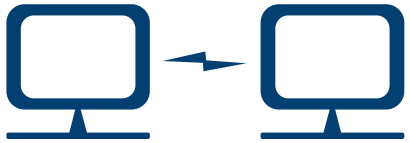
Objectives

- Increase the reach of the message by expanding the target
- Improve the efficacy of communication by increasing the call frequency
- Reduction of overall detailing costs

Implementation

- France: sales reps 100% dedicated to remote e-detailing, quantitative approach (20 contacts/day)
- Italy: sales reps 100% dedicated to remote e-detailing, qualitative approach (retention goal)
- Russia, Sweden: implementation of hybrid sales reps (face-to-face and remote e-detailing)

Results



- France: some physicians systematically refuse remote e-detailing
- Italy: 35%-40% of physicians regularly accept remote e-detailing
- Russia and Sweden: increase of call frequency

Key learning

- Remote e-detailing does not suit all physicians, hence, before implementing it, to identify those who:
  - Can have online access
  - Are likely to accept remote e-detailing
- The quality of calls is key to build a long-term relationship with physicians, thus it is important to:
  - Train the sales force properly
  - Propose interesting and useful contents, meeting customer expectations and needs
  - Fix appointment by telephone rather than by e-mail (risk of spamming)

Sources: Smart Pharma Consulting

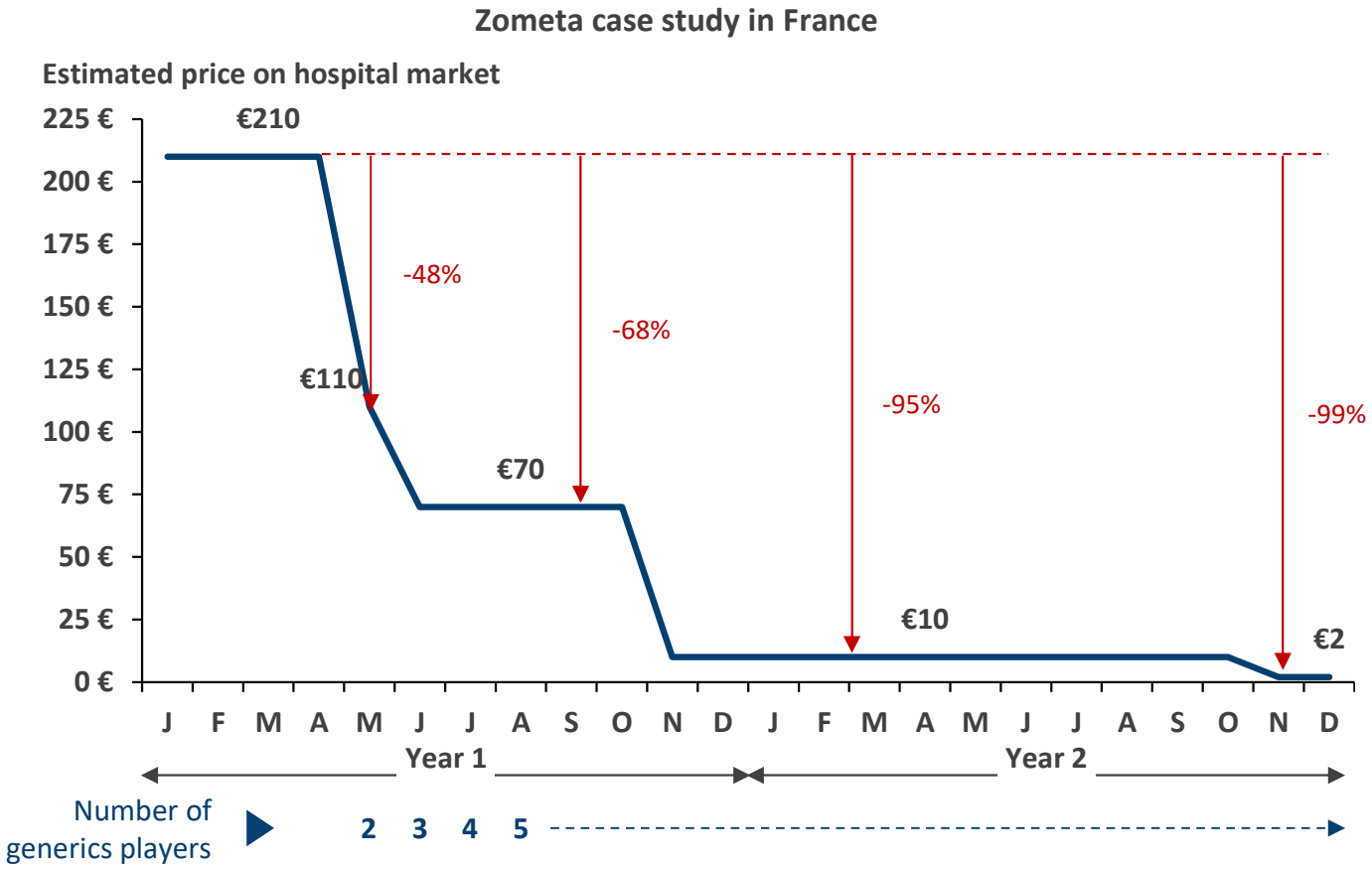
Through desk research and interviews, Smart Pharma Consulting has been able to estimate the magnitude of generics price war overtime on the French hospital market

1. Competitive landscape

Competitors

Example: Hospital generics pricing

Competitive intelligence



Comments

- Zometa (zolendronic acid), marketed by Novartis, is a bisphosphonate used in:
  - The prevention of bone complications in adult patients with advanced malignant disease with bone involvement
  - The treatment of tumor-induced hypercalcemia in adult patients
- The first generic, marketed by Sandoz, entered the market mid-May 2013, a week before Mylan. Fresenius launched its 4 mg version in June, Pfizer (ex-Hospira) in May and Medac in August
- **Competition on price is usually even more aggressive in hospitals when there are more than one company marketing a generic version**
- According to a generics company: *"This behavior is illogical and is prejudicial for all generics companies as this price does not support the market and does not permit us to offer associated services"*

Sources: Smart Pharma Consulting

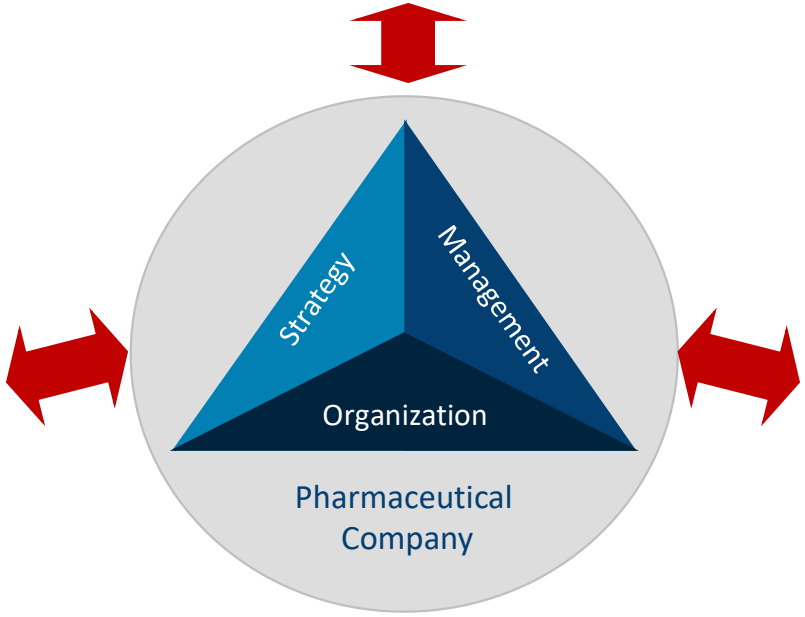
Smart Pharma Consulting rigorous and evidence-based analyses allow to transform information into actionable and added-value recommendations to pharma companies

2. Brand Position

Methodological approach

Performance

- In-depth historical sales analysis



Development

- Brand value assessment in a partnership perspective
- Potential partnership identification (e.g., in- and out-licensing)

Resources

- Sensitivity to promotion
- Sales force sizing
- Competencies requirement

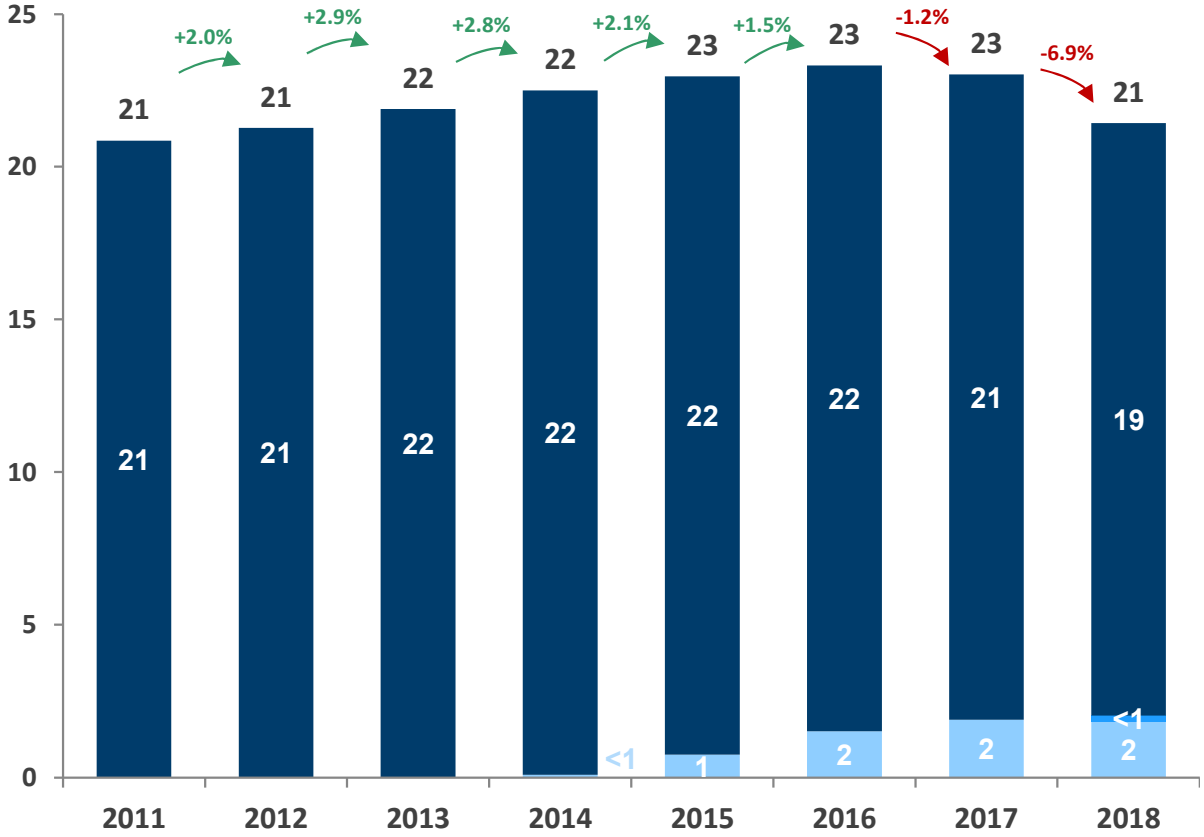
Sources: Smart Pharma Consulting

Smart Pharma Consulting regularly carries out in-depth brands analyses to get a comprehensive understanding of the dynamics of their performance

2. Brand Position

Performance

Example: Historical analysis of intra-uterine contraception systems



	CAGR[3] 2011-2018	CAGR 2014-2018	Market share 2011	Market share 2014	Market share 2018
IUS[1] market	+0.4%	-1.2%			
Mirena	-1.0%	-3.5%	100.0%	99.6%	90.6%
Kyleena[2]	N/A	N/A	0.0%	0.0%	1.0%
Jaydess	N/A	+113.0%	0.0%	0.4%	8.4%

Sources: Smart Pharma Consulting

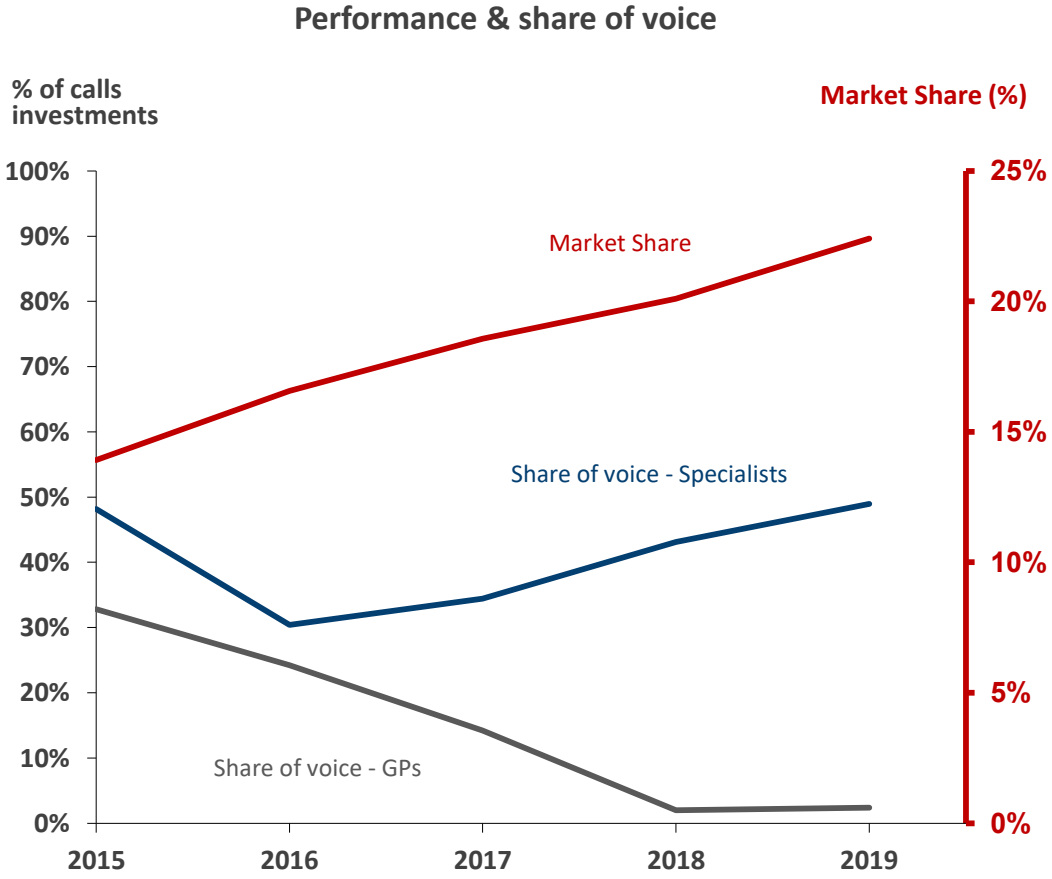
[1] Intra-uterine system – [2] Product launched at the end of March 2018 – [3] Compound annual growth rate

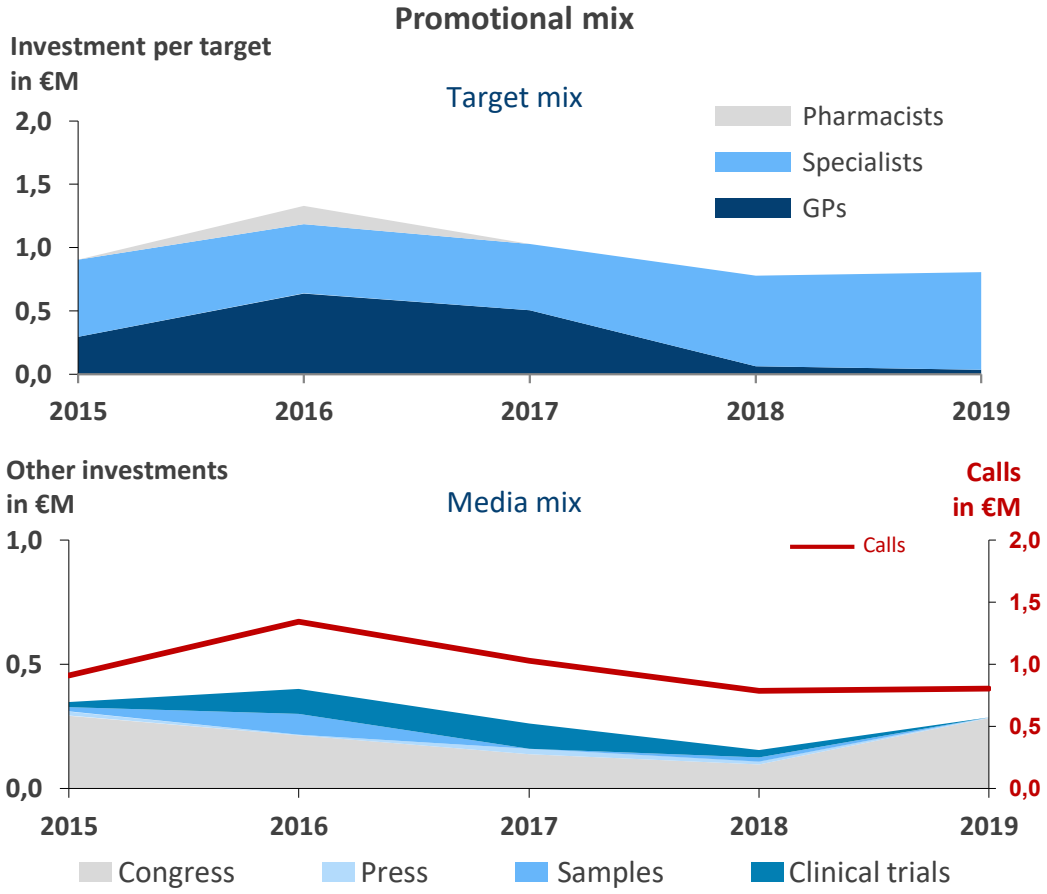
Smart Pharma Consulting can help pharma companies assess the sensitivity of their brands to promotional investments in quantitative and qualitative terms

2. Brand Position

Resources

Example: Sensitivity to promotional investments





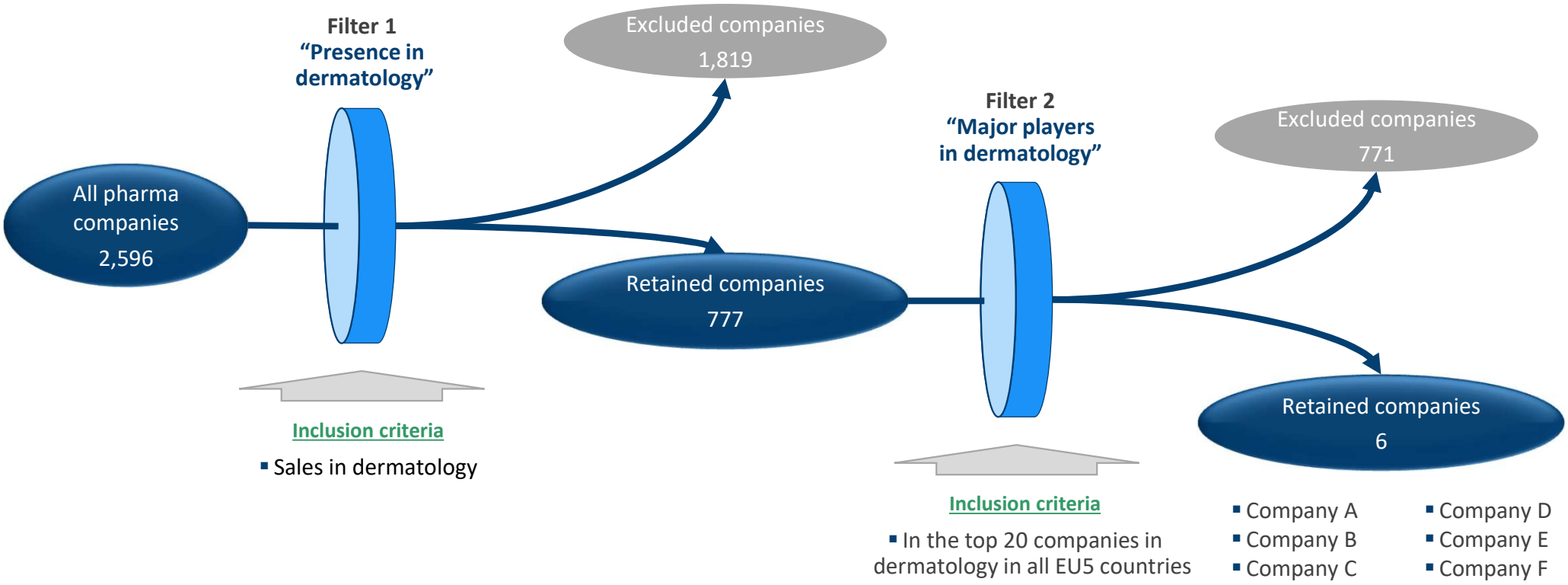
Sources: Smart Pharma Consulting

Based on rigorous market analyses and an effective methodology[1], Smart Pharma Consulting can help identify potential partners for in- or out-licensing deals

2. Brand Position

Development

Example: Identification of partners for an out-licensing deal



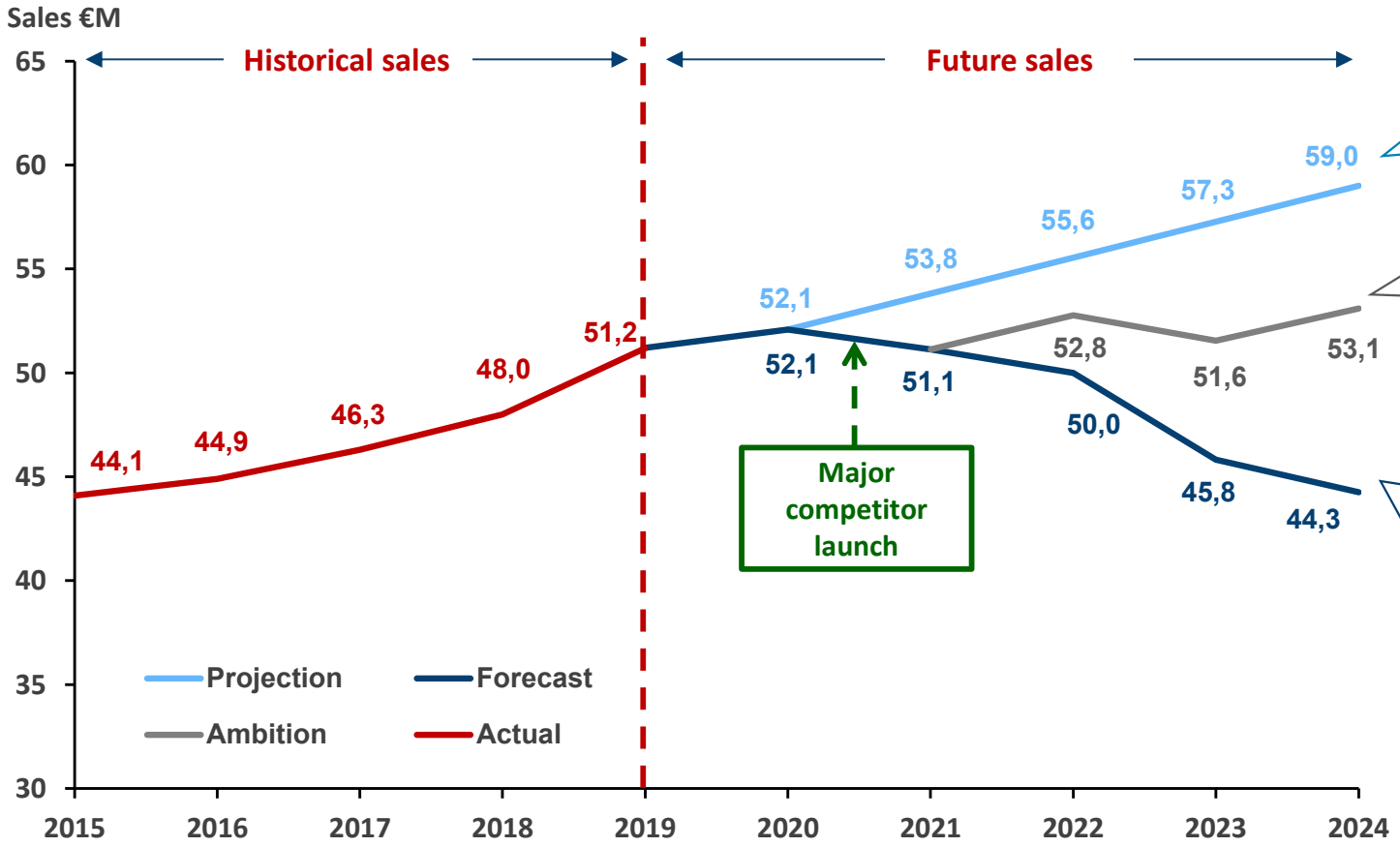
Sources: Smart Pharma Consulting

[1] Developed by Smart Pharma Consulting (see position paper "Best-in-Class Pharma BD&L" on: www.smart-pharma.com)

Smart Pharma Consulting is regularly asked by pharma companies to build scenarios to estimate sales and profits objectives according to the forecast method

3. Brand Objective

Methodological approach



Projection
Objectives based on historical trends, considering "other things being equal"

Ambition
Objectives based on top management commitment to shareholders (top – down approach)

Forecast
Objectives based on projections adjusted according to anticipated:

- Market events (new regulations, new market entrants, changes in customers behaviors, etc.)
- Company events (new marketing authorization, positive clinical study results, sales force cut, etc.)

Sources: Smart Pharma Consulting

A patient approach based on epidemiological data, diagnosis and treatment rates can be applied to estimate the evolution of a market size and of a brand market share

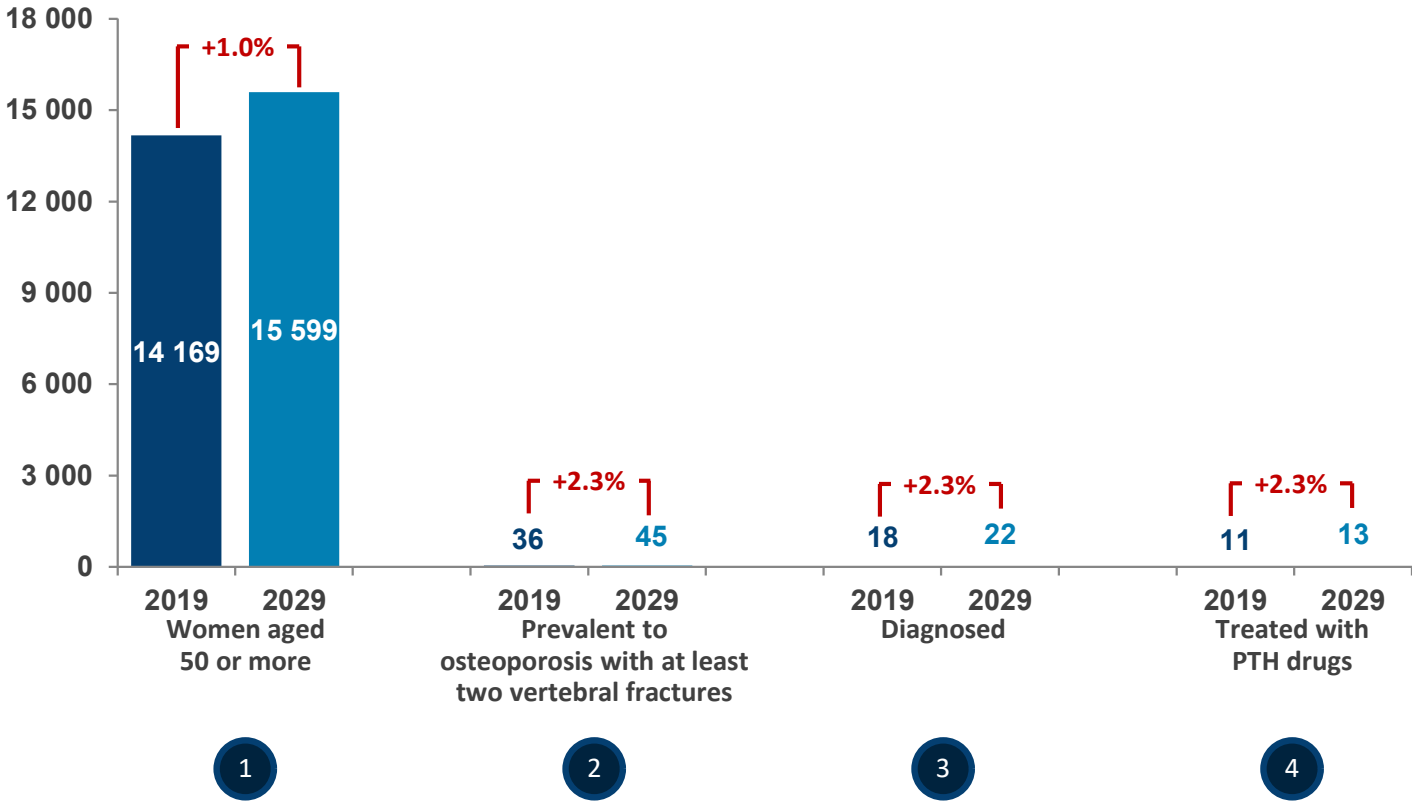
3. Brand Objective

Example: Sales forecasting in the osteoporosis market

Patient approach

Number of women, in thousands

In red: CAGR[1] 2019-2029



Comments

- **Prevalence** (+2.3% on average per year) **increases faster** than the total **population of women aged 50 or more** (+1.0% p.a.) because of a mixed effect :
  - **Ageing effect** (**baby boomers**): women aged **75 and more** will represent **~31%** of the women aged 50 and more in **2029**, vs. **~27%** in **2019**
  - In addition, the **prevalence** rate within women aged **75 and more** (**~0.85%**) is much higher than the prevalence of women **aged between 50 and 74 years** (**~0.04%**)
- **Diagnosis** and **treatment rates** have been maintained at a **stable rate** over the period, in accordance with interviewed KOLs feedback:
  - **Diagnosis** rate: **50%** of prevalent women
  - **Treatment** rate: **60%** of diagnosed women

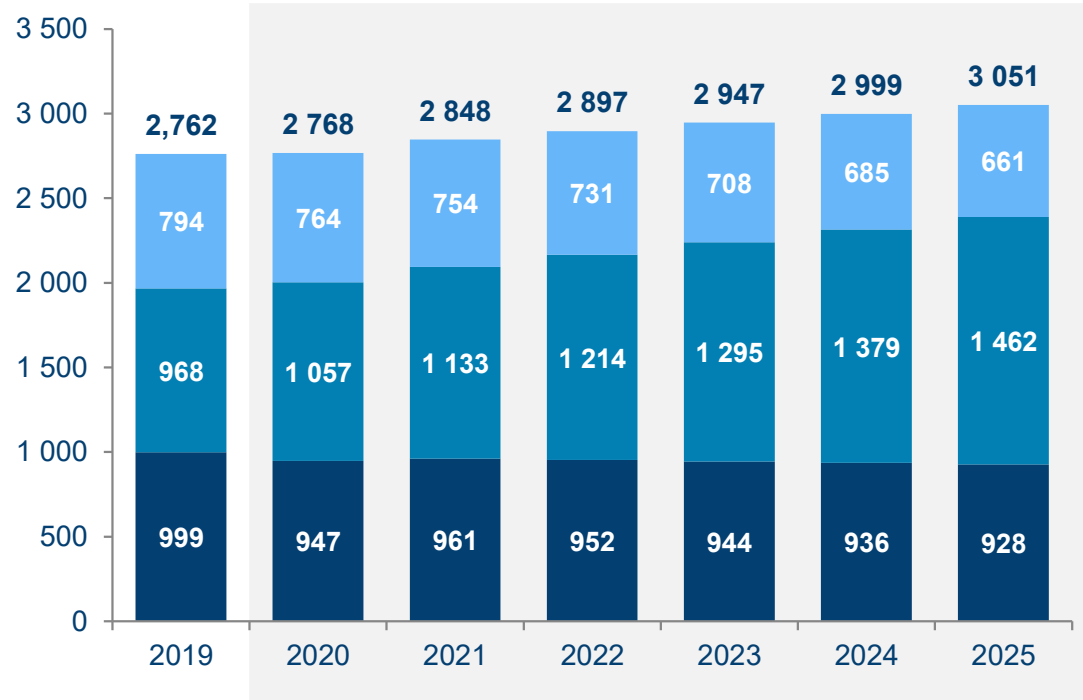
Sources: Smart Pharma Consulting

[1] *Compound annual growth rate*

A market approach based on the adjustment of historical sales projections can also be applied to estimate the dynamics of a brand on its market

3. Brand Objective

Example: Sales forecasting in the oncology market



Market approach

	CAGR[1] 2019-2025	Market share 2019	Market share 2022	Market share 2025
Total market	+1.7%			
Product A	-3.0%	28.8%	25.2%	21.7%
Product B	+7.1%	35.1%	41.9%	47.9%
Product C	-1.2%	36.2%	32.9%	30.4%

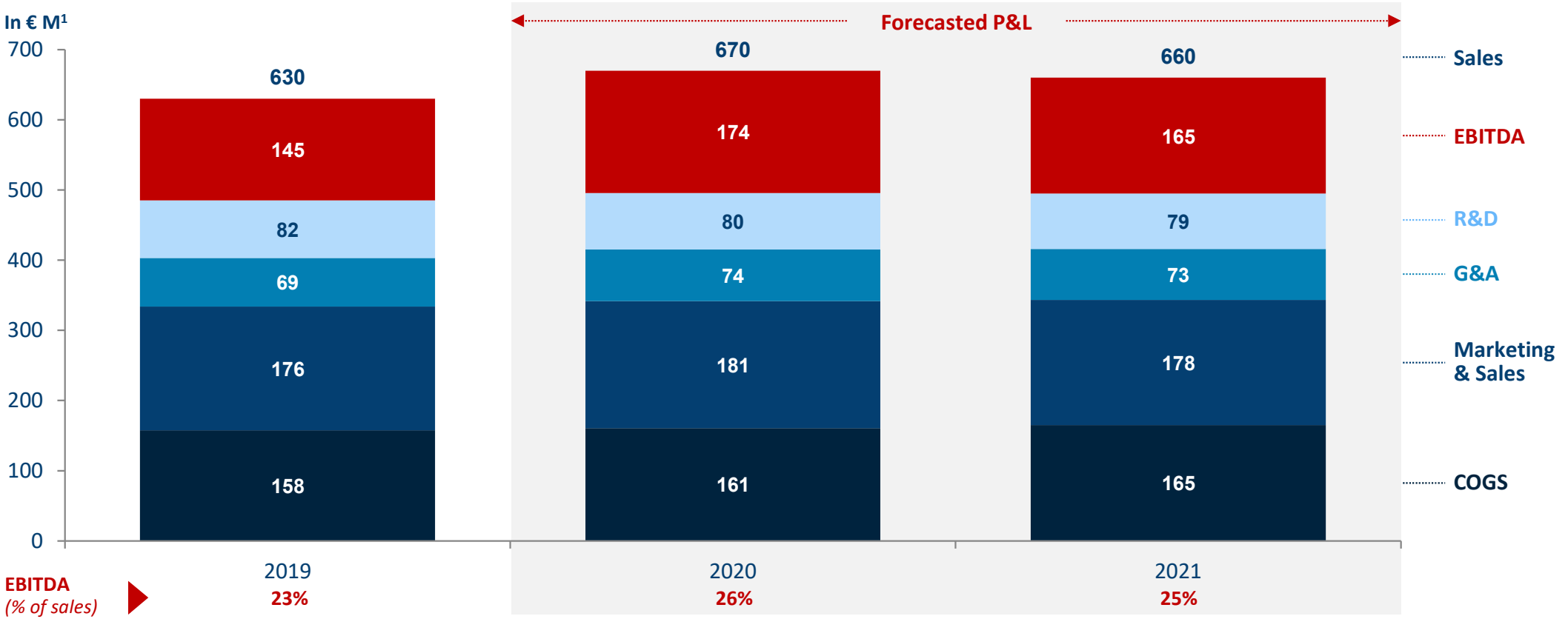
Sources: Smart Pharma Consulting

[1] *Compound annual growth rate*

Smart Pharma Consulting can develop for pharma companies' models to forecast the potential margin of selected products

3. Brand Objective

Example: Profit forecasting for a CNS product



Sources: Smart Pharma Consulting

[1] Constant ex-factory prices, excluding VAT

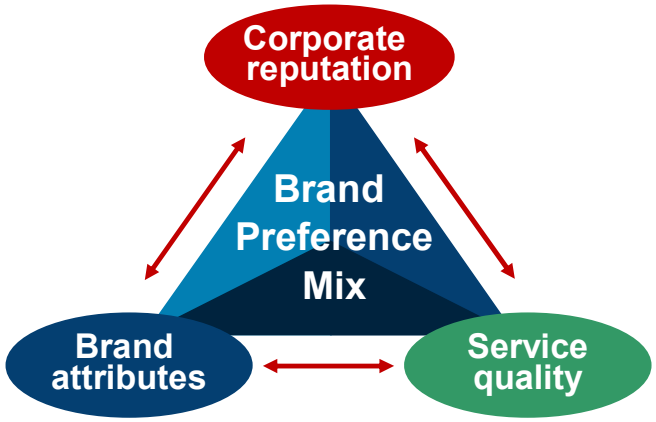
Smart Pharma Consulting proposes highly effective positioning and segmentation methods that are associated with specific data collection about customers

4. Brand Strategy

Positioning & Segmentation studies

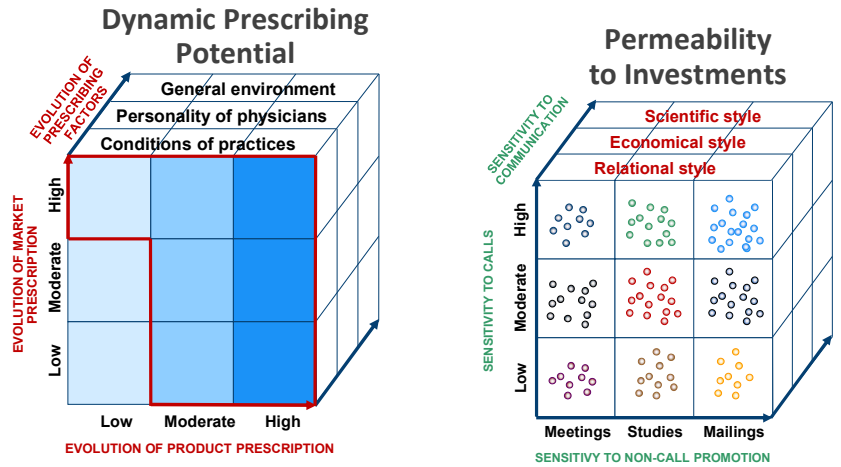
Applications to Physicians

Brand Preference Mix (BPM)[1] – Positioning



- The share of brand prescription is driven by physicians' preference level…
- … which is enhanced by acting on the BPM: (1) brand attributes, (2) service quality and (3) corporate reputation

Behavioral Prescriber Segmentation (BPS)[1]



- The BPS optimizes investment efficiency by considering:
  1. Factors that drive the dynamics of prescriptions[2]
  2. Prescribers' personalities
  3. Prescribers' permeability to investments[3]

Smart Pharma Consulting has developed methods and tools to gather each physician opinion on the 3 components of the Brand Preference Mix and information regarding the 3 dimensions of the Behavioral Prescriber Segmentation

Sources: Smart Pharma Consulting

[1] Developed by Smart Pharma Consulting (see position paper "Best-in-Class Pharma Marketers" on: www.smart-pharma.com) – [2] By market (competitors + brand) and by brand – [3] Medico-marketing-sales investments

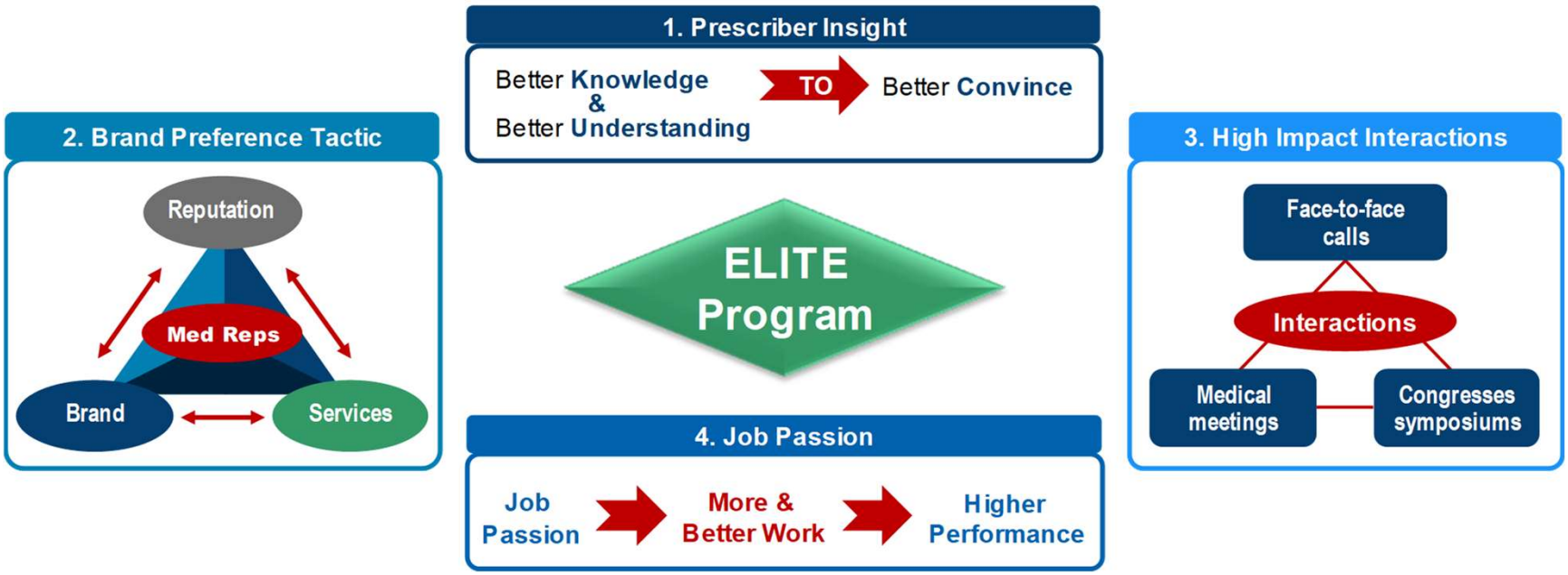
The ELITE Program[1] enables med reps to interact more efficiently with prescribers and to optimize the prescription share of the brands they promote

5. Brand Tactics

Sales force effectiveness studies

The ELITE Program proposes a **holistic** and **practical** approach to **improve med reps' efficiency** and **efficacy**

The ELITE Program



Smart Pharma Consulting has created a series of tools and indicators to measure the impact of the ELITE Program on physicians' opinion and prescribing behavior, especially in terms of Brand Preference

Sources: Smart Pharma Consulting

[1] Developed by Smart Pharma Consulting (see position paper "Boosting Med Reps Effectiveness"

Smart Pharma
CONSULTING

Five Insights about the Pharma Industry

Truths & Untruths

1. Pharma market attractiveness
2. Drug price pressure intensification
3. Cost of R&D
4. Impact of drugs on people's life
5. Pharma companies' reputation

POSITION PAPER

April 2023

Smart Pharma Consulting has selected 5 characteristics of the pharma industry that are essential to know and understand to make informed opinions and relevant decisions

Introduction

Smart Pharma Consulting proposes to cover 5 key insights that are specific to the pharma industry:

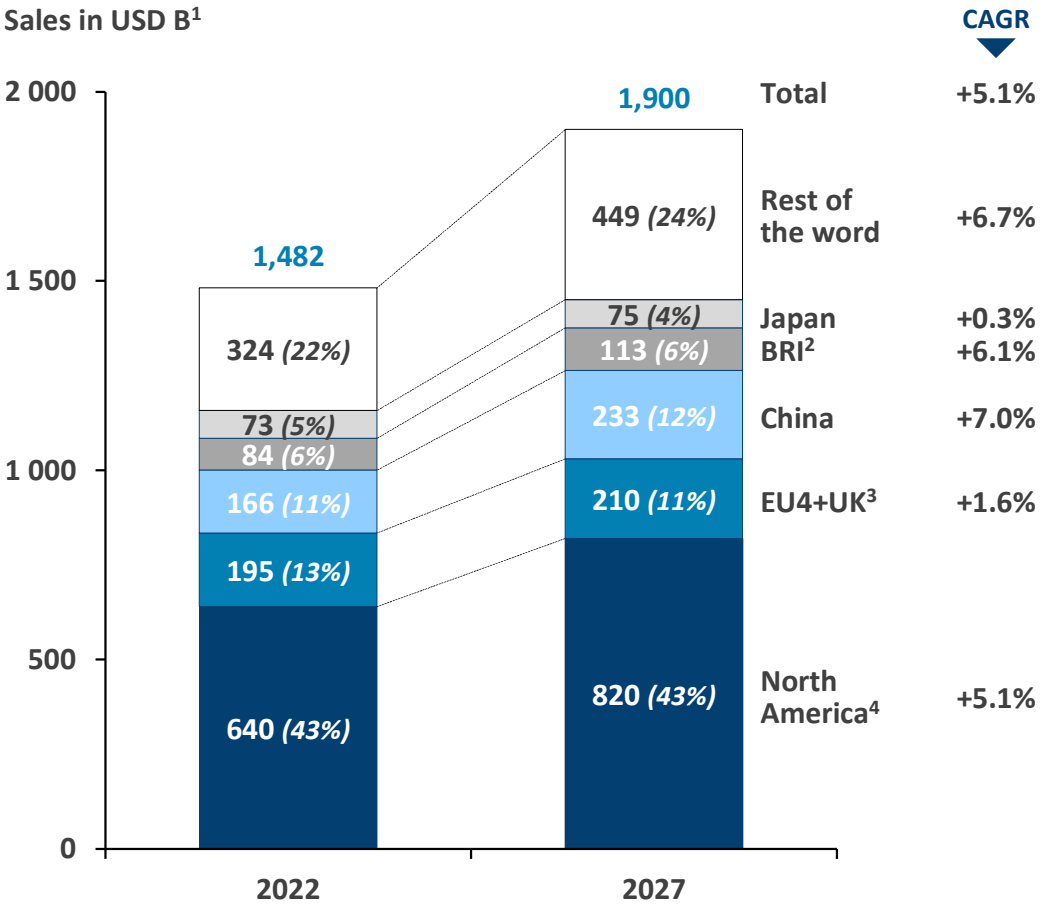
1. Why is the pharma market so attractive?
2. Why will the pressure on drug price intensify?
3. What is the R&D cost of drugs?
4. Do drugs really improve people's life?
5. Why do pharma companies have a poor reputation?

Sources: Smart Pharma Consulting

The pharma market should keep on growing by the end of 2027, at a pace of ~5% per annum, with North America being the main contributor of growth

1

Pharma market structure and dynamics (2022 – 2027)



- The pharma market is expected to grow with a CAGR of +5.1% by 2027 vs. +3.2% for the worldwide economic growth
- Euro-5 countries account for 13% of the market:
  - Germany: 4%
  - France: 3%
  - Italy: 2%
  - UK: 2%
  - Spain: 2%

  and they should see their weight drop by 2 points (i.e., to 11% of the market) by 2027, due to higher price pressure than in the average of other countries
- North America should continue to weigh for 43% of the global pharma market in value and remain the key contributor to the worldwide pharma market growth

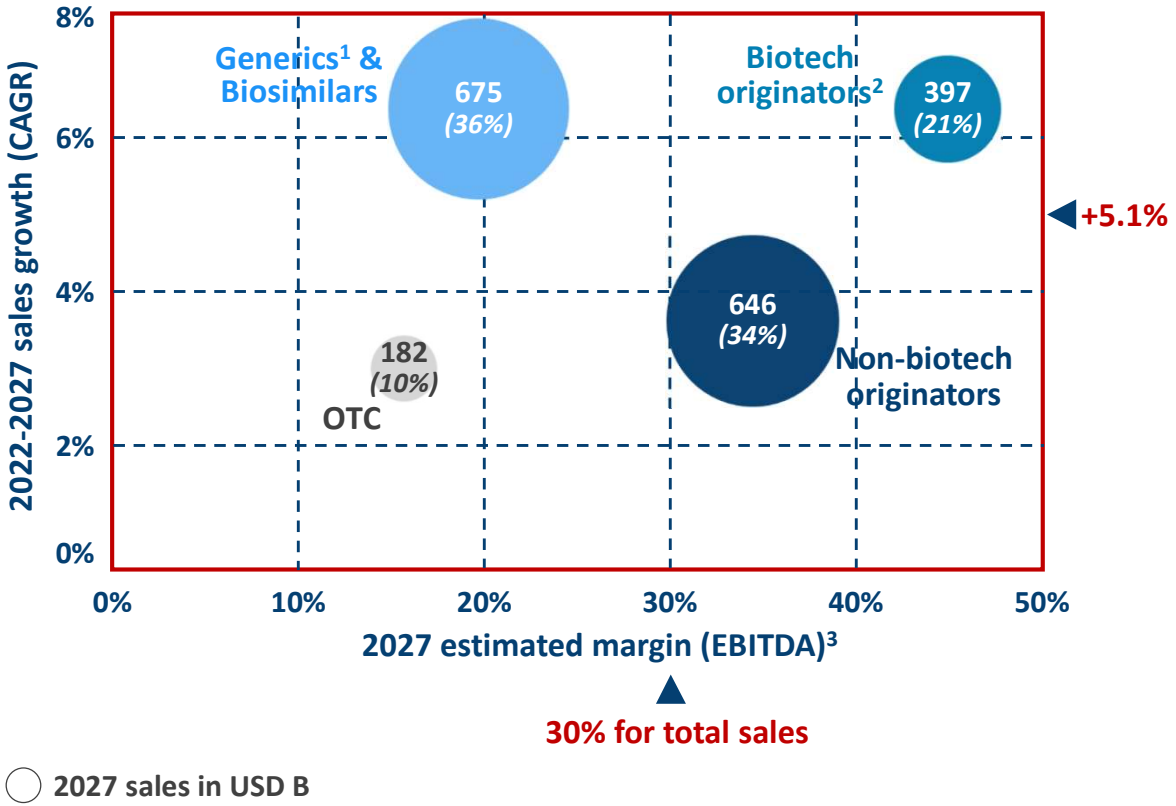
Sources: IQVIA Institute (January 2023) – Smart Pharma Consulting estimates

[1] Ex-factory price before rebates – [2] Brazil, Russia, India – [3] France, Germany, Italy, Spain and UK – [4] USA and Canada, accounting for 41% and 2% of the total, respectively

Over the 2022 – 2027 period, the pharma market growth should be essentially driven by generics and biotech originators, while the profitability of the industry should decrease from ~32% to ~30%

1

Pharma market attractiveness by strategic segment (2022 – 2027)



- The strategic segment of “Generics & Biosimilars” is the largest and the most dynamic
- The biotech segment will remain attractive despite the ramp up of biosimilars
- The OTC segment will remain the least attractive one
- The average EBITDA of the pharma industry should decrease from ~32% in 2022 to ~30% in 2027, mainly as a result of increasing price pressure, and inflation

Sources: IQVIA Institute (January 2023) – World economic outlook, IMF (October 2022) – Smart Pharma Consulting estimates

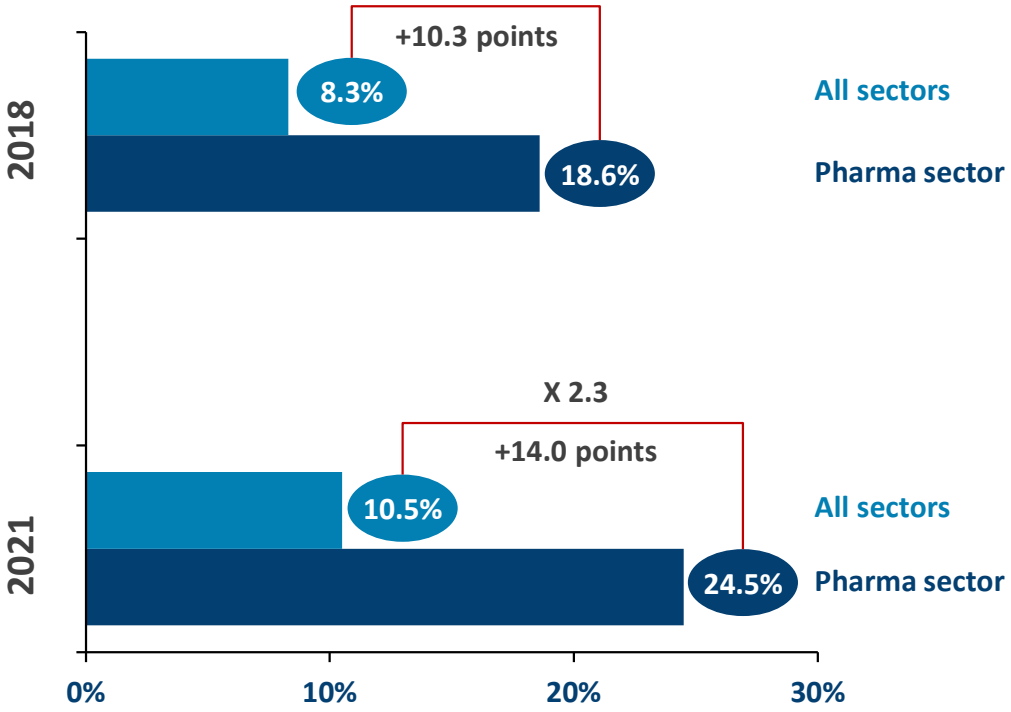
[1] Including branded and unbranded generics and excluding OTCs – [2] Excluding biosimilars, already combined with Generics in a single segment – [3] Earnings before interest, taxes, amortization and depreciation

In 2021, the net profitability of the pharma sector was 2.3 times higher than the average of all other sectors, and revenues of top 20 companies grew by +8.3% p.a. between 2018 and 2021

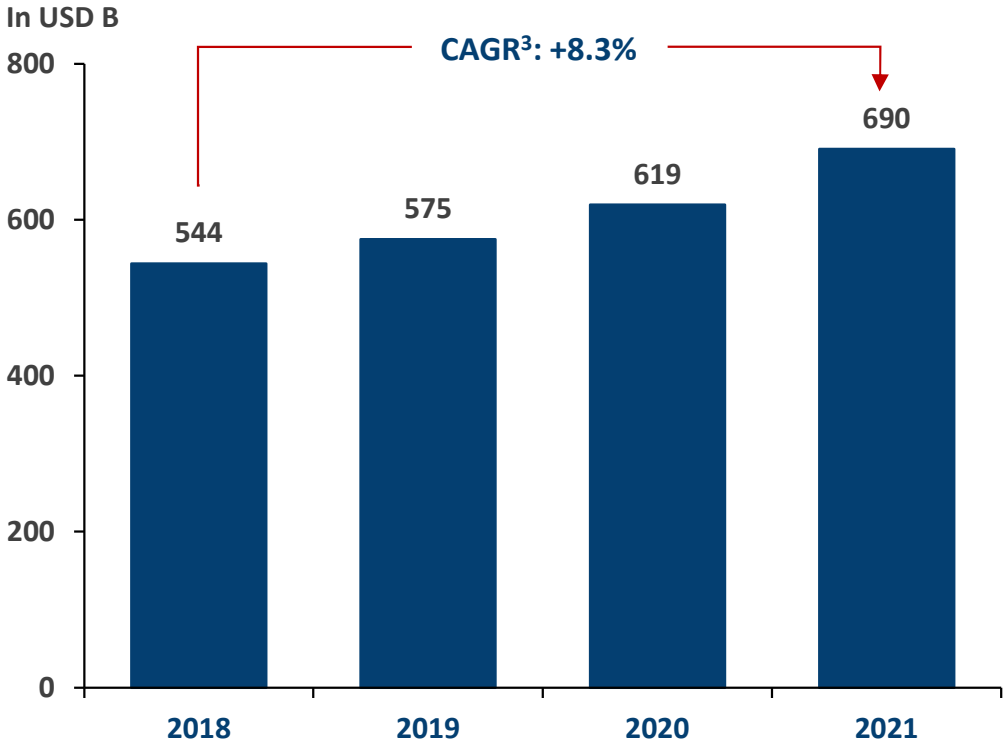
1

Net profitability and sales dynamics of the pharma sector (2018 – 2021)

Net profitability in 2018 & 2021
(Of top Rx pharma companies[1] and of the global economy)



Market sales trend
(Cumulated revenues of top 20 Rx pharma companies)



Sources: Top 20 Rx pharma companies' 2021 and 2018 annual reports (2022 and 2019) – Forbes: The Global 2000 (May 2022 and 2019) – World economic outlook, IMF (October 2022 and 2018) – Smart Pharma Consulting analyses

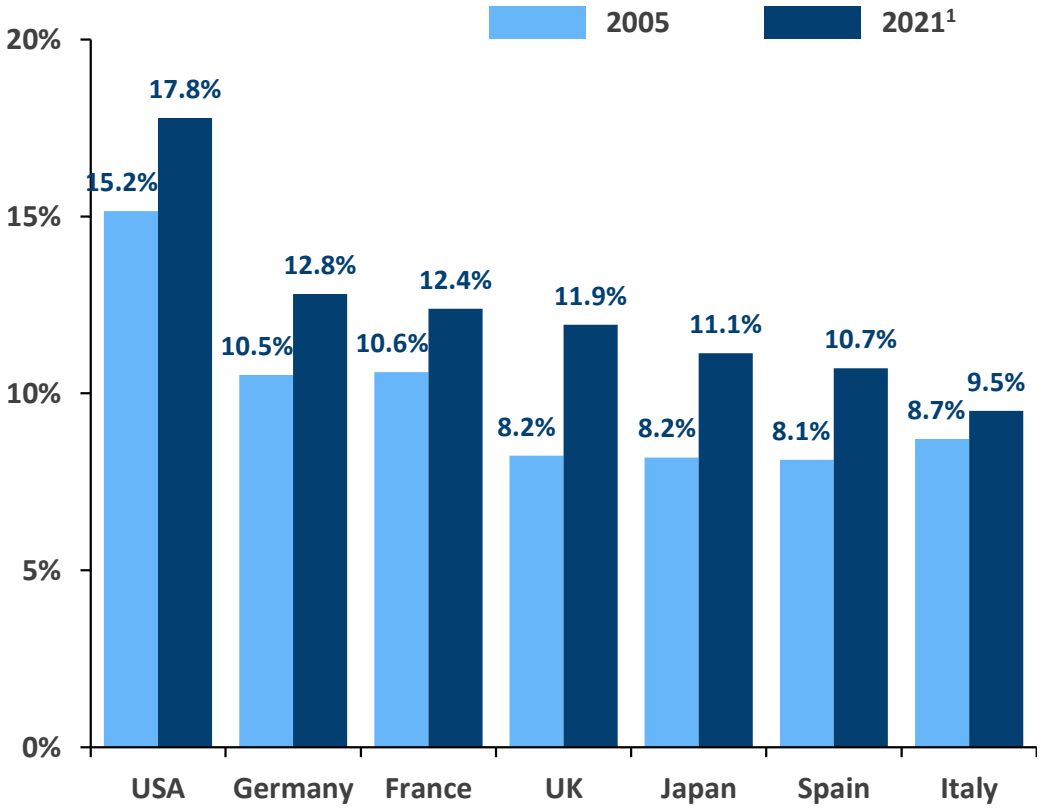
[1] Top 30 for 2018 and top 20 for 2021 – [2] Return on revenues = net profits / total revenues – [3] Compound annual growth rate

Healthcare expenditure should keep on growing faster than national economies due to demographic factors and willingness of citizens to have a better access to healthcare

2

Healthcare expenditure as a percentage of GDP (2021)

Total healthcare expenditure as a % of GDP (Local currency)



- Healthcare expenditure represents one of the largest public spending items in most developed economies:
  - 2nd (France, Germany, UK, USA and Spain)[2]
  - 3rd (Italy[3] and Japan[4])
- At best, governments and payers will manage to slow down the rise of healthcare expenditure as a percentage of GDP but not to stop it, unless they initiate a hazardous rationing policy
- There is no optimal ratio of spending over GDP
- This ratio primarily results from:
  - National economies
  - Public health conditions
  - Governments' investment prioritization
  - Citizens' willingness to seek for care
  - Healthcare cost

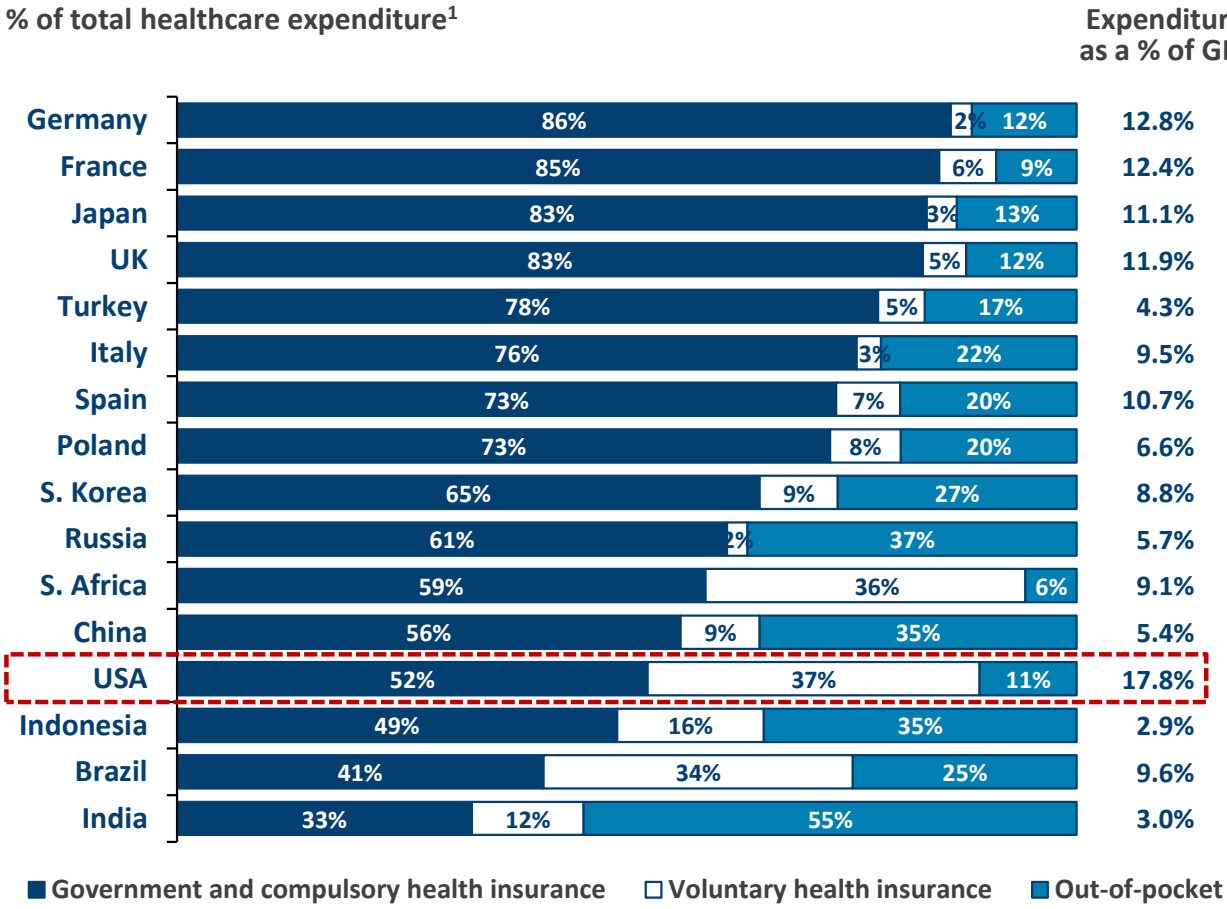
Sources: OECD database (January 2023) – Smart Pharma Consulting analyses

[1] Provisional/Estimated value, excluding for Spain – [2] After social protection – [3] After social protection and general public services – [4] After social protection and economic affairs

Germany, France Japan and the UK ensure more than 80% of healthcare expenditure covering through a government and compulsory health insurance scheme

2

Share of public spending in total healthcare expenditure (2021)



- Germany and France levels of public spending on healthcare are amongst the highest, showing a highly protective healthcare system
- As a result, “out-of-pocket” spending represents only 12% and 9% of total healthcare expenditure, respectively, in these two countries
- USA public spending share on healthcare is much lower...
- ...although this expenditure represents a larger share of GPD than in Germany and France (~18% vs. ~13 and 12%, respectively)

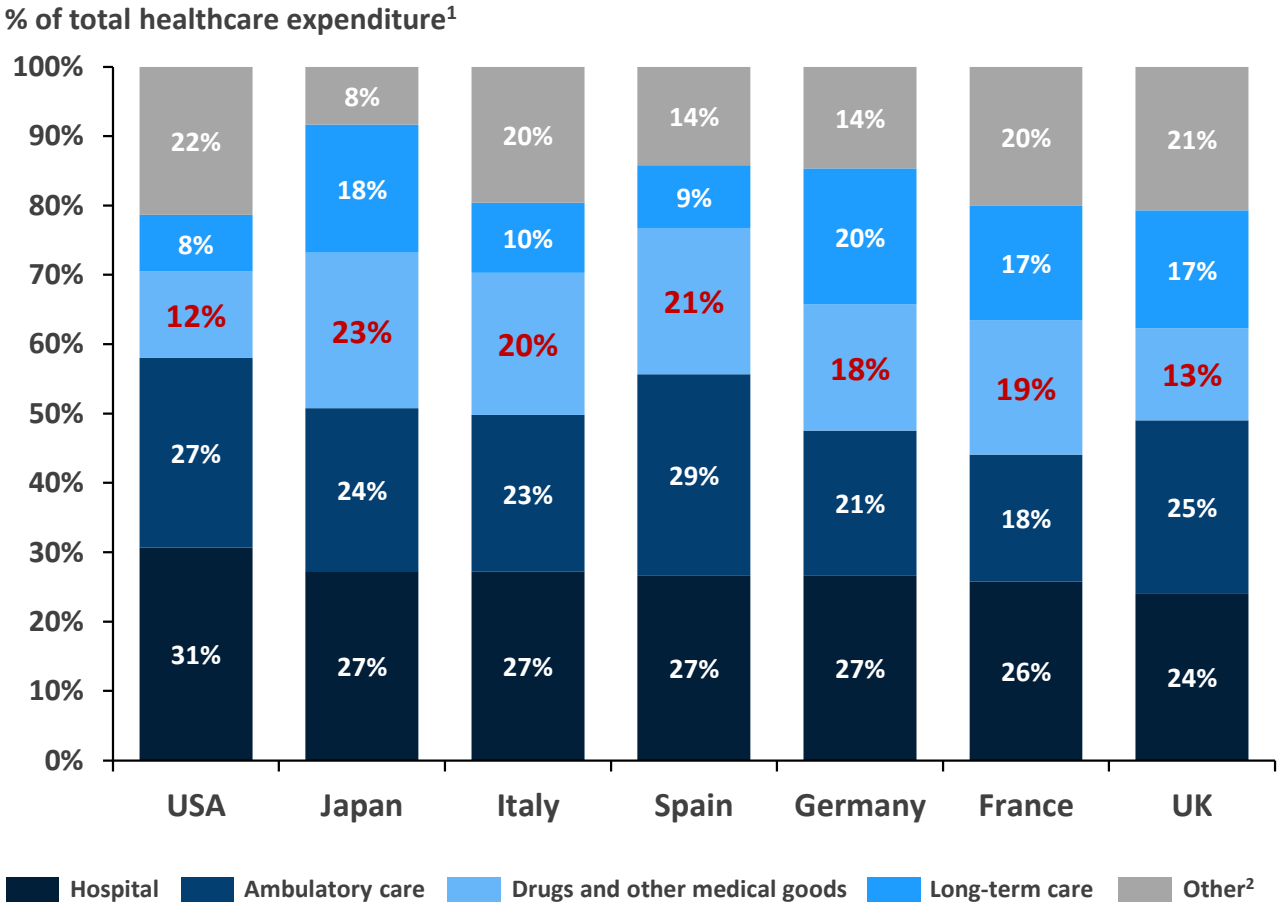
Sources: World Bank and OECD databases (January 2023) – National Health Expenditure database: Centers for Medicare & Medicaid Services (January 2023) – Smart Pharma Consulting analyses

[1] *Or latest data available*

The cost of drugs is far behind that of hospital and ambulatory care, yet this segment is targeted by governments because it is technically and politically easier to control

2

Breakdown of healthcare expenditure per country (2021)



- Drugs represent the 3rd largest source of healthcare expenditure in most major developed countries
- Drugs are typically the easiest segment to apply cost-containment measures on, as decisions are:
  - Made by payers (either public and/or private), with a limited bargaining power of suppliers
  - Much better accepted by citizens than restriction measures on the other segments

Sources: OECD database (January 2023) – Center for Medicare & Medicaid Services (February 2023) – Smart Pharma Consulting analyses

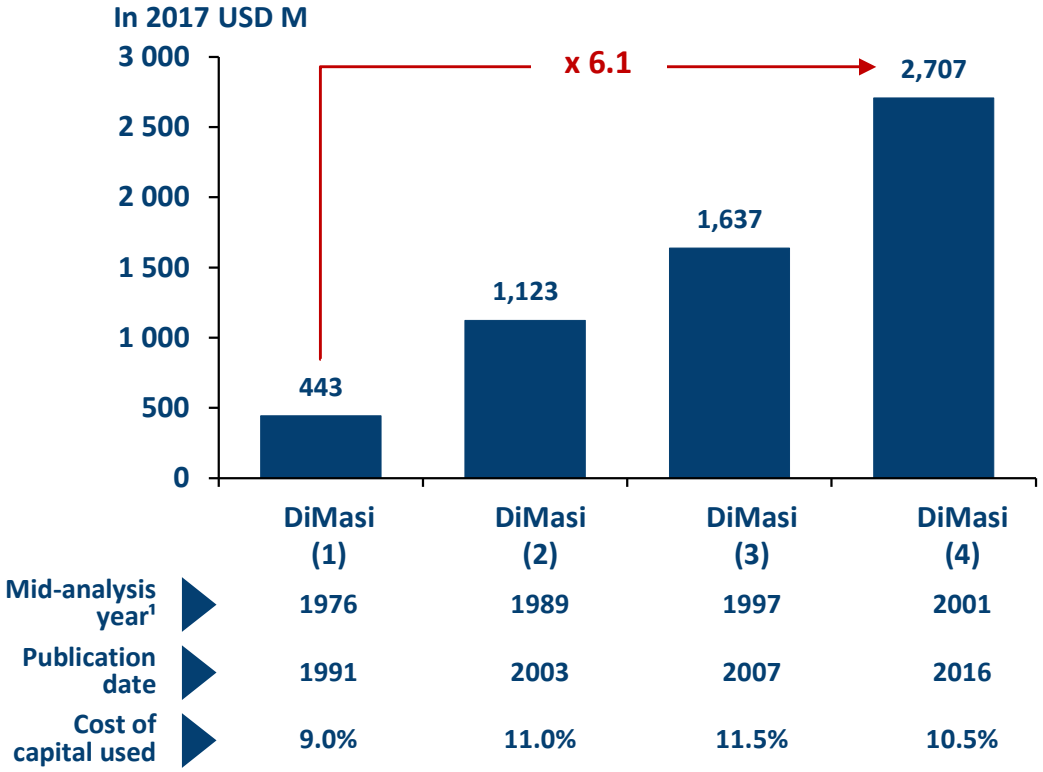
[1] Or latest data available – [2] Other expenditures include ancillary services, preventive care and governance, healthcare system and financing administration

The analysis of four studies carried out with the same methodology shows that the development cost of new drugs has more than sextupled over the last three decades

3

Evolution of R&D costs

Estimated capitalized cost per approved new drug (pre-tax)



Note: For the sake of comparability, all values are adjusted to USD 2017 prices using data of the US GDP implicit price deflator from the US. Bureau of Economic Analysis. The GDP implicit deflator shows the rate of price change in the economy as a whole; being the ratio of GDP in current local currency to GDP in constant local currency

- The increase of the capitalized R&D costs per approved new drug, between 1991 and 2016 is explained by:
  - Growth of out-of-pocket costs, especially clinical trial spending (x10.8 vs. x3.9 for preclinical spending)
  - Decrease of the success rate to reach approval from phase I (23% vs. 12%)
  - Overall increase of the used cost of capital
- However, these assumptions of cost of capital seem overestimated compared with available data from NYU[2] Stern School of Business for biotech products (9.2% for biotech and 7.7% for traditional pharma companies)

Sources: DiMasi (1991) – DiMasi et al. (2003) – DiMasi, Grabowski (2007) – DiMasi (2016) – Cost of Capital, NYU Stern School of Business (January 2016) – Implicit price deflators for GDP, Bureau of Economic Analysis – Smart Pharma Consulting analyses

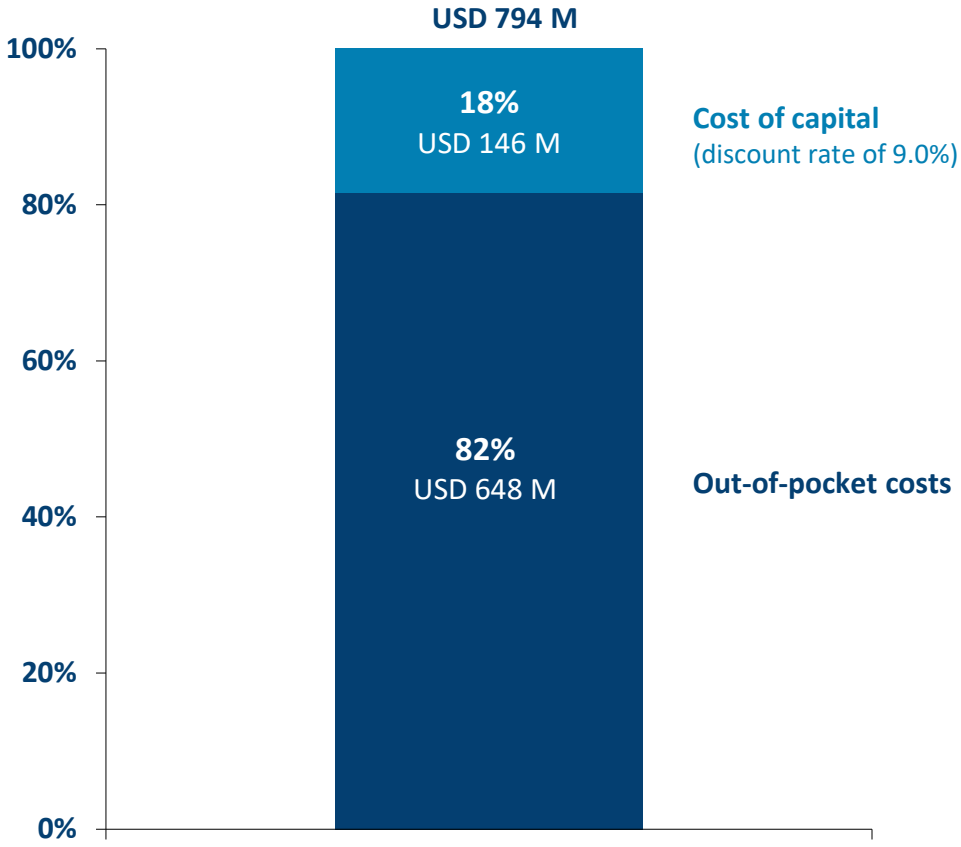
[1] Products with first testing in humans over the analyzed period – [2] New York University

This study, published in the JAMA Internal Medicine, estimates the median cost of developing a single cancer drug at USD 794 M, including a 9% per annum cost of capital

3

R&D costs estimates for oncology drugs (2017)

Estimated 2017 capitalized R&D cost per new cancer drug[1]



- The 10 drugs included in the study had a medium development time of 7.3 years
- The median cost of drug development was estimated at:
  - USD 648.0 M
  - USD 757.4 M (with a 7% per annum cost of capital[2])
  - USD 793.6 M (with a 9% per annum cost of capital)
- With a median time of 4.0 years since approval, the total revenues from sales of these 10 drugs since approval was USD 67.0 B compared with total R&D spending of USD 7.2 B (USD 9.1 B, including 7% cost of capital)

Source: V. Prasad et al. in JAMA Internal Medicine (November 2017) – Smart Pharma Consulting analyses

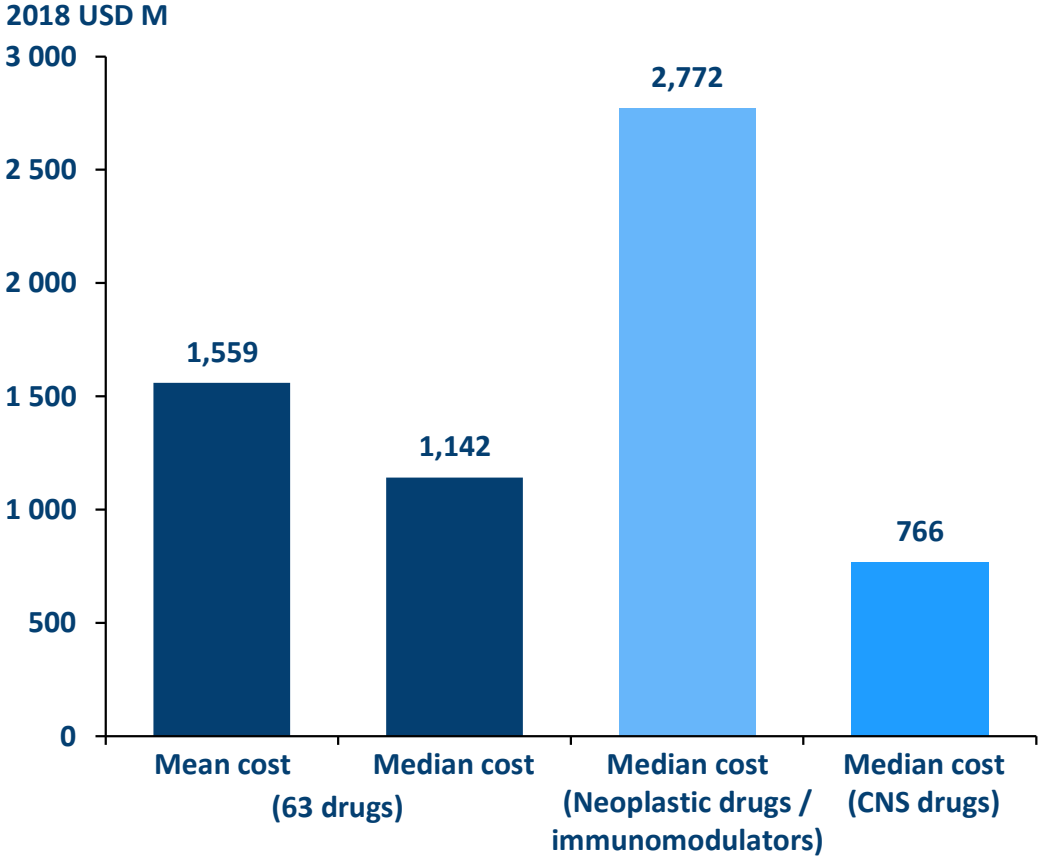
[1] Cumulative R&D spending was estimated from initiation of drug development activity to date of approval – [2] Opportunity cost

This study confirms the important variability of R&D estimated costs, depending on the products analyzed, the calculation method and the underlying assumptions

3

R&D costs estimates for drugs (2018)

Estimated 2017 capitalized R&D cost per new drug[1]



- The mean cost of R&D was estimated at USD 1,559 M…
- …and the median R&D cost at USD 1,142 M, after accounting for the costs of failed trials
- The median costs by therapeutic area ranged from:
  - USD 766 M for CNS drugs, to
  - USD 2,772 M for antineoplastic and immunomodulating drugs
- The R&D costs were capitalized at a real cost of capital rate of 10.5% per year

Source: O. J. Wouters et al., JAMA (March 3, 2020), corrected on September 20, 2022 – Smart Pharma Consulting analyses

[1] Including the costs of failed trials ; data (mainly coming from US SEC, FDA database and ClinicalTrials.gov) were analyzed on 63 new products approved by the FDA between 2009 and 2018

Remicade, the first marketed anti-TNF agent, has revolutionized the management of autoimmune diseases by introducing biotherapies into the therapeutic arsenal

4

Remicade (infliximab): Autoimmune diseases

Drug history

- Infliximab, a chimeric monoclonal antibody, was discovered in 1989 by Jan Vilcek and Jungmin Le at New York School of Medicine
- They collaborated with Centocor, a biotech company, acquired by Johnson & Johnson in 1999, to develop the drug
- Infliximab (Remicade), is the first anti-TNFα, which obtained its initial approval in 1998 followed by approval in another five adult and two pediatric chronic inflammatory conditions
- J&J entered into an agreement with Schering-Plough[1] to distribute the product in Europe, Russia and Turkey
- In 2017, Remicade was ranked 4th amongst best-selling prescription drugs of all time

Impact on patients' life

- Remicade is indicated in different autoimmune diseases by directly addressing the inflammatory mechanism (e.g., IBD[2], rheumatoid arthritis, psoriasis)
- Before the 2000s, conventional treatments (e.g., methotrexate) were the only therapeutic option...
- ...and did not stabilize patients in the long term
- As a new treatment option, Remicade allowed to considerably improve patients' life with for example the:
  - Slowing down of the disease progression
  - Recovery of mobility
  - Decrease in joint pain

Sources: Johnson & Johnson and MSD press releases – R. Melsheimer et al. in Biologics: Target and Therapy (2022) – Smart Pharma Consulting

[1] Acquired by MSD in 2009 – [2] Inflammatory bowel diseases (i.e., Crohn Disease, Ulcerative Colitis)

Gleevec is an extraordinary innovation, developed in a record time by Novartis, which allows to treat in a very effective way, chronic myeloid leukemia

4

Gleevec[1] (imatinib): Chronic myeloid leukemia (CML)

NOVARTIS

Drug history

- Imatinib (Gleevec) was discovered in the late 90s by scientists at Ciba-Geigy, that became Novartis after the merger with Sandoz in 1996
- The first clinical trial of Gleevec took place in 1998, and showed exceptional results
- Novartis made the product its priority, despite the forecasted low business potential of the product, at that time
- Gleevec was approved by the US FDA in 2001, less than 3 years after the first clinical trial…
- …which is significantly less than the standard development duration

Impact on patients' life

- Imatinib, a tyrosine kinase inhibitor, is an oral therapy that directly targets the origin of CML
- Before imatinib, people with chronic myeloid leukemia had a life expectancy of four to five years after diagnosis
- Clinical results showed:
  - A complete hematological response in 98% of patients
  - An overall survival rate of 89% at 5 years (vs. 30% before Gleevec)
  - A relapse rate of only 17%
- Gleevec is now used to treat other cancer types (e.g., skin cancer, digestive tract cancer)

Sources: Gleevec: The breakthrough in cancer treatment (2008) – Smart Pharma Consulting

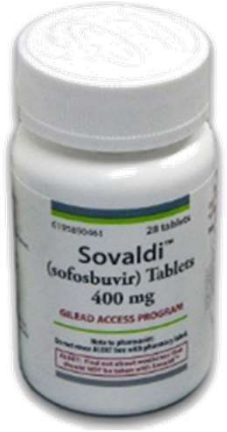
[1] Also commercialized as Glivec, outside of the US

Sovaldi, approved at the end of 2013 and commercialized by Gilead Sciences, has revolutionized the care of hepatitis C, with a definitive cure in 12 to 24 weeks in over 90% of patients

4

Sovaldi (sofosbuvir): Chronic hepatitis C infection

GILEAD



Drug history

- Sofosbuvir was discovered in 2007 by Michael Sofia, a Pharmasset scientist, and the drug was first clinically tested in 2010
- In 2011, Gilead Sciences bought Pharmasset for about USD 11 B and got the FDA approval in December 2013
- The first year of commercialization, Sovaldi sales exceeded USD 10 B
- No generics of Sovaldi are currently marketed...
- ...but price reductions have been agreed to facilitate access to the treatment

Impact on patients' life

- Hepatitis C virus causes inflammation of the intestine which can lead to serious consequences (cirrhosis or cancer)
- The direct antiviral drug is effective for all HCV types, in association with ribavirin or interferon
- At one tablet per day for 12-24 weeks, Sovaldi is a definitive cure with very few side effects
- The treatment has proven to be effective in over 90% of patients
- Previously, treatment strategies relied on strengthening the patient's immune system
- The drug has paved the way for global eradication of the hepatitis C virus

Sources: Gilead press releases – HepCoalition website –
Hepatitis C treatment: a short history of Sofosbuvir and Sovaldi (2017) – Smart Pharma Consulting

Zolgensma, a gene therapy marketed by Novartis, but partly developed via public research, cures children with spinal muscular atrophy with a single injection

4

Zolgensma (onasemnogene abeparvovec): Spinal Muscular Atrophy (SMA)

Drug history

- Zolgensma gene therapy was pre-clinically developed by Genethon[1] and the CNRS[2]
- The clinical studies were delegated from 2013 onwards to the US biotech AveXis, which had the necessary financial resources
- In 2018, after the success of the clinical trials, Genethon and the CNRS granted a license to AveXis,...
- ...acquired the same year for USD 8.7 B by Novartis which finally obtained an FDA approval in 2019
- With a price of more than USD 2 M per patient, Zolgensma was the most expensive drug in the world at its launch

Impact on patients' life

- SMA is a rare neuromuscular disease, extremely physically disabling or fatal depending on the type
- Zolgensma, by a single injection, allows to overcome the deficiency of the responsible gene for the disease
- The therapy is indicated in children under 2 years of age and to date, more than 2,300 patients have benefited from it worldwide
- Phase III clinical trial showed a 95% survival rate, compared to 50% based on the natural history of the disease
- Data in pre-symptomatic patients showed a 100% survival rate

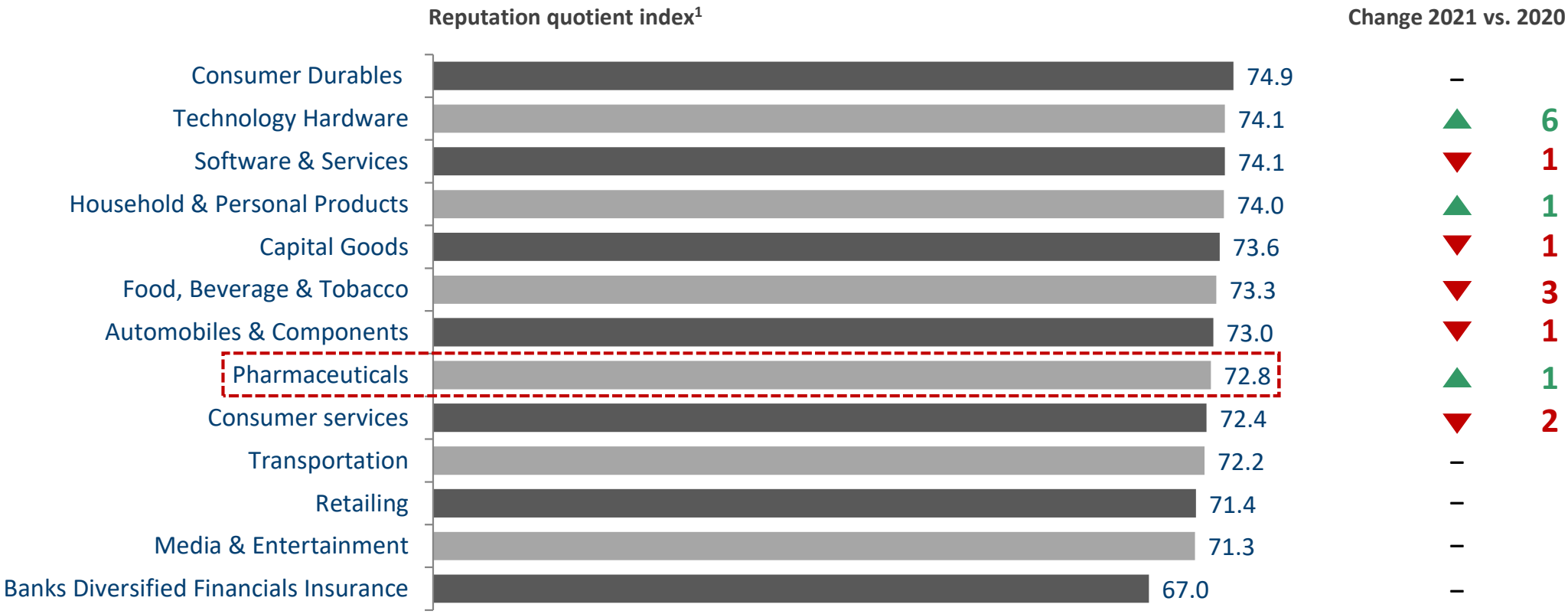
Sources: AFM Telethon website – Novartis press releases – Smart Pharma Consulting

[1] AFM Telethon laboratory, French association fighting against myopathies – [2] French national center for scientific research

If the pharma industry's role to fight the Covid-19 pandemic has contributed to improve its reputation, it is still behind consumer goods and tobacco, for reasons that are mainly structural

5

Corporate reputation ranking by sector (2021)



"Distrust of pharma companies stems from a belief that they have deviated from their mission of improving public health to focus on increasing profits"

Sources: 2021 Global RepTrak 100 Study – Smart Pharma Consulting analyses

[1] Based on 7 indicators: Products/Services, Innovation, Workplace, Governance, Citizenship, Leadership, Financial performance; and with score > 80 = Excellent/top Tier, 70-79 = Strong/Robust, 60-69 = Average/Moderate, 40-59 = Weak/Vulnerable, < 40 = Poor/Bottom Tier

While pharma companies contribute to save and improve health of billions of people, they are regularly and heavily criticized by stakeholders for the manner they accomplish their mission

5

Drivers of pharma companies' reputation (1/2)

Main criticisms from different stakeholders (e.g., governments, HCPs, media, citizens)

- High drug costs limiting access to the wealthiest countries and social classes
- Massive profits (~32%)[1] to enrich shareholders
- Aggressive patent protection strategies, limiting access to innovative medicine
- Unethical practices to influence the prescription of HCPs
- Lack of transparency (e.g., drug pricing, clinical study results, collaborations with KOLs, etc.)

Mission: contribution to prolong life, to improve health and wellbeing of people by developing drugs and vaccines

Sources: Smart Pharma Consulting analyses

[1] Expressed in EBITDA (Earnings before interest, taxes, amortization and depreciation) as a percentage of sales

There is a mismatch between the pharma companies' mission, their corresponding activities and the way they implement them

5

Drivers of pharma companies' reputation (2/2)

Pharma companies claim that their **mission** consists in **improving** and **extending people's lives** by offering products and related services

Actions enabling to accomplish their mission are **not well-known**, nor **well-understood** by stakeholders, which **lead** to **distrust** and **suspicion**

If **stakeholders** agree with pharma companies' mission…
… they **consider** that corresponding **actions are not fully in line**

Sources: Smart Pharma Consulting analyses

Pharma companies will remain very profitable, despite increasing price pressure and R&D costs, while their reputation could improve by raising awareness about their breakthrough drugs

Conclusions

Pharma Market Attractiveness

- Pharma companies' profitability should decline by end of 2027, but will remain highly profitable, provided they keep on improving their operational and organizational efficiency

Drug Price Pressure

- Knowing that payors will keep on increasing drug price pressure, pharma companies should negotiate a "Drug Price Stability Pact" based on various criteria such as medico-economic value, commitment to invest in R&D, manufacturing, logistics, to safeguard employment

R&D Cost of Drugs

- R&D cost varies significantly from one source to another, due to differences in therapeutic areas, methodologies and cost assumptions used, ranging from USD 0.8 to 2.7 Bn per drug

Impact of Drugs on people's life

- Pharma companies contribute to improve and extend people's life by discovering and marketing breakthrough drugs (e.g., Remicade, Gleevec, Sovaldi, Zolgensma)

Companies' reputation

- To improve their average reputation, pharma companies should carry out activities in line with their mission, be compliant with the code of ethics and communicate faithfully

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Global Pharma Market
& Covid-19 Impact

2019-2024 Perspectives

"Wrong decisions are often due to weak market insights"

POSITION PAPER July 2020

Smart Pharma Consulting proposes to share insights regarding 8 topics that are essential to play and to win in the pharmaceutical industry

Introduction

- This position paper provides specific insights for those who want to anticipate the global pharma market evolution, while considering the impact of the Covid-19
- We have selected 8 topics for which we share our knowledge and thoughts:

Part A - Pharma Market Insights

1. Size and Dynamics by Geography
2. Size and Dynamics by Business
3. Attractiveness
4. Access to Market

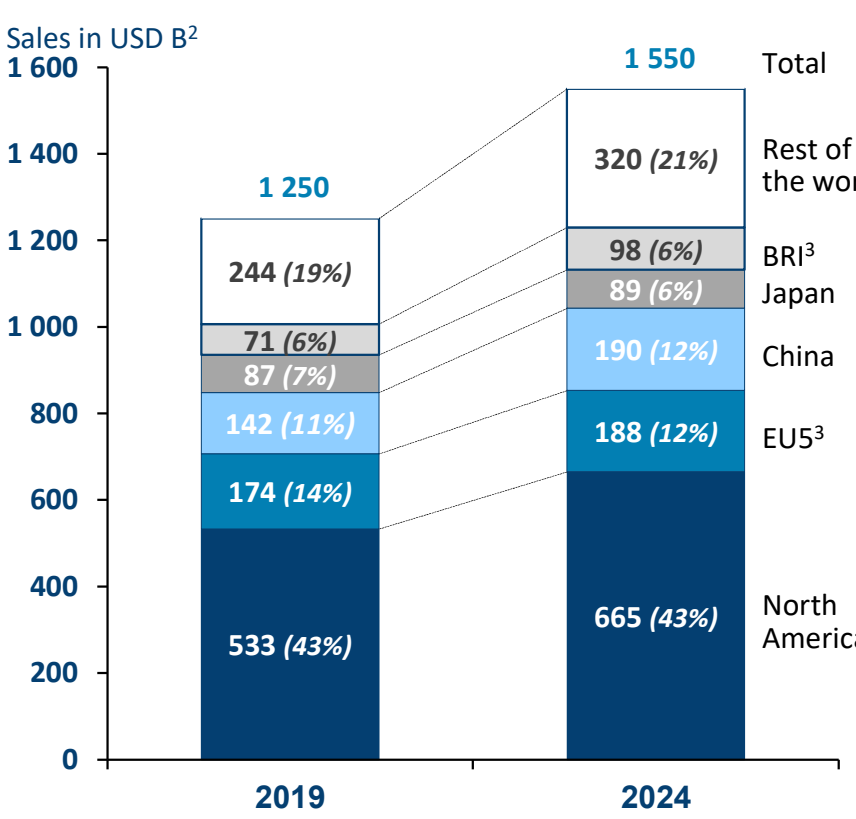
Part B - Pharma Company Insights

5. Strategic Directions
6. R&D Operations
7. Manufacturing & Supply Chain Operations
8. Medico-Marketing & Sales Operations

Sources: Smart Pharma Consulting

Sales of EU5[1] should grow slowly by 2024 due to stringent cost containment measures leading to a two-point decrease of their weight in the global pharmaceutical market

Part A – Pharma Market Insights – 1. Size and Dynamics by Geography



	CAGR	Contribution to growth
Total	+4.4%	
Rest of the word	+5.6%	+25%
BRI[3]	+6.6%	+9%
Japan	+0.5%	+1%
China	+6.1%	+16%
EU5[3]	+1.6%	+5%
North America[4]	+4.5%	+44%

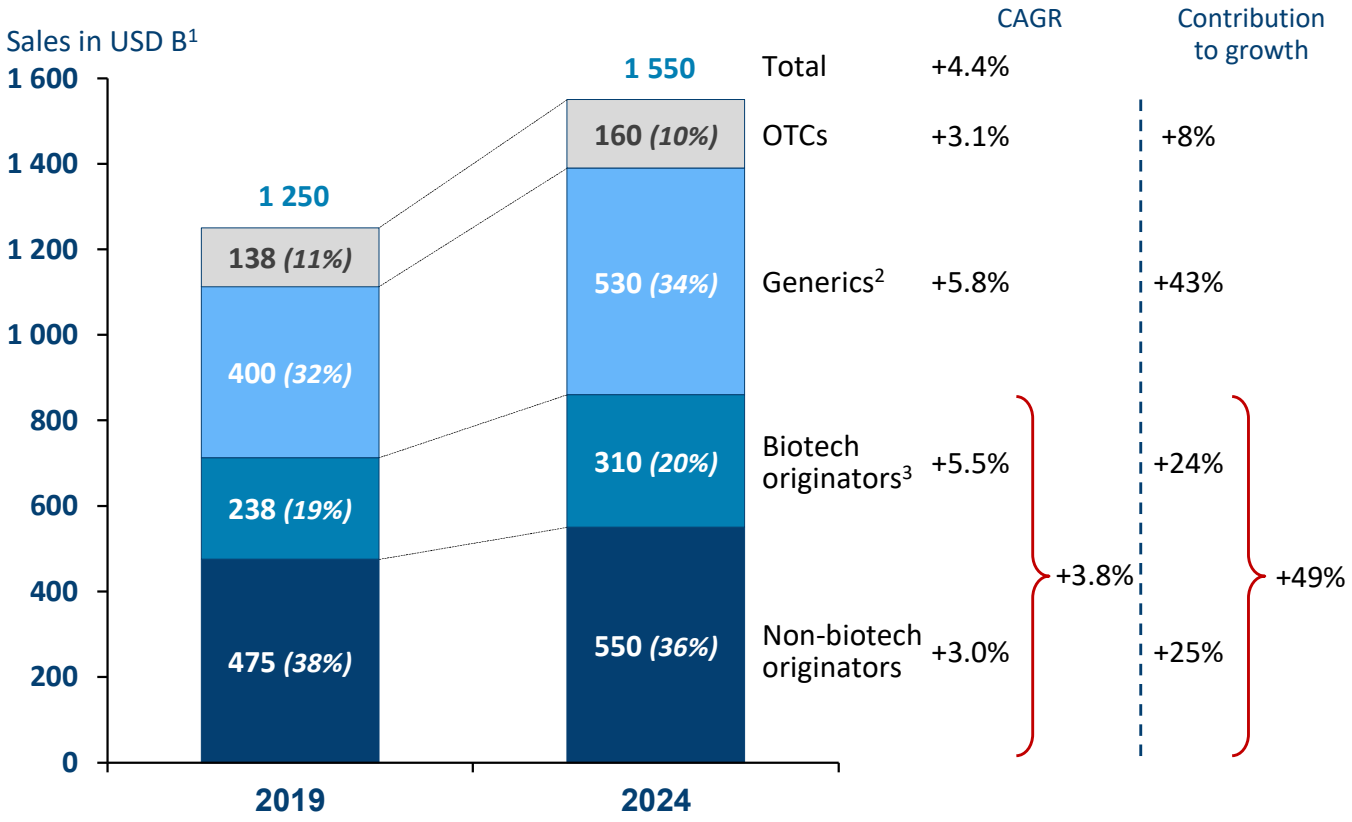
- The global pharma market is expected to grow with of a CAGR of +4.4% by 2024 including the impact of Covid-19, that should negatively impact volumes over 4 to 6 months in 2020 and lead to higher pressure on prices worldwide in the next 5 years
- EU5 countries account together for only 14% of the global pharma market (Germany: 4%, France: 3%, Italy: 3%, UK: 2% and Spain: 2%) and should see their weight drop by 2 points by 2024, due to higher price pressure than in the average of the other countries
- North America should continue to weigh for 43% of the global pharma market in value and contribute to 44% to worldwide market growth over the 2019 – 2024 period

Sources: IQVIA Institute (March 2020) – Smart Pharma Consulting estimates

[1] France, Germany, Italy, Spain, UK – [2] Ex-factory price before rebates – [3] Brazil, Russia, India – [4] USA and Canada

All the business segments of the pharma market will be affected by the Covid-19 crisis through a volume effect in 2020 and a strong price pressure over the 2019-2024 period

Part A – Pharma Market Insights – 2. Size and Dynamics by Business



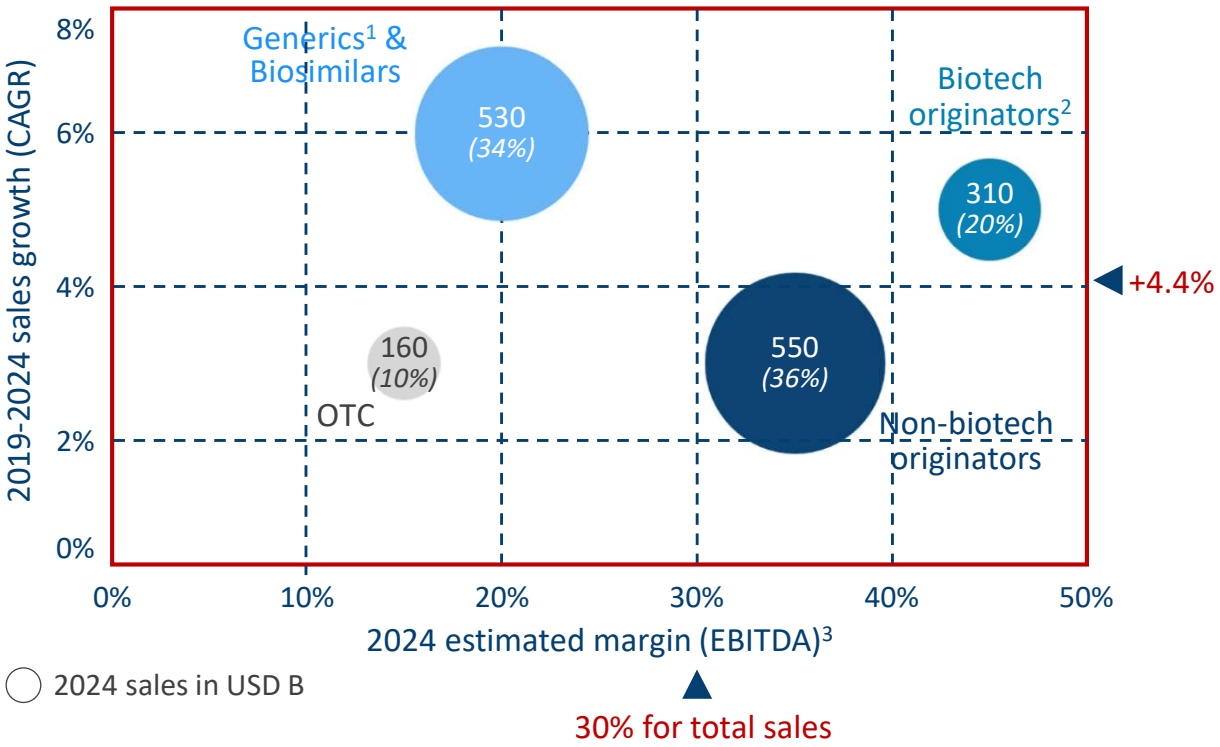
- OTCs, which should remain the smallest segment of the global pharma market, has been significantly affected by the Covid-19 crisis, especially during the lockdown period and the following months
- Generics and biosimilars should continue to grow in volume due to patents expiry, but pressure on prices should intensify on this market segment
- Biotech originators should become the main driver of innovation in the next 5 years
- Non-biotech originators should be less dynamic, but they should remain the largest segment of the global pharma market

Sources: IQVIA Institute (January 2019) – Smart Pharma Consulting estimates

[1] Ex-factory price before rebates – [2] Including branded and unbranded generics and biosimilars, excluding OTC – [3] Excluding biosimilars, already included in the "Generics" segment

By 2024, the sales growth of the pharma market should be essentially driven by generics and biotech originators, but pharma companies should lose two points of profitability

Part A – Pharma Market Insights – 3. Attractiveness



- By 2024, the global pharma market should reach USD 1,550 B and grow at a pace of +4.4% per year, i.e. 1.8 point of percentage above the forecasted worldwide economic growth, but 0.6 point below the pre-Covid-19 estimates
- The average EBITDA of the Pharma industry should decrease from ~32% in 2019 to ~30% in 2024, mainly as a result of increasing price pressure
- In 2024, the average profitability of pharma companies should remain more than 4 times higher than the average of all other business sectors
- The biotech segment will remain very attractive but biosimilar competition will ramp up
- The OTC segment appears to be the least attractive

Worldwide economic growth – CAGR 2019-2024: +2.6%

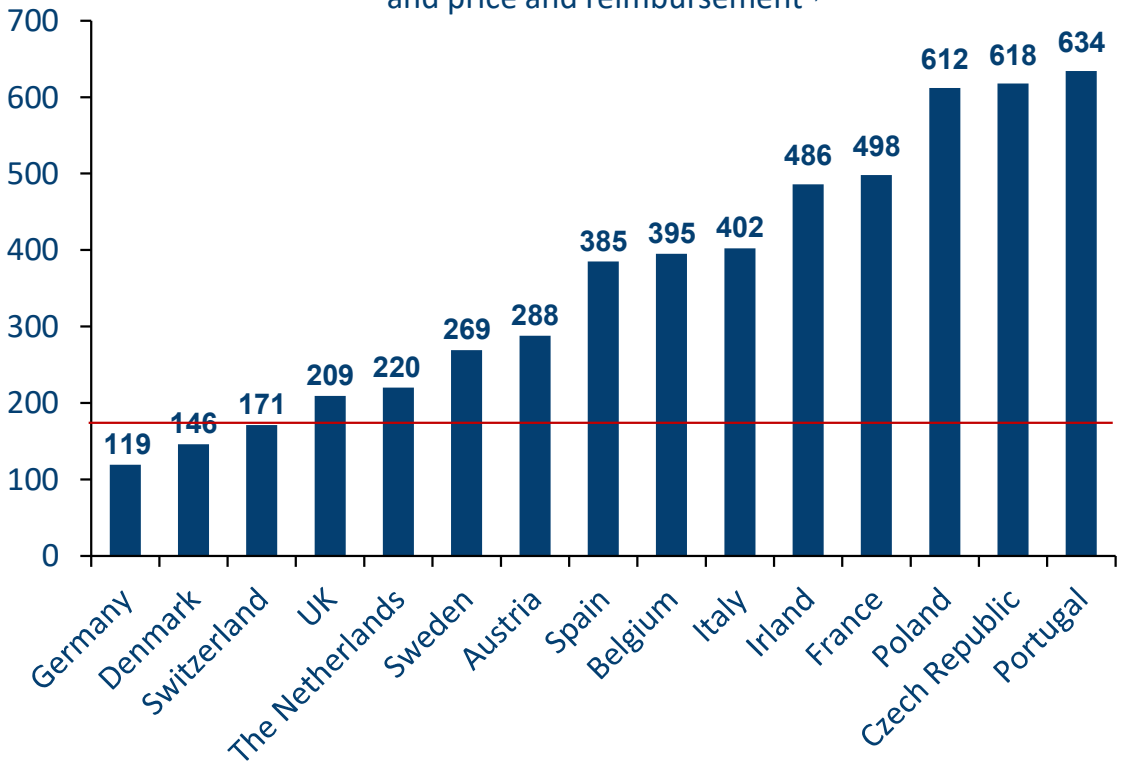
Sources: IQVIA Institute (January 2019) – Smart Pharma Consulting estimates

[1] Including branded and unbranded generics and excluding OTC – [2] Excluding biosimilars, already included in the "Generics" segment – [3] Earnings before interest, taxes, amortization and depreciation

The Covid-19 crisis will have a negative impact, irrespective of the countries, over the 2019-2024 period due to lockdown restrictions and its economic consequences

Part A – Pharma Market Insights – 4. Access to Market

Median time in days between marketing authorization and price and reimbursement[1,2]



2018 analysis based on a sample of 121 products approved by EMA (European Medicines Agency) between January 2015 and December 2017

- The Covid-19 pandemics should defer the availability of new medicines in all countries, due to:
  - Lockdown measures having delayed the assessment of drug registration and market access negotiations
  - The induced economic crisis which will lead to stricter cost containment measures
- In most European countries, delays between marketing authorization and drugs availability exceed the 180 days recommended by the European Commission
- The UK and Germany have no delay since reimbursement and price negotiations occur once the product is in the market
- Delays vary widely, due to the time required to obtain their inclusion on reimbursement list and to agree on a price
- Delays are harmful for pharma companies which face a loss of revenues[1] and patients who do not have access to innovation
- The slowing down of the pricing and reimbursement approval process is used by several countries to contain the cost of new drugs with a price likely to be higher than the existing ones
- The delay is also often due to the difficulties for the drug pricing committee and the pharma company to come to an agreement

Sources: Patients W.A.I.T. Indicator – EFPIA (April 2019) – Smart Pharma Consulting analyses

[1] Excluding early access programs for breakthrough innovations (e.g., ATU in France) –
[2] For drugs receiving their first marketing authorization between 2015 and 2017

Drug price pressure imposed by public or private payers is going to intensify, more than ever, irrespective of the value created

Part A – Pharma Market Insights – 4. Access to Market

Historical Trends

- Payers[1] put in place increasingly drastic measures to control drug cost growth
- Drugs account for ~20% of the total healthcare costs[2], but are used by payers as the main lever of cost-containment[3]
- HTA[4] agencies and drug pricing committees control drug cost through:
  - The definition of the target population
  - The positioning of the drug in the therapy
  - The price set per unit of the drug
  - A capping of the drug turn-over reimbursed
- Progressive shift from pay-per-product to pay-per-performance pricing model

2020 Impact

- Delays in drug assessment due to lockdown (part-time activities, backlog assessment put on hold)
- Redirected priorities to assess technologies related to the Covid-19
- Price negotiations becoming tougher due to tighter budgets resulting from financial disruption, across the board
- Considering the anticipated worldwide financial recession, HTAs and payers should put more emphasis than ever on assessing the value of drugs for patients and healthcare systems

2021 – 2024 Impact

- Strong squeezes drug (innovative, me-toos, biosimilars, generics, vaccines) prices which are likely to affect by ~2 points the average profitability of the pharma sector
- Value-based pricing models, incl. pay-per-performance, will become the rule, especially for innovative drugs, if the implementation is not too complex
- Generalization of a budget approach by disease (e.g. € 700M budgeted for antidiabetic drugs on a given year) with a mechanism of drawbacks per drug prescriber for that disease

Sources: Smart Pharma Consulting

[1] Either public or private – [2] After the OECD publication "Health at a Glance" (2019) – [3] Cost-containment measures applied to drugs are easy to implement and well accepted by citizens, unlike those applied to hospital, ambulatory care, long-term care, which have a significant deleterious social impact (layoffs, pay cuts) – [4] Health Technology Assessment

Best performers are focused on innovative Rx-bound drugs and generate an important share of their revenues from the USA, which is the most profitable and dynamic market

Part B – Pharma Company Insights – 5. Strategic Directions

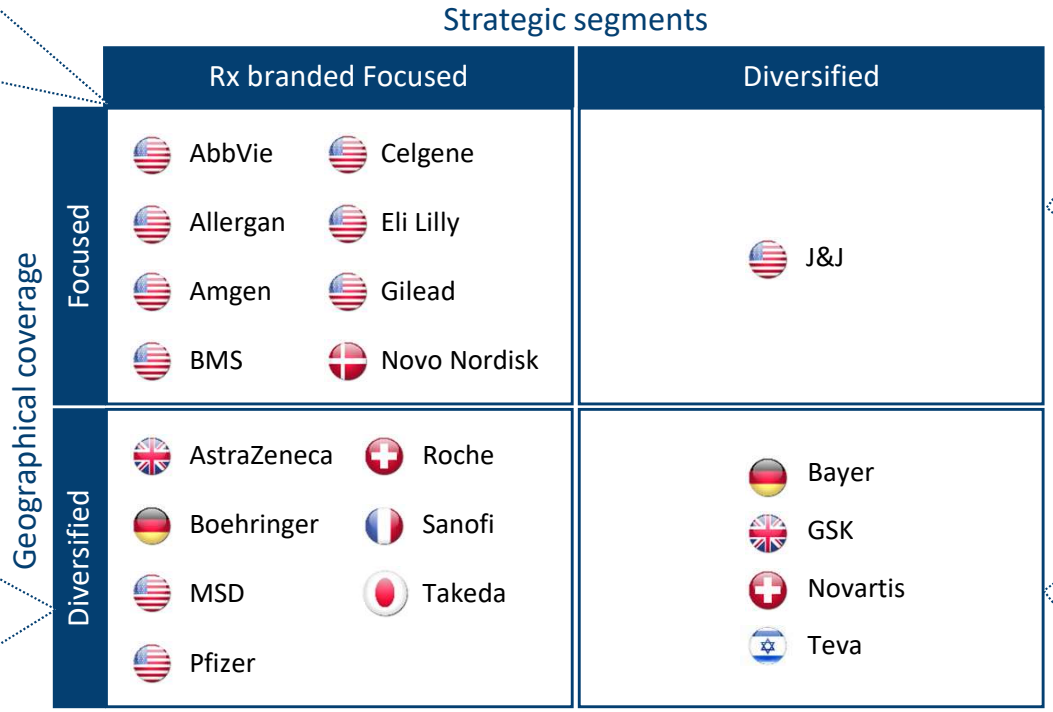
Top 20 pharma companies Strategic Mapping[1]

- Activities concentrated in the USA, EU5[2] and Japan
- Portfolio mainly centered on the innovative branded ethical segment

Higher profitability
Lower growth perspectives

- Strong presence, incl. in Latin America, Africa and Asia[3]
- Portfolio mainly centered on the innovative branded ethical segment

Moderate profitability
Higher growth perspectives



- Activities concentrated in the USA, EU5[2] and Japan
- Broad portfolio incl. generics, OTCs, food supplements, medical devices, vaccines, services, etc.

Moderate profitability
Moderate growth perspectives

- Strong presence, incl. in Latin America, Africa and Asia[3]
- Broad portfolio incl. generics, OTCs, food supplements, medical devices, vaccines, services, etc.

Lower profitability
Higher growth perspectives

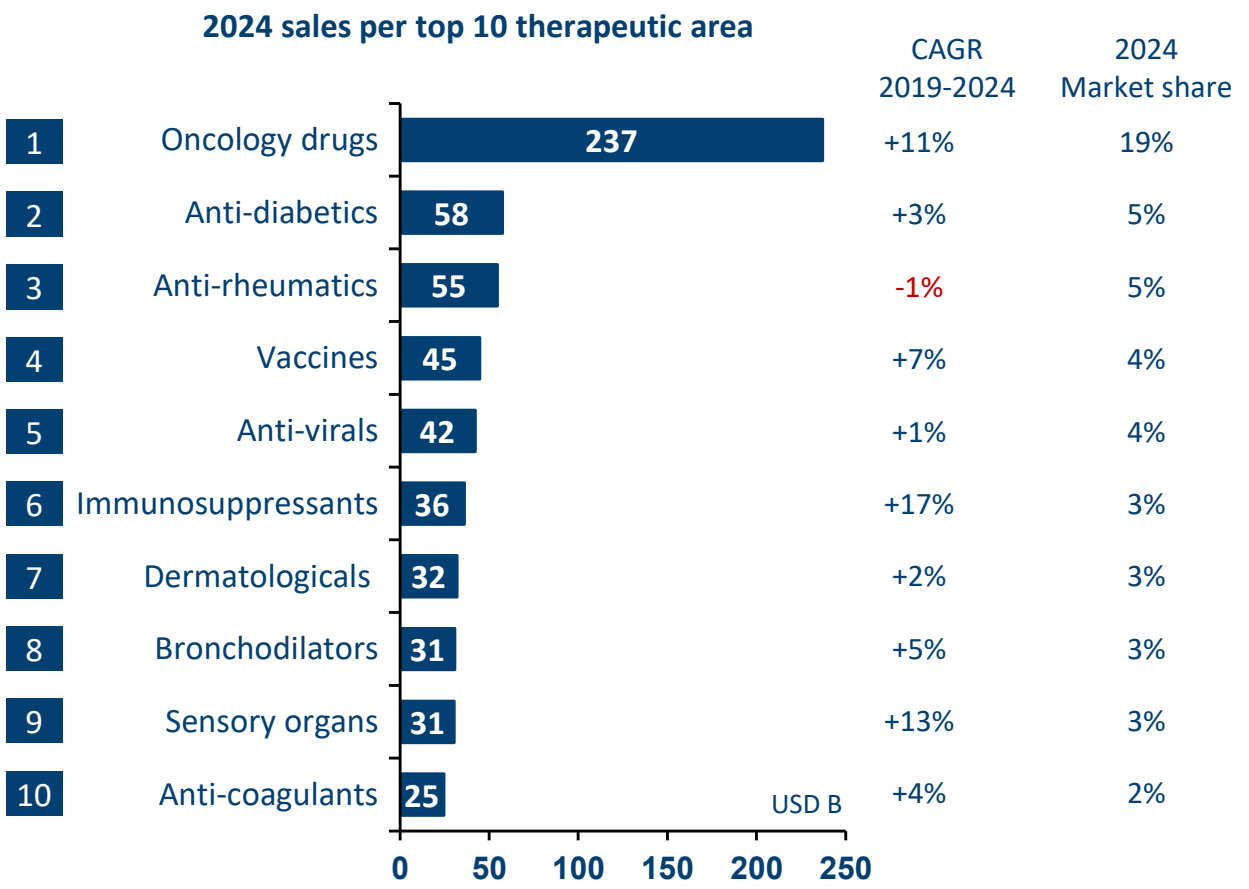
Note: Rx Branded focused: Original Rx-bound drugs and vaccines ≥ 75% of total product sale – Geographically focused: >50% of sales in a single geographical region (e.g. USA, Europe, Japan, etc.)

Sources: Companies annual reports (2018) – Smart Pharma Consulting analyses

[1] Top 20 pharma companies based on their prescription sales – [2] France, Germany, Italy, Spain, UK – [3] Including segments of the population with lower income and/or from rural areas

The important growth in oncology will be mainly driven by anti PD-1 products while immunosuppressants will benefit from an increased incidence of chronic diseases

Part B – Pharma Company Insights – 6. R&D Operations



- The 2024 therapeutic area forecasts shows the steadily increasing weight of specialty products, sustained by the development of new biological drugs
- Oncology prevails as the leading therapeutic area and will be notably driven by the growth of PD-1 inhibitors
- Immunosuppressants will have the highest CAGR through 2024, driven by the incidence of chronic diseases and the use of immunotherapeutic agents in clinical development for other therapeutic areas
- Biosimilars are beginning to make their mark on the anti-rheumatic segment, which should see a decline in its CAGR despite the high drive in sales from JAK inhibitors
- If a vaccine and/or a treatment for the Covid-19 were discovered, the Vaccines and the Anti-virals segments could be boosted over the period

Sources: World Preview 2019 – Outlook to 2024 , Evaluate Pharma (June 2019) – Smart Pharma Consulting estimate

The Covid-19 crisis should contribute to accelerate AI use and further increase partnerships between pharma players to speed up the development of new drugs

Part B – Pharma Company Insights – 6. R&D Operations

Historical Trends

- A lot of hope has been placed in the potential contribution of Artificial Intelligence (AI) to streamline the development of drugs
- In January 2021, for the 1st time, the UK firm, Exscientia, managed to move a drug from the pre-clinical to the clinical stage in 12 months by using AI; which is five times less than what it would have taken without AI
- The use of AI can potentially accelerate timeline and reduce cost of R&D, but most pharma companies are not yet using it

2020 Impact

- The Covid-19 pandemic appears to be a tipping point for the use of AI in accelerating the R&D timeline to find a vaccine or a treatment
- For example, BenvolentAI, in three days, selected six out of more than 370 drug candidates that could be active on the Covid-19, with an AI-based discovery platform
- The Covid-19 crisis has led numerous collaborations, as surprising as the one between the “enemy brothers”, Sanofi and GSK, to co-develop a vaccine

2021 – 2024 Impact

- The value of AI to select the drug candidates likely to have the best efficacy / safety ratio will lead to a significant increase of their use
- Big pharma companies will increase their partnerships with other pharma companies, with public and private research centers and data centers to improve their R&D productivity
- The articles[1] published in the New England Journal of Medicine and the Lancet and then withdrawn due to lack of data reliability will lead much stricter peer review processes

Sources: Smart Pharma Consulting analyses – Exscientia website – BenvolentAI website

[1] Two articles related to the Covid-19

The Covid-19 crisis might lead to relocate the manufacturing of certain essential drugs in Europe, while CMOs[1] should account for ~30% of the drugs produced by the end of 2024

Part B – Pharma Company Insights – 7. Manufacturing & Supply Chain Operations

Historical Trends

- Pharma companies have tried to control or even reduce their manufacturing costs, which account for ~27% of their revenues, by implementing strategies such as:
  - Relocation in low manufacturing cost countries like India or China
  - Outsourcing to CMOs which are flexible and/or have specific assets and expertise (e.g., in biologicals)
  - Shifting from conventional batch to continuous manufacturing system
  - Digitalization of production and distribution to increase efficiency

2020 Impact

- With China and India representing 70 to 80% of the APIs manufactured in the world, the EU, under the pressure of the German and French governments, is going to develop a plan to increase EU sovereignty on medical and pharmaceutical products
- If financial and regulatory incentives are introduced at the EU and/or national levels, some pharma companies may relocate certain drugs in Europe, but it is likely to be limited due to the negative impact of such a move on cost of good sold and thus on their profitability

2021 – 2024 Impact

- Pharma companies will keep on streamlining their manufacturing capabilities by shutting down, spinning off[2] or selling plants[3]
- The outsourcing of drug production should increase from ~25% to ~30% of the volumes, over the period
- To de-risk the supply chain, pharma companies will favor partnerships:
  - With CMOs having an international presence
  - With multiple CMOs in parallel

  Moving from fee-for-service deals to complex joint ventures

Sources: Smart Pharma Consulting analyses – E. Wilson, NS Healthcare, May 25, 2020

[1] Contract Manufacturing Organizations – [2] For instance, Sanofi has recently announced that it will spin off its API business into a separate company by 2022 – [3] In general, to CMOs

Medical Affairs will become, more than ever, essential to engage KOLs and other key stakeholders to take the full benefit of the products pharma companies offer

Part B – Pharma Company Insights – 8. Medico Marketing & Sales Operations

Medical Affairs Operations

Historical Trends

- Medical Affairs operations are increasingly essential to generate and disseminate high-quality scientific data related to:
  - Diseases and corresponding treatments
  - Pharma company's products
- Medical Affairs play a key role in engaging KOLs[1] and other stakeholders[2] by showing how their products improve patient outcomes with clinical and real-world evidence data
- They also gather information on patient unmet needs to direct the R&D

2020 Impact

- The Covid-19 outbreak, and the related lockdown restrictions have led to:
  - Limited interactions with KOLs and other stakeholders
  - Cancellations or transformations of medical meetings[3] into e-meetings
  - Disruptions in the recruitment and follow-up of patients in clinical studies / IISs[4]
- Interactions between Medical Affairs, KOLs and other stakeholders are progressively resuming with the lifting of the lockdown restrictions

2021 – 2024 Impact

- The on-going decreasing efficacy of marketing and sales activities to engage HCPs will make Medical Affairs more and more important, to do so
- Medical Affairs should help key stakeholders prioritize the increasing abundance of scientific data, incl. clinical and real-world evidence data, to make better therapeutic decisions
- Medical Affairs, Market Access and Commercial teams should work closely and in a coordinated way to optimize the perceived value of their products

Sources: Smart Pharma Consulting

[1] Key Opinion Leaders – [2] Such as healthcare professionals, patient advocacy groups, health authorities, payers, etc. – [3] Congresses, symposiums, ad boards, etc. – [4] Investigator-Initiated Studies

Pharma marketing strategies should, more than ever, focus on offering high-value content and building strong relationships, so that to raise HCPs preference for marketed brands

Part B – Pharma Company Insights – 8. Medico Marketing & Sales Operations

Marketing Operations

Historical Trends

- The number of marketing interactions per HCP has significantly decreased
- Marketing initiatives have become much more customer-focused, as shown by the development of services[1] for:
  - Institutions and HCPs to facilitate diagnosis and treatment choices
  - Patients, often through PAGs[2], to improve adherence, quality of life, etc.
- Invitations of HCPs to congresses and to other medical meetings have also significantly dropped and been even stopped by certain pharma companies

2020 Impact

- During the lockdown period[3] and the following months, congresses and other meetings have been digitalized, postponed or even cancelled
- The number of commercial interactions will be lower than in 2019…
- … while the importance of digital channels will significantly increase vs. conventional ones
- Pharma companies are crafting multi- or omni-channel strategies in the hope of securing regular interactions with HCPs, across the year

2021 – 2024 Impact

- AI will be more systematically leveraged to gather actionable insights
- HCPs engagement will take greater account of their individual profile
- HCPs will require high-value marketing content and service offering, while interacting with pharma companies' collaborators
- The marketing battle will be focused on raising HCPs brand preference by leveraging the drug value, the quality of associated services and the corporate reputation[4]

Sources: Smart Pharma Consulting

[1] Conventional or digital, including Apps – [2] Patient Advocacy Groups – [3] Two or three months, depending on the countries – [4] See the "Brand Preference Mix" concept and tools developed by Smart Pharma Consulting: https://smart-pharma.com/wp-content/uploads/2019/07/Stakeholders-Brand-Preference-Mix-2016-EN-web.pdf

To positively influence HCPs, med reps should be able to carry out regular and highly valued interactions – either in-person or digital – and propose them useful services

Part B – Pharma Company Insights – 8. Medico Marketing & Sales Operations

Sales Operations

Historical Trends

- Strong decrease in face-to-face interactions between HCPs and med reps (40 to 50% over the last 10 years)…
- … partially outweighed by virtual contacts
- The youngest generation of physicians (below 40-45 years old) considers medical calls (either in-person or remotely) as useless, most of the time
- Coordination between med reps and MSLs is increasing but remains limited, due to regulatory and compliance barriers
- Sales activities are mainly in-person and still very focused on quantitative aspects

2020 Impact

- During the lockdown period (~2-3 months) in-person and remote interactions between HCPs and med reps have been largely restricted
- 10-15% of HCPs are likely to not accept anymore calls from medical reps, following the Covid-19 crisis
- The proportion of remote vs. in-person calls will increase but their sum will be significantly reduced vs. previous years
- HCPs are more than ever expecting useful and interesting contents from medical reps

2021 – 2024 Impact

- The number of interactions between HCPs and med reps (either in-person or remotely) will further decrease[1]
- To keep on interacting with HCPs, med reps have no choice but to create bespoke service-led interactions[2]
- Content communicated must be adapted to each HCP fields of interest and needs to offer him a high value
- Med reps should orchestrate their interactions, combining different channels, according to the content to convey and to each HCP preference

Sources: Smart Pharma Consulting

[1] By 30% to 40% between 2019 and 2024 – [2] See our position paper: https://smart-pharma.com/wp-content/uploads/2019/12/Service-led-Medical-Calls-VW.pdf

The Global Pharmaceutical Market will remain very attractive despite a much stronger pressure on drug prices, partly outweighed by early and broader access to patients

Conclusions

Global Pharma Market Perspectives 2019-2024

Market Opportunities

- Despite the Covid-19, the pharma market should increase by 4.4% p.a., on average, over the 2019-2024 period
- Access to high quality healthcare is the top priority of governments and citizens
- Boosted opportunities to discover new treatments – such as for a Covid-19 vaccine – through partnerships:
  - Public-Private with academics[1] or public funds[2]
  - Private-Private with other pharma companies[3]

Market Threats

- Increasing price pressure on all categories of drugs (innovative or not, reimbursed or not) from public and private health insurers; and from patients for OTCs
- Higher risks and stricter regulations re. R&D and registrations, leading to higher costs to launch innovations
- Increasing difficulties to interact with healthcare professionals to inform them or create partnerships due to lack of interest and time, and regulatory constraints

Implications

- The Global Pharma Market will remain one of the most dynamic and profitable industrial sectors over 2019-2024, despite a decrease from 5.0% to 4.4% of its CAGR and from 32% to 30% of its profitability, due to the Covid-19 pandemic
- Drastic budget constraints of payers and willingness of governments to give patients, early and broad access to innovations, will lead pharma companies to accept lower prices than in the past that should be partly offset by higher volume sold

Sources: Smart Pharma Consulting

[1] AstraZeneca and Oxford University in the UK – [2] Sanofi and the BARDA (Biomedical Advanced Research and Development Authority) in the USA – [3] Sanofi and GSK biologicals

The future of pharma companies should be bright, provided they adopt a focused strategy, keep on improving their operational efficiency and design a lean organization

Conclusions

Global Pharma Companies Perspectives

Pharma Companies Strengths

- Improving portfolio management with a more focused strategy on the most attractive strategic segments
- Breakthrough innovative drugs to come
- Increased manufacturing efficiency with Artificial Intelligence
- Better clinical studies quality and development of real word evidence data contributing to optimize drugs benefits
- Reduction or removal of marketing and sales investments having no or limited business impact

Pharma Companies Weaknesses

- Weak negotiating power of pharma companies vs. public or private payers (e.g., HMOs in the USA)
- Lack of robust strategy as shown by frequent changes of priorities amongst numerous pharma companies[1]
- Rigidity and complexity of internal processes preventing pharma companies from optimally seizing opportunities and addressing threats[1]
- Underperforming marketing and sales investments

Implications

- R&D-based companies should focus on a limited number of attractive TAs and countries with the USA being the top priority
- The potential for efficiency and efficacy improvements along the value chain of pharma companies is important, especially in R&D, marketing and sales operations
- Pharma companies' organizations should need to simplify their processes and become further agile

Sources: Smart Pharma Consulting

[1] See the position paper "Best-in-class Pharma Strategy Crafting": https://smart-pharma.com/wp-content/uploads/2019/07/Best-in-class-Pharma-Strategy-WFV.pdf

Best performing pharma companies have in common to market better drugs, offer highly valued services and have a good reputation, driving the preference of their stakeholders

Conclusions

Strategic Priority: Fight for Key Stakeholders Preference

Innovative Product Portfolio

- Develop innovative drugs to address public health priorities as set by governments (e.g., cancers, neuro-degenerative, infectious and cardio-metabolic diseases) at an affordable and acceptable price for payers
- Endeavour to enter first markets with innovations and avoid me-too products with no or minimal incremental added value
- Carry out robust clinical studies to raise early confidence of key stakeholders:
  - Health authorities and payers to ease market access
  - HCPs for earlier adoption
- Complete clinical studies with RWE[1] data

Highly Valued Services

- Offer services highly valued by key stakeholders (e.g., policy makers, payers, HCPs, patients and/or PAGS[2])…
- … and related to the company products (services around the pills) to enhance the perceived value of the latter
- Thus, these services should be useful, interesting, convenient and properly executed
- Better communicate about high added-value services proposed, so that to enhance stakeholders' preference for the drug sold by the company

Good Corporate Reputation

- Build a stronger corporate reputation[3], better than competition, by:
  - Offering highly valued drugs at an affordable price
  - Offering highly valued services to key stakeholders
  - Communicating on R&D activities and product pipeline
  - Investing in R&D projects[4] in strategic markets
  - Strengthening the skills and ethical behavior of collaborators
  - Developing a good working atmosphere …
  - … and possibly going beyond CSR[5] legal obligations

Sources: Smart Pharma Consulting

[1] Real World Evidence data – [2] Patient advocacy groups – [3] See the position paper "How to create a superior Pharma Corporate Reputation?": https://smart-pharma.com/wp-content/uploads/2019/07/Pharma-Corporate-Reputation-VF.pdf – [4] And to a lesser extent in distribution or manufacturing facilities – [5] Corporate Social Responsibility

Smart Pharma
CONSULTING

What Future for Orphan Drugs?

Strategic Insights for Pharma Companies

POSITION PAPER January 2022

Smart Pharma Consulting has carried out an analysis to evaluate the future of the orphan drugs market and to draw strategic insights for pharma companies

Introduction

Context

- In 2021, orphan drugs sales reached USD 156 B, representing ~11% of the worldwide pharma market
- This market segment offers prospects of strong growth and attractive profit margins
- With orphan drugs currently available for only ~5% of rare diseases, the future is widely open for investment

Objectives

- The objective of this study was to:
  - Better understand orphan drugs market structure and dynamics
  - Anticipate its evolution by 2024
  - Assess the attractiveness of this market segment for pharma companies
  - Determine the key success factors for market players

Methodology

- Literature search regarding the orphan drugs market and its perspectives by 2024
- Analysis of implications for pharma companies and identification of key strategic challenges

Sources: Smart Pharma Consulting

Rare diseases prevalence is defined as particularly low, and its order of magnitude is quite consistent across different geographical regions

Definitions per geographical region – Rare diseases, orphan drugs, orphan diseases

	Europe	United States	Japan
Rare diseases	▪ Population **< 1 / 2,000**	▪ Population **< 200,000**[1] or ▪ Population **> 200,000** without possibility to **cover the cost of development** and **distribution** by sales on the national territory	▪ Population **< 50,000** or ▪ Population **< 1 / 2,500**
Orphan drugs	▪ Drugs for **prevention**, **diagnosis** or **treatment** of **rare diseases, not developed** by the pharmaceutical industry **under normal market conditions** as the **cost of bringing them** to the market **would not be recovered** by the **expected sales** of drugs without incentives provided, but which **respond to public health need**		
Orphan diseases	▪ Diseases **not adopted** by pharma companies as it provides **little financial incentive** for the private sector: – **Rare diseases**, as defined according to geographical regions – **Common diseases** that have been **ignored** (e.g.; tuberculosis, cholera, typhoid, malaria) as they are more prevalent in developing countries than in the developed world		

Sources: Orphanet – Eurordis – FDA – Japanese Ministry of Health, Labor and Welfare – Smart Pharma Consulting analyses

[1] *Representing ~1 / 1,650 people (based on USA population in 2020)*

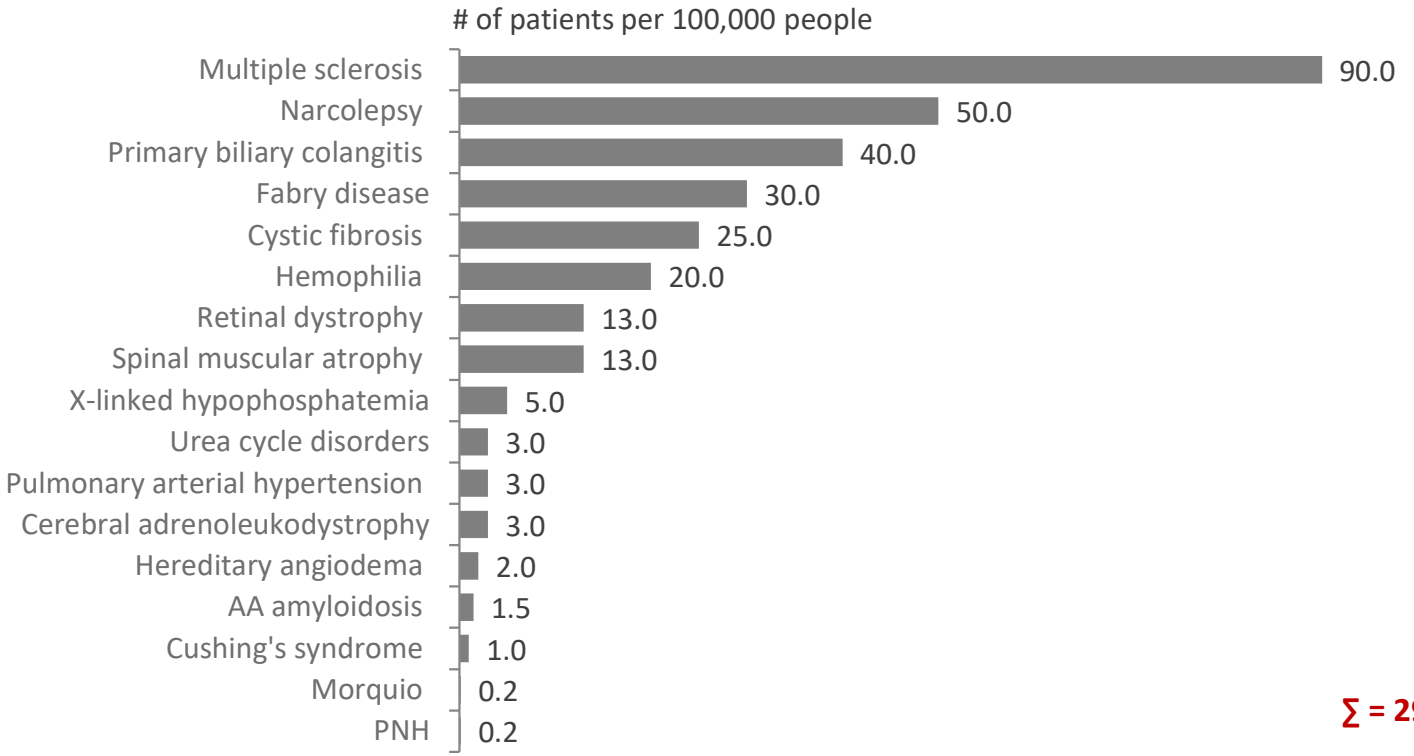
Prevalence rates per condition are low but their collective impact on population and healthcare systems is significant and too often underestimated

Key figures and prevalence of selected rare diseases worldwide

Key figures (2021)

- ~7,000 existing rare diseases, of which ~85% are very serious or life-threatening diseases
- ~5% of rare diseases treated with approved drugs
- More than half of rare diseases starting in childhood
- ~25-30 million patients
- ~25-30 million patients
- ~400 million patients worldwide

Prevalence rate of selected rare diseases worldwide (2017) [1]



∑ = 299.8*

*The collective prevalence of those leading rare diseases is ~300 per 100,000 inhabitants

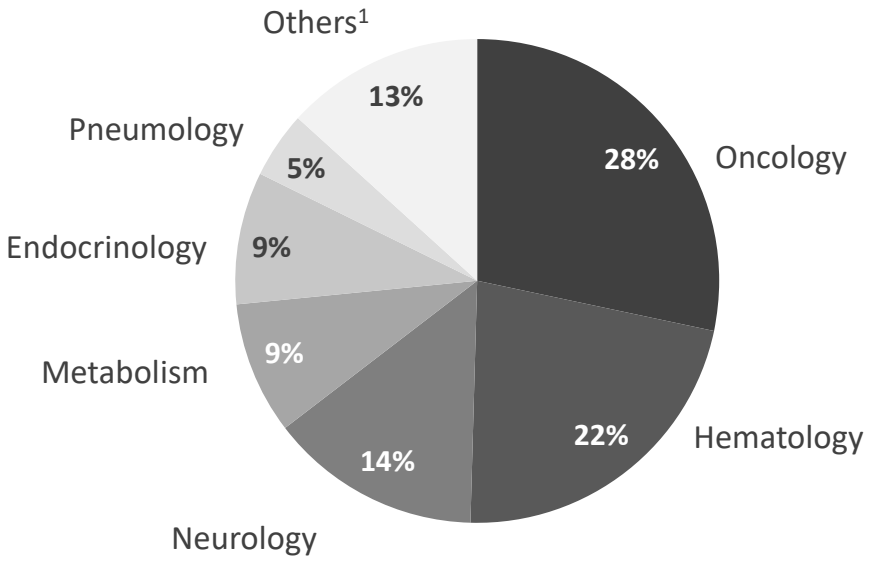
Sources: Orphanet – Genetic and rare disease information center – European Commission – Torreya Partners (2017) – Smart Pharma Consulting analyses

[1] Selection based on leading diseases treated by the top 20 most valuable rare disease companies

Oncology, hematology and neurology are the three major therapeutic areas of rare diseases, accounting for ~64% of EMA orphan drugs approval between 2015 and 2021

Main therapeutics areas covered by orphan drugs (2015-2021)

Distribution of 2015-2021 EMA orphan drugs approvals by therapeutic area



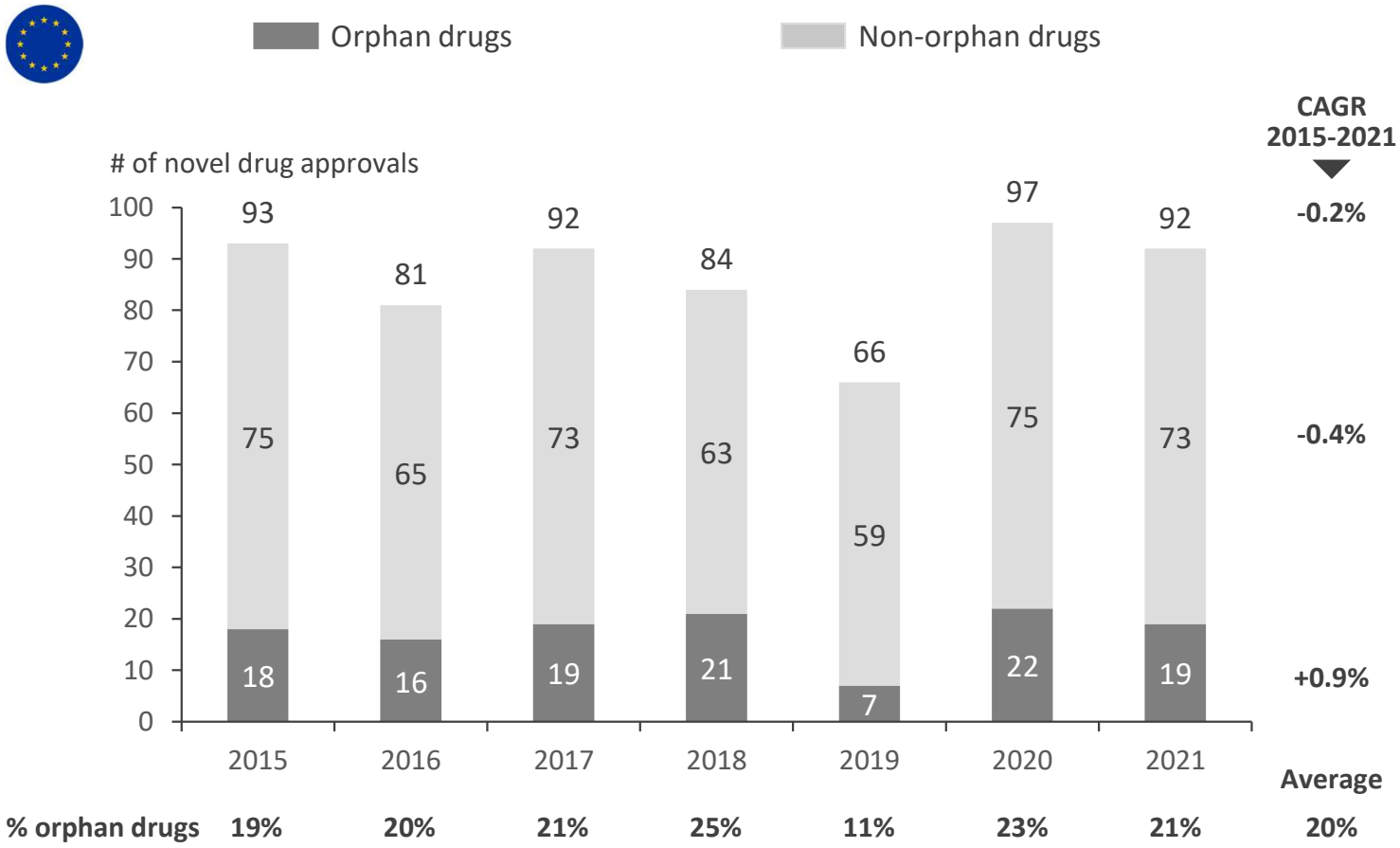
- **Oncology:** most of orphan drugs approvals concern treatments for leukemia (e.g.; ALL[2], AML[3], CLL[4]), multiple myeloma and gastroenteropancreatic neuroendocrine tumors (GEP-NETS)
- **Hematology:** orphan drugs approvals concern diverse pathologies such as sickle cell disease or BPDCN[5]
- **Neurology:** mostly concern treatments for spinal muscular atrophy, for seizures and for neuro-ophthalmology disorders
- **Metabolism:** treatments for diverse pathologies such as neonatal diabetes, Wilson's disease or genetic diseases (e.g.; familial chylomicronemia syndrome)
- **Endocrinology:** treatments for various diseases such as X-linked hypophosphatasemia, acute hepatic porphyria, Cushing's syndrome, mucopolysaccharidosis type VII
- **Pneumology:** mostly concern treatments for cystic fibrosis, hereditary angioedema and pulmonary infections with non-tuberculous mycobacteria

Sources: "Human medicines highlights", EMA (2015-2021) – Smart Pharma Consulting analyses

[1] Incl. infections, hepatology, ophthalmology, uro-nephrology, gastroenterology, immunology, transplantation – [2] Acute lymphoblastic leukemia – [3] Acute myeloid leukemia – [4] Chronic lymphocytic leukemia – [5] Blastic plasmacytoid dendritic cell neoplasm

Over the 2015-2021 period, the weight of orphan drugs approved by the EMA has been quite stable and accounted for 20% on average of all approved drugs

Weight of orphan drugs in EMA novel drugs approvals (2015-2021)



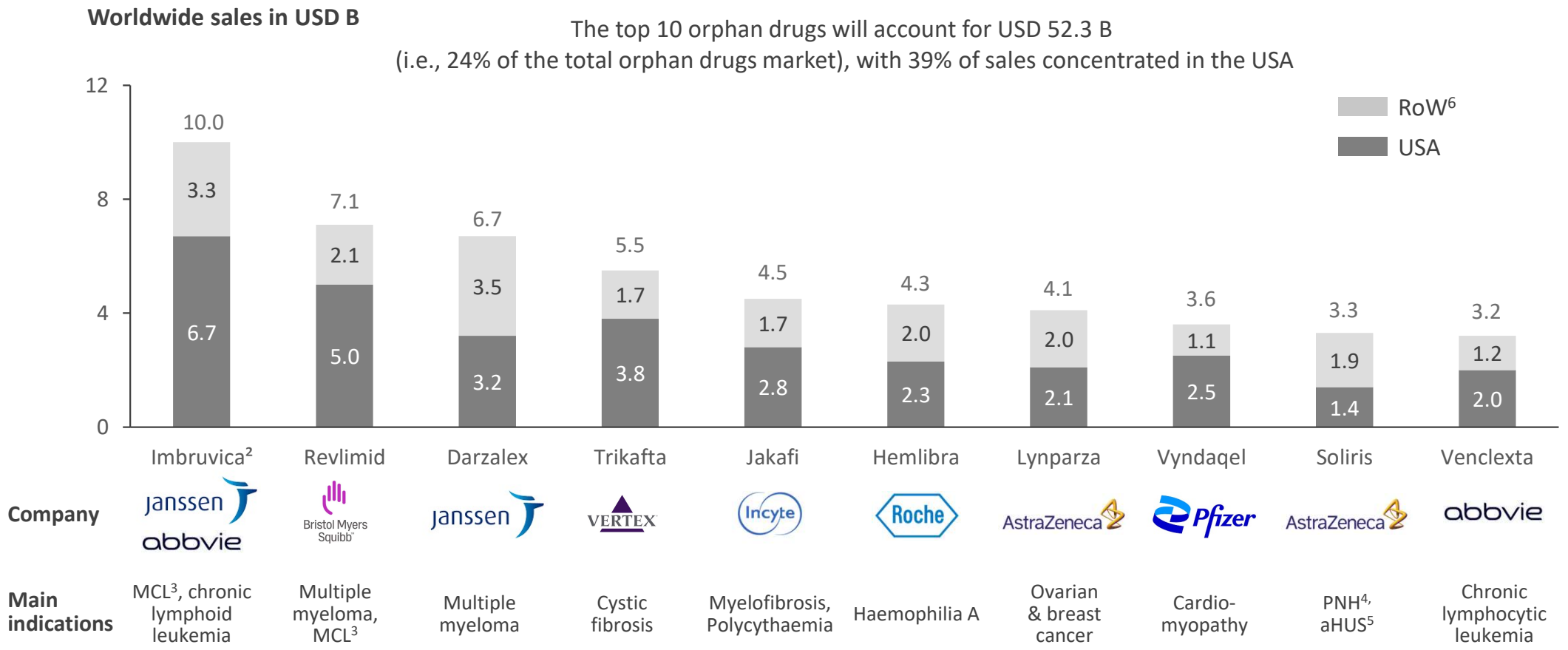
	2015	2016	2017	2018	2019	2020	2021	CAGR 2015-2021
# of novel drug approvals	93	81	92	84	66	97	92	-0.2%
# orphan drugs	18	16	19	21	7	22	19	+0.9%
% orphan drugs	19%	20%	21%	25%	11%	23%	21%	Average 20%

- In **2021**, **orphan drugs** accounted for **~21%** of all EMA drugs approvals
- The **total number of novel drugs** approved by the **EMA** from 2015 to 2021 has been quite stable, with a CAGR of **-0.2%**
- **Orphan drugs** approvals increased slightly, with a **CAGR** of **+0.9%** between 2015 and 2021, accounting, on average, for **~20%** of all EMA approved drugs, over the period
- However, the year **2019** was marked by a **low number of new orphan drugs** approved by the EMA compared with the other years of the 2015-2021 period

Sources: "Human medicines highlights", EMA (2015-2021) – Smart Pharma Consulting analyses

The top 10 drugs addressing cancers, rare genetic diseases, blood disorders and CNS[1] diseases should account for ~24% of the orphan drugs market in 2024 and achieve ~61% of their sales in the USA

Top 10 orphan drugs (2024)

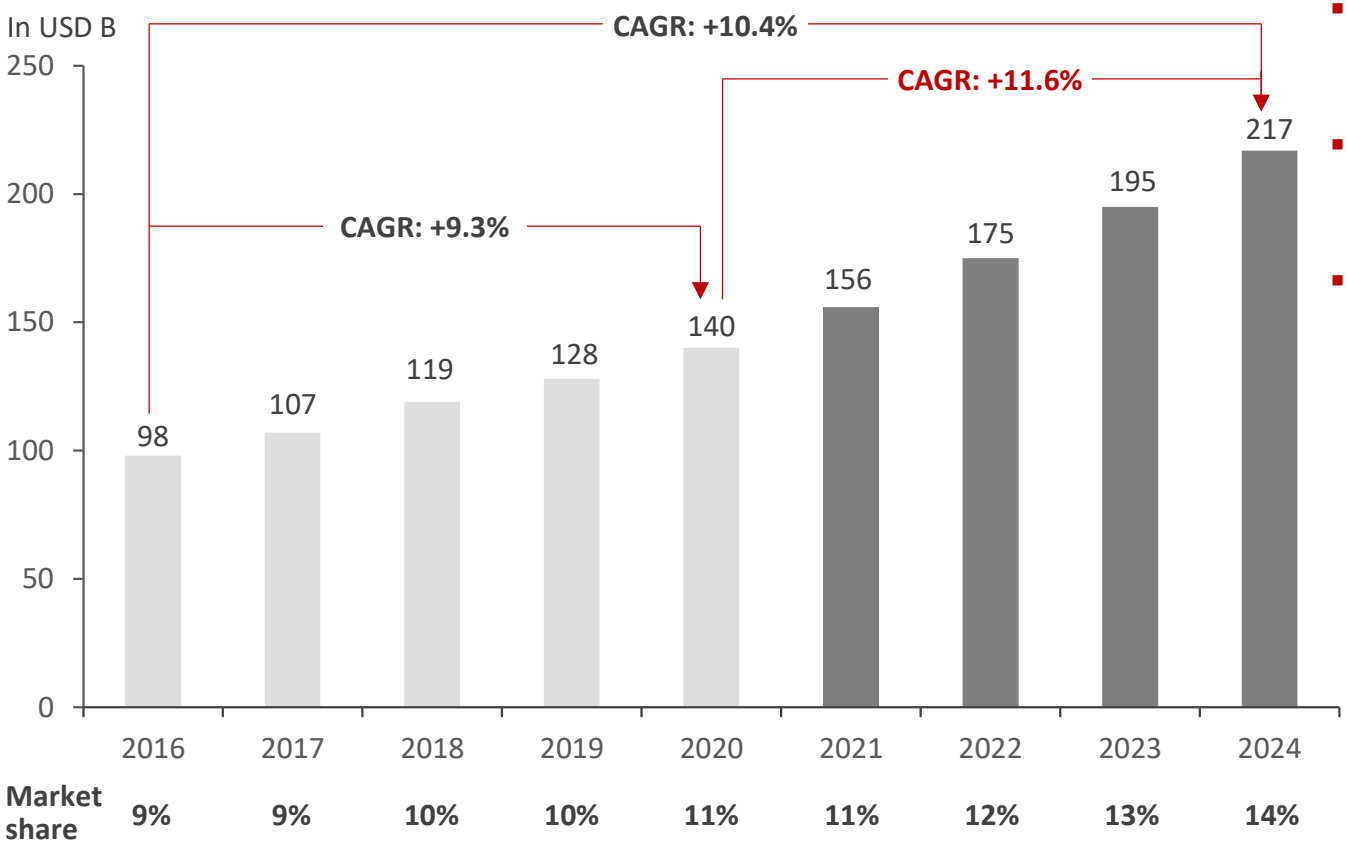


Sources: EvaluatePharma (2020) – FDA – SmPCs – Smart Pharma Consulting analyses

[1] Central Nervous System – [2] Product co-licensed to Janssen and AbbVie in the United States and licensed to Janssen outside the United States – [3] Mantle Cell Lymphoma –[4] Paroxysmal Nocturnal Hemoglobinuria – [5] Atypical Hemolytic Uremic Syndrome – [6] Rest of the world

The weight of the orphan drugs market in the pharmaceutical industry is more and more important and should reach up to ~14% of the worldwide pharmaceutical market by 2024 (+ 5 pts vs. 2016)

Worldwide orphan drug sales (2016-2024)



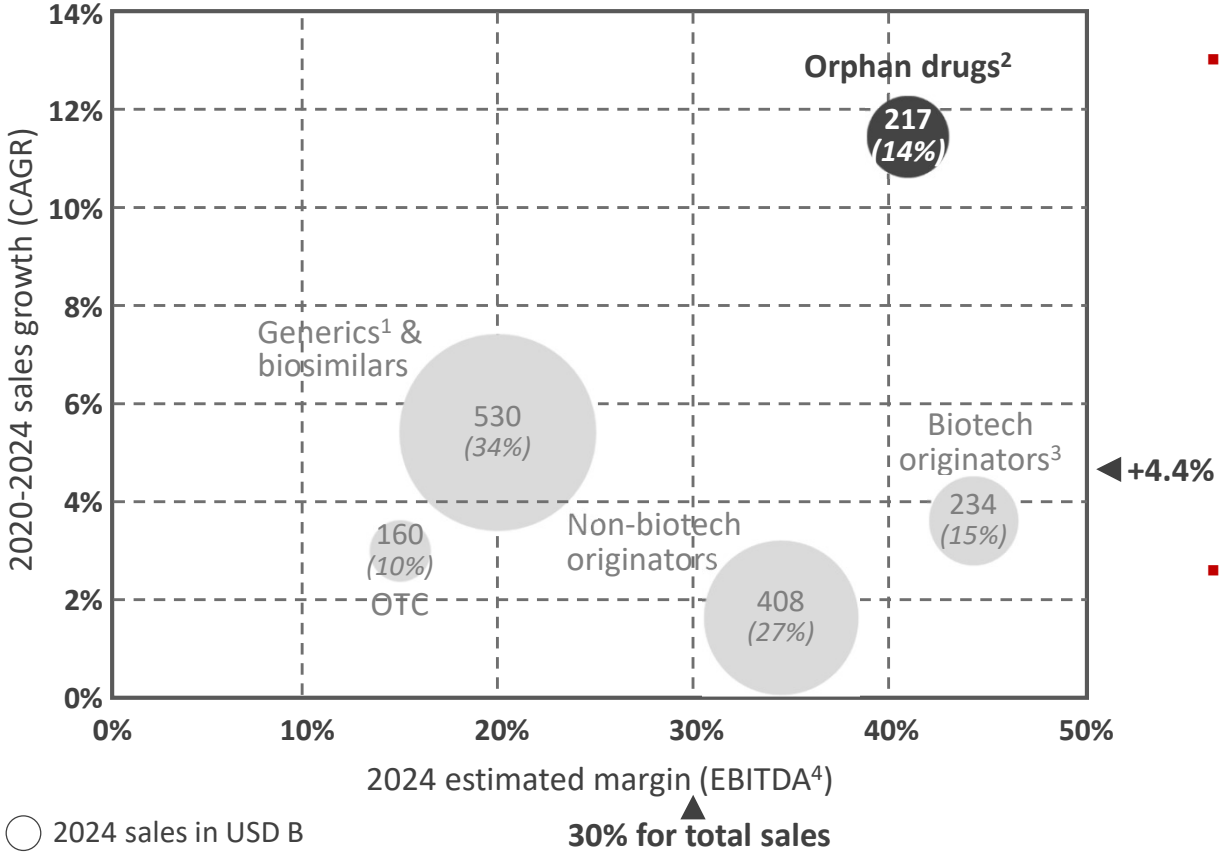
- Orphan drugs have become a **cornerstone** of the pharma market, with **~11%** of the **worldwide market** in **2020** and **~14%** expected in **2024**
- With a forecasted CAGR of **+11.6%** between **2020** and **2024**, the orphan drugs segment should **grow 2.6 times** faster than the **worldwide pharma market**
- This dynamic growth is driven by:
  - A strong demand from HCPs and patients due to high clinical unmet needs
  - The development of new technologies (e.g., genomics, gene sequencing, gene therapy) enabling to treat rare genetic diseases
  - The "orphanization" of certain TAs (e.g., oncology, diabetes) which consists in identifying rare disease subtypes and developing new drugs or repurposing existing ones
  - Financial and regulatory incentives (e.g., tax credits, marketing exclusivity, etc.) granted by health authorities to fulfill that demand
  - Generic and biosimilar products[1] improving the access to a larger number of patients

Sources: EvaluatePharma (2020) – Smart Pharma Consulting analyses

[1] Generic (e.g., Imatinib) and biosimilar (e.g., bevacizumab, adalimumab) versions of older original orphan drugs or drugs with orphan indications that have lost their patent

By 2024, orphan drugs should be the main driver of pharma market growth and be one of the most profitable segments due to premium prices and lower costs across the drug value chain

Profitability of orphan drugs companies (2020-2024)



- **High profitability** (~41% EBITDA rate) of orphan drugs due to:
  - **Lower R&D costs** (4 times less): ~ USD 0.5 B for orphan drugs vs. USD 2 B for non-orphan drugs
  - **Premium prices** vs. non-orphan drugs
  - **Incentives** granted by regulatory agencies (e.g.; clinical trials subsidies, reduced regulatory fees, tax credits, etc.)
  - **Fewer commercial** and **promotional investment** due to:
    - Lower number of expert centers and HCPs to target
    - Lower competition intensity
- **Market growth** (+11.6% CAGR over 2020-2024) due to:
  - Favorable means to **speed up registration**
  - Increasing number of **medicines** addressing **unmet needs**
  - Progressive entry of expensive **one-shot therapies** (e.g.; **CAR T-cell therapies**)

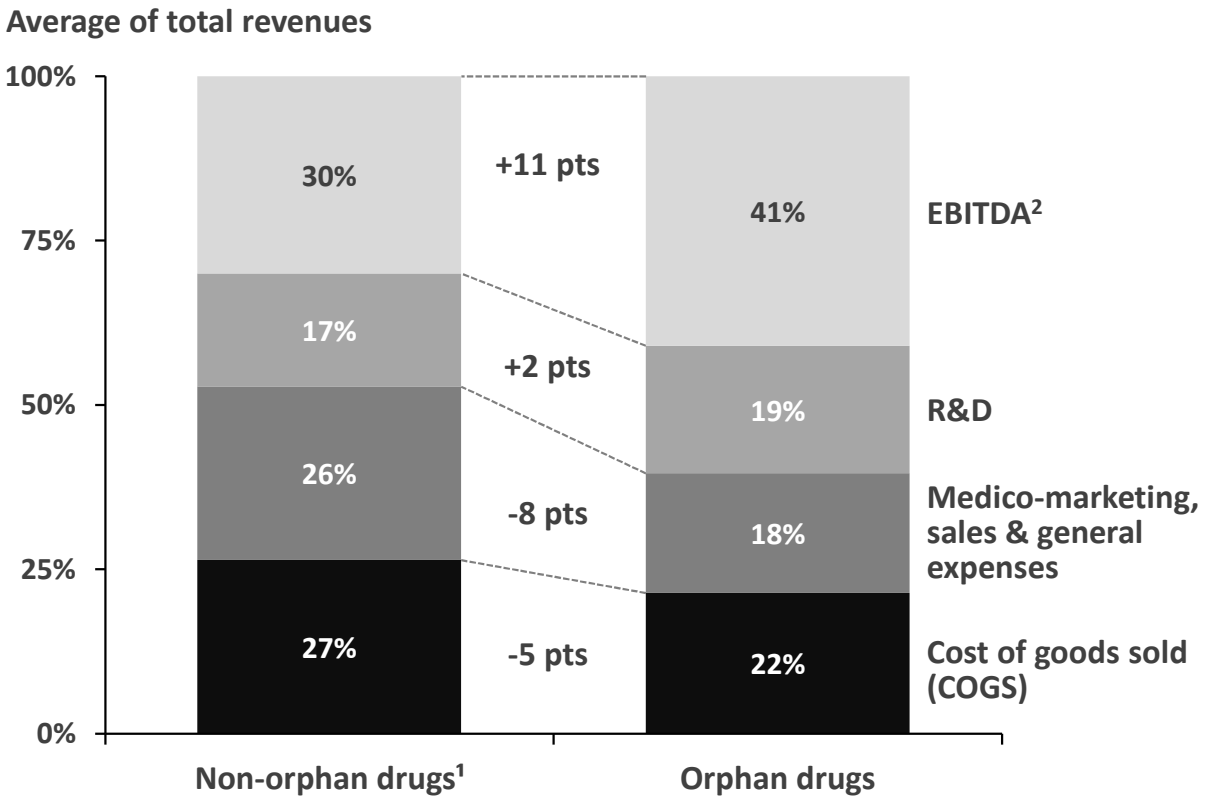
Sources: EvaluatePharma (2020) – Smart Pharma Consulting estimates, based on the 3 latest annual reports of a panel of 5 pure players of the orphan drugs market (Alexion prior to its acquisition by AstraZeneca, Biogen, Shire prior to its acquisition by Takeda, SOBI and Vertex)

[1] Incl. branded and unbranded generics – [2] Incl. chemical and biotech drugs, for 65% and 35% of orphan drugs sales, respectively – [3] Excl. biosimilars – [4] Earnings before interest, taxes, amortization and depreciation

The average EBITDA rate made by orphan drugs is 11 pts higher (41% vs. 30%) than the one drawn by non-orphan Rx-bound drugs (either biological or chemical)

Typical cost structure of non-orphan vs. orphan drugs

Cost structure as a percentage of total revenues



- With an average **EBITDA rate** reaching **~41%** of total revenues, orphan drugs **profitability** is **higher** vs. non-orphan drugs (**+11 pts**)
- This **positive gap** can be explained by:
  - **Fewer medico-marketing**, **sales** and **general expenses (-8 pts)** due to:
    - Lower number of expert centers and HCPs to target
    - Lower competition intensity
  - **Fewer COGS as a percentage of revenues** (**-5 pts**) due to **premium prices**…
  - **… partially offset** by higher weight of **R&D investment** in total revenues (**+2 pts**)

***Note**: reconciliation items between EBIT[3] and EBITDA (incl. amortization, depreciation and one-off items such as restructuring) have been equally distributed between each type of costs. They accounted for ~12% of orphan drugs revenues and ~8% of non-orphan drugs revenues*

Sources: Smart Pharma Consulting estimates, based on the 3 latest annual reports of a panel of the 20 biggest pharma companies (excl. Biogen) and 5 pure players of the orphan drugs market (Alexion prior to its acquisition by AstraZeneca, Biogen, Shire prior to its acquisition by Takeda, SOBI and Vertex)

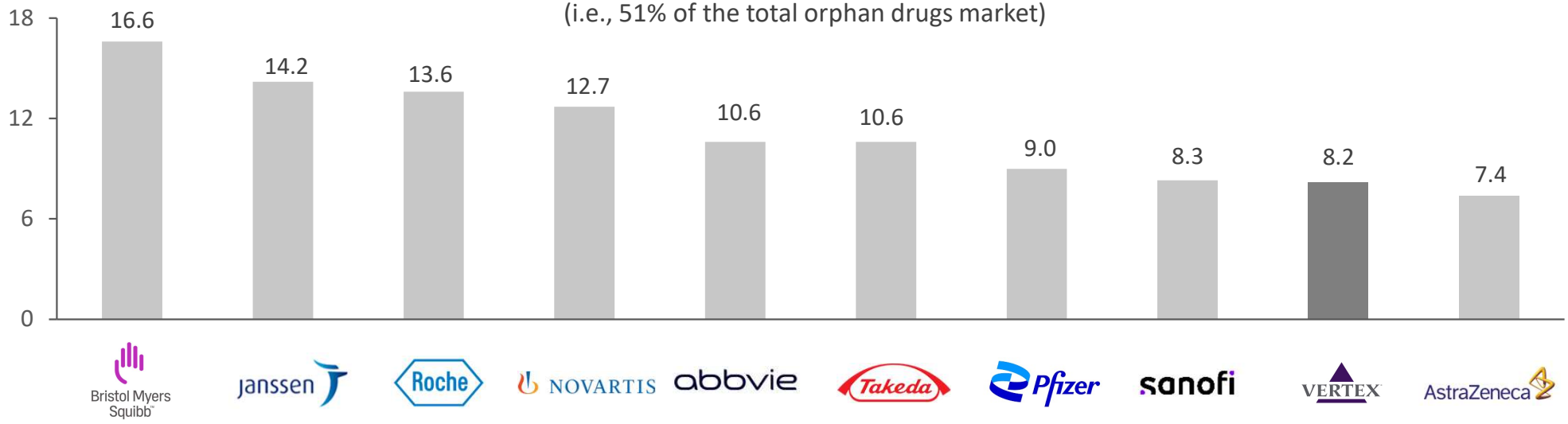
[1] Rx-bound drugs only – [2] Earnings before interest, taxes, amortization and depreciation – [3] Earnings before interest and taxes

In 2024, the top 10 companies operating on the orphan drugs market should account for 51% of the total market segment, with Bristol-Myers Squibb, Johnson & Johnson and Roche as leaders

Top 10 companies operating on the orphan drugs market (2024)

2024 worldwide sales in USD B

The top 10 companies will account for USD 111 B
(i.e., 51% of the total orphan drugs market)



Orphan drugs with sales > USD 1 B	Revlimid	Imbruvica[1] Darzalex	Hemlibra	n.a.	Imbruvica[1] Venclexta	n.a.	Vyndaqel	n.a.	Trikafta	Soliris

Mid- or big pharma companies Biotech "pure players"

Sources: EvaluatePharma (2020) – Smart Pharma Consulting analyses

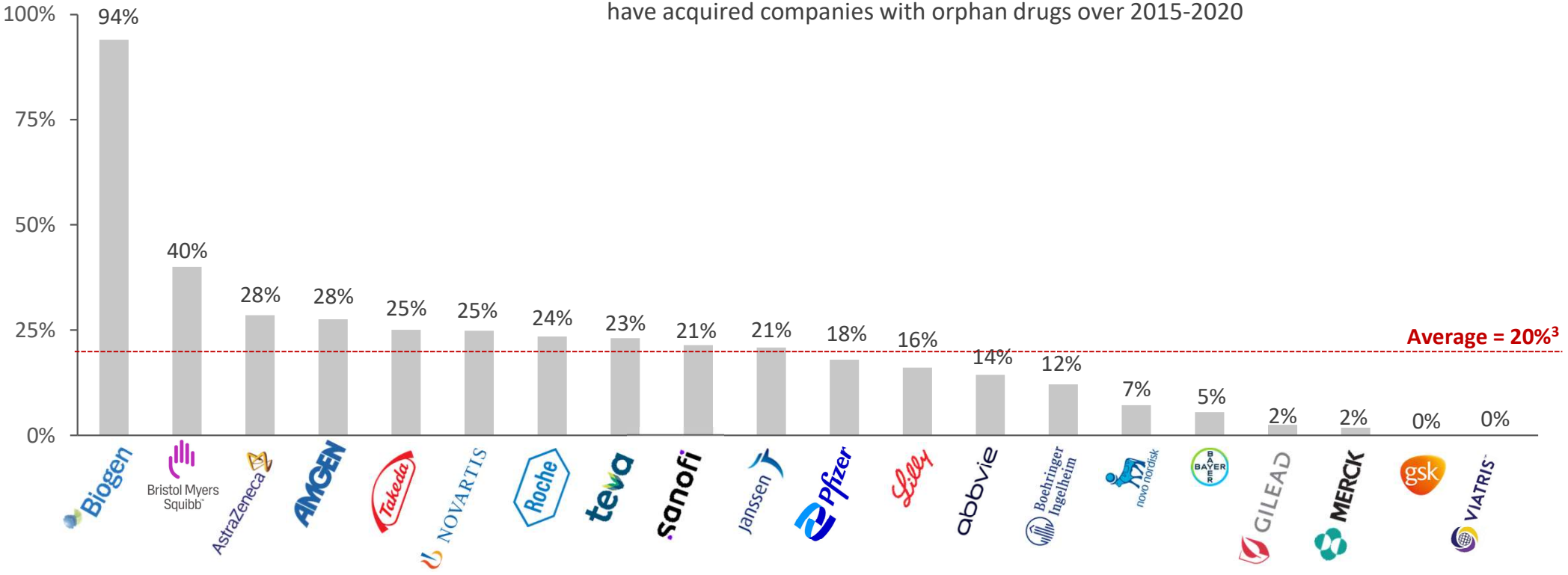
[1] Product originally co-developed by Janssen and Pharmacyclics, an oncology-focused biotech acquired by AbbVie in 2015, co-licensed to Janssen and AbbVie in the United States and licensed to Janssen outside the United States

Among the top 20 pharma companies worldwide, Biogen, Bristol-Myers Squibb, AstraZeneca and Amgen have the most important share of orphan drugs in their portfolio

Strategic importance of orphan drugs in top 20 pharma companies[1] portfolio (2020)

Estimated share of orphan drugs sales in total drugs & vaccines worldwide sales

The top 20 pharma companies with orphan drugs sales – excepted Boehringer Ingelheim, Novo Nordisk and Pfizer[2] – have acquired companies with orphan drugs over 2015-2020



Sources: EvaluatePharma (2019) – Companies annual reports (2020) – Smart Pharma Consulting analyses

[1] Based on drugs & vaccines sales of companies – [2] Boehringer Ingelheim did not make any acquisition over the period but signed a partnership in 2019 with the UK-based drug technology firm Healx to identify approaches to treat rare neurological disorders. Pfizer acquired Arena and Novo Nordisk Dicerna, but in 2021 – [3] If one excludes Biogen, the average weight of orphan drugs drops at 16% of big pharma companies revenues

The acquisition of Celgene by BMS, Shire by Takeda and Alexion by AstraZeneca are the top 3 M&A operations carried out in rare diseases since 2015, by the top 20 pharma companies

Major orphan drugs M&A operations[1] (2015-2021) (1/2)

Item	Acquirer	Acquired	Price (USD B)	Year	Key brands / projects
#1	BMS	Celgene	74,0	2019	Ozanimod, CAR-T therapies
#2	Takeda	Shire	62,0	2018	Advate, Elaprase, Replagal, Vpriv
#3	AstraZeneca	Alexion	39,0	2020	Soliris, Ultomiris
#4	Janssen (J&J)	Actelion	30,0	2017	Opsumit, Uptravi, Tracleer
#5	AbbVie	Pharmacyclics	21,0	2015	Imbruvica
#6	BMS	MyoKardia	13,1	2020	Mavacamten
#7	Gilead	Kite Pharma	11,9	2017	CAR-T therapies
#8	Sanofi	Bioverativ	11,6	2018	Eloctate, Alprolix
#9	MSD	Acceleron	11,5	2021	Reblozyln
#10	Novartis	AveXis	8,7	2018	Zolgensma
#11	Lilly	Loxo Oncology	8,0	2019	Loxo-305
#12	Pfizer	Arena	6,7	2021	Etrasimod
#13	Janssen (J&J)	Momenta	6,5	2020	Nipocalimab

Sources: Smart Pharma Consulting analyses

[1] M&A operations carried out over 2015-2021 by the top 20 pharma companies for prices of USD 2 B or more

During the 2015 – 2021 period, all the top 20 pharma companies with orphan drugs sales have acquired companies with orphan drugs, excepted Boehringer Ingelheim[1]

Major orphan drugs M&A operations[1] (2015-2021) (2/2)

Item	Acquirer	Acquired	Price (USD B)	Year	Key brands / projects
#14	AbbVie	Stemcentrx	5,8	2016	Rova-T
#15	Takeda	NPS	5,2	2015	Naptara
#16	Takeda	Ariad	5,2	2017	Iclusig
#17	Gilead	Forty Seven	4,9	2020	Magrolimab
#18	Roche	Spark Therapeutics	4,3	2019	Voretigene neparvovec-rzyl
#19	AstraZeneca	Acerta Pharma	4,0	2015	Acalabrutinib
#20	Bayer	Asklepios	4,0	2020	Gene therapies
#21	Sanofi	Ablynx	3,9	2018	Caplacizumab
#22	Sanofi	Principia	3,7	2020	Rilzabrutinib
#23	Novo Nordisk	Dicerna	3,3	2021	Nedosiran, Belcesiran
#24	Teva	Auspex	3,2	2015	SD-809
#25	MSD	VelosBio	2,8	2020	VLS-101
#26	Novartis	Endocyte	2,1	2018	CAR-T therapies

Sources: Smart Pharma Consulting analyses

[1] M&A operations carried out over 2015-2021 by the top 20 pharma companies for prices of USD 2 B or more

In the United States as in Europe, regulatory agencies boost orphan drug development by offering incentives including financial, regulatory and marketing benefits

Main incentives to support orphan drugs (2021)

Benefits	Europe	United States
Financial	▪ R&D: scientific advice on study protocols, various fee reductions ▪ Reduced fees for regulatory activities (e.g., protocol assistance, marketing-authorization applications) ▪ Available fundings from Horizon 2020 (the EU Framework Program for Research and Innovation), and E-Rare (a transnational project for research programs on rare diseases) ▪ Specific incentives for SMEs[1] (incl. administrative and procedural support, specific fee reductions, etc.)	▪ Tax incentives "The Orphan Drug Tax Credit": 25% tax credits for expenses engaged during clinical trials[3] ▪ "Waiver of Prescription Drug User Fees": orphan drug products exempt from the usual new drug application fees charged by the FDA ▪ "Orphan Products Grants Program": funding for development of promising orphan products ▪ "Rare Pediatric Disease Priority Review Vouchers": voucher to receive a priority review for a different drug[4]
Access	▪ Centralized authorization procedure: a single application to the EMA (opinion & decision valid in all EU Member States) ▪ Designated orphan medicines eligible for conditional marketing authorization: allowed to be administered to patients under compassionate use[2] ▪ Global benefits: EMA & FDA developed common procedures for applying for orphan designation in the EU/USA	▪ Eligibility of the drug approval process to fast-track procedure for evaluation by the FDA ▪ FDA assistance and guidance in the design of an overall drug development plan ▪ Possible availability of orphan drug to patients before gaining market approval under specific conditions[5]
Marketing	▪ 10 years of marketing exclusivity from EMA approval ▪ Pediatric medicines eligible for 2 additional years of marketing exclusivity	▪ 7 years of marketing exclusivity from FDA approval ▪ 6 additional months of exclusivity if pediatric indication

Sources: EMA – FDA – Smart Pharma Consulting analyses

[1] Small & medium enterprises – [2] Allows the use of an unauthorized medicine outside a clinical study – [3] After the obtention of an orphan drug designation – [4] After receiving the approval for a rare pediatric disease drug – [5] Drug is intended for the treatment of a serious life-threatening disease, no alternative drug is available, and product is in the process of clinical trials and an active phase of marketing approval

The most important challenges faced in the orphan drugs development are the small size of patient populations and the lack of knowledge and awareness of related rare diseases

R&D challenges

Diseases knowledge and awareness

- **Complex diseases**, with a **lack of** widespread **knowledge,** incl. among medical experts
- **Lack of background data** (e.g., treatment pathway, patient subgroups, epidemiology)
- **Delays to diagnosis**, preventing early clinical trial enrolment, and potentially leading to missed therapeutic windows
- **Difficulties to define unmet needs**, due to diagnosis challenges and patient heterogeneity
- Low proportion of patients in each market, potentially making these diseases a **lower priority for regulators and payers**

Clinical evidence

- **Difficult trial design** (comparators, endpoints, outcomes, etc.) and **enrolment**, far from double-blinded randomized clinical trial standards, especially due to:
  - **Small** and **geographically dispersed populations**
  - High **disease burden** and **significant medical challenges**
- **High level of pediatric populations**, leading to several issues (e.g., dose, endpoints and outcomes selection, informed consent, logistics and scheduling)
- Difficult **demonstration of statistically significant impacts** on a mortality outcome, due to the rarity of these diseases, and their long-term evolution

Implications for pharma companies

- **Closely collaborate** with academics, clinicians, PAGs and health authorities to **overcome** the many **hurdles** to **develop orphan drugs**
- Focus on **epidemiological research**[1] to identify possible **new paths of drug developments**
- Ensure an **early collaboration** with **agencies** to get regulatory guidance, protocol design assistance
- Whenever RCTs[2] cannot be applied, due to the small number of patients, **adaptative trials designs**[3] and **new measures for efficacy** should be considered
- **Communicate** about **rare diseases** to patients, PAGs[4], general public and physicians, and **collaborate** with centers of excellence to **recruit patients**
- **Develop patient registries** and generate **RWE data** to **complete** data generated through clinical studies
- Precisely **define patients** with **biomarkers**, **genetic** markers, **specific digital tools** and **artificial Intelligence**
- Overcome **barriers to diagnosis** with appropriate **diagnostic tools**

Sources: Office of Health Economics (2018) – "The balancing act of orphan drug pricing", The Lancet (2017) –Evidera-PPD The Evidence Forum (2020 & 2021) – Mtech Access (2021) – "Six ways to help drugs for rare diseases take off", BCG (2019) – "Orphan drug clinical development ", Therapies 2020 by O. Blin et al – Smart Pharma Consulting analyses

[1] That is: occurrence of the disease, underlying pathophysiology, burden of the disease for patients and care givers, impact on the health system, etc. – [2] Randomized controlled trials – [3] Such as: single-patient (n-of-1) trials, adaptative randomization methods (e.g., play the winner, drop the loser designs) – [4] Patient advocacy groups

Difficulties to demonstrate clinical benefits and cost-effectiveness of orphan drugs are the main challenges faced in terms of registration and pricing

Registration and Pricing challenges

Registration

- Same assessment process as a regular drug, causing a **difficult demonstration of clinical benefit** due to the:
  - **Lack of patients** to conduct clinical trials
  - **Lack of** established **active comparators** and **well-defined clinical end-points**, compounded by the usually short follow-up duration of studies
- **Lack of knowledge** about rare diseases among medical experts and regulatory agencies

Pricing

- **Difficult demonstration of cost-effectiveness**[1] due to:
  - Lack of patients, knowledge, comparators, and defined clinical end-points
  - Geographical **differences between HTA**[2] **bodies** in their evidence requirements
  - Unfavorable ICER[3], above typical willingness-to-pay thresholds
- Debate about **orphan drug premium prices**:
  - **Major burden on the healthcare systems**, yet under financial pressure
  - **Expensive products**, unaffordable by many patients
  - **Several costs** are **lower** than for **non-orphan drug** due to smaller patient number
  - **Budget capping** imposed **for orphan drugs** by certain governments (e.g., France)
- **Increasing price pressure** due to post **Covid-19** healthcare **budget deficits**

Implications for pharma companies

- **Collaborate closely** with **registration** and **HTA agencies** to ensure **alignment** re. **clinical development** and **medico-economic evaluation**, respectively
- Identify **surrogate end-points** w/ **proven clinical utility**
- Design and implement post-launch **real world evidence data collection**
- **Leverage** emerging **data** sets and **AI** to **substantiate** the **long-term value** of therapies
- Develop disease-specific **PROMs**[4] **and PREMs**[5]**,** and **health-related quality of life tools**
- **Involve market access** department in **decision process**, at an early stage of the drug development
- Strengthen **medico-economics** and **cost-effectiveness models**
- **Propose**, with the support of PAGs, physicians, KOLs, centers of excellence, etc., **risk sharing models** (clinical outcome-based, financial outcome-based, indication-based) or **any other win-win approach**

Sources: Berdud et al, "Establishing a reasonable price for an orphan drug" (2020) – Office of Health Economics (2018) – Pharmaceutical Technology (2020) – "The balancing act of orphan drug pricing", The Lancet (2017) – Evidera-PPD The Evidence Forum (2020 & 2021) – Mtech Access (2021) – "Six ways to help drugs for rare diseases take off", BCG (2019) – Smart Pharma Consulting analyses

[1] Especially for one-shot therapies like CAR-T cells – [2] Health Technology Assessment – [3] Incremental cost-effectiveness ratio – [4] Patient-Reported Outcomes Measures – [5] Patient Reported Experience Measures

The success in the orphan drugs market depends on the capacity of pharma companies to develop creative and hands-on approaches focused on HCPs, patients and caregivers needs

Medico-marketing challenges

Each rare disease is specific	Rare diseases are under-diagnosed	Patients are strongly engaged

Implications for pharma companies

- Get to **know the market**:
  - What is the **prevalence** and/or the **incidence**?
  - Are there international or national **PAGs**[1]?
  - Is there a **patient's network**?
  - Are there any decent **sources of information** available to these patients?
  - What is the **patient journey** from first symptoms to diagnosis?
  - How many and which **types of physicians** might patients see in search for a treatment?
  - How many **treatment centers** are there? And where?
  - What are the **barriers** patients might face in accessing treatment?
- Adopt a **holistic approach** by developing close relationships **with** all the involved **stakeholders**[2]

- **Beyond** building **relationships** with **patients** and **PAGs**, pharma companies should use every piece of information that might help them **identify** patients who experience many of the typical **symptoms** of the disease but that **have not been diagnosed**
- Marketers should **map** the **diagnostic patient journey** to identify points in care management to educate **physicians** on their **patient profile**
- If the **diagnostic rate** is **low**, pharma companies could distribute **free diagnostic tests**
- Other **disease awareness initiatives** could also be considered:
  - **Medical congresses**
  - **Forums** and **websites** to share data
  - Quality **interactions** with **medical community**
  - **Early access** programs

- A **tailor-made approach** – around & beyond the drug – must be proposed as unmet needs of **stakeholder**' involved in **rare diseases** are high
- Thus, they should **co-create services** such as:
  - **Information** about patients' **condition** and current **treatment options**
  - **Connection** with **KOLs** / **specialists**
  - Building of the **medical community**
  - Development of **early access programs**
- Information provided by pharma companies must be **comprehensive** and **address** the following **topics**:
  - Therapy access
  - Patients-assistance programs
  - Clinical nursing support
  - Disease education
  - Lifestyle management
- These supports may be **provided** directly or indirectly, depending on **regulatory constraints**

Sources: "How to successfully launch a rare disease drug", McKinsey (2018) – "A nuanced message: marketing to the rare diseases community", Pharma Voice (2017) – Smart Pharma Consulting analyses

[1] Patient advocacy groups – [2] Payers, policy markers, HCPs, PAGs, patients, care givers, etc.

To succeed in the orphan drugs market, pharma companies should work cross-functionally, have close relationships with various stakeholders[1], generate and disseminate real-world evidence

Organizational recommendations

Recommendations	Description	Rationale
1 Embed a culture of **cross-functional collaboration**	▪ Ensure a very strong and constant interactivity between medical, marketing and sales departments	▪ Join the dots between the pieces of information accrued by medical and commercial field representatives and thus generate patients' insights required to craft brand strategy ▪ Avoid inconsistency of messages
2 **Size** field teams accurately and **deploy** them **early**	▪ Give priority to small teams of high-level professionals strongly involved and who will be able to show flexibility and vitality	▪ As a rule, field teams for rare diseases are smaller than those for conventional treatments and very engaged in the disease they are concerned by ▪ Sizing depends on 5 key factors: disease, regulation, patient journey, market access situation and competitive level
3 Excel at generating and disseminating **real-world evidence**	▪ Work on case reports at national and international levels	▪ Impossibility of conducting large cohort studies because of low prevalence of rare diseases ▪ Importance of having a permanent international exhibition in order to favor consensus conferences and consolidate position before new market players' entry

Sources: Smart Pharma Consulting analyses

[1] Payers, policy markers, HCPs, PAGs, patients, care givers, etc.

The orphan drugs market will remain highly attractive despite the risks due to increasing healthcare budget deficits and sky-rocketing costs per patient of orphan drugs, especially for gene therapies[1]

Orphan drugs market features

- Size: USD ~156 B in 2021
  (11% of the total pharma market)
- Growth: 2020-2024 GAGR: ~11.6%
  (2.6 times > than the total pharma market)
- Profitability: 2020-2024 EBITDA: ~41%
  (vs. ~30% for the non-orphan RX-bound drugs)

- Orphan drugs weight on average 20% of top 20 pharma companies sales in 2020
- The top 10 players should account for 51% of the orphan drugs market in 2024
- Rare diseases require a strong engagement of medico-marketing and sales teams
- Clinical benefits and cost-effectiveness are difficult to demonstrate due to lack of adapted methodologies
- US and European regulatory agencies have boosted the market development through various incentives

Sources: Smart Pharma Consulting analyses

[1] Zolgensma (onasemnogene abeparvovec) is a one-time treatment for spinal muscular atrophy sold at the price of USD 2.1 million

Pharma companies operating on the orphan drugs market should favor M&As, adopt a "start-up spirit" and offer their stakeholders[1] second to none services, around and beyond their drugs

Key success factors on the orphan drugs market

Strategy

- Pharma companies strategically engaged on the orphan drugs market should **intent to generate 30%** or more of **their sales** (i.e., 37% of their profits), within **5 to 6 years**, from this market segment
- To grow on the orphan drugs market, pharma companies should **favor M&A deals**, rather than organic development, to **save time** and **better control R&D hazards**
- Pharma companies should **prioritize their efforts** on the **US** market which represents **~40% of the total orphan market sales**, and **~85%** of its corresponding **profits**

Tactics

- **Close interactions** with academics, clinicians, PAGs and health authorities **are imperative** to **successfully develop orphan drugs**, due to the poor disease understanding and the lack of patients
- Pharma companies must **collaborate** with **registration** and **HTA agencies** at a very **early stage** of their drug development to agree on clinical protocols and medico-economic evaluation, respectively
- Medico-marketing and sales teams should **focus** on **generating** and **disseminating data**, while **adopting** a **holistic approach** by offering specific **around / beyond** the **drug services** for HCPs and patients

Organization

- **Rare diseases** requiring from pharma companies a **strong engagement** with various key stakeholders …
- … it is essential to **preserve** the rare disease **skills** and **culture** of the **acquired company** by giving it a **certain degree of autonomy**[2], for a period of **one to several years**[3], as AstraZeneca did with Alexion
- Organization should **rely on highly professionals**, very much **customer-focused**, having a **real dedication** for **rare diseases**
- The **structure** should remain **lean** and the **processes simple**
- **Cross-functional** operating mode and **excellence** in **execution** should be a **cultural priority** to **ensure operational efficiency**

Sources: Smart Pharma Consulting analyses

[1] Payers, policy markers, HCPs, PAGs, patients, care givers, etc. – [2] Ideally for the R&D, medico-marketing and sales activities. Other functions such as regulatory and governmental affairs, market access, finance, human resources, legal affairs, etc. should be shared – [3] The ideal duration will depend on the existing portfolio and on the previous experience of the acquirer in the orphan drugs market

Smart Pharma
CONSULTING

Anti-Obesity Medications Market

What Perspectives

for Pharma Companies

February 2024

Smart Pharma Consulting proposes a method for a preliminary but documented evaluation of drug markets, illustrated by the analysis of the Anti-Obesity Medications market by 2030

Introduction

Context

- Obesity – defined by a BMI[1] ≥ 30 kg/m² – is a major risk factor for several chronic diseases such as heart diseases and stroke, which are the leading causes of death
- The rate of obesity keeps on growing, becoming a major global public health issue, incl. in low-income countries
- The Anti-Obesity Medications (AOMs) market is making a fresh start with the launch of GLP-1 RAs[2], showing significantly higher weight loss vs. former drugs
- The AOMs market is expected to show the highest growth rate, by 2030, ahead of the Anti-Cancer Drugs market

Objectives

- The objectives of this study are to:
  - Propose a "Quick & Robust" method to evaluate drug market potentials, through the case of AOMs
  - Share insights regarding the potential development of the adult AOMs market, incl. its drivers and limiters
  - Exhibit the important heterogeneity of current and future AOMs market sizes, depending on the most recent published estimates
  - Assess the attractiveness of this market segment for pharma companies, over the 2023 – 2030 period

Methodology

- Literature search re. healthcare environment of obesity (epidemiology, health policies, competition, customers) at a global level
- Building of a forecasting model
- Development of assumptions re. the adult AOMs market
- Global adult AOMs market sales estimates (2023 – 2030)
- Analysis of key market drivers and constraints, and implications for pharma companies

Sources: WHO – Smart Pharma Consulting analyses

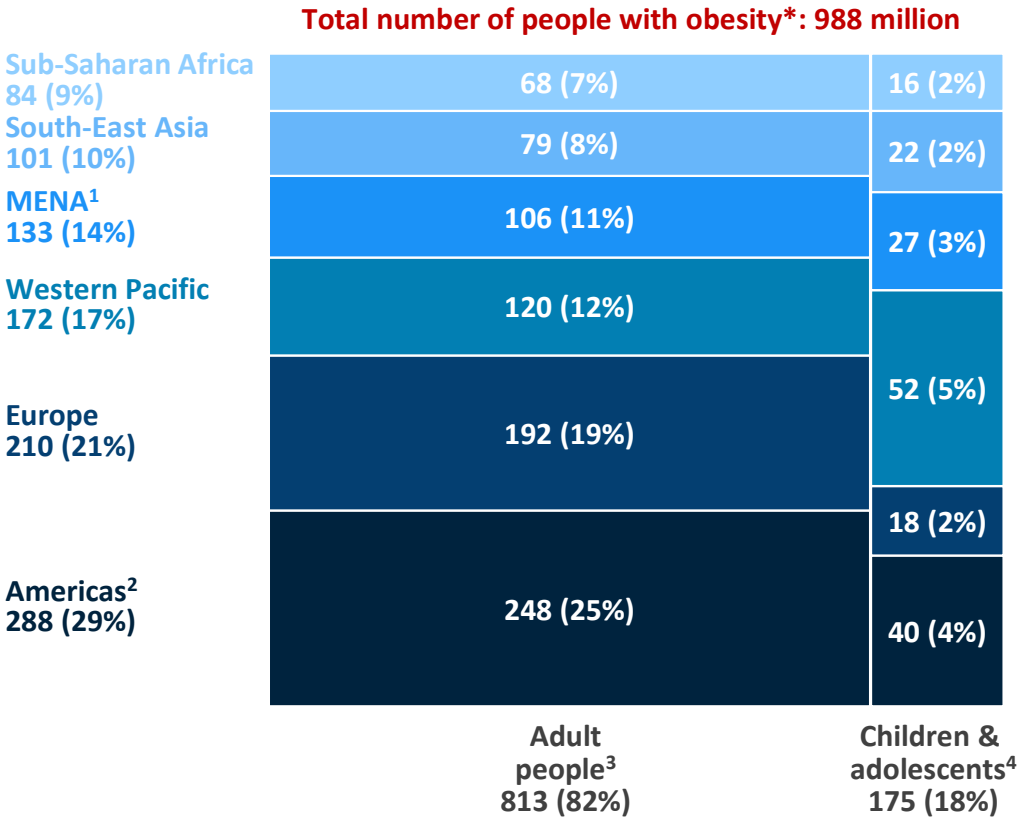
[1] Body Mass Index – [2] Receptor Agonists

The worldwide prevalence of obesity amongst adults should rise from 16% in 2020 to 21% in 2030, with significant discrepancies between regions

Epidemiology by region

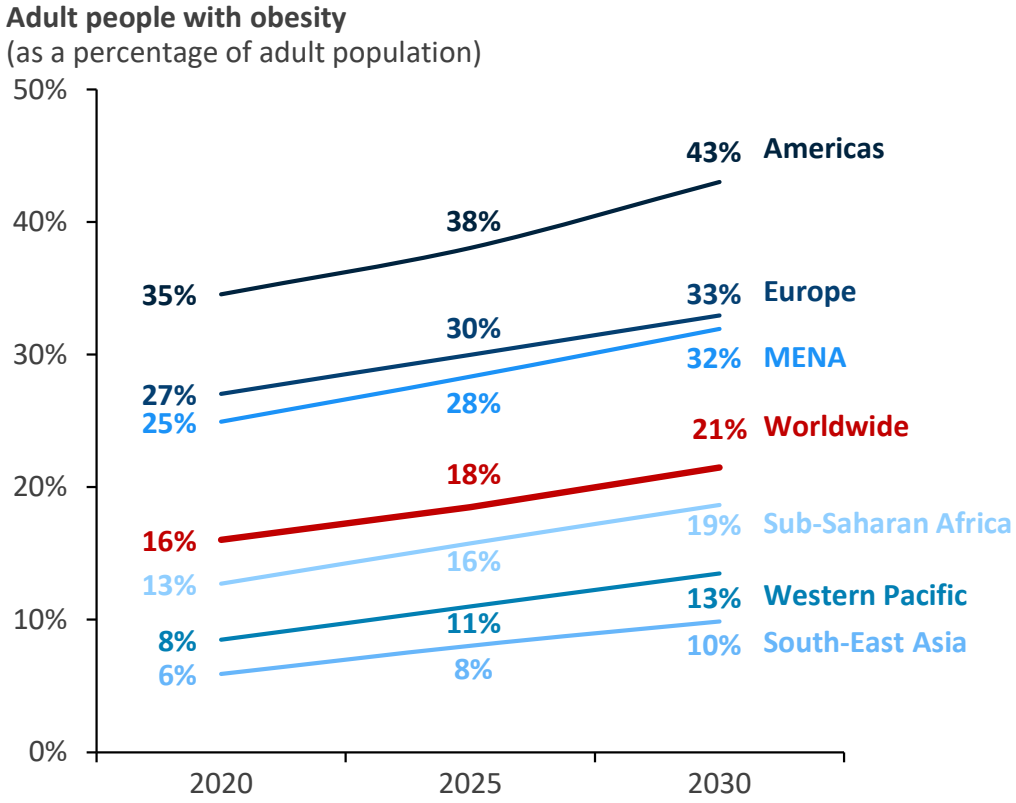
Prevalence of obesity (2020)

All people (in millions)



Projected trends (2020 – 2030)

Adults only (as a percentage of population)



** Adults with a BMI ≥ 30 kg/m² and children and adolescents with a + 2SD above median growth reference (as defined by the WHO classification)*

Sources: World Obesity Atlas, World Obesity Federation (March 2023) – Smart Pharma Consulting analyses

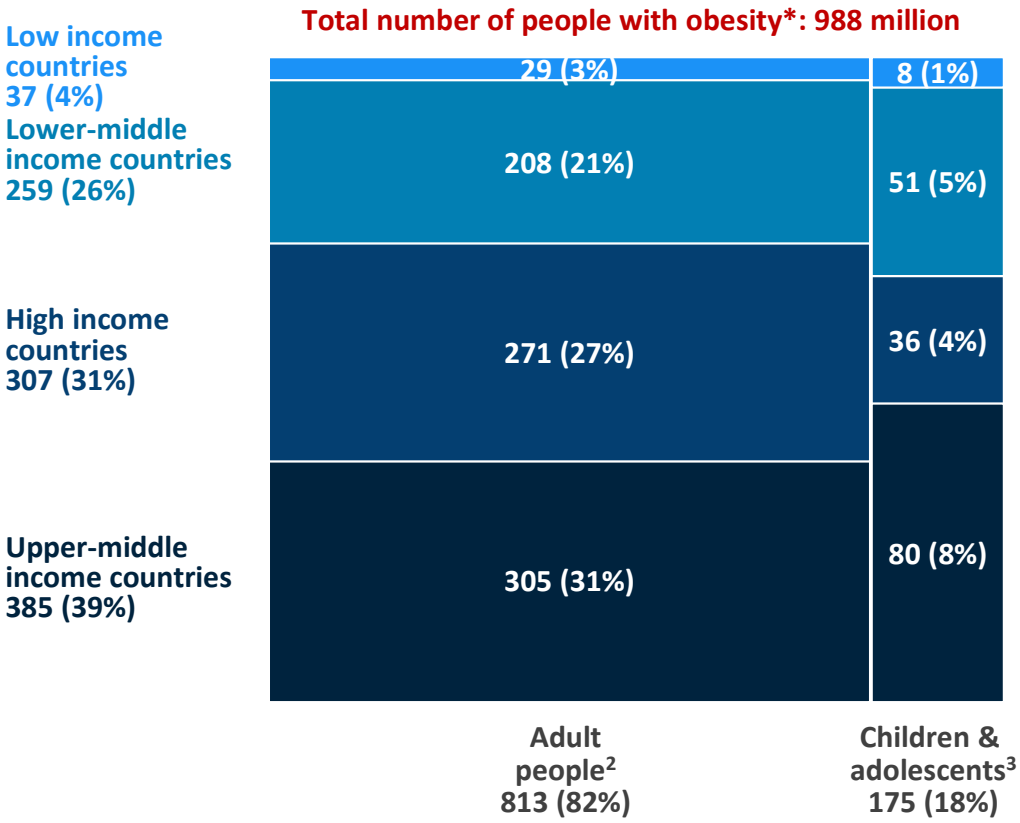
[1] Middle East and North Africa – [2] North, Central and South America – [3] People aged 20 years and over – [4] People aged from 5 to 19 years

The 2030 projected prevalence of obesity amongst adults is higher in high income countries (35%) than the worldwide average (21%)

Epidemiology by level of income[1]

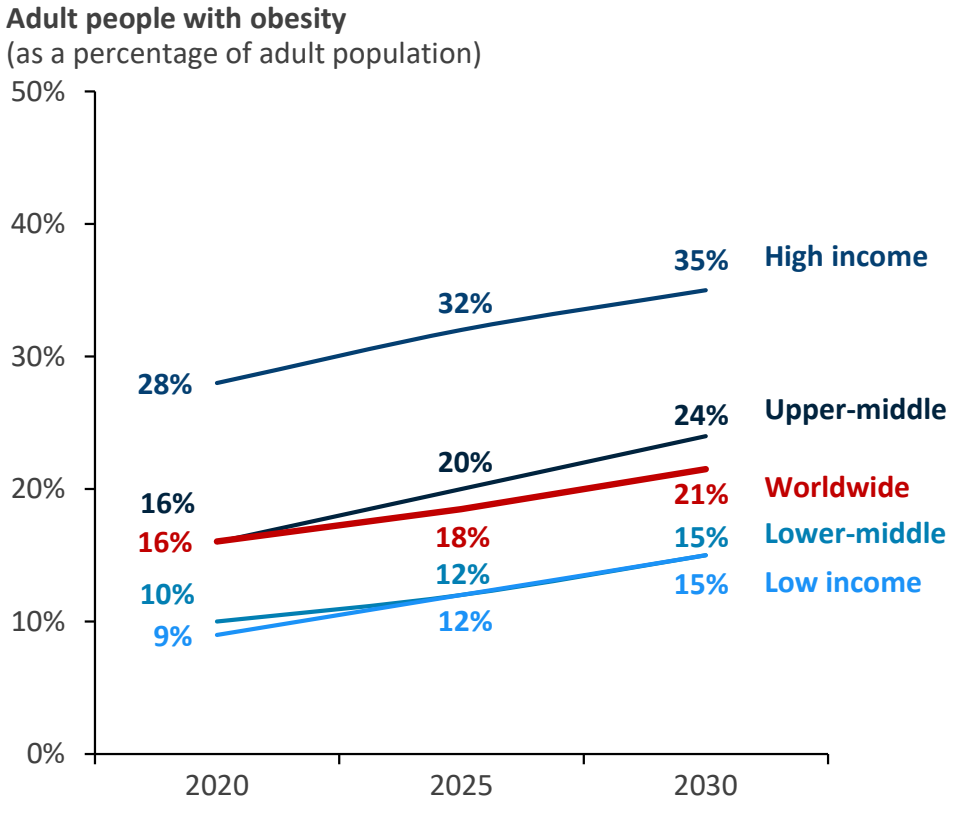
Prevalence of obesity (2020)

All people (in millions)



Projected trends (2020 – 2030)

Adults only (as a percentage of population)



** Adults with a BMI ≥ 30 kg/m² and children and adolescents with a + 2SD above median growth reference (as defined by the WHO classification)*

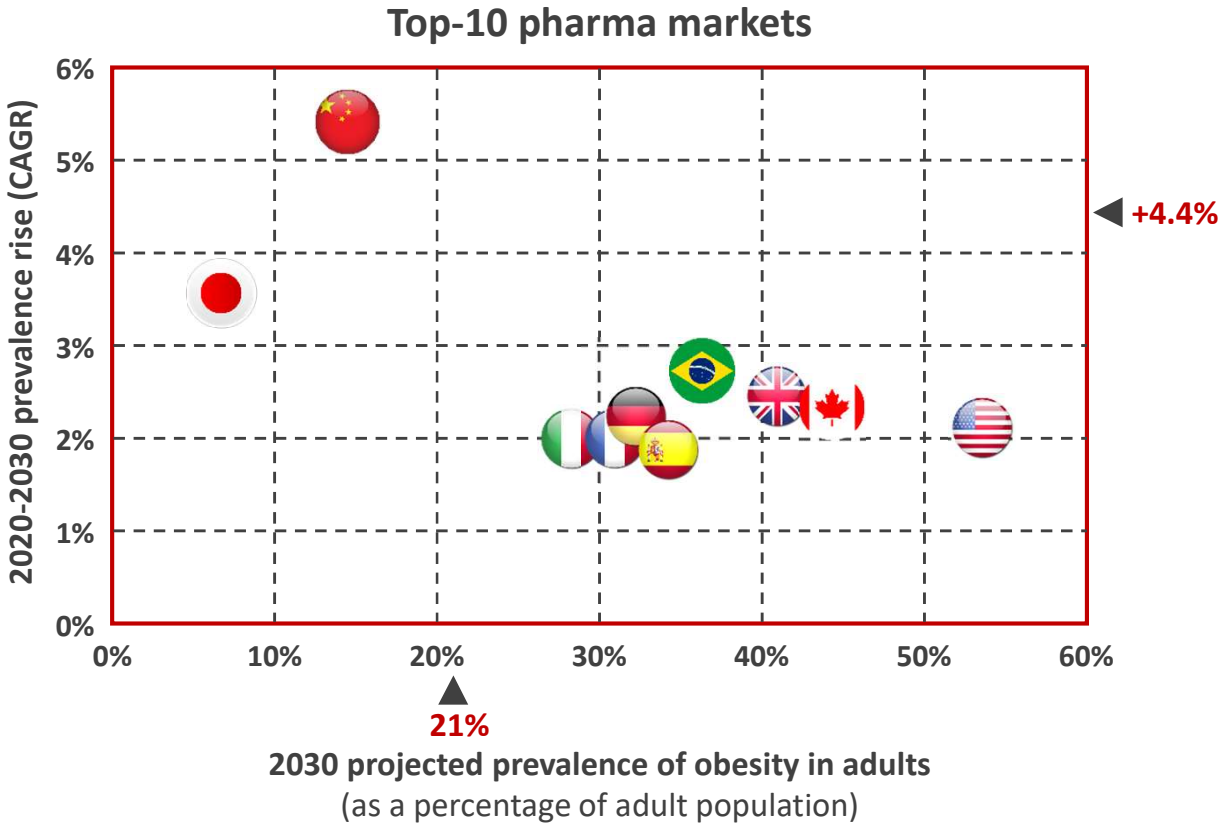
Sources: World Obesity Atlas, World Obesity Federation (March 2023) – Smart Pharma Consulting analyses

[1] Depending on the 2023 gross national income per capita, as defined by the World Bank – [2] People aged 20 years and over – [3] People aged from 5 to 19 years

The AOMs market should be mainly driven by the USA, where ~53% of adults are expected to have a BMI ≥ 30 kg/m² by 2030

Epidemiology by country

Projected trends in the prevalence of obesity* (2020 – 2030)



- By 2030, the global prevalence of obesity should increase by 4.4% on average per year and reach up to 21% of the global adult population
- The 2030 projected prevalence is higher in most top-10 pharma markets than the worldwide average due to high-income countries' lifestyle (e.g., consumption habits, sedentary):
  - USA has the highest projected prevalence of obesity (53% of adults by 2030) followed by Canada (44%), UK (41%) and Brazil (36%)
  - EU-4 countries[1] have projected prevalence rates ranging from 28% to 34% of adults
  - Japan and China have the lowest projected prevalence rates (7% and 14%, respectively)

** Adults with a BMI ≥ 30 kg/m²*

Sources: World Obesity Atlas, World Obesity Federation (March 2023) – IQVIA Institute (January 2023) – Smart Pharma Consulting analyses

[1] *Germany, France, Italy and Spain*

Multiple pharmacological and non-pharmacological solutions can be considered; the efficacy of the latter being harder to prove and often associated with each other

Main existing solutions to fight obesity

Non-pharmacological solutions[a]

- **Food regimen** are numerous and must be personalized to effectively impact the weight (e.g., paleolithic diet, intermittent fasting)
- **Physical activity** increases the energy expenditure as well as the mental and emotional well-being of obese people
- **Thermal cures** have biological, physical and sociable positive effects and are usually accompanied by a food diet and educational content
- **Cognitive behavioral therapy** (CBT) is considered as the 1st line treatment for eating disorders (e.g., goal setting, stimulus control)
- **Gastric balloon** method consists in placing a balloon in the stomach and then fill it, so that the person feels full faster
- **Bariatric surgery**[1] leads to significant weight loss through a physical modification (e.g., a sleeve gastrectomy removing a part of the stomach)

Pharmacological solutions[b]

- **Peripherally acting drugs** are lipase inhibitors, which reduce the intestinal absorption of fat (e.g., orlistat[2])
- **Centrally acting drugs** act on the central nervous system (e.g., phentermine/topiramate[3], bupropion/naltrexone[4], lorcaserin[5]…)

  Some anti-depressants are also used against obesity (e.g., fluoxetin)
- **Mimicking drugs** mimic intestinal hormones, naturally released after eating, to send the brain the signal of satiety (e.g., semaglutide[6] and liraglutide[7] mimic the GLP-1[8] hormone, tirzepatide[9] mimics the GLP-1 and GIP[10] hormones)

Sources: [a] "Pharmacologic Therapy for Obesity", US National Library of medicine (August 2022) – [b] "Pharmacotherapy of obesity: an update on the available medications and drugs under investigation", EClinicalMedicine (August 2023) – Smart Pharma Consulting analyses

[1] Surgery is only used for severe cases (BMI > 40) or when an obesity-related condition such as diabetes can be improved through the weight loss – [2] Xenical/Alli – [3] Qsymia – [4] Contrave / Mysimba – [5] Belviq – [6] Wegovy – [7] Saxenda – [8] Glucagon-Like Peptide-1– [9] Zepbound – [10] Glucose-dependent Insulinotropic Polypeptide

The main products on the market are centrally-acting drugs and mimicking drugs, with a higher proven efficacy of the two latest entrants on the market

Marketed AOMs

Drug name	Zepbound	Wegovy	Imcivree	Saxenda	Contrave / Mysimba[1]	Qsymia	Belviq	Xenical / Alli
INN	Tirzepatide	Semaglutide	Setmelanotide	Liraglutide	Bupropion / Naltrexone	Phentermine / Topiramate	Lorcaserin	Orlistat
Mechanism of action	GLP-1 RA[2] / GIP RA	GLP-1 RA agonist	MC4[3] RA	GLP-1 RA	MC4 RA	Sympathomimetic / GABA R modulation	Serotonin 3C RA	Lipase inhibitor
Type	Mimicking drugs	Mimicking drugs	Centrally acting drugs	Mimicking drugs	Centrally acting drugs	Centrally acting drugs	Centrally acting drugs	Peripherally acting drugs
Pharma company	Lilly	novo nordisk	Rhythm PHARMACEUTICALS	novo nordisk	Currax pharmaceuticals LLC	VIVUS	ARENA PHARMACEUTICALS / Eisai	HALEON / H2 pharma / CHEPLA PHARM Arzneimittel
FDA / EMA approval	2023 / 2023	2021 / 2022	2022[4] / 2022	2014 / 2015	2014 / 2015	2012 / *not yet approved*	2012[5] / *not yet approved*	1999 / 1998[6]
Weight loss (%)[7]	20.9 %	14.8 %	7.9 %	8.0 %	6.1 %	8.6 %	5.0 %	< 5%

Note: Phentermine on its own (Adipex, Lomaira) is used as an appetite suppressant – Other products are commercialized, e.g., amfepramone, phendimetrazine

Sources: "Novel Anti-Obesity Therapies and their Different Effects and Safety Profiles: a critical overview", US National Library of medicine (June 2023) – EMA – FDA – Smart Pharma Consulting analyses

[1] Contrave in the EU and Mysimba in the RoW – [2] Receptor Agonist – [3] Melano Cortin-4 – [4] Supplemental indication for obesity due to Bardet-Biedl Syndrome – [5] Withdrawn from the market in 2020 and active lawsuit since 2021 due to suspicions of increased risks with cancer – [6] Initially introduced by Roche as a Rx-bound drug under the brand name Xenical – [7] Clinically proven

Multiple Phases II and III clinical trials are running, with Lilly and Novo Nordisk being the most advanced companies

AOMs in development

Phase II			
Maridebart cafraglutide	AMGEN		IV form
Dapiglutide	ZEALAND PHARMA		IV form
LB54640	LG Chem	Rhythm PHARMACEUTICALS	Oral form
CT-388	CARMOT THERAPEUTICS	Roche	IV form
CT-868	CARMOT THERAPEUTICS	Roche	IV form
Danuglipron	Pfizer		Oral form

Phase III			
Retatrutide	Lilly		IV form
Survodutide	Boehringer Ingelheim	ZEALAND PHARMA	IV form
Pemvidutide	altimmune		IV form
Cagrilintide + semaglutide	novo nordisk		Oral form
Semaglutide	novo nordisk		Oral form
Orforglipron	Lilly		Oral form
Mazdutide	Lilly	Innovent	IV form
Bimagrumab	Lilly		IV form

Sources: clinicaltrials.gov – Smart Pharma Consulting analyses

Oral form IV form

Amongst the Anti-Obesity Medications in Phase II development stage, maridebart cafraglutide from Amgen has shown, to date, the best results

AOMs in development – Phase II

Maridebart cafraglutide

AMGEN

- **GIP** RA[1] **/ GLP-1** RA
- **14.5%** weight reduction after 12 weeks[2] (Phase I – June 2023)
- Phase II study (estimated completion date: January 2026)

Dapiglutide

ZEALAND PHARMA

- **GLP-1** RA **/ GLP-2** RA
- **4.3%** weight reduction after 4 weeks[2] (Phase I – June 2022)
- DREAM Phase II study (estimated completion date: August 2024)

LB54640

LG Chem Rhythm[3] PHARMACEUTICALS

- **MC4** RA
- Phase I study completed in July 2022
- An ongoing Phase II study in patients with genetic obesity (estimated completion date: December 2025)

CT-388

CARMOT THERAPEUTICS Roche[4]

- **GLP-1** RA **/GIP** RA
- **8.4%** weight reduction after 4 weeks on patients with type 2 diabetes (Phase I – October 2023)
- Ongoing Phase I/II study in people with and without type 2 diabetes

CT-868

CARMOT THERAPEUTICS Roche[4]

- **GLP-1** RA **/GIP** RA
- For overweight and obese patients with Type 1 and type 2 diabetes
- No disclosed results from Phase I study
- Ongoing phase II study (started in October 2023)

Danuglipron

Pfizer

- **GLP-1** RA (oral form)
- **8% to 13%** weight reduction after 32 weeks (Phase IIb results disclosed by Pfizer in December 2023)
- An improved once-daily form is to be tested in 2024, after high rates of side effects seen with the twice-daily form

Sources: clinicaltrials.gov – Respective company's announcement as of January 2024 – Smart Pharma Consulting analyses

[1] Receptor Agonist – [2] In overweight and obese adults – [3] Rhythm Pharmaceuticals acquired the global licensing rights of LB54640 in January 2024 – [4] Roche acquired Carmot Therapeutics in Dec. 2023

Several of the Anti-Obesity Medications in Phase III have reached more than 15% weight loss results

AOMs in development – Phase III

Retatrutide

- **GLP-1/GIP/Glucagon** RA[1]
- **24.2%** weight reduction[2] over 48 weeks (Phase II – June 2023)
- Ongoing phase III study: TRIUMPH-2 trial (2023 – 2026)

Survodutide

- **GLP-1/Glucagon** RA
- **19.0%** weight reduction[2] after 46 weeks (Phase II – June 2023)
- 3 ongoing phase III studies: SYNCHRONIZE-1, -2, - CVOT[3]

Pemvidutide

- **GLP-1/Glucagon** RA
- **15.6%** weight reduction[2] over 48 weeks (MOMENTUM) (Phase II – November 2023)
- Altimmune is looking for a partner to start a phase III study and launch the product

Cagrilintide + semaglutide

- **Amylin / Calcitonin** RA (**CagriSema**)
- **15.6%** weight loss over 32 weeks (Phase II – August 2023)
- Ongoing phase III study: REDEFINE 2 trial (2023 – 2025)

Semaglutide (oral form)

- **GLP-1** RA
- **15.1%** weight loss[2] over 68 weeks (Phase III: OASIS 1 trial – published in August 2023)

Orforglipron

- **GLP-1** RA
- Up to **14.7%** weight reduction[2] after 36 weeks (Phase II – June 2023)
- Ongoing phase III study: ATTAIN-1 (2023 – 2027)

Mazdutide

- **GLP-1/Glucagon** RA
- **7.0%** weight reduction[2] over 24 weeks in Chinese patients (Phase II – December 2023)
- Phase III GLORY-1 completed & phase III GLORY-2 ongoing

Bimagrumab[4,5]

- **Activin II** RA
- **6.5%** weight reduction[2] after 48 weeks (Phase II – January 2021)
- No ongoing phase III study, to date in obesity

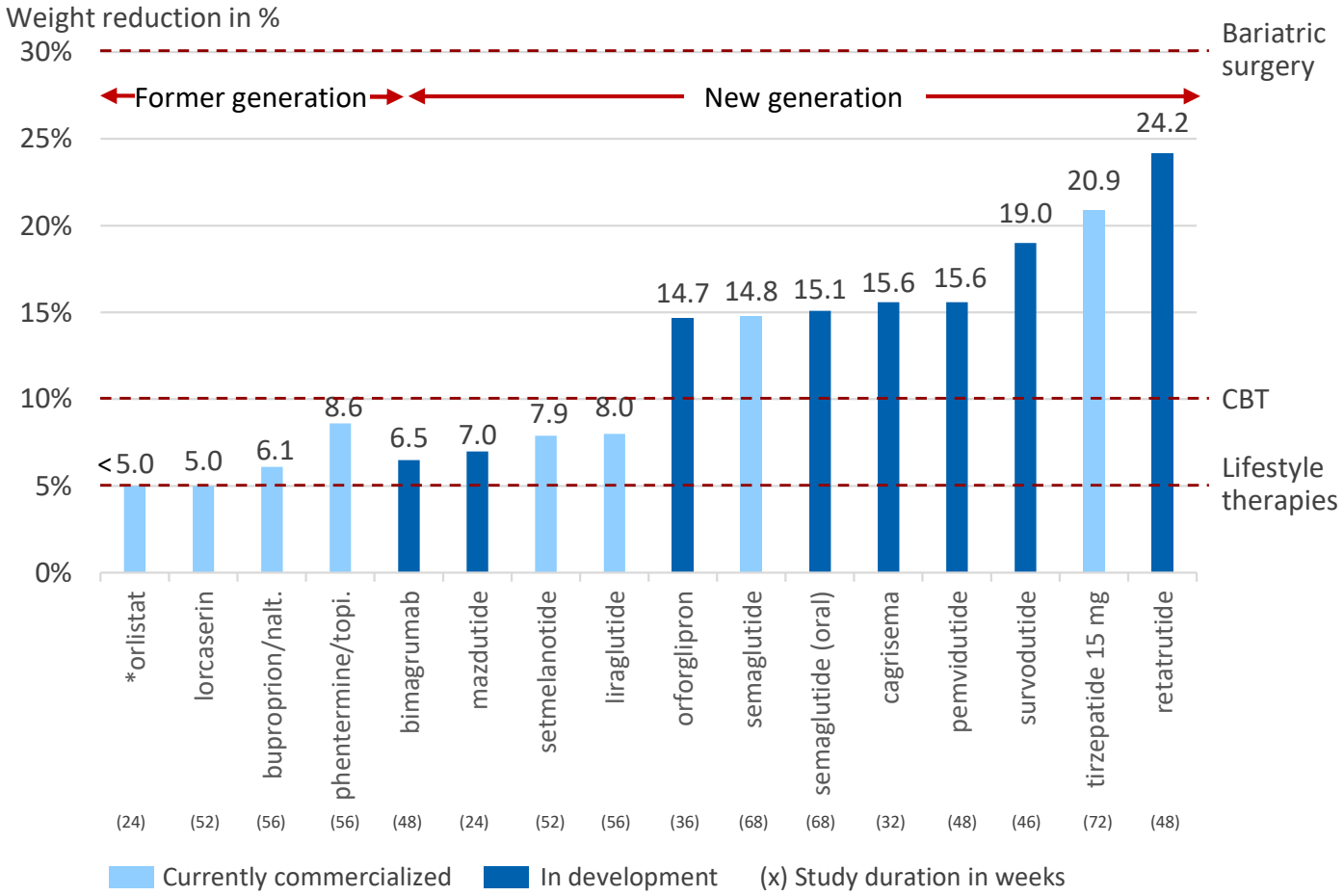
Note: An ongoing Phase II study of S-309309 – a MonoacylGlycerol AcylTransferas 2 (MGAT2) inhibitor is developed by Shionogi. Expected results in April 2024

Sources: clinicaltrials.gov – Respective company' investors' announcements as per Jan. 2024 – Smart Pharma Consulting analyses

[1] Receptor Agonist – [2] In overweight and obese adults – [3] Cardio-Vascular Outcomes Trials – [4] Acquired by Lilly from Versanis Bio. For USD 1.9B in August 2023 – [5] Ongoing phase IIb study: BELIEVE alone and combined with semaglutide

Retatrutide from Lilly has shown the highest weight loss results, being more than twice as effective as CBT[1] and approaching the efficiency of bariatric surgery

Efficacy of AOMs[2]



- **Former generation** of AOMs provides **< 9% weight loss**:
  - Peripherally acting drugs: less than 5%* weight loss for orlistat (Xenical / Alli)
  - Centrally acting drugs: from 5.0% weight loss for lorcaserin (Belviq) to 8.6% weight loss for phentermine/ topiramate (Qsymia)
- **New generation** of AOMs has demonstrated variable results, ranging from **6.5%** to **24.2% weight loss**:
  - Liraglutide (Saxenda): 8.0% weight loss
  - Semaglutide (Wegovy) was the most effective anti-obesity drug until the arrival of tirzepatide (Zepbound)
  - Five drugs currently in Phase III clinical trials have shown to be more effective than semaglutide to reduce weight
  - Retatrutide clinical results are close to that obtained with bariatric surgery

* Estimated after Orlistat clinical trials results that have been expressed as a reduction in kg and not in %

Sources: "Pharmacotherapy of obesity: an update on the available medications and drugs under investigation", EClinicalMedicine (March 2023) – Companies' investors' announcements as of January 2024 – Smart Pharma Consulting analyses

[1] Cognitive behavioral therapy – [2] Clinically proven weight loss in obese patients

Obesity is tackled through national prevention campaigns in the USA, but the lack of HCPs trainings and the limited coverage of AOMs should hamper their growth

Healthcare environment (1/3)

USA

- The government has launched **national campaigns** about the importance of balancing food intake with exercise (e.g., Play Hard campaign) and about nutrition education (e.g., Food Stamp campaign)
- **HCPs lack training** to provide **recommendations** to obese people, with only 40% of overweight or obese people receiving HCP counseling on weight loss[a]
- Multiple **patient associations** and **NGOs** address obesity, specializing on different categories (age, level of income, ethnicity, etc.)
- **Coverage** of AOMs **by private** health **insurance** companies is at least **possible** while in the **public** it is either **spotty**, as in Medicaid, **or prohibited**, as in Medicare, though some select Medigap and Medicare Advantage plans for retirees do
- Members of Congress have introduced the **Treat and Reduce Obesity Act of 2023** (H.R. 4818 and S. 2407) that **would allow Medicare** to **cover AOMs** which would result in greater use by Medicare enrollees
- Many **health plans paid** for by **large employers will cover Wegovy** and **Zepbound**, although they may require that patients try a rigorous diet program and/or cheaper drugs first
- Semaglutide (**Wegovy**), liraglutide (**Saxenda**[1]), and tirzepatide (**Zepbound**) are **approved for obesity in adults**
- As of September 2023, the **street price** for **Wegovy was $1,349 for 4 weeks**, but **discounts** are **granted** to **public** and **private insurers**; and **patients** can benefit from **coupons**
- The **outcomes** of the **SELECT study**, showing a **20% reduced risk of major cardiovascular events** such as **heart attacks** or **strokes** when obese **patients** are **treated by Wigovy**, will **put pressure** on insurance companies **to cover obese patients** with **associated co-morbidities**
- **Novo Nordisk expects** to obtain from the FDA a **label extension based on** the **SELECT study** outcomes by end of 2025

Sources: "The Challenges and Opportunities associated with reimbursement for obesity pharmacotherapy in the USA", PubMed (2015) – "Public Health Considerations regarding Obesity" US National library of medicine (June 2023) – [a] "HCP counseling for weight management behaviours among adults with overweight or obesity", BMJ (Nov. 2020) – Smart Pharma Consulting analyses

[1] Also approved for adolescents aged 12 to 17 by the FDA (December 2020) and the EMA (March 2021)

The coverage of AOMs by public and private health insurance systems in major European countries by 2030, could be introduced but partially, considering the high budget impact

Healthcare environment (2/3)

Europe

Germany

- **No national strategy** nor **prevention program** re. obesity
- Since February 2023, the German Minister of Nutrition fights to ban advertising of sugar, salt and fat-content food for children
- Creation of the **German Obesity Alliance** in **2020**[1]
- By law, public health insurance schemes cannot **reimburse** the so-called "**lifestyle drugs**" as Anti-Obesity Medications
- **Wegovy** is available since 2023 for a 4-week cost of **USD 328** for the 2.4 mg dosage

UK

- The **NICE**[4] produced several official **guidelines on prevention**, weight loss **treatments** and **surgery** since 2014
- **Access** to **Wegovy** under a **two-year pilot**[5] **program** implemented by hospital specialists for patients with a BMI >35 and one obesity-related condition (e.g., diabetes, high blood pressure) which will give access to around **35,000 obese patients**
- **Pharmacy chains** (e.g., Boots, Superdrug) charge private patients for **Wegovy 2.4 mg from USD 256** for a four-week treatment

France

- Several **preventive governmental** actions, incl. reimbursed health checks and follow-ups for obese children
- **37 centers specialized** in obesity and **multiple associations**
- **Wegovy** benefited from an **early access scheme** (July 2022 – October 2023) with strict conditions[2] and a coverage by the National Health Insurance Fund
- **Wegovy** has been **considered as** providing **no clinical added value** (CAV) by the Transparency Committee in December 2022[3]

Italy

- **Best practices policies** for a healthier food environment exist, but obesity is **not a major topic** for the government
- Obesity-focused **facilities are heterogeneously present** in the country, with few facilities in highly prevalent regions
- **Patient associations** fight especially against **child obesity**
- AOMs are **not reimbursed** in Italy by the National Healthcare system

Sources: Countries' national Healthcare systems' websites – "Confronting obesity in Germany", The Economist Intelligence Unit (2016) – NICE clinical guidance on obesity (July 2023) – Smart Pharma Consulting analyses

[1] Includes patients, HCPs, insurance companies and drug manufacturers to change awareness of, and attitude towards obesity in the society – [2] For people with a BMI >35, complementary to a low-calory diet and an increase in physical activity, if a nutritional therapy did not result in the patient losing more than 5% of their weight in 6 months – [3] The positive results from the SELECT cardiovascular outcomes trail (August 2023) will lead to a reassessment of Wegovy – [4] National Institute for Health and Care Excellence – [5] Zepbound could join the program too

In China, India and Brazil, it is unlikely that AOMs will be reimbursed, even partially, due to the general economic context and the existing healthcare cost coverage systems

Healthcare environment (3/3)

Rest of the World

China[a]

- **Chinese** people have **higher percentages of body fat** and **rates of cardiovascular risk factors** and all-cause mortality than the western population at given BMI levels
- The government has made **obesity prevention** a **priority** in its national healthcare blueprint, known as "Healthy China 2030"
- Active role of the **academic community** with the creation of the **Obesity Prevention & Control Section** in 2021
- **Liluping** (benaglutide), a locally developed **GLP-1 RA**[1] has been **approved in 2023**, **as well as** a **copycat version of Saxenda** (liraglutide) which is **marketed** at **~USD 123 per month**

Japan[d]

- Japan has **one of the lowest** adult **obesity rates** in the world (4.5%)
- **National programs** to **prevent** obesity through **education**
- The "**metabo law**[2]", introduced by the Ministry of Health in 2008, aims at helping citizens live a healthier lifestyle by achieving a **mandatory waistline** of 85 cm for women and 90 cm for men
- **Adult obesity** includes **BMI > 25**, due to physiological differences between Asian and Western metabolisms
- **Most patients** will pay **30%** of **medical expenses for Wegovy**, which has been approved in March 2023 and will be launched from February 22, 2024, at **USD 289** for 2.4 mg for 4 weeks[3]

India

- Implementation by the government of a "**fat tax**" on food and beverage considered to have "a high amount of fat"[b]
- In 2021, **74% of Indians** are **unable** to **afford a healthy diet**[c]
- **Saxenda** is **available**, **Wegovy** is **expected in 2026**, and **Sun Pharma** develops **utreglutide**, a **long-acting GLP-1 RA**

Brazil[e]

- Proposal of a strategy for "the **prevention** and **care**" of **childhood obesity** in Oct. 2023 (Proteja strategy)
- **Approval** of **Wegovy** in **early 2023** by the Brazilian Health Regulatory Agency (ANVISA) for **adolescents** and **adults**
- Wegovy is **not reimbursed** in Brazil

Sources: : [a] "The serious challenge faced by Chinese children and adolescents", US National library of medicine (July 2023) – [b] "Fat taxation in Indi", Health Promotion Perspectives (2020) – [c] Regional Overview of food security and nutrition, FAO (Dec. 2023) – [d] "Japanese data from the ACTION-IO study", US National library of medicine (Nov 2020) – [e] "Analysis of the elaboration and proposal of a Brazilian intersectoral strategy for the prevention and care of childhood obesity", Cad Saude Publica (Oct. 2023) – Smart Pharma Consulting analyses

[1] Receptor Agonist – [2] It includes an objective to decrease obesity rate by 25% in 17 years, and failure to meet the goals results in a fine, called the "fat tax", paid by the regions – [3] Access will be limited to patients with a BMI >27 and suffering from at least two obesity related diseases, or having a BMI > 35

Prevalence, medical needs, economic and social impacts are so important, that the arrival of new effective and safe AOMs are speeding up the market growth, despite their high prices

AOMs market drivers and limiters (2023 – 2030)

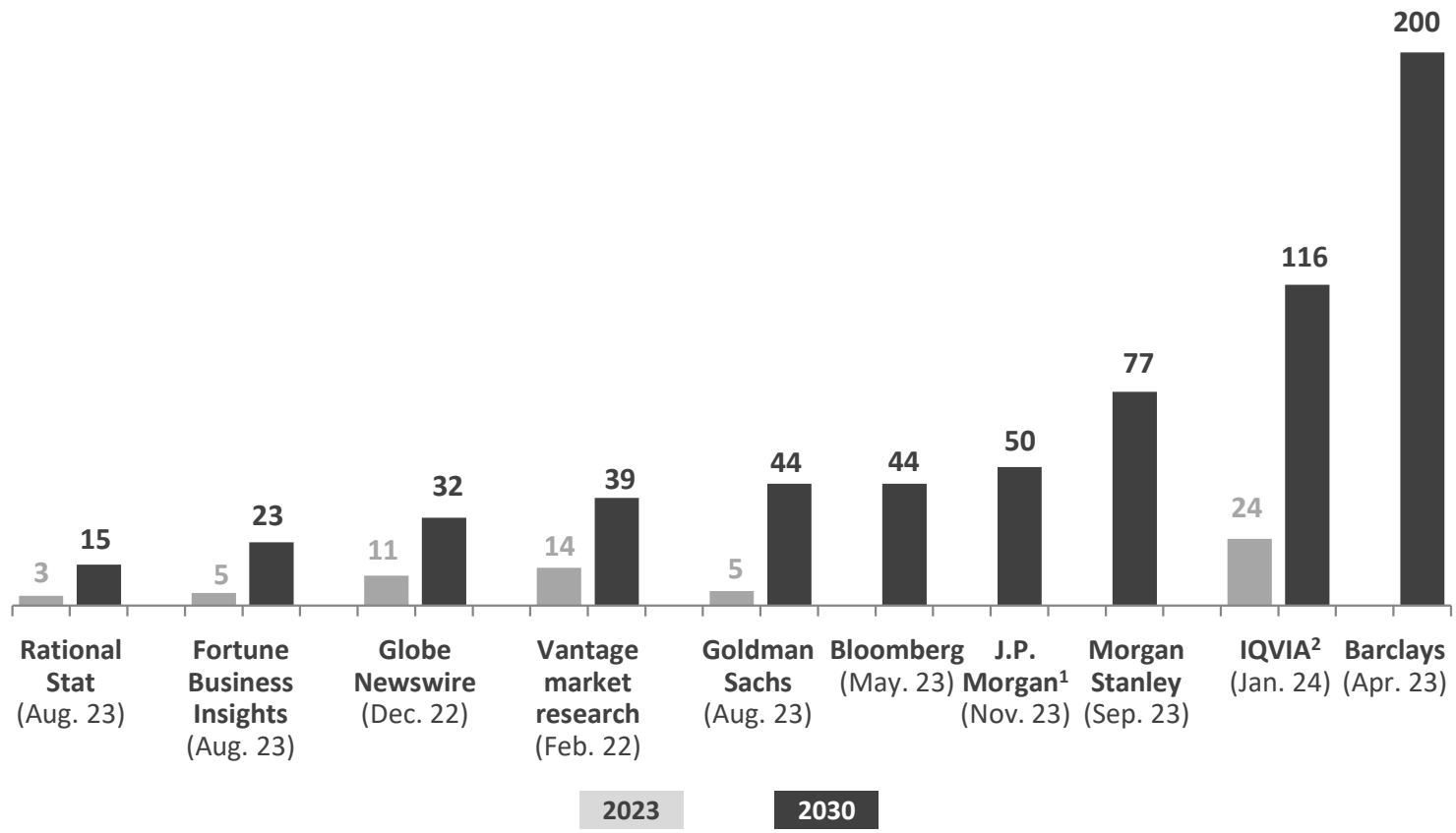
Market Determinants	Driving Factors	Limiting Factors
Health Authorities (Policy-markers – Public payers)	▪ Obesity is a public health burden having an economic (e.g., absenteeism) and social (e.g., exclusion) impact ▪ Obese-related risks of chronic diseases (e.g., cardio-vascular diseases, hypertension, cancer[1], type-2 diabetes, depression, sleep apnea, arthritis) and premature death[2] ▪ Political pressure to better support the obese population	▪ Budget constraints of public healthcare coverage systems ▪ No strong evidence re. the positive impact of AOMs on total healthcare costs relative to obese patients ▪ Non reimbursement / partial reimbursement and/or limited reimbursement to a subset of the obese population
Customers (HCPs – Patients – PAGs – Private payers)	▪ Increasing prevalence due to population ageing and a larger number of people with unhealthy and sedentary lifestyles ▪ Increase in population awareness re. severe chronic diseases related to obesity ▪ Rising disposal income, healthcare expenses and awareness for AOMs, especially in Asian countries (e.g., India, China)	▪ High costs to be beard by patients or insurance companies (e.g.; ~USD 17,537 street price[3] p.a. for Wegovy in the USA) ▪ Medium-low persistence (e.g., 60% of dropouts within a year under Wegovy[a]) ▪ Appetite for non-pharmacological solutions (e.g., gyms, exercise, diet plans, compliance for surgical procedures) ▪ Off-label prescriptions of same molecules indicated for T2D[4]
Competitors (Pharma companies)	▪ Increase of the offer contributing to raise HCP and patient awareness ▪ Development of more effective and safer AOMs favoring earlier adoption, better adherence and longer persistence ▪ New coming AOMs leading to increasing price competition and consequently market expansion in volume ▪ Oral forms that would be more cost-effective	▪ Adverse events induced by AOMs (e.g., gastro-intestinal disorders with GLP-1 RAs[5]) ▪ Medications that speed up the metabolism and suppress the appetite are risky and can lead to high blood pressure, increase in heart rate, lung and heart problems ▪ Supply limitations that should extend into 2024 and 2025 ▪ Counterfeit drugs that may put at risk patients and represent a loss of income for original manufacturers

Sources: [a] H. Gasoyan et al., Obesity (Silver Spring, Dec. 2023) – Smart Pharma Consulting analyses

[1] Centers for Disease Control and Prevention (CDC) estimated in 2021 that more than 650,000 obese-associated cancers occur in the USA per year – [2] The WHO considers that more than 2.8 million people are dying each year because of their obesity – [3] Without considering the Wigovy savings card (a type of coupon) or the discounts granted to insurance companies – [4] These products have the same active pharmaceutical ingredient (e.g., semaglutide) but are marketed under different names and prices with different coverage status (e.g. Ozempic for T2D (type 2 diabetes) and Wegovy for obesity) – [5] Receptor Agonists

Various sources, recently published, estimate the AOMs market from USD 15 B to USD 200 B by 2030, showing a very high variance with assumptions most often poorly documented

AOMs market sales estimates (2023 – 2030) – Open Access Data



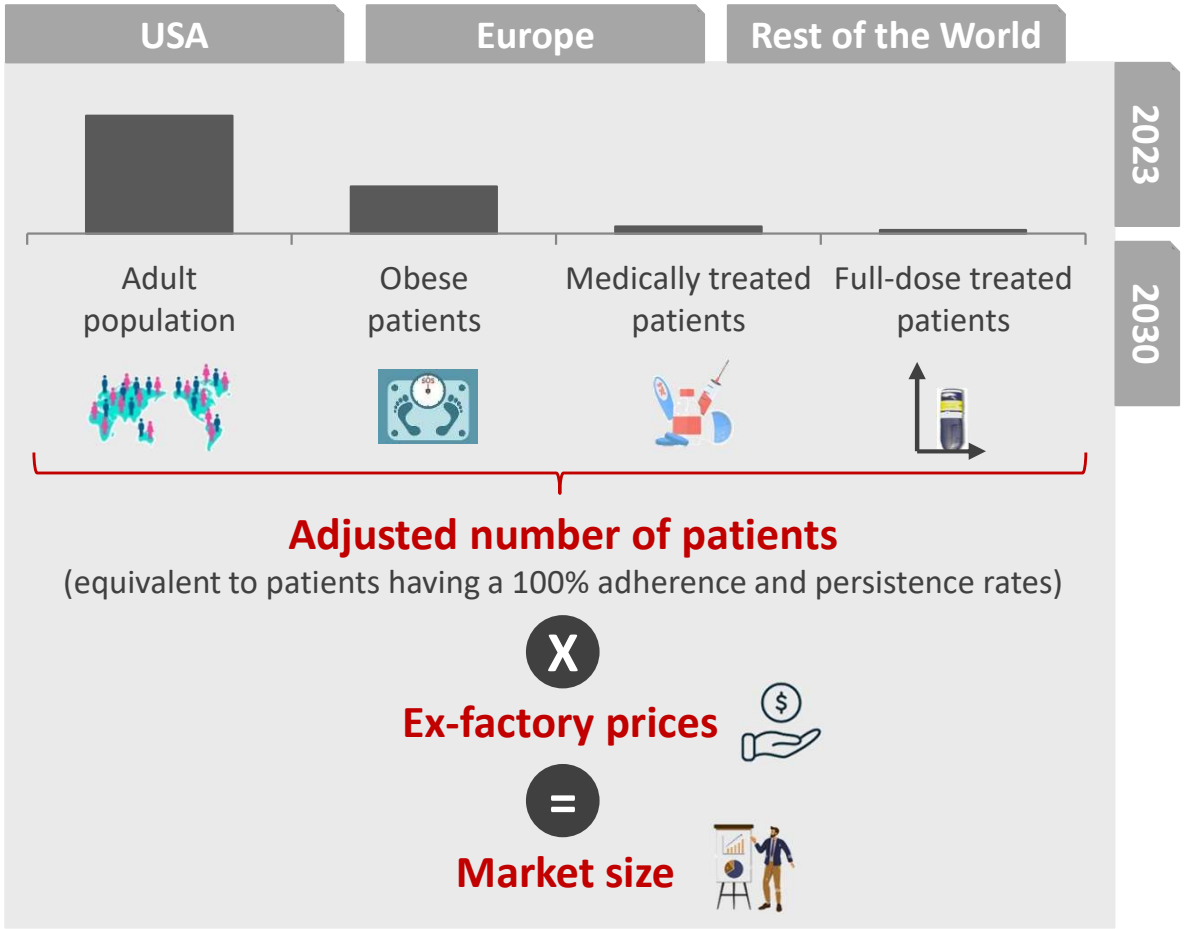
- Open access data show a significant variance, with a global obesity market estimated to range, by 2030, from USD 15 B to USD 200 B
- The rationale behind the assumptions made is most often poorly documented whether in volume (e.g., prevalence of obesity, share of obese patients medically treated, patient adherence to treatment) or in price
- Amongst the 10 recent reports that have been reviewed, 4 present a 2030 forecast without specifying the starting point in 2023

Sources: Desk research (January 2024) – Smart Pharma Consulting analyses

[1] USD 100 B forecast by 2030, driven equally by diabetes and obesity usage – [2] Extrapolated from 2028 estimates

Smart Pharma Consulting estimated the number of equivalent full-dose treated patients and then translated it in value, based on net price assumptions by region over the 2023–2030 period

AOMs market sales estimates (2023 – 2030) – Methodology



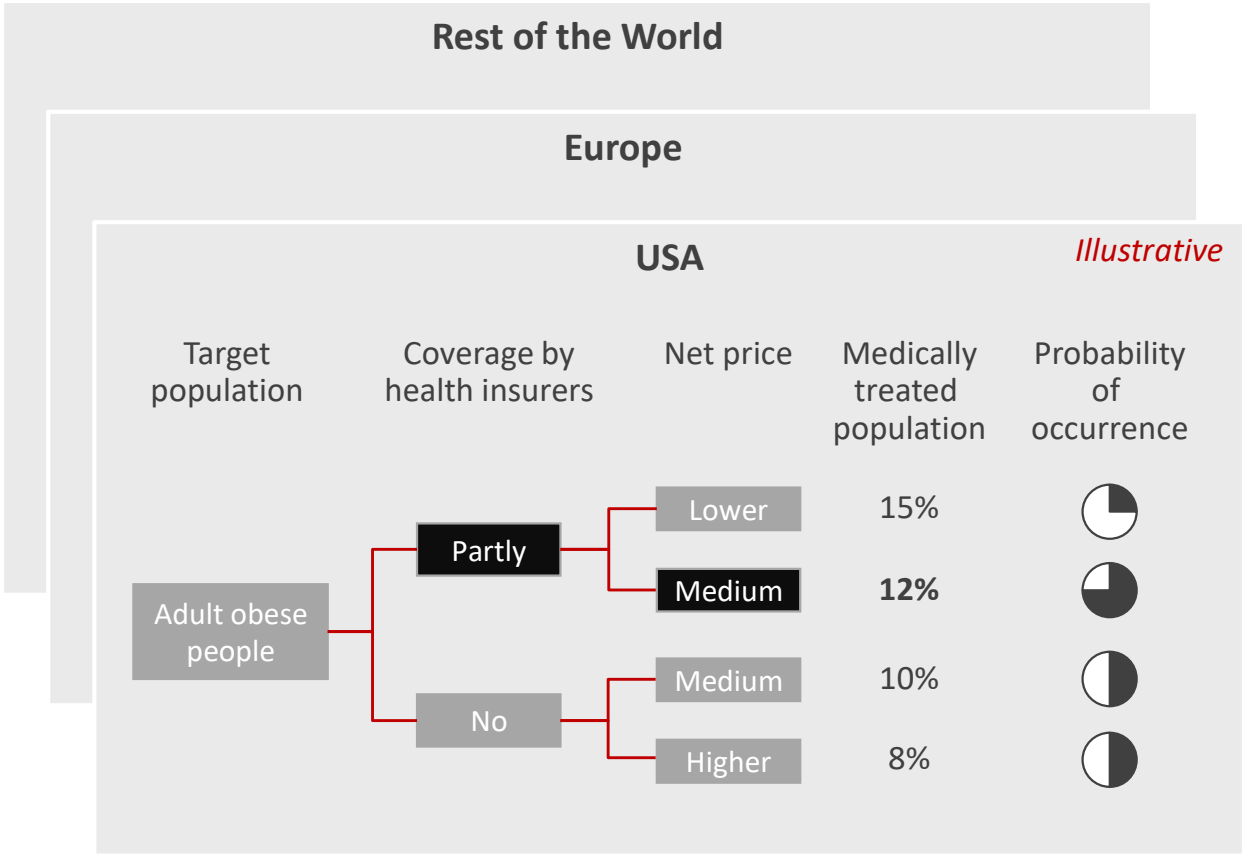
- Only adult people with a BMI ≥ 30 kg/m² have been considered by Smart Pharma Consulting, in line with WHO's definition of obesity
- Population projections are based on OECD[1] statistics
- Prevalence projections are adapted from the Atlas of the World Obesity Federation[2] (March 2023)
- Number of medically treated patients are estimated after multiple sources (e.g., IQVIA, market players' investor communications, investment funds)
- Number of full-dose[3] medically treated patients are estimated by combining adherence and persistence rates by analogy with results of various real-world studies carried out with semaglutide in obesity and in T2D[4], and with other drugs in chronic diseases[5]
- Ex-factory prices have been estimated, net of rebates granted to patients, public and private health insurers or other intermediaries
- Several scenarios have been considered according to reimbursement status and net pricing strategy

Sources: Smart Pharma Consulting analyses

[1] Organization for Economic Cooperation and Development – [2] Organization representing professional members of the scientific, medical and research communities from over 65 regional and national obesity associations – [3] Adjusted number of patients as if their adherence and persistence rates were 100% – [4] Type-2 diabetes – [5] Crohn disease, rheumatoid arthritis, psoriasis, hypercholesterolemia, hypertension

The AOMs market growth by 2030 will strongly depend on their coverage status by health insurance organizations, pharma companies pricing strategy and patients' willingness to pay

AOMs market sales estimates (2023 – 2030) – Scenario building principle



- The ramp up of the AOMs market over the 2023 – 2030 period will be strongly dependent on the following inter-related variables – per country:
  - The degree of coverage by public and/or private health insurers
  - The net price granted by pharma companies to these organizations and/or to patients
- The coverage of AOMs can be:
  - Limited to the most severe cases[1]
  - Restricted to patients having failed to respond to non-pharmacological and/or cheaper medications
  - Limited in duration (e.g., one year)
  - Conditional upon patients' enrolment in a journey[2]
  - Capped in term of reimbursement level[3]
- The net price by country and over time will depend on:
  - Coverage policy of health insurance organizations[4]
  - Payers' sensitivity to price
  - Competitive intensity of pharma companies on price
  - Balance between supply and demand

Sources: Smart Pharma Consulting analyses

[1] E.g., BMI > 35 + one risk factor – [2] Such as a specific Patient Support Program to ensure the proper usage and adherence of obese patients to AOMs, and thus optimize their clinical outcomes and value – [3] Per pack in percentage or in absolute terms, or for a certain treatment duration – [4] Their position could evolve with additional studies demonstrating a reduction of risk factors associated to obesity with the new generation AOMs and/or a positive budget impact

The base case scenario has been built on the assumption of a partial coverage of AOMs in the USA, a very limited one in Europe and no reimbursement in the rest of the world[1]

AOMs market sales estimates (2023 – 2030) – Base case scenario description

USA

- The percentage of adult obese patients medically treated will grow from 4% to 12% over the period due to increasing awareness re. the disease
- The coverage of AOMs by private and public health insurers will be partial, but should increase over the period, especially with the confirmation of the positive cardio-vascular outcomes of Wegovy (SELECT trial) and with the expected morbidity and mortality reduction of Zepbound (SURMOUNT-MMO trial)
- The net price will remain moderately high
- The net price has been set based on the 2023 situation and its evolution has been estimated at +3.8% p.a., based on historical trends

Europe

- The reimbursement of AOMs in Europe will be strictly limited to the most severe obese patients (e.g., BMI > 35 + one risk factor)
- The reimbursement would occur for a limited duration (e.g., 6 to 12 months) and if patients adhere to a strict weight reduction program
- The net price will be moderately low compared to the US and will decrease by ~-2% p.a.

Preliminary estimates		USA		Europe		Rest of the World		Worldwide	
		2023	2030	2023	2030	2023	2030	2023	2030
Adult population (in millions)		257	271	710	719	4,326	4,808	**5,293**	**5,798**
Adult obese[1] patients (in millions) *(% of adult population)*		118 *(46%)*	142 *(52%)*	204 *(29%)*	237 *(33%)*	602 *(14%)*	867 *(18%)*	**924** ***(17%)***	**1,246** ***(21%)***
Medically treated adult obese patients[2] *(as a % of adult obese patients)*		4.4 *(4%)*	17.0 *(12%)*	4.0 *(2%)*	19.0 *(8%)*	6.0 *(1%)*	26.0 *(3%)*	**14.4** ***(2%)***	**62.0** ***(5%)***
Full-dose treated patients p.a.[3] (in millions) *(adjustment factor in % of treated patients)*		1.5 *(35%)*	6.0 *(35%)*	1.5 *(38%)*	7.2 *(38%)*	1.0 *(16%)*	4.1 *(16%)*	**4.0** ***(28%)***	**17.3** ***(28%)***
Full-dose treated patients by generation of AOMs (in millions) *(% of the total)*	New generations[4]	0.5 *(35%)*	4.2 *(70%)*	0.2 *(10%)*	4.3 *(60%)*	0.0 *(1%)*	0.8 *(20%)*	**0.7** ***(18%)***	**9.3** ***(54%)***
	Former generations	1.0 *(65%)*	1.8 *(30%)*	1.3 *(90%)*	2.9 *(40%)*	1.0 *(99%)*	3.3 *(80%)*	**3.3** ***(82%)***	**8.0** ***(46%)***
Ex-factory prices p.a., net of rebates[5] (in USD)	New generations	9,100	11,825[6]	2,861	2,484[7]	2,861	2,484[8]	**7,639**	**6,688**
	Former generations	792	1,029[6]	307	267[7]	189	164[8]	**419**	**395**

Most likely scenario based on collected insights and follow-on analyses carried out by Smart Pharma Consulting

Rest of the World

- AOMs should not be reimbursed, excepting in Japan, over the period due to the budget impact and/or the social perception of obesity
- The net price will be moderately low, and close to the average European price, as Novo Nordisk, and Lilly are unlikely to enter in a price war
- The net price of manufacturers should decrease by ~-2% p.a.

The current high level of uncertainties requires to treat these figures with caution and to carry out regular updates

Sources: Smart Pharma Consulting analysis

[1] With the exception of Japan

The share of obese adults medically treated worldwide should rise from ~2% in 2023 to ~5% in 2030, with new generation of drugs accounting for ~54% of patients in 2030 (+36 pts vs. 2023)

AOMs market sales estimates (2023 – 2030) – Base case assumptions*

Preliminary estimates		USA		Europe		Rest of the World		Worldwide	
		2023	2030	2023	2030	2023	2030	2023	2030
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* Most likely scenario based on collected insights and follow-on analyses carried out by Smart Pharma Consulting. The current high level of uncertainties requires to treat these figures with caution and to carry out regular updates

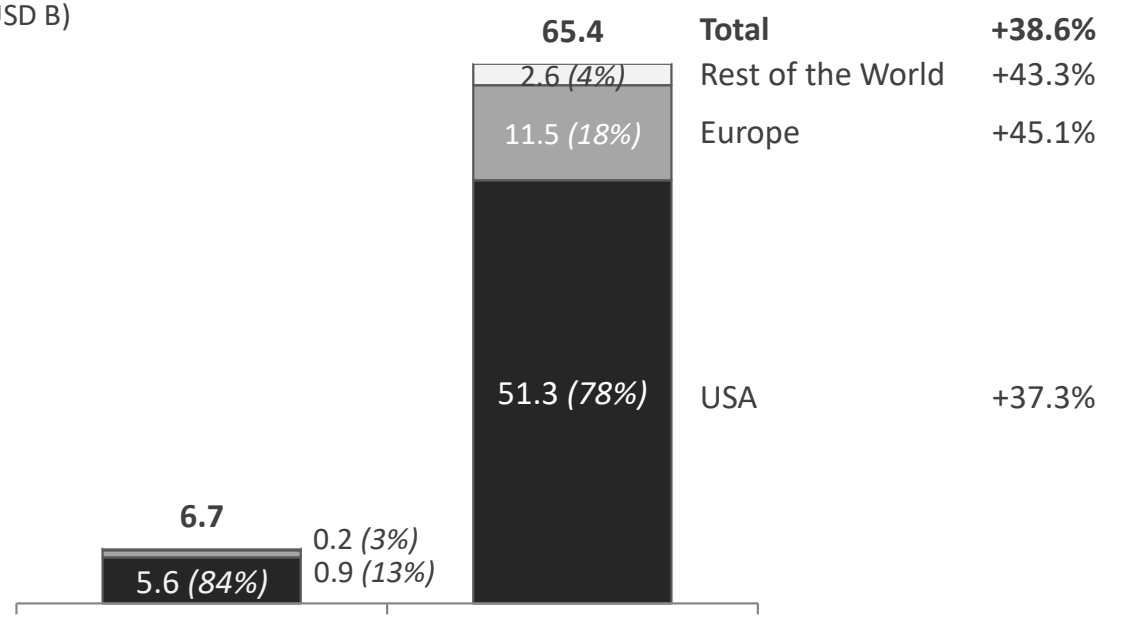
Sources: OECD population statistics (Jan. 2024) – World Obesity Federation (Jan. 2024) – Market players' websites (Jan. 2024) – PubMed (Jan. 2024) – Atonra (Nov. 2022) – Estimating the cost of new treatments for diabetes and obesity, American Enterprise Institute (Sep. 2023) – Smart Pharma Consulting estimates

[1] People with a BMI ≥ 30 kg/m² – [2] Excluding patients treated for type 2 diabetes – [3] Adjusted number of patients as if their adherence and persistence rates were 100% – [4] GLP-1 RAs indicated for obesity and other new generation AOMs being developed – [5] Rebates to patients (e.g., coupons), public and private health insurers or other intermediaries – [6] +3.8% CAGR over 2023-2030 – [7] -2.0% CAGR over 2023-2030

According to Smart Pharma Consulting, The AOMs market should reach ~ USD 65 B by 2030 with a +39% CAGR vs. 2023 and be mainly driven by Wegovy and Zepbound; and the US demand

AOMs market sales estimates – Base case results

AOMs market sales[1,2] (in USD B)



	CAGR 2023-2030
Total	**+38.6%**
Rest of the World	+43.3%
Europe	+45.1%
USA	+37.3%

	2023	2030
New generation[3]	*5.3 (79%)*	*62.2 (95%)*
Former generation	*1.4 (21%)*	*3.2 (5%)*

- By 2030, the obesity market is expected to reach USD 65.4 B at ex-factory prices before VAT and net of rebates to patients, public payers, private insurers and other intermediaries, representing a +38.6% CAGR over the 2023-2030 period:
  - USA should account for 78% of the market, with sales increasing from USD 5.6 B in 2023 to USD 51.3 B in 2030 (+37.3% CAGR)...
  - … Followed by Europe, whose sales should reach USD 11.5 by 2030 (+45.1% CAGR)
  - The rest of the world should account for ~4% of the global market, with sales reaching USD 2.6 B by 2030
- Market growth should be mainly driven by new generation of anti-obesity medications (e.g., Wegovy, Zepbound) which should account for 95% of the market in net value by 2030

* Most likely scenario based on collected insights and follow-on analyses carried out by Smart Pharma Consulting. The current high level of uncertainties requires to treat these figures with caution and to carry out regular updates

Sources: Smart Pharma Consulting estimates

[1] Excluding patients treated for type 2 diabetes – [2] Net ex-factory sales after rebates to patients (e.g., coupons), public payers, private insurers or other intermediaries and before VAT – [3] GLP-1 RAs indicated for obesity and other new generation AOMs being developed

The AOMs market offers huge sales perspectives for the first-comers – Novo Nordisk and Lilly – provided they match the supply with the demand and get significantly covered by health insurers

Worldwide AOMs market perspectives for Pharma companies

Opportunities to seize

- The number of obese adults should rise from 924 million in 2023 to 1,246 million in 2030 (i.e., +35% over the period)
- Obesity being associated with mortality, severe and costly events, governments would be forced to facilitate patients' access
- Obese people demand for effective and well-tolerated AOMs is huge and increasing
- Clinical outcomes of new AOMs[1] with 15% or more weight loss, and a pretty good safety profile should meet most of obese patients needs
- Demonstrated reduction in MACEs[2] associated with weight loss reinforces the value of these new AOMs[3] and the probability for public and private health insurers to cover their cost

novo nordisk
Lilly
AMGEN
Pfizer
Roche
Boehringer Ingelheim
Rhythm PHARMACEUTICALS
ZEAL& ZEALAND PHARMA
innovent
altimmune
CARMOT THERAPEUTICS
LG Chem

Challenges to address

- The AOMs market growth will remain hampered by insufficient production capacities for Wegovy and Zepbound, that are estimated to last up to 2026, and possibly beyond
- The off-label Rx of Ozempic (semaglutide) and Mounjaro (tirzepatide) registered for diabetes, will cannibalize Wegovy and Zepbound respectively, due to price and/or coverage status differences
- Newcomers would have to offer a minimum weight reduction of 18-20%, a good safety profile, while demonstrating positive cardiovascular outcomes through CVOT[4] data to gain market share
- The pricing strategy of pharma companies will be essential to determine the coverage level of AOMs by health insurers and the magnitude of obese patients' access

Sources: Smart Pharma Consulting analyses

[1] Such as retatrutide, tirzepatide, semaglutide – [2] Major Adverse Cardiovascular Events – [3] As demonstrate in mid-2023 with the results of the SELECT study carried out with Wegovy of Novo Nordisk. Lilly is currently investigating the effect of tirzepatide on the reduction of morbidity and mortality in obese adults (SURMOUNT-MMO trial) – [4] Cardio-Vascular Outcomes Trials

According to our current insights and analyses, the worldwide AOMs market could reach USD ~65 B* in 2030, with more than ~80% of it captured by Novo Nordisk and Lilly

Key Takeaways

- The worldwide AOMs market is preliminary evaluated at USD ~65 B* in 2030

- 1.25 B adult obese people are expected in 2030 (+35% vs. 2023)

- 78% of sales in value will come from the USA and 18% from Europe

- Novo Nordisk and Lilly insufficient level of production to meet AOMs demand cannot be fixed before 2026

- Health, social and economic burden of obesity will urge policy makers and payers to facilitate patients' access

- The pricing strategy of pharma companies will be instrumental on the magnitude of patients' access

- ≥15% weight reduction, good tolerability and evidenced prevention of MACE[1] are a prerequisite for newcomers

- Novo Nordisk (Wegovy) and Lilly (Zepbound) will take the lion's share on the 2023 – 2030 AOMs market, knowing that most promising AOMs currently in phase II or III development will not reach the market before 2028 – 2029

* Most likely scenario based on collected insights and follow-on analyses carried out by Smart Pharma Consulting. The current high level of uncertainties requires to treat these figures with caution and to carry out regular updates

Sources: Smart Pharma Consulting analyses

[1] *Major Adverse Cardiovascular Events*

Smart Pharma
CONSULTING

The French Pharma Market 2022 – 2027

Strategic Implications for Pharma Companies

EXCERPTS

March 2023

This report[1] analyzes the current situation and the key trends on the French Pharma market by the end of 2027 to provide pharma companies with key strategic insights

Introduction

- Despite an ever-tougher environment, the French pharma market should remain a key priority for most of pharma groups
- Smart Pharma Consulting proposes to address the following key issues related to the French healthcare system and pharma market evolution by the end of 2027, to better grasp its strategic impacts for pharma companies

- How is the French healthcare system organized at national and regional levels?
- What are the key recent measures introduced by health authorities and their impact?
- What are the behavioral trends of key stakeholders and their impact by 2027?
- What are the estimated sales forecasts by strategic segment on the French pharma market by 2027?
- What could be the strategic and organizational implications for pharma companies by 2027?

Sources: Smart Pharma Consulting

[1] Has been published in 2023 by Smart Pharma Consulting and can be ordered at the following address: jmpeny@smart-pharma.com

The 4 Ws approach has been used to draw up this report, enabling to make evidence-based strategic, tactical and organizational decisions and thus improve their relevance and consistency

The 4 Ws approach

WHAT?

- Identify key market facts and events:
  - Sales data (competitors and own sales)
  - Opinion, decisions and / or behavioral changes of key stakeholders (The 7 Ps):
    - Policy-makers
    - Payers
    - Physicians
    - Pharmacists
    - Patients & PAGs
    - Pharma competitors

WHY?

- Identify the factors that have triggered or that are likely to trigger market facts and events:
  - What are the root causes of sales data and trends?
  - What are the root causes of key stakeholders' opinion, decisions and / or behavior?
  - Etc.

SO WHAT?

- Analyze the implications for the key stakeholders and the company itself related to the key market facts and events that have been identified or anticipated
- Define if these facts and events represent major opportunities or threats for the company (and its brands)

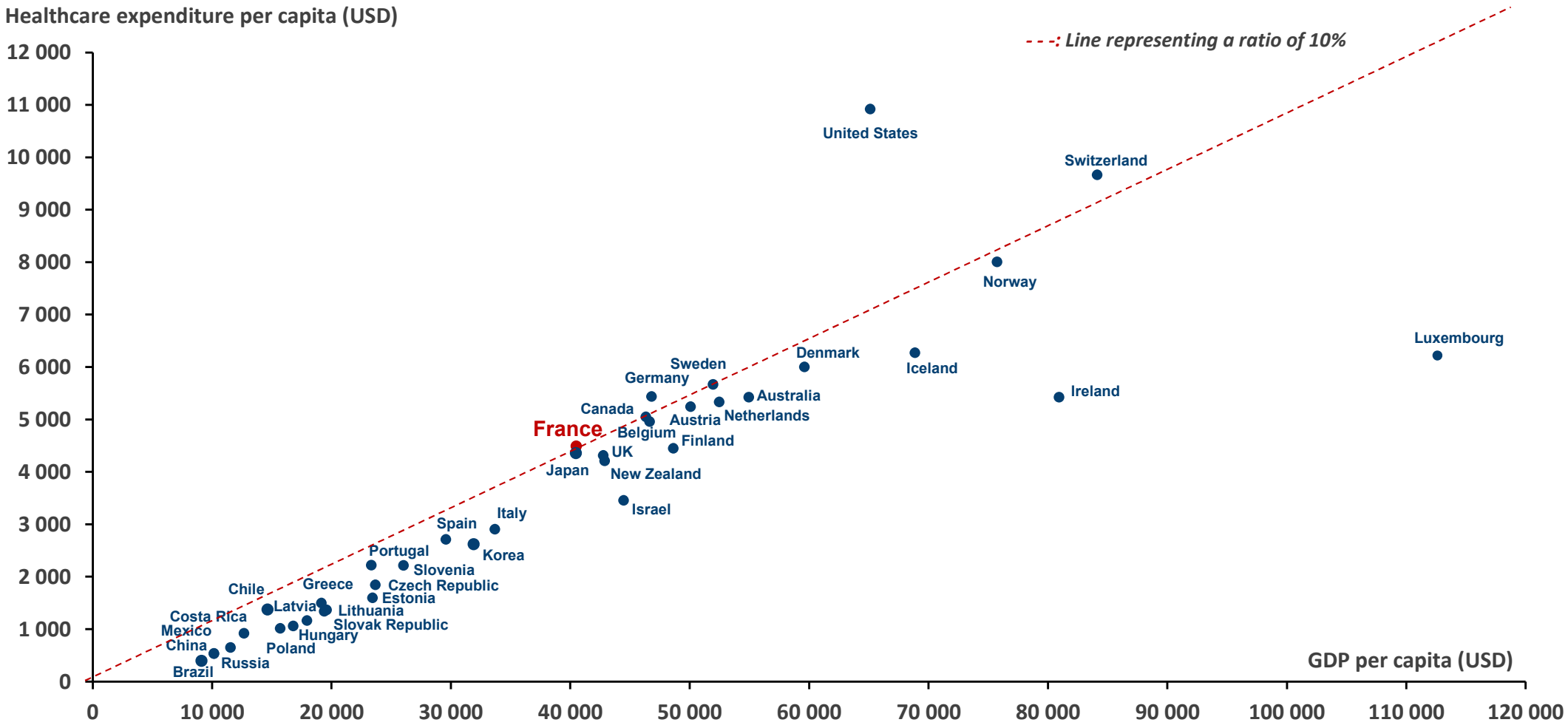
WHAT TO DO?

- Based on the three previous steps (WHAT – WHY – SO WHAT) define the relevant strategic and tactical decisions to be made to optimize the performance of the company and its brands
- Then, adjust/redesign the organization of the company to best support the new strategy and the corresponding tactics, if needed

Sources: Smart Pharma Consulting

Healthcare expenditure and GDP[1] per capita are highly related and the ranking[2] of France (#15 and #19 respectively) shows that healthcare is a key national priority

Relation between GDP and healthcare expenditure per capita (2019[3])



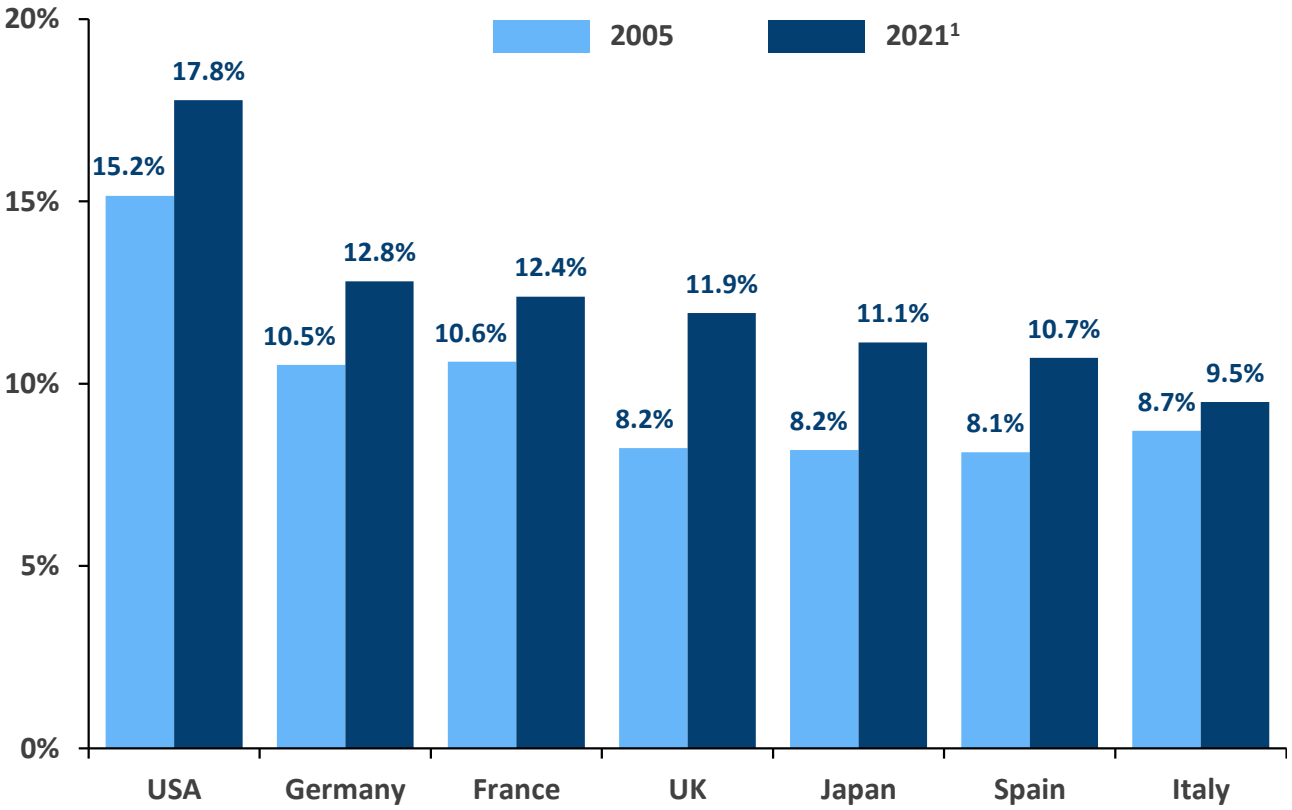
Sources: World Bank database (January 2023) – Smart Pharma Consulting analyses

[1] Gross Domestic Product – [2] Amongst 44 countries in the world – [3] Latest healthcare expenditure data available for all countries

Healthcare expenditure should keep on growing faster than national economies due to demographic factors and willingness of citizens to have better access to healthcare

Healthcare expenditure as a percentage of GDP (2021)

Total healthcare expenditure as a % of GDP (Local currency)



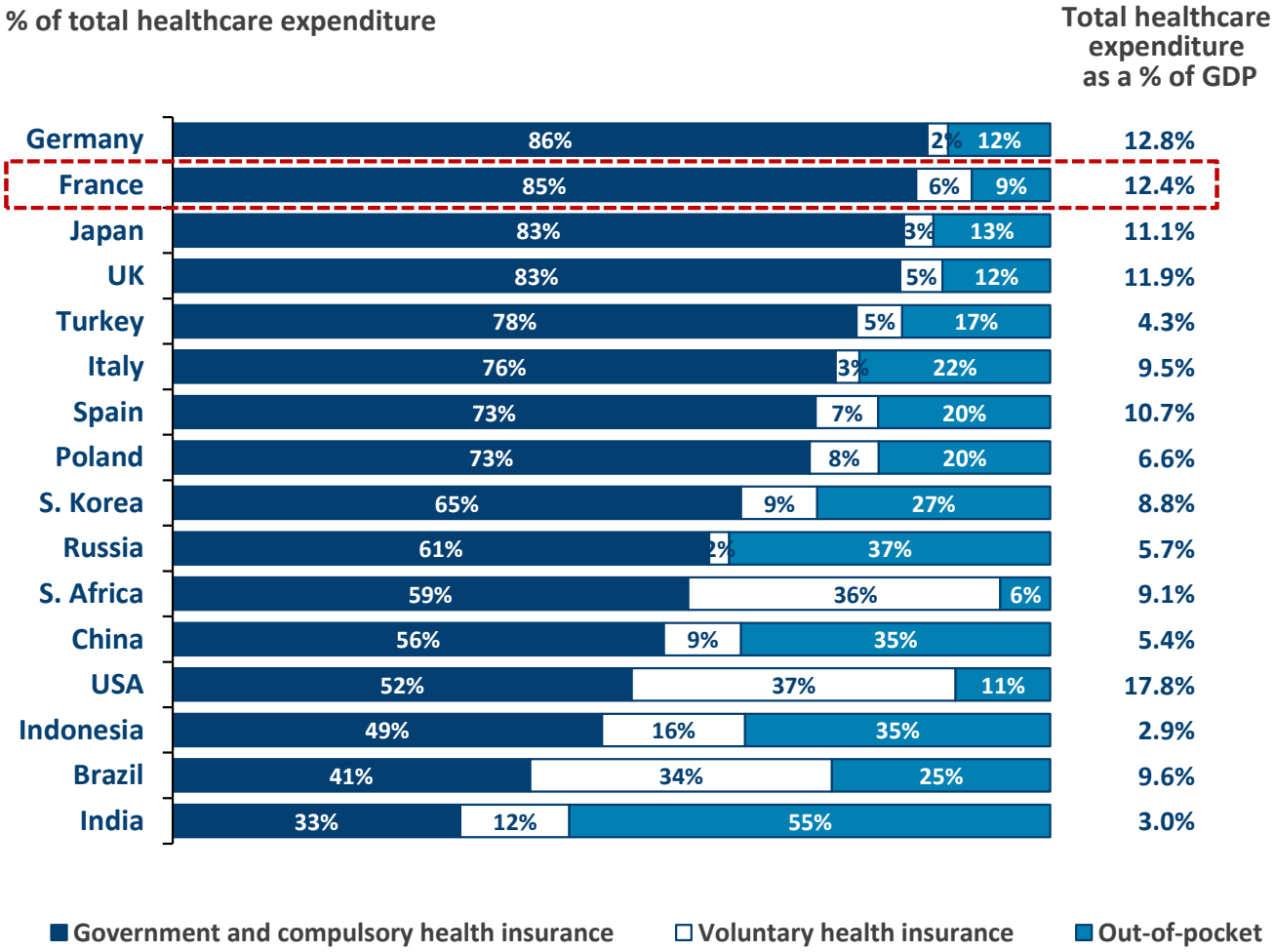
- Healthcare expenditure represents one of the largest public spending items in most developed economies:
  - 2nd (France, Germany, UK, USA and Spain)[2]
  - 3rd (Italy[3] and Japan[4])
- At best, governments and payers will manage to slow down the rise of healthcare expenditure as a percentage of GDP but not to stop it
- There is no optimal ratio of healthcare expenditure over GDP
- This ratio primarily results from:
  - National economies
  - Public health conditions
  - Governments' investment prioritization
  - Citizens' willingness to seek for care
  - Healthcare cost

Sources: OECD database (January 2023) – Smart Pharma Consulting analyses

[1] Provisional/Estimated value, excluding for Spain – [2] After social protection – [3] After social protection and general public services – [4] After social protection and economic affairs

France is one of the countries where the percentage of "out-of-pocket" spending to cover the healthcare expenditure is the lowest

Share of public spending in total healthcare expenditure (2021*)



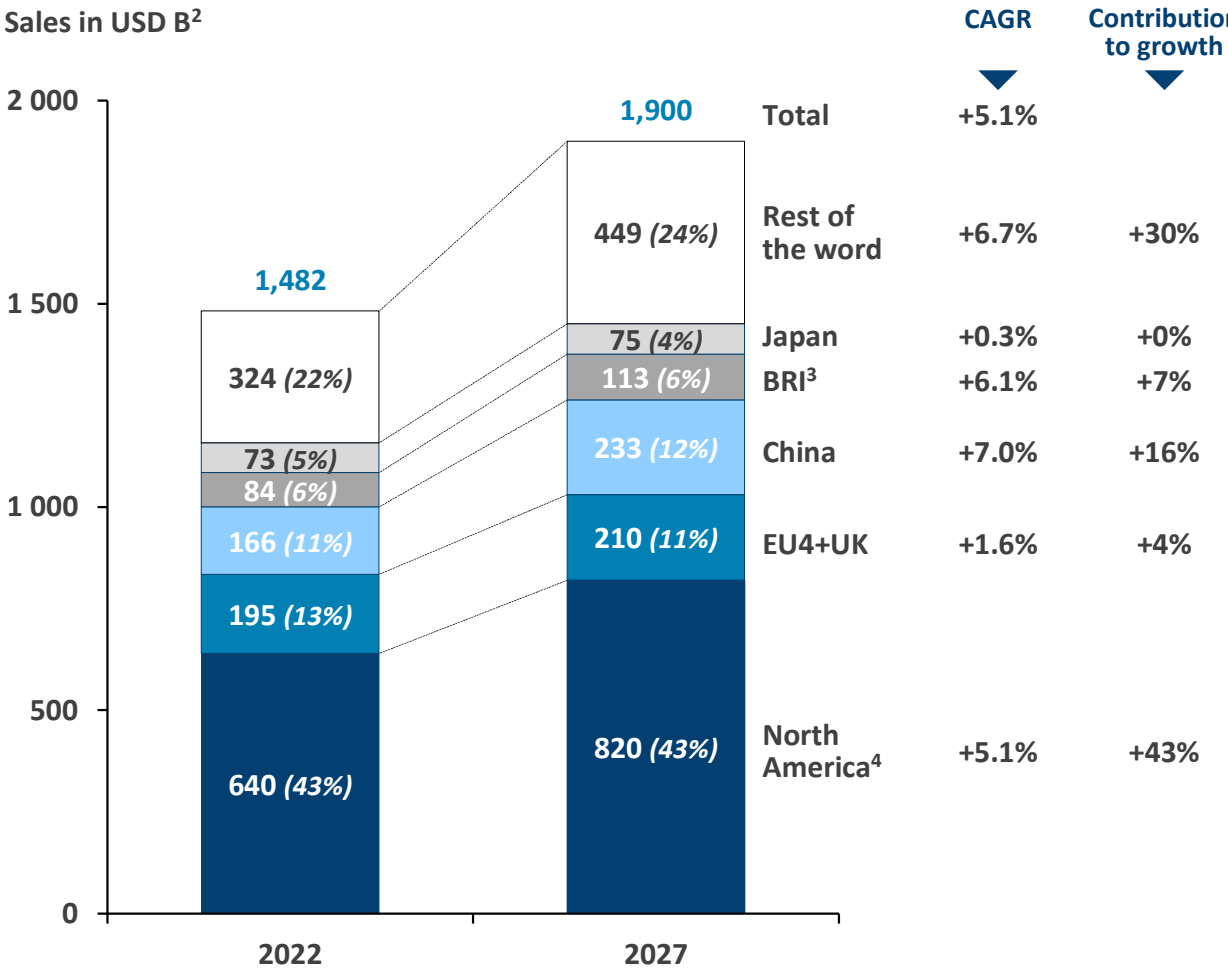
- With 12.4% of its GDP spent in healthcare, France belongs to the countries allocating the largest share of their resources
- Its level of public spending on healthcare is amongst the highest, just behind Germany, showing a highly protective healthcare system
- All the French citizens benefit from a public health insurance and 95% of them have a complementary private healthcare insurance, which is compulsory since the 1st of January 2016, for all employees, irrespective of the size of their company
- As a result, "out-of-pocket" spending represents only 9% of total healthcare expenditure

Sources: World Bank and OECD databases (January 2023) – National Health Expenditure database: Centers for Medicare & Medicaid Services (January 2023) – Smart Pharma Consulting analyses

** Or latest data available*

Sales of EU4[1]+UK should grow slowly by 2027 due to stringent cost containment measures leading to a two-point decrease of their weight in the global pharmaceutical market

Global pharmaceutical market size and growth by geographic area (2022 – 2027)



- The global pharma market is expected to grow with a CAGR of +5.1% by 2027 including the impact of Covid-19, that should lead to higher pressure on prices worldwide in the next 5 years
- EU4+UK countries account together for only 13% of the global pharma market:
  - Germany: 4%
  - France: 3%
  - Italy: 2%
  - UK: 2%
  - Spain: 2%

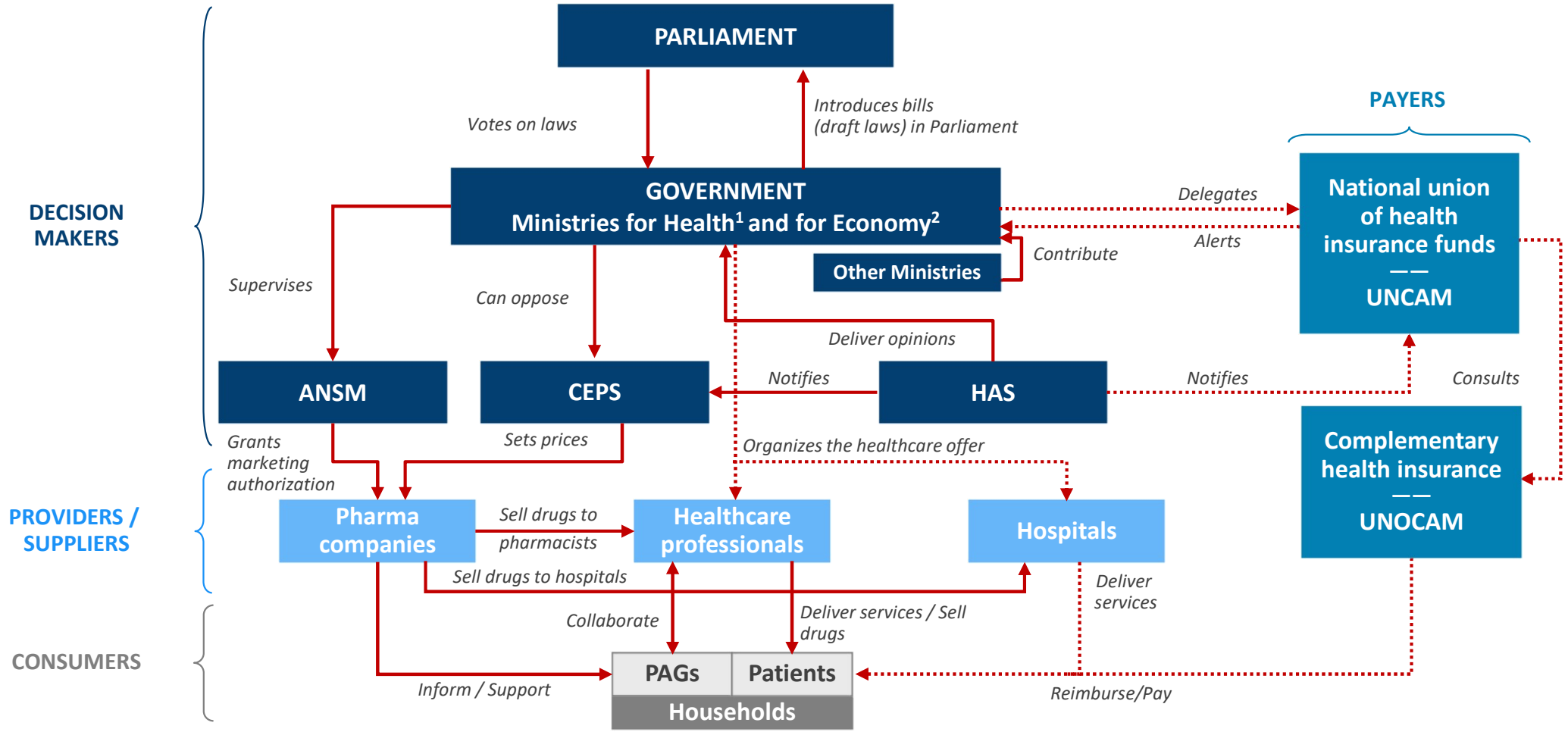
  and should see their weight drop by 2 points by 2027, due to higher price pressure than in the average of the other countries
- North America should continue to weigh for 43% of the global pharma market in value and contribute to 43% to worldwide market growth over the 2022 – 2027 period

Sources: IQVIA Institute (March 2020) – Smart Pharma Consulting estimates

[1] France, Germany, Italy, Spain – [2] Ex-factory price before rebates – [3] Brazil, Russia, India – [4] USA and Canada accounting for 41% and 2%, respectively

Stakeholders in the French healthcare system can be divided according to their role as decision makers, payers, providers / suppliers and consumers

The French healthcare system – Key stakeholders mapping

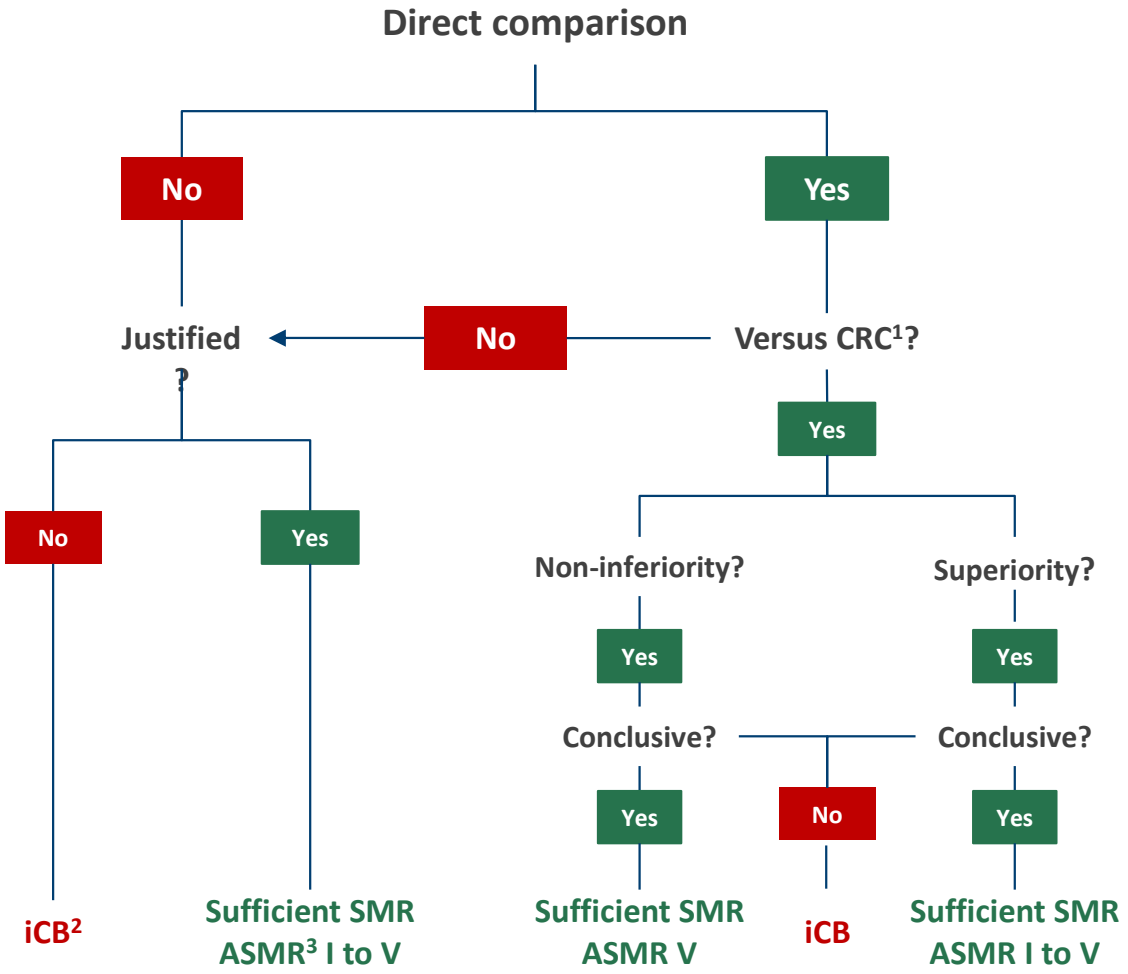


Sources: Smart Pharma Consulting

[1] The exact name of this ministry is: Ministry of Solidarity and Health – [2] The exact name of this ministry is the Ministry for the Economy and Finance which includes the budget and the industry

To assess the therapeutic progress of a product, the Transparency Committee will expect direct comparison – whenever possible – in terms of efficacy and safety with existing relevant therapies

Transparency Committee – ASMR (Clinical added value) assessment



- The Transparency Committee (TC) will particularly pay attention to the following criteria, in view of medical need:
  - The quality of the demonstration:
    - The choice of comparator(s)
    - The methodological quality of the study
    - The appropriateness of the population included
    - The relevance and significance of clinical endpoints
  - The effect size in terms of clinical efficacy, quality of life and safety in view of the demonstration robustness
  - The clinical relevance of this effect compared to clinically relevant comparators
- Double-blind randomized trials are the gold-standard
- The absence of direct comparison to comparator must be justified and can be accepted by the TC in certain situations
- The absence of a direct comparison, which the TC believes was possible, may lead to an ASMR V
- The TC reasoning presented in this table is not fixed and is adapted to the context of each evaluation

Sources: Transparency Committee doctrine December 2020 – Smart Pharma Consulting analyses

[1] Clinically Relevant Comparator – [2] Insufficient Clinical Benefit – [3] Clinical Added Value

The framework agreement signed between CEPS and Leem in March 2021 aimed at improving patient access to innovation, encouraging investments in France and simplifying access processes

CEPS – Framework agreement signed with the Leem (2021 – 2024)

Context & objectives

- Framework agreement signed on March 5, 2021, by Philippe Bouyoux (CEPS) and Frédéric Collet (Leem), in the presence of Olivier Véran (Minister of Health) and Agnès Pannier-Runacher (Delegate to the Minister of Economy in charge of Industry)
- This new agreement, that replaces the previous one which had been signed in 2016, has been concluded for a 3-year period, i.e., until March 5, 2024
- 3 main objectives pursued:
  - Improve patient access to innovation
  - Encourage productive investments in France
  - Simplify market access processes

Patient access to innovation

Innovative drugs

- Guidance on the duration of effect of comparators, the inclusion on uncertainty, the setting of rebates and the splitting of payments

Orphan drugs

- Possibility of renegotiating the terms of conventional rebates if target population evolves
- Commitment to come to a contractual amendment within 6 months with an adjusted budget package

Drugs that meet public health needs

- Possibility for ASMR IV drugs meeting a non- even partially-covered medical need to access to an EU price[1]

Productive investments in France

Support for investment and export

- Creation of a specific chapter intended to support for investment and export
- Authorization for investing pharma companies to proactively meet with the CEPS President to be informed of conventional terms

Pricing counterparties

- Possibility of granting a EU price[1] to ASMR I to III drugs whose manufacturing activities[2] are mainly carried out in France
- List price stability guaranteed over 2 years (renewable once) for products manufactured in Europe (notably in France) for which more than 60% of volumes are exported

Market access processes

Fast-track

- Access guaranteed within a maximum period of 15 days for:
  - ASMR I to III with dominant efficiency
  - ASMR IV with dominant efficiency & allowing savings
  - ASMR V with prices lower than comparators

Price stability and predictability

- 5-year stability of the EU price[1] for ASMR I to III drugs, covering both list and net prices

Transparency

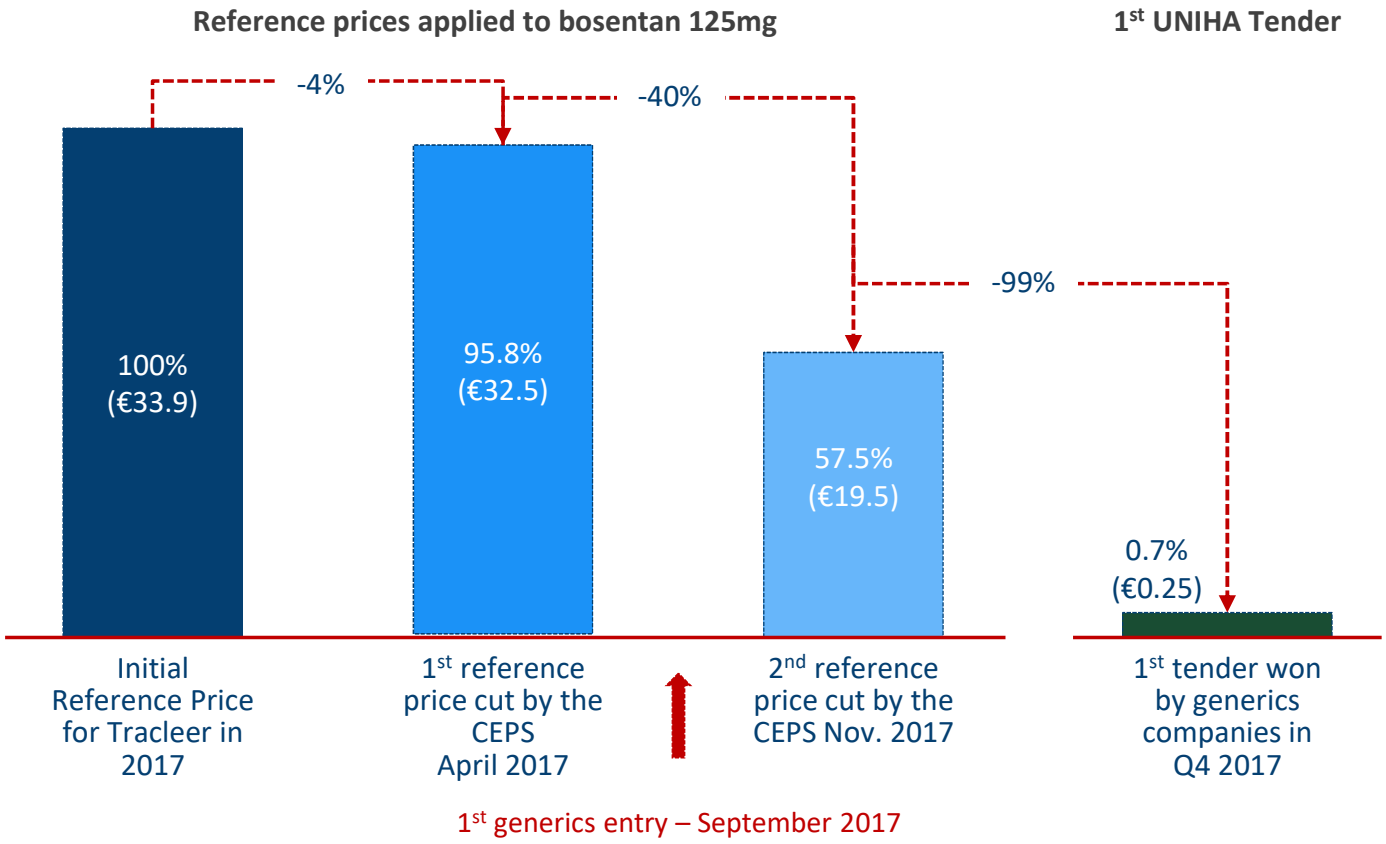
- Statement by pharma companies of the amount of both R&D investment made, and public incentives received

Sources: Framework agreement signed between CEPS and Leem (March 5, 2021) – Smart Pharma Consulting analyses

[1] In this case, French price cannot be lower than the lowest price in the rest of EU5 (Germany, UK, Italy and Spain) –
[2] Including the manufacturing of active components, finished goods and/or packaging

Bosentan net price has dropped drastically as soon as the 1st call for tender, enabling the best bidder to discard competitors while taking the risk to make this "market" little or even non profitable

CEPS – Hospital generics pricing: Bosentan (Tracleer)



Comments

- For bosentan, the purchasers did not really value the quality of the dossier
- UNIHA[1] and the AGEPS[2] account for 80% of the total bosentan market
- The UNIHA market has been won at €0.25, Teva offered €0.50, and the originator price was €19
- The prices on generics should go up for the future calls for tender
- The prices should not remain at this level, which is unlikely to generate profits
- Such a drastic drop was not expected by Actelion (Janssen)
- Few small accounts do not list generics of bosentan
- Janssen doesn't discount beyond -75%

Sources: Business Intelligence – Smart Pharma Consulting analyses

[1] Purchasing group for the Regional Teaching hospitals and other public hospitals –
[2] Purchasing group for largest public hospitals in Paris and close suburbs

The prices, margins and level of rebates are regulated by the CEPS throughout the value chain of the reimbursable products, either originators or generics

CEPS – Prices, margins and rebates for reimbursable drugs

	Originator without TFR[1]	Originator with TFR	Generic without TFR	Generic with TFR
Ex-factory price	▪ Price negotiated / set by the CEPS ▪ Generics are priced 60% below originator price at patent expiry ▪ Originator price is cut by 20% after generics entry or at patent expiry			
Wholesalers' margins	▪ Minimum of € 0.30 per pack if ex-factory price below € 4.33 ▪ 6.93% of ex-factory price if ex-factory price from € 4.33 to € 468.97 ▪ 0% beyond € 468.97, representing a maximum of € 32.50 margin per sold unit			
Pharmacists' margins	▪ Variable margin: – 10.0% of ex-factory price below € 1.92 – 7.0% from € 1.92 to € 22.90 – 5.5% from € 22.91 to € 150.00 – 5.0% from € 150.01 to € 1,930.00 – 0% above € 1,930.00 ▪ Dispensing fees (VAT excluded): – € 1.00 per pack (for monthly packs) – € 2.70 per pack (for quarterly packs) – € 0.50 per prescription including at least 1 reimbursable drug – € 3.50 for specific drugs (e.g., immunosuppressive drugs) – € 1.55 if the patient is under 3 years or over 70 years old – € 0.30 per prescription with at least 5 medicines		Margin in absolute terms identical to the corresponding originator	Calculation identical to the originator's one
Pharmacists' rebates[2]	▪ Maximum legal rebate: 2.5% of ex-factory price	▪ Maximum legal rebate: 40% of ex-factory price, since September 2014 (17% before)		
	▪ Possibility to add up to 100% of the wholesaler margin in case of direct sales			

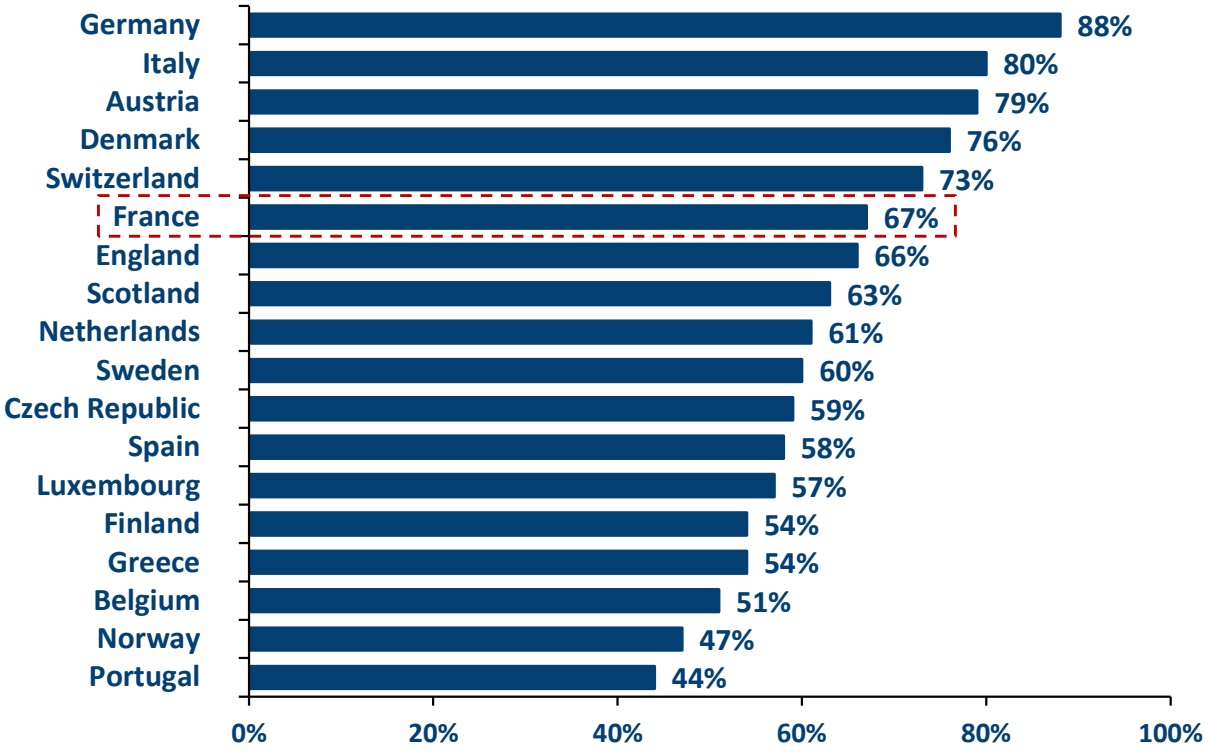
Sources: CEPS annual report (December 2022) – National pharmaceutical agreement (March 2022) – Legifrance – Ameli – Leem – Smart Pharma Consulting analyses

[1] Tarif Forfaitaire de Responsabilité (Reference price) – [2] Including cooperation and other commercial rebates

About a third of globally approved drugs are not launched in France mainly due to market access obstacles (non-reimbursed, low price, etc.)

Market access to new drugs – European comparisons

% of new medicines available to patients in European countries (rate of availability)



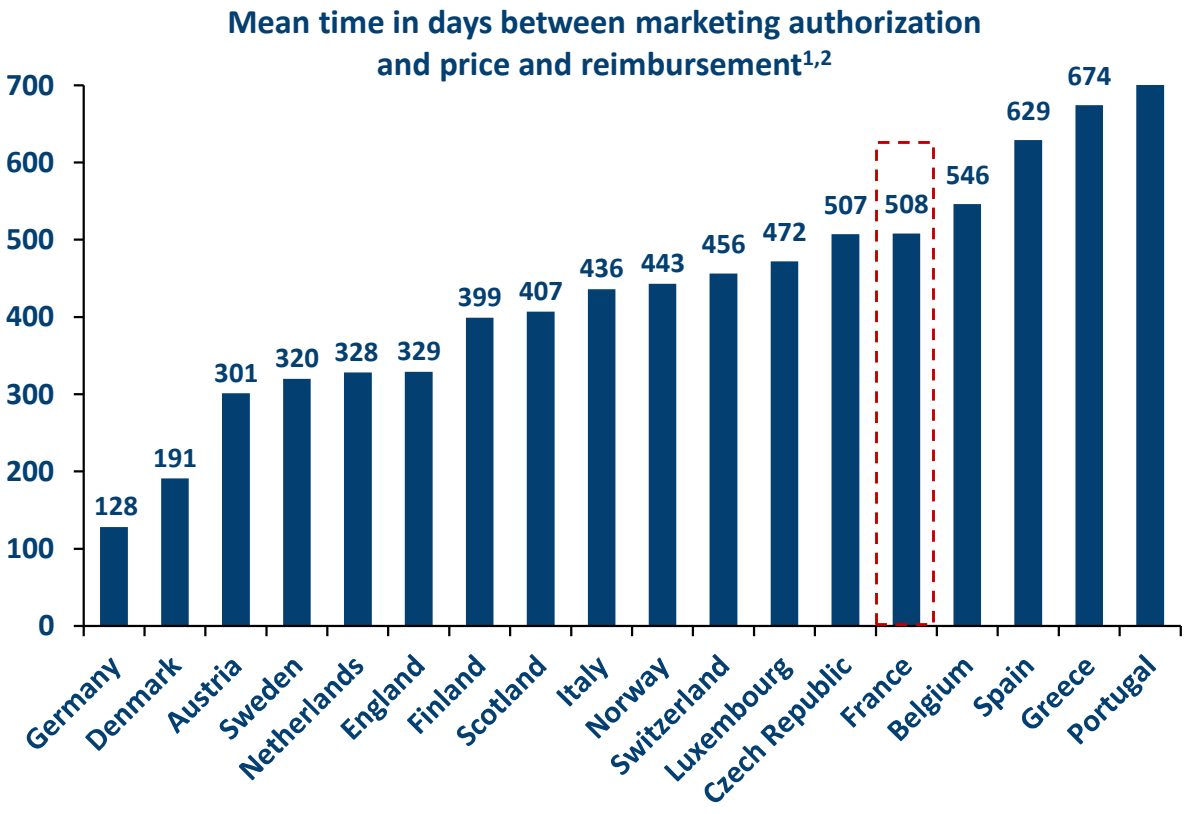
2023 analysis based on a sample of 168 products approved by EMA (European Medicines Agency) between January 2018 and December 2021

- The fact that all approved new molecular entities (NMEs) are not introduced everywhere depends on several factors:
  - Different regulatory systems and authorities (FDA, EMA, etc.) impose different market access requirements and procedures
  - Even when there is a centralized approval procedure like in the European Union, the approved drug is not necessarily introduced in all countries as local pricing and reimbursement policies can make the launch unattractive
  - Generally, market potential and attractiveness (e.g., epidemiology, pricing and reimbursement policies) are key factors in the decision of introducing a drug in a specific country by pharma companies
  - New drugs are usually more expensive, which makes their introduction more difficult in lower income countries, where the public budget for pharmaceuticals is lower
- In the future, the availability of new drugs might be reduced in developed countries due to stricter cost containment measures

Sources: Patients W.A.I.T. Indicator – EFPIA (April 2023) – Smart Pharma Consulting analyses

In France, pharma companies and patients must wait ~17 months after marketing authorization to get a new drug reimbursed and launched[1]

Average time to market access – European comparisons



2023 analysis based on a sample of 168 products approved by EMA (European Medicines Agency) between January 2018 and December 2021

- In Europe, the delay between marketing authorization of a drug and its availability on the market may vary widely, due to the time required to obtain its inclusion on reimbursement list and a price agreement
- In countries such as Italy, France or Spain, this delay exceeds the 180 days recommended by the European Commission
- An important delay may be harmful both for patients who do not have full access to innovative therapies and for companies which face a loss of revenues
- Germany has smaller delays since the price and reimbursement negotiations occur once the product has reached the market

Sources: Patients W.A.I.T. Indicator – EFPIA (April 2023) – Smart Pharma Consulting analyses

[1] Excluding early access programs for breakthrough innovations –
[2] For drugs receiving their first marketing authorization between 2018 and 2021

As of January 1st, 2022, there were about 1.5 million healthcare professionals in France with the majority (~76%) working in paramedical practice

Healthcare professionals (2022[1])

Total number: 1,526,742

24.3%			75.7%		
Medical practice	**370,350**	**(100%)**	**Paramedical practice[2]**	**1,156,392**	**(100%)**
▪ Specialists	128,917	(34.8%)	▪ Nurses[3]	764,260	(66.1%)
▪ General Practitioners	99,941	(27.0%)	▪ Physiotherapists[4]	91,485	(7.9%)
▪ Pharmacists	73,574	(19.9%)	▪ Psychologists	70,790	(6.1%)
▪ Dental surgeons	44,154	(11.9%)	▪ Laboratory technicians	52,160	(4.5%)
▪ Midwives	23,764	(6.4%)	▪ Opticians	40,755	(3.5%)
			▪ ERM manipulators	40,751	(3.5%)
			▪ Speech therapists	24,208	(2.1%)
			▪ Dieticians	15,495	(1.3%)
			▪ Ergo-therapists	14,214	(1.2%)
			▪ Psychomotor therapists	14,185	(1.2%)
			▪ Chiropodists[5]	14,039	(1.2%)
			▪ Orthoptists	5,724	(0.5%)
			▪ Hearing aid dealers	4,121	(0.4%)
			▪ Orthopedics-orthotics	1,962	(0.2%)
			▪ Prosthetics orthotics	1,449	(0.1%)
			▪ Others[6]	794	(0.1%)

Sources: DREES, ADELI (Ameli) and RPPS database (February 2023) – Smart Pharma Consulting analyses

[1] As of January 1st, 2022 – [2] Excl. ambulance drivers – [3] 2021 data – [4] 2020 data – [5] 2017 data – [6] Pedorthists (673), anaplastologists (72) and ocularists (49)

Since the introduction of the T2A reform in 2004, the allocation of resources of public and private hospitals is based on the nature and on the volume of the activities carried out by hospitals

Hospital funding system: Activity-based funding (T2A) principles

Objectives	Means	Expected results
Increase the efficiency of hospitals	▪ Converge funding systems to be able to compare public and private sectors ▪ Gradually implement the T2A to facilitate the adaptation of both structures and players ▪ Harmonize funding arrangements between public and private sectors ▪ Expand the clarity and the visibility of the role of the players, for both managers and supervisors	Greater involvement of medical players in financing
Address the inequity of resources allocation across structures		Accountability of health players
Optimize the funding of the most active structures		Development of quality management and medico-economic tools
		Fairness of treatments between public and private sectors

Major drawback

- The T2A has led to an inflationary effect; hospitals being prompted to increase their level of activities and notably of the most profitable medical procedures, for maintaining adequate funding
- "MyHealth2022" aimed to cap T2A at 50% of total hospital funding (T2A still represented 67.5% in 2021)

Sources: French Ministry of Health website (January 2023) – Senate committee of inquiry (2021) – Smart Pharma Consulting analyses

The criteria for the inclusion of a hospital drug in the "on-top of T2A[1]" list are well defined since March 2016 and have been revised by a decree dated December 11th, 2021

Criteria for inscription on/radiation from the on-top of T2A[1] list

Criterion n°1

The drug must be mainly used in the hospital setting

- If it is not the case, the CEPS considers that its cost can be funded under the hospital service tariffs (T2A system)

Criterion n°2

The drug must provide an important SMR (Clinical Benefit)

- Suggesting that the drug has a positive risk/benefit ratio and that it covers an actual medical need

Criterion n°3

The drug must provide an ASMR I to IV (Clinical added value)

- Since January 2022, there are no longer any conditions for ASRM IV drugs to be included in the on-top of T2A list. Previously, they had to have no therapeutic alternatives
- When a product receives an ASMR V and its comparators are already listed, the product will also be listed, despite its lack of clinical added value (e.g., biosimilars, generics, hybrids)

Criterion n°4

The cost of the drug is incompatible with the T2A system

- The threshold is set at a cost of the drug representing > 30% of the GHS[2] (as set under the hospital service tariffs for a given disease)

Indication per indication

Criteria for radiation from the on-top of T2A list

When a product does not meet inclusion criteria anymore, it may be excluded:

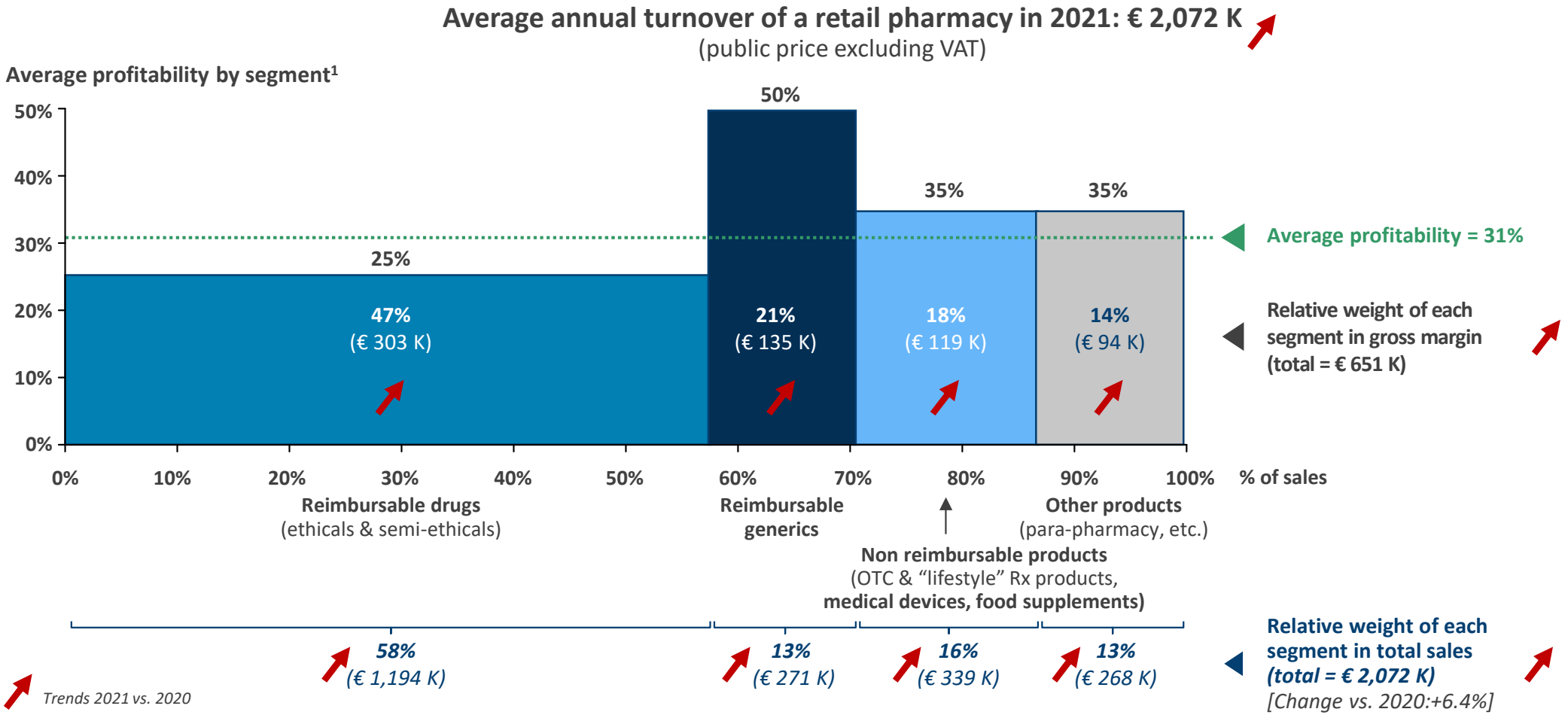
- When there is a reevaluation of its SMR / ASMR
- When prices have decreased enough to be compatible with the T2A system

Sources: Leem website (February 2023) – Decree of December 11th, 2021, removing the conditions required for ASMR IV drugs to be included in the on-top of T2A list – Decree of March 25th, 2016, regarding modalities of inscription to the on-top of T2A list – Smart Pharma Consulting analyses

[1] Activity-based costing system like a Diagnosis related group-based funding which has been introduced to facilitate the access to expensive drugs. In this case, the cost of the drug is covered by the National Health Insurance Fund and not from the hospital budget – [2] Groupe Homogène de Séjour (homogeneous stay group)

In 2021, originators accounted for ~58% of the retail pharmacies sales on average, and for ~47% of their gross margin

Economic structure of retail pharmacies in France (2021)



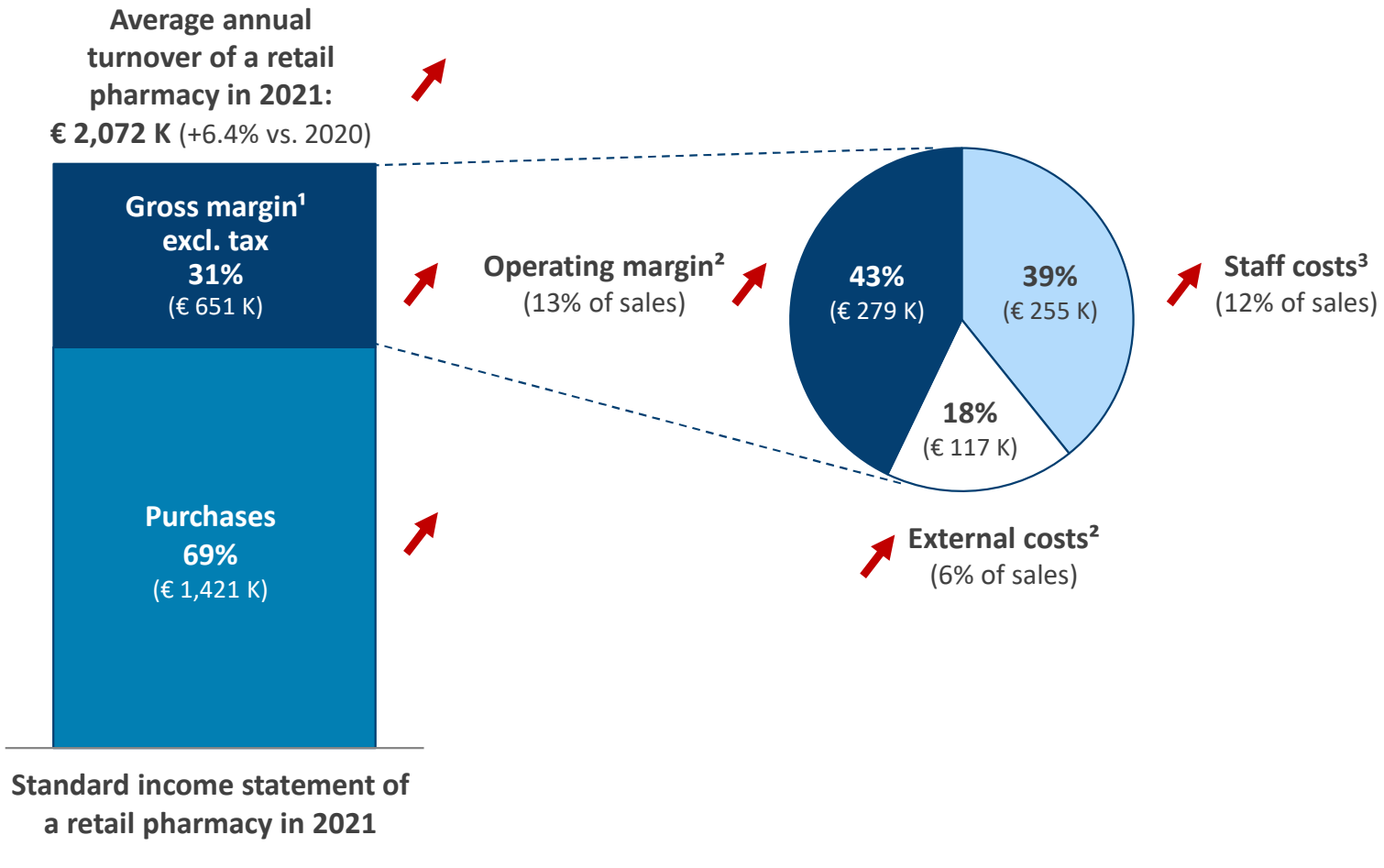
Note: Dispensing fees, ROSP and fee for services accounted for ~67% of the retail pharmacy margin on reimbursed drugs

Sources: CGP Experts Comptables (2022) – Smart Pharma Consulting estimates

[1] Including legal margin, rebates, commercial agreements and remuneration for pharmaceutical services, notably those corresponding to the public health objectives (e.g., generics substitution objectives, pharmaceutical interviews with patients, etc.)

The revitalization of sales (by the expansion of products and services offers), as well as purchasing cost optimization, are the key levers to protect / increase profits

Standard income statement of a retail pharmacy (2021)

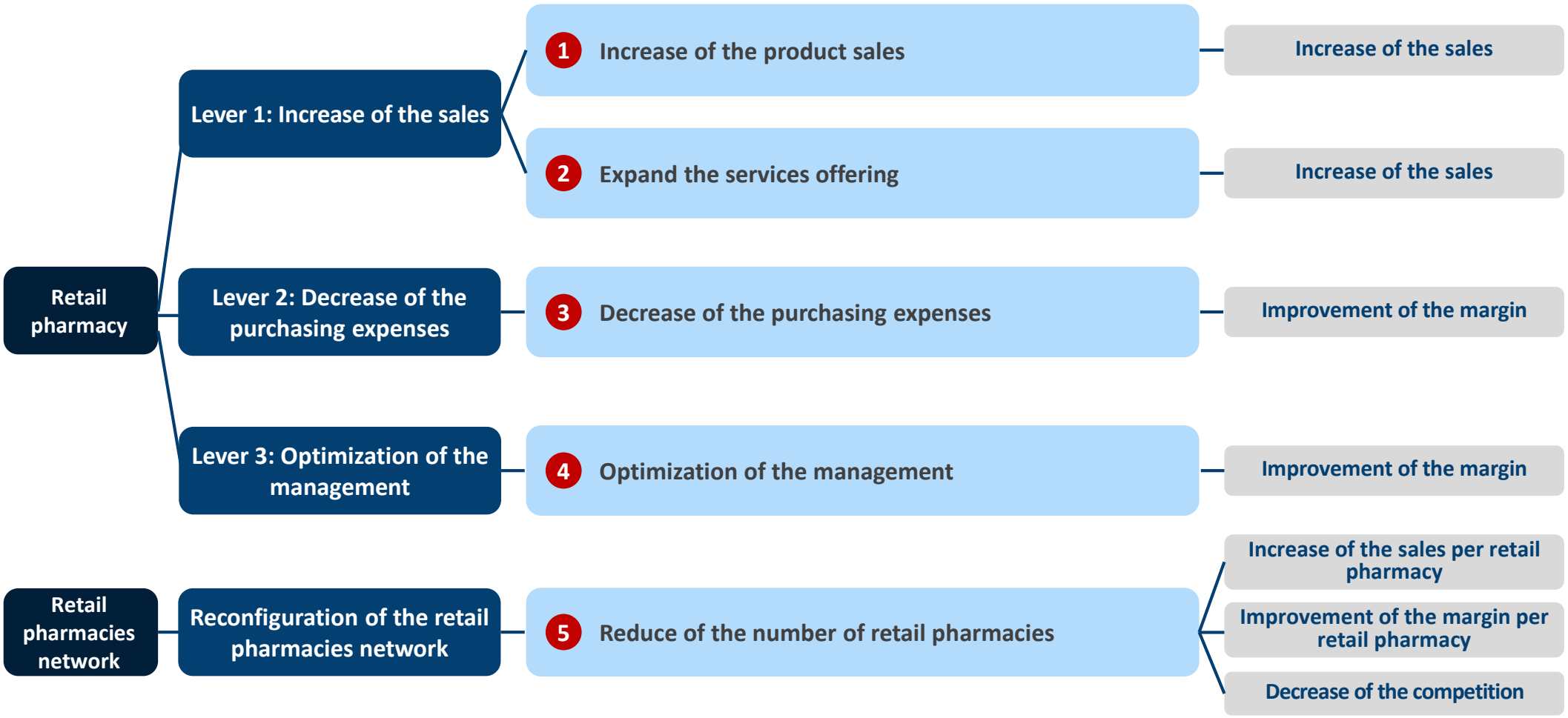


Sources: CGP Experts Comptables (2022) – Smart Pharma Consulting analyses

¹ Including rebates and commercial offers – ² Before amortization, financial expenses and dues paid by the pharmacist owner – ³ Including social charges

The room for improvement of retail pharmacies performance is important, but requires to rethink and reshape the role and the organization of pharmacies

Levers and solutions to improve the economy of pharmacies

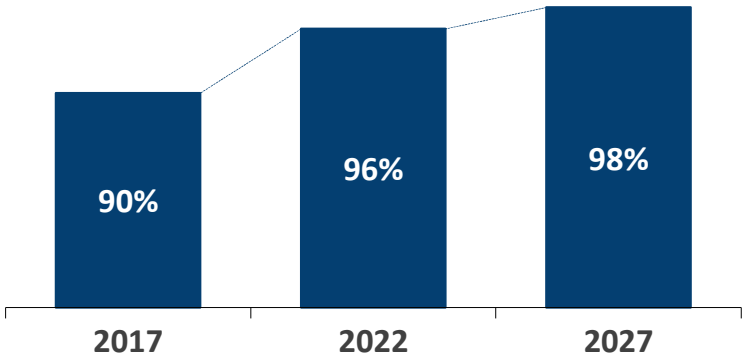


Sources: Smart Pharma Consulting analyses

Med reps are not viewed by physicians as a robust, updated and convenient source of scientific information, which means that they must bring high-value services to stay connected to them

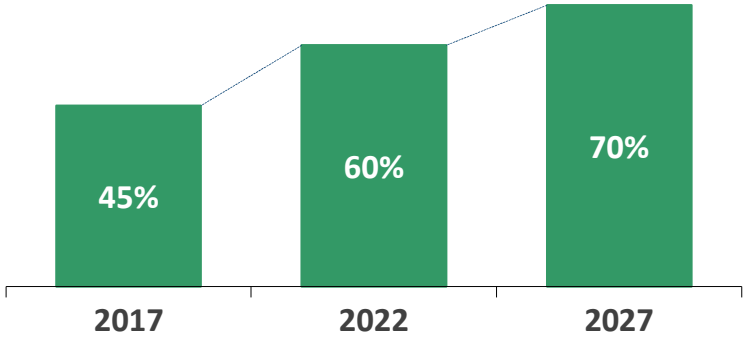
Access to HCPs in France (2017 – 2022 – 2027)

Online scientific search by physicians (% of total)



- Physicians becoming more familiar with the Internet, they are increasingly finding information online, as needed
- The Covid-19 crisis has accelerated the usage of digital channels by physicians to find scientific information
- Product-related is the most accessed website resource

Credit given to pharma websites by physicians (% of total)



- 60% or more physicians using search engines, rely on pharma companies' digital resources
- Most of pharma companies have designed product-related websites, with objective and well-presented information
- Thus, these websites have a certain influence on physicians' prescribing decision

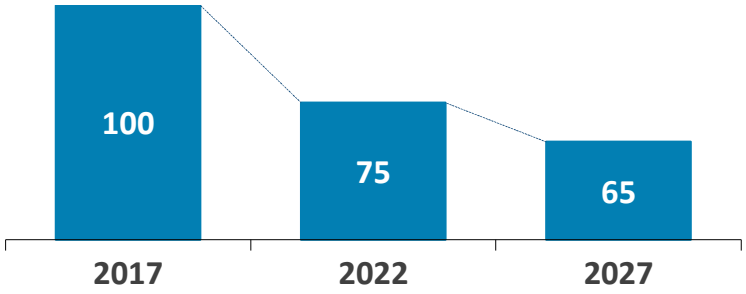
For scientific data, including those related to products, online websites are the first source of information, while pharma companies' websites are gaining credibility with physicians

Sources: Smart Pharma Consulting estimates and analyses based on multiple historical studies (e.g., DRGs – ZS – McKinsey)

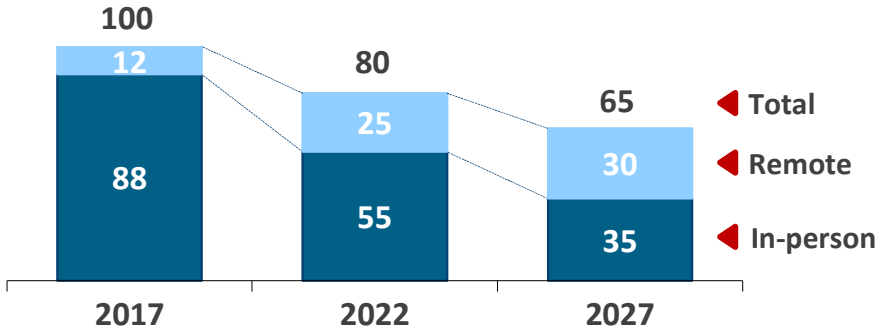
The number of med reps should be reduced by 35% over the 2017 – 2027 period, while remote interactions should account for ~46% of their total interactions in 2027

Access to HCPs in France (2017 – 2022 – 2027)

Sales force size
(Index based on 2017 situation)



Med reps' interactions
(Index based on 2017 situation)



- The increasing difficulties for med reps to carry out in-person calls will force pharma companies to reduce their sales force size by ~1/3 over the 2017-2027 period
- The sales force size evolution will vary significantly according to the countries[1], the therapeutic areas[2], the profile of prescribers[3] and their mode of practice[4]

- We assume that the total number of interactions per med rep will remain constant at 750 p.a. over the 2017-2027 period
- The number of in-person contacts should be reduced by 60% while remote interactions by med reps will grow by 150%
- Remote interactions include phone calls, web / video calls, text messaging, emails, etc., carried out by med reps

Med reps will still play an essential role in 2027, despite their decreased number, provided they take into consideration physicians' preferences in terms of channels and needs in terms of content shared

Sources: Smart Pharma Consulting estimates and analyses based on multiple historical studies (e.g., DRGs – ZS – McKinsey)

[1] The decrease will be more important in the USA and Southern European countries than in Northern European countries – [2] In oncology and hematology where many innovation are expected, the number of med reps may increase while in pulmonology or diabetes it will be the opposite – [3] According to their age, to their opinion vis-à-vis pharma companies' sales forces in general – [4] Independent, in a hospital or institution

The health system transformation plan, called "My Health 2022" was based on a better organization of healthcare professionals for the benefit of patients

"My Health 2022": three priority axes

Put quality at the heart of the healthcare system

- Development of guidelines re. the care pathways
- Measurement of quality indicators of care pathways for pathologies with high public health challenges
- Extension of the measure of user satisfaction
- Strengthening equal access to quality care

Create a care network at patients' service

- Development of care pathways to improve the coordination of caregivers around patients
- Thus, private and public structures, primary care and hospital will have to work together in the territories
- Increase in the number of coordinated and sponsored structures of practices
- Support the rise of telemedicine

Rethink professionals' careers and their initial training

- Elimination of the numerus clausus and the national classifying exams to allow:
  - A progressive orientation encouraging bridges and diversification of profiles
  - A more relevant definition of students' specialty choices

Sources: Ministry of Solidarity and Health – Smart Pharma Consulting analyses

CAQES are tripartite contracts between the ARS, health care institutions and the health insurance to improve the quality and efficiency of care

CAQES[1]

LFSS 2016 - Article 81

- Since 2016, contractual objectives for improving the quality, relevance and efficiency of care (CAQES) have been planned for healthcare institutions with the aim of outlawing unjustified expenditure
- This measure creates, after evaluation of the contracts concluded as of January 1st, 2018, a profit-sharing to the establishments, in the form of endowments of the FIR[2], up to 30% of the savings realized according to the results obtained
- The existing incentive, which previously only concerned the additional components of the CAQES, is extended to the compulsory components

LFSS 2020 - Article 64

- The purpose of this article is to simplify the CAQES and support institutions in relevance and efficiency of their objectives

Old CAQES (Before 2022)	New CAQES (2022-2024)
290 institutions concerned	83 institutions concerned
Standard contract for each institution	Customized contract for each institution
47 indicators	1 to 14 indicators per institution
Regional assessment for all indicators	Adapted evaluation for national and regional indicators
Common incentives for all indicators in function of the institutions	Incentives to be adjusted according to the savings achieved

Sources: LFSS 2016 – LFSS 2020 – Smart Pharma Consulting analyses

[1] CAQES: contract for healthcare quality and efficiency enhancement –
[2] "Fonds d'Investissement Régional": Regional Investment Fund

The simplification of the EAP process, as voted in the LFSS 2021, will be associated to measures enabling a better control of the rising costs

Early Access Programs (1/2)

Overhaul of the EAP – Early Access Programs (Article 78, LFSS 2021)

- This article simplifies the Early Access Program, secures its financial sustainability[1] and is operative since end of June 2021
- Early access is a system that allows patients who have reached a therapeutic dead end to benefit, on an exceptional and temporary basis, from certain drugs that are not authorized for a specific therapeutic indication
- The Early Access Program process is streamlined into:
  - Early access pathway
  - Compassionate pathway
- To benefit from an Early Access Program, the following 5 conditions must be met:
  1. The drug must be intended for the treatment of serious, rare or debilitating diseases
  2. There is no suitable treatment available
  3. The implementation of the treatment cannot be deferred
  4. The drug is presumed to be innovative, particularly with regards to a possible relevant comparator
  5. No adverse opinion from the EMA for drugs without marketing authorizations (LFSS 2023)
- The Early Access Authorization and the Compassionate Access Authorizations, once evaluated by the ANSM and the HAS, are automatically covered by the National Health Insurance Fund
- The HAS becoming a decision maker in this new process, we can anticipate a reduction in the number of eligible drugs
- Real-life data would be collected by prescribers while being funded by pharma companies

Sources: LFSS 2021-2023 – NILE Consulting – Pharmaceutiques, N°281, November 2020 – HAS website (January 2023) – Smart Pharma Consulting analyses

[1] In recent years, the annual costs of the early access programs has ranged from €700 M to €1 B

Early Access programs are composed of two pathways, the Early Access pathway replacing ATU[1], and the Compassionate use pathway replacing RTU[2] and ATUn[3]

Early Access Programs (2/2)

Early Access pathway

- Early access pathway concerns drugs with marketing authorization or planning to obtain one, replacing the former ATU
- To determine Early Access pathway, ANSM evaluates the benefit/risk balance and in case of a positive opinion, HAS evaluates the criteria for granting Early Access
- Free price set by pharma companies but subject to rebates:
  - Annual rebates based on the annual sales
  - Product rebates retroactively applied after the final price is set
- Pharma companies must:
  - Ensure the continuation of the treatment (Article 58 of the LFSS 2022 allowing the Early Access to be maintained even in case of a refusal or delay in the procedure)
  - Submit a market access request within a specific timeframe
- Discounts apply if pharma companies do not fulfill the above commitments and if negotiations last > 6 months

Compassionate use pathway

- This pathway which is regulated by the ANSM is particularly relevant for rare diseases with unmet needs
- It comes in two types:
  - Compassionate access authorizations (AAC[4], former ATUn), concerning drugs not intended to be marketed in the indication but allowing to be delivered punctually
  - Compassionate prescribing frameworks (CPC[5], former RTU), allowing the securing of an off-label practice
- Prescribers or healthcare authorities can ask the ANSM to evaluate the conditions for access, which covers a 3-year renewable period
- ANSM grants the named-patient access to the off-label treatment
- Once access is approved, reimbursement is based on:
  - The published price (if available)
  - Annual rebates calculated on the revenues
  - Flat-rate price set by the Ministry of Health

Sources: HAS website (January 2023) – ANSM website (January 2023) – Intuity-legal early access newsletter (March 2022) – Smart Pharma Consulting analyses

[1] Autorisation temporaire d'utilisation – [2] Recommandation temporaire d'utilisation – [3] Autorisation temporaire d'utilisation nominative (early access for a given patient) – [4] Autorisation d'Accès Compassionnel Nominative – [5] Cadre de Prescription Compassionnelle

The article 62 of the LFSS 2022 introduced a system of direct access to the market after evaluation by the HAS, in addition to the EAP system of the LFSS 2021

Direct access to reimbursed market

Direct Access to reimbursed market post-HAS evaluation (Article 62, LFSS 2022)

- A new experimental dispositive called “direct access”, launched by article 62 of the LFSS 2022 for a maximum duration of four years, allows pharma companies to access the market as soon as they obtain the opinion of the HAS
- This dispositive concerns new treatments that are not eligible for early access but with:
  - An ASMR (CAV) I, II, III or IV
  - An important SMR (CV)
  - And which are not commercialized in the retail market
- The coverage by the National Health Insurance Fund is carried out on an exceptional basis and for a maximum period of one year and is decided by decree
- The company pays rebates calculated based on the turnover (excluding tax) invoiced to the hospitals and these rates are defined according to a progressive scale, as for the EAP, but with an increase due to the wider scope
- Conventional agreement must be signed within 10 months after the decision to cover the costs has been made. If it is not the case, the CEPS sets the price of the drug before the end of the direct access period (which lasts 12 months)
- An evaluation will be done after 2 years, by the parliament, to evaluate the relevance and efficiency of this new system

Sources: Nile (2023) – Smart Pharma Consulting analyses

The CSIS[1] 2021 is an ambitious plan set by the French government aimed at strengthening France's attractiveness for the healthcare sector by 2030

CSIS – Strategic Committee for Healthcare Industries (2021)

MINISTÈRE DE LA SANTÉ ET DE LA PRÉVENTION
Liberté Égalité Fraternité

FRANCE 2030

Context & objectives

- The **Covid-19 pandemic revealed the need for France to have an innovative and strong healthcare industry, to support:**
  - **Patients**' access to **innovation**
  - French healthcare **sovereignty**
- **The President Emmanuel Macron has made health industries a priority, to restore France's footprint in the EU biopharma landscape**
- In this context, the French government has set an **ambitious objective** for **CSIS 2021**: make France a **leading nation i**n terms of **healthcare industry** and **innovation**

2030 ambition

Make France a leading nation in terms of healthcare industry and innovation

5 key priorities

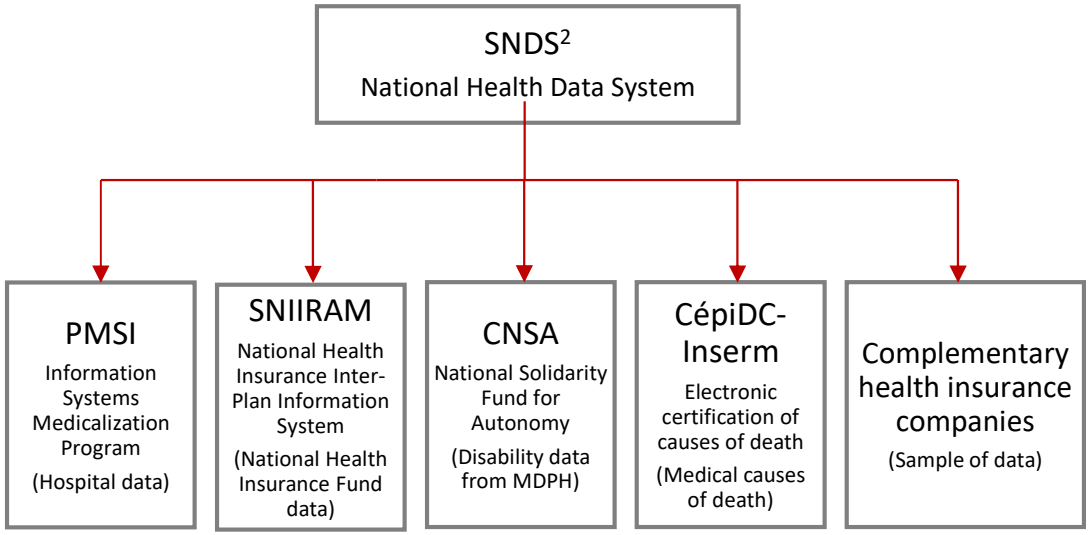
1	2	3	4	5
Excel in fundamental and interdisciplinary research	**Catalyze innovation**	**Improve patients' access to innovation**	**Support industrialization**	**Develop and promote training**
▪ Fueling of innovation with a continuous flow ▪ Ensure continuity from basic research to clinical research	▪ Improve access to funding ▪ Secure innovation in France in all phases of innovation (incl. during risky and capital-intensive phases)	▪ Allow the earliest access to innovation ▪ Strengthen the integration of these innovations into the care pathway	▪ Relocate production sites ▪ Have sufficient production capacities ▪ Allow innovations to be developed and produced in France	▪ Develop and bring out the initial and lifelong training necessary to have the skills to achieve the proposed objectives

Sources: CSIS (February 2021) – Smart Pharma Consulting analyses

[1] Conseil stratégique des industriels de santé: Strategic Committee for Healthcare Industries

Launched in December 2019, the Health Data Hub[1] is a new French platform designed to cross-reference existing health databases for medical research purposes

Health Data Hub



Aggregating and making these data available to promote studies, research or evaluation of a public interest nature and contributing to the :

- Information on health
- Implementation of health policies
- Knowledge of health expenditures
- Information of professionals and institutions about their activities
- Innovation in the fields of health and medico-social care

Definition

- New French health data platform, created in December 2019, that allows to cross-reference existing health database and thus facilitate their use for research and development purposes

Objective

- Based on the Artificial Intelligence, create a platform for accessing and sharing data, in the service of health research and innovation

Pros

- Health issues: improving research and development
- Competitive advantage at international level for research and innovation

Cons

- Sensitive and personal data that can be used if there is a public interest and after the CNIL's[3] consent
- Data hosted by Microsoft: exposure to US law (Cloud Act)

Implication for pharma companies

- Perspectives of interest at each stage of the drug or medical device value chain, from research to development, including monitoring the use of healthcare products in real life and organizing care pathways
- Access to data, not accessible as of today
- Additional place to forge new links and partnership relations with the players of the ecosystem, whether public or private

Sources: "La Plateforme des données de santé (Health Data Hub)", CNIL (February 2021) – "Health Data Hub : 6 questions sur la plateforme de données de santé et sa polémique", Numerama (June 2020) – "Le Health Data Hub : quelles opportunités pour l'industrie pharmaceutique ?", Alcimed (July 2020) – Smart Pharma Consulting analyses

[1] Also named PDS (Plateforme des données de santé) – [2] Système National des Données de Santé – [3] Commission Nationale de l'Informatique et des Libertés (National commission for information technology and civil liberties)

The "Innovation Santé 2030" plan[1] provides for a set of legislative and regulatory measures to make France the leading European healthcare industry

"Innovation Santé 2030" (2021)

7 measures for health innovation

1. Strengthen the biomedical research capacity
2. Support the 3 sectors of the future of the healthcare industry:
   - Biotherapy and bioproduction
   - Digital health
   - Infectious and emerging diseases
3. Make France the leading country in Europe for clinical trials
4. Enable equal access to care for patients and provide an accelerated and simplified market access framework for innovations
5. Provide a predictable economic framework consistent with the objective of health and industrial sovereignty
6. Support the industrialization of healthcare products in France and the growth of companies in the sector
7. Create a structure to drive and strategically manage innovation in health: the Health Innovation Agency

3 acceleration strategies

1 Biotherapy and bioproduction

- The objective of the strategy is to restore France's position as European leader in pharmaceutical biomanufacturing through an aggressive industrial and research & innovation policy in healthcare

2 Digital health

- This acceleration strategy, in line with the PariSanté Campus project announced by the President of the Republic, supports the development of digital tools that are the pillars of this new medicine (AI[2], IoT[3], etc.) in order to meet three main challenges:
  - Healthcare system efficiency
  - Economic growth
  - French health sovereignty

3 Infectious and Emerging Diseases

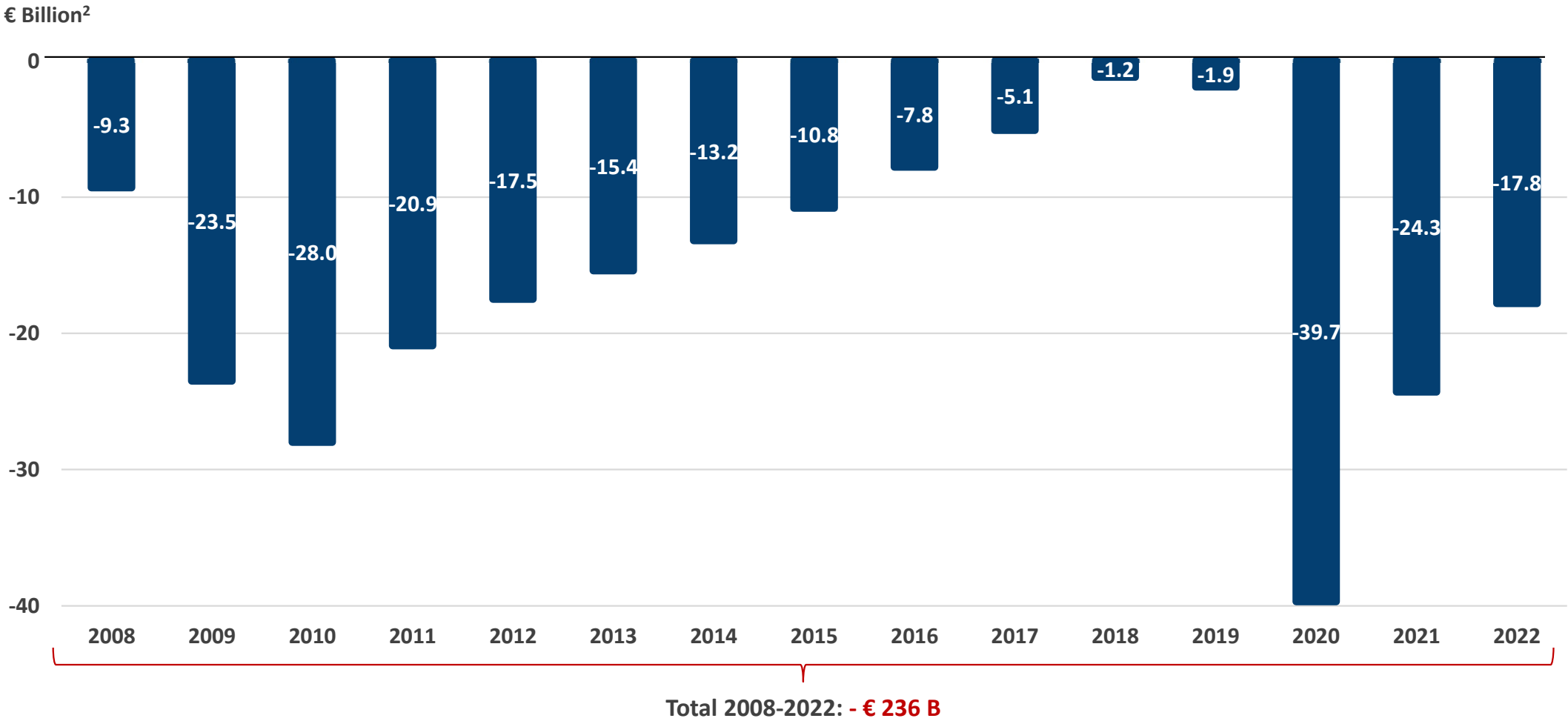
- To prepare France to face the risks likely to provoke a new major health crisis and to limit its impacts or even prevent it, the Government is launching a national acceleration strategy "Emerging Infectious Diseases and Nuclear, Radiological, Biological and Chemical Threats"

Sources: Innovation Santé 2030, CSIS (July 2021) – Smart Pharma Consulting analyses

[1] Announced by the President of the Republic on June 29 and October 12, 2021 – [2] Artificial Intelligence – [3] Internet of Things

The National Health Insurance Fund cumulated deficit since 2008 amounts to ~€ 236 B, of which ~€ 40 B in 2020, because of the Covid-19 crisis

National Health Insurance Fund deficit – General regime1 evolution (2008 – 2022)

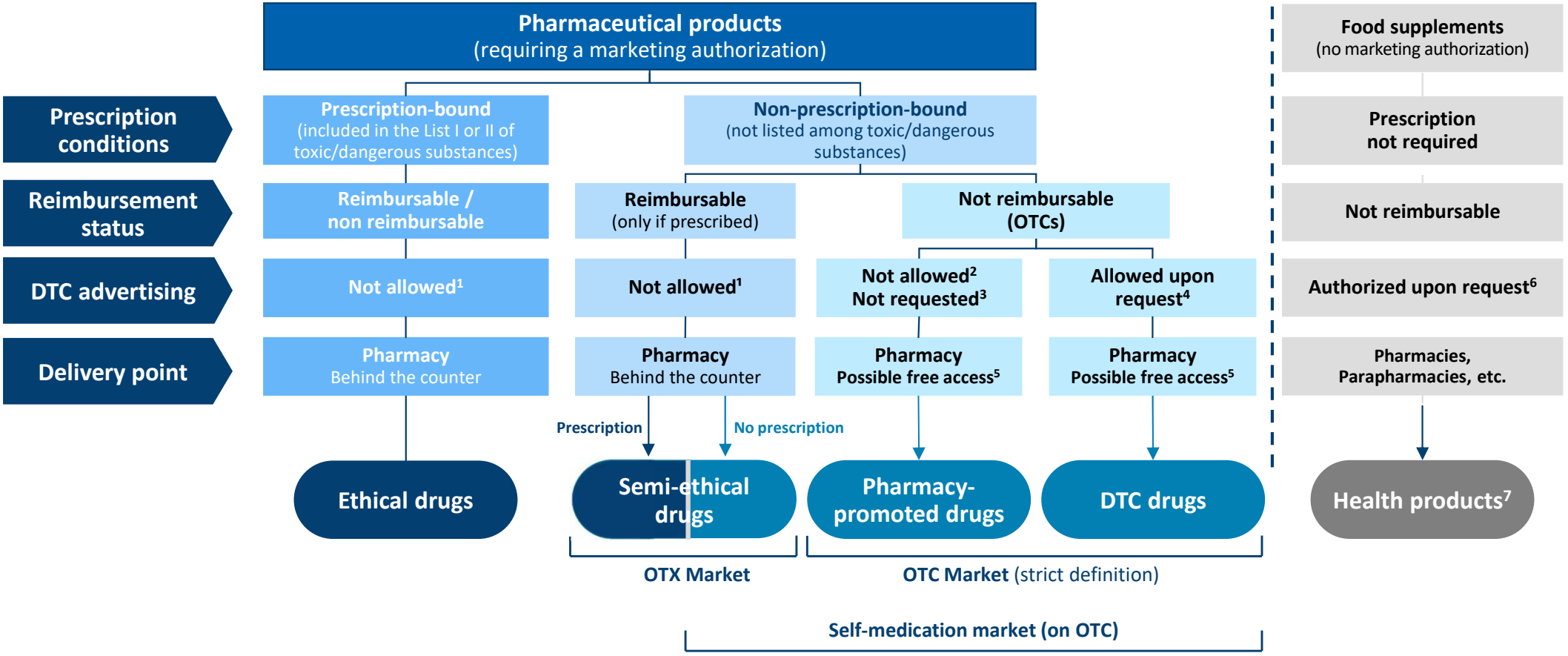


Sources: Ministry of Health website – Court of Auditors report (October 2022) – Smart Pharma Consulting analyses

[1] Including old-age solidarity fund (FSV: "Fonds de solidarité vieillesse") – [2] Current price

Pharmaceutical products can be split into prescription-bound and non-prescription-bound drugs, knowing that some of the prescribed drugs are not reimbursed

Classification of pharmaceutical products in France



Note: OTC = Over-the-counter, OTX = combination of prescription (RX) and over-the-counter (OTC), DTC = Direct to consumer

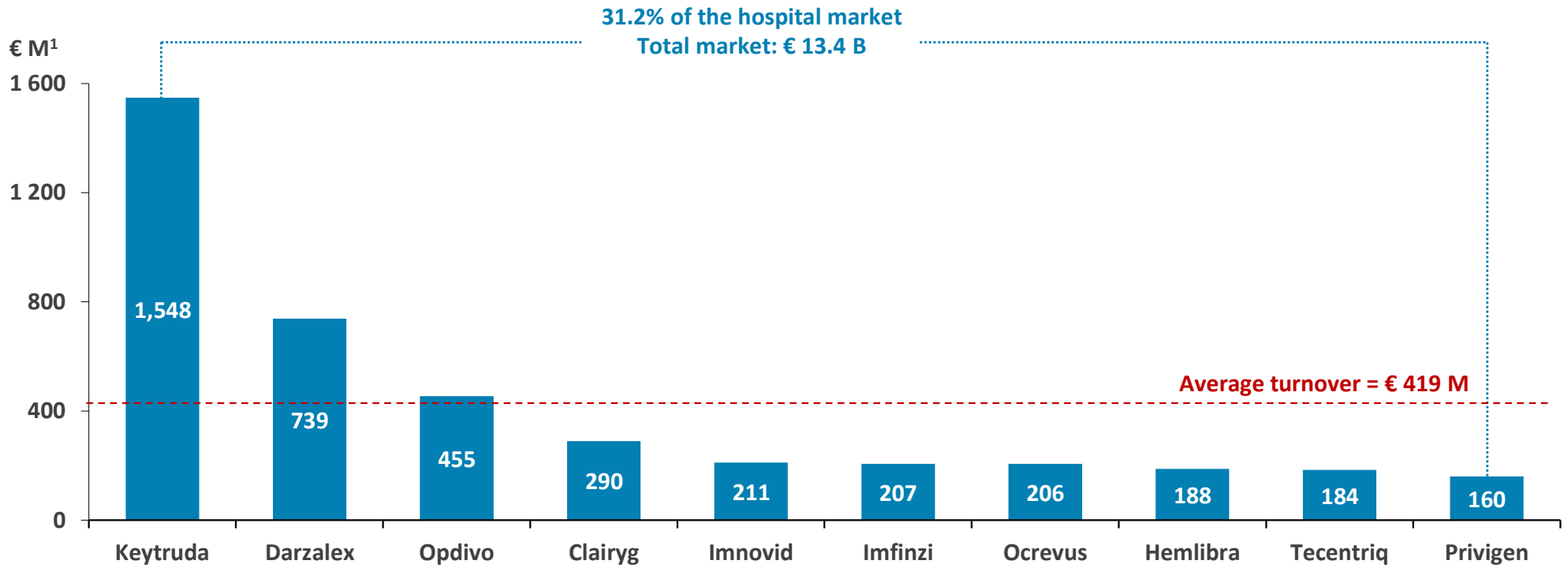
Sources: ANSM – DGCCRF – Smart Pharma Consulting analyses

[1] Rare exceptions (e.g., vaccines) – [2] Psychotropic or narcotic drugs – [3] When the pharma company does not wish to communicate to the general public – [4] Whatever the claims – [5] Possibility of "free access" within the retail pharmacy for certain OTC products – [6] Only for claims relating to healing, alleviating or preventing diseases – [7] Other than drugs and pharmaceutical products

With a +52.3% growth rate in 2022, Imfinzi integrated top 10 hospital drugs in France, while the top 3 remained Keytruda, Darzalex and Opdivo

Top 10 products – Hospital sales (2022)

Gross price



	Keytruda	Darzalex	Opdivo	Clairyg	Imnovid	Imfinzi	Ocrevus	Hemlibra	Tecentriq	Privigen
Market share	11.5%	5.5%	3.4%	2.2%	1.6%	1.5%	1.5%	1.4%	1.4%	1.2%
2021 ranking	1 =	2 =	3 =	5 ⇗	7 ⇗	15 ⇗	10 ⇗	6 ⇘	9 =	14 ⇗
2021 - 2022 evolution	+27.6%	+41.6%	+0.1%	+8.3%	+11.5%	+52.3%	+24.8%	-13.9%	+11.2%	+13.9%

⇗: *Rise* - ⇘: *Drop* - = ***No change in 2022 vs. 2021 ranking***

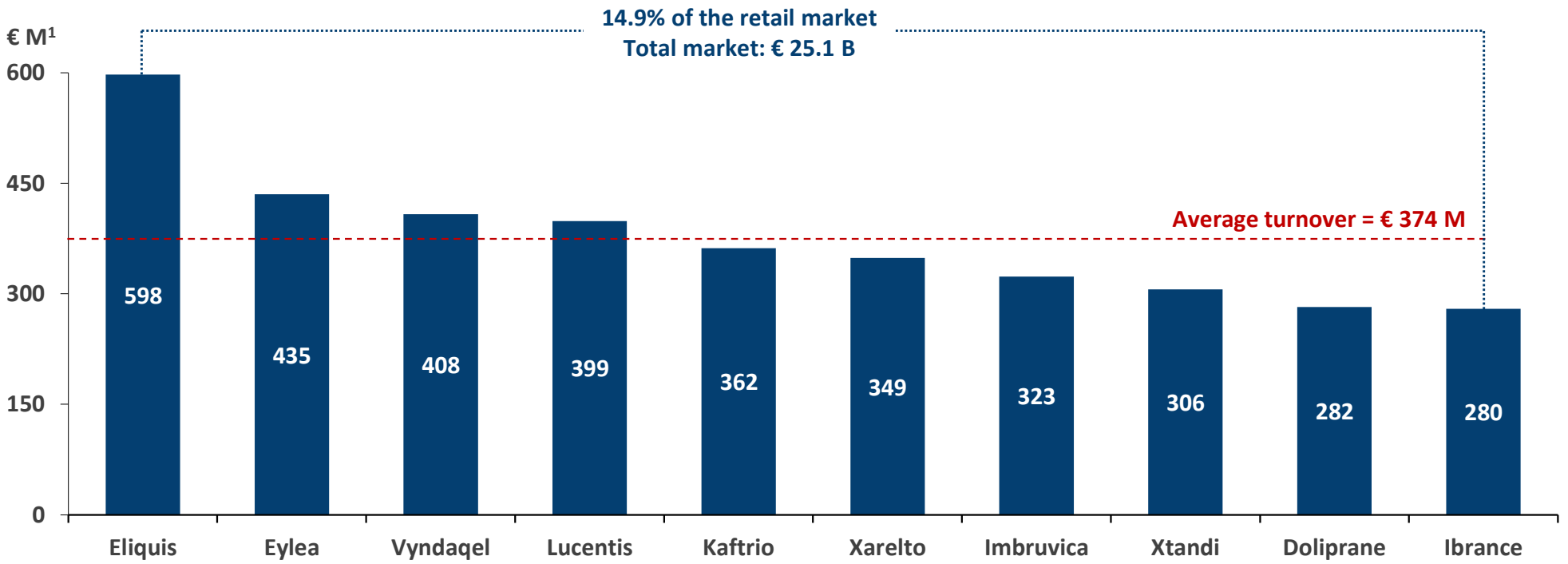
Sources: GERS – Smart Pharma Consulting analyses

[1] Constant ex-factory price, before rebates and taxes (after rebates, the hospital market amounted to ~€ 8.7 B in 2022)

Eliquis and Eylea are still leading the French retail market, ahead of Vyndaqel which gained 10 places and entered the top 3 with a +120.7% growth vs. 2021

Top 10 products – Retail sales (2022)

Gross price



	Eliquis	Eylea	Vyndaqel	Lucentis	Kaftrio	Xarelto	Imbruvica	Xtandi	Doliprane	Ibrance
Market share	2.4%	1.7%	1.6%	1.6%	1.4%	1.4%	1.3%	1.2%	1.1%	1.1%
2021 ranking	1 =	2 =	13 ⇗	3 ⇘	24 ⇗	4 ⇘	6 ⇘	10 ⇗	8 ⇘	7 ⇘
2021 - 2022 evolution	+11.3%	+11.9%	+120.7%	+3.6%	+197.8%	+6.3%	+2.8%	+18.3%	+7.3%	-3.3%

⇗: *Rise* - ⇘: *Drop* - **= *No change in 2022 vs. 2021 ranking***

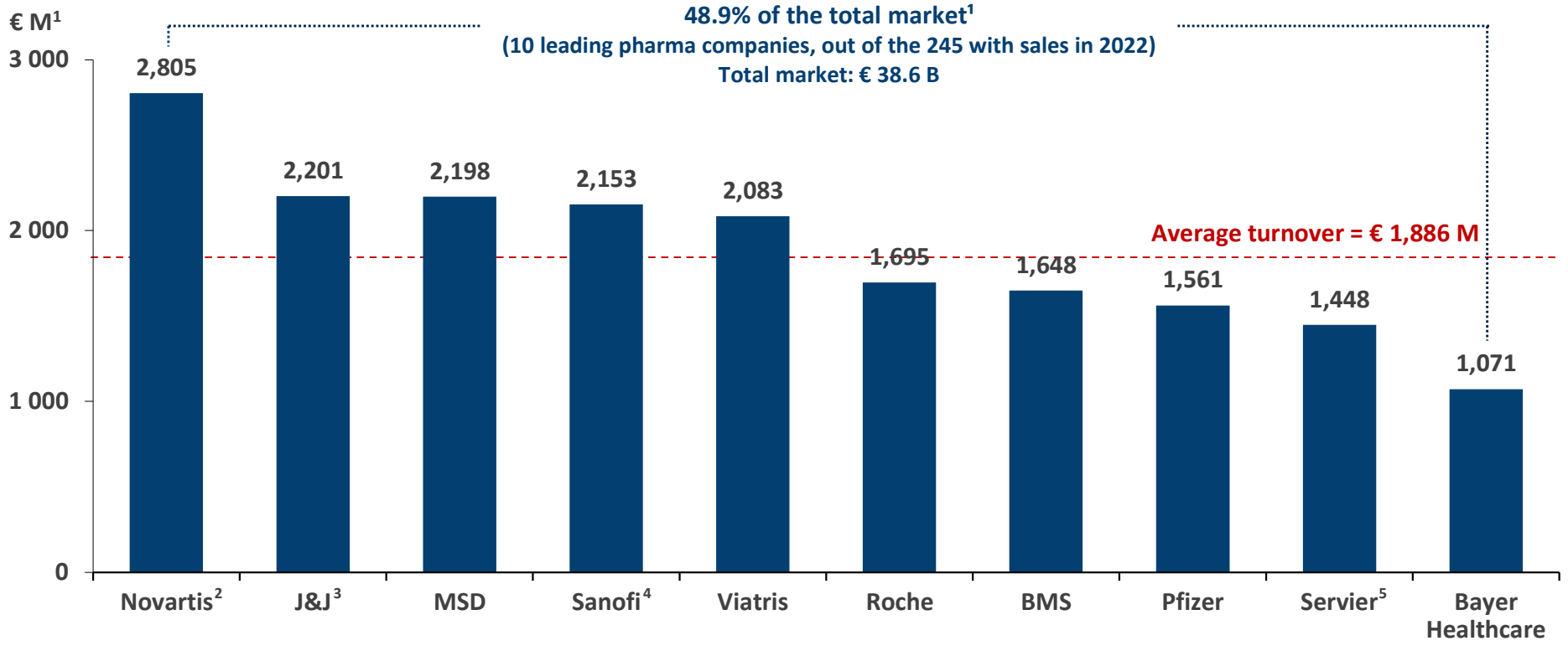
Sources: GERS – Smart Pharma Consulting analyses

[1] *Ex-factory price, excluding rebates and taxes*

In 2022, the top 10 pharma companies accounted for almost half of the French pharma market, with Novartis, J&J and MSD standing on the top

Top 10 pharma companies on the hospital and retail markets – In value (2022)

Gross price



	Novartis[2]	J&J[3]	MSD	Sanofi[4]	Viatris	Roche	BMS	Pfizer	Servier[5]	Bayer Healthcare
Market share	7.3%	5.7%	5.7%	5.6%	5.4%	4.4%	4.3%	4.0%	3.8%	2.8%
2021-2022 evolution	+4.2%	+15.6%	+19.6%	+4.6%	+6.0%	+12.9%	-9.0%	+2.0%	+8.2%	+6.7%

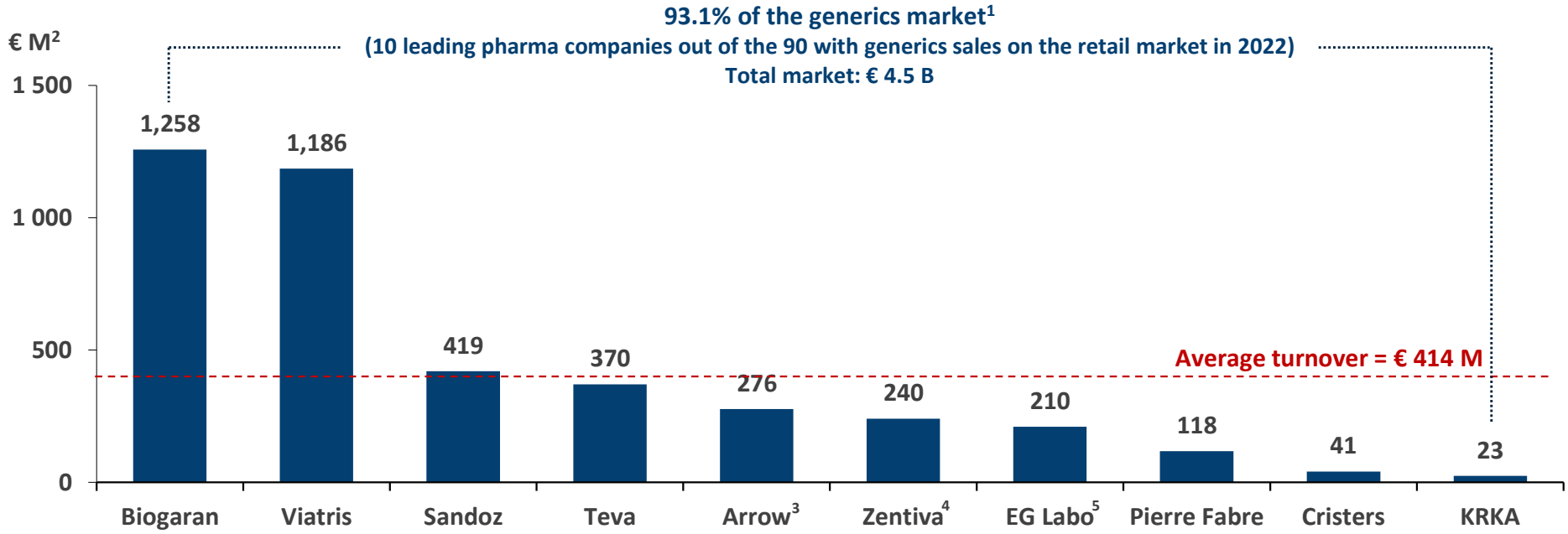
Sources: GERS – Smart Pharma Consulting analyses and estimates

[1] Constant ex-factory prices, before taxes and rebates – [2] Including Sandoz – [3] Including Janssen, J&J Santé Beauté and J&J Médical – [4] Including Opella Healthcare – [5] Including Biogaran

In 2022, Biogaran and Viatris generated more than € 2.4 B sales and represented together ~55% of the French retail generic market in value

Top 10 generics companies on the retail market – In value (2022)

Gross price



	Biogaran	Viatris	Sandoz	Teva	Arrow[3]	Zentiva[4]	EG Labo[5]	Pierre Fabre	Cristers	KRKA
Market share	28.3%	26.6%	9.4%	8.3%	6.2%	5.4%	4.7%	2.6%	0.9%	0.5%
Generics weight in the retail portfolio	97.0%	90.9%	69.1%	67.3%	89.6%	96.2%	91.7%	30.5%	97.2%	91.3%
2021-2022 evolution	+6.6%	+5.2%	+8.1%	+3.7%	+5.5%	-2.5%	+11.4%	-0.5%	-6.4%	+2.3%

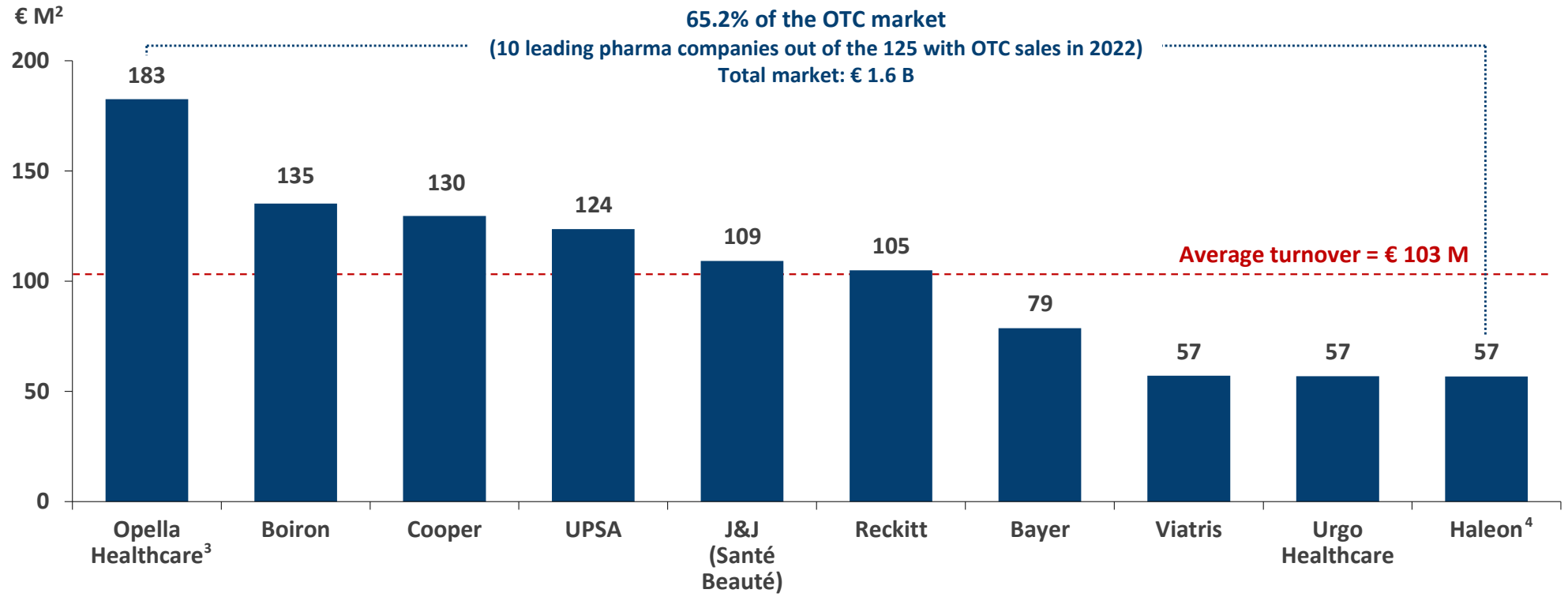
Sources: GERS – Smart Pharma Consulting analyses

[1] Reimbursable and non-reimbursable, listed in the ANSM generics Directory, including quasi generics – [2] Ex-factory price, before taxes and rebates – [3] Part of Aurobindo, since its acquisition of Actavis in 2014 – [4] Acquired by Advent International on September 30th, 2018 – [5] Subsidiary of Stada which was acquired by Bain Capital and Cinven in August 2017

The OTC business of companies operating in the French market is relatively small, with only six of them showing sales above € 100 M

Top 10 companies on the OTC[1] market – In value (2022)

Gross price



	Opella Healthcare[3]	Boiron	Cooper	UPSA	J&J (Santé Beauté)	Reckitt	Bayer	Viatris	Urgo Healthcare	Haleon[4]
Market share	11.5%	8.5%	8.2%	7.8%	6.9%	6.6%	5.0%	3.6%	3.6%	3.6%
2021-2022 evolution	+28.1%	+34.8%	+19.8%	+33.6%	+15.4%	+46.1%	+1.8%	+17.7%	+86.6%	+3.3%

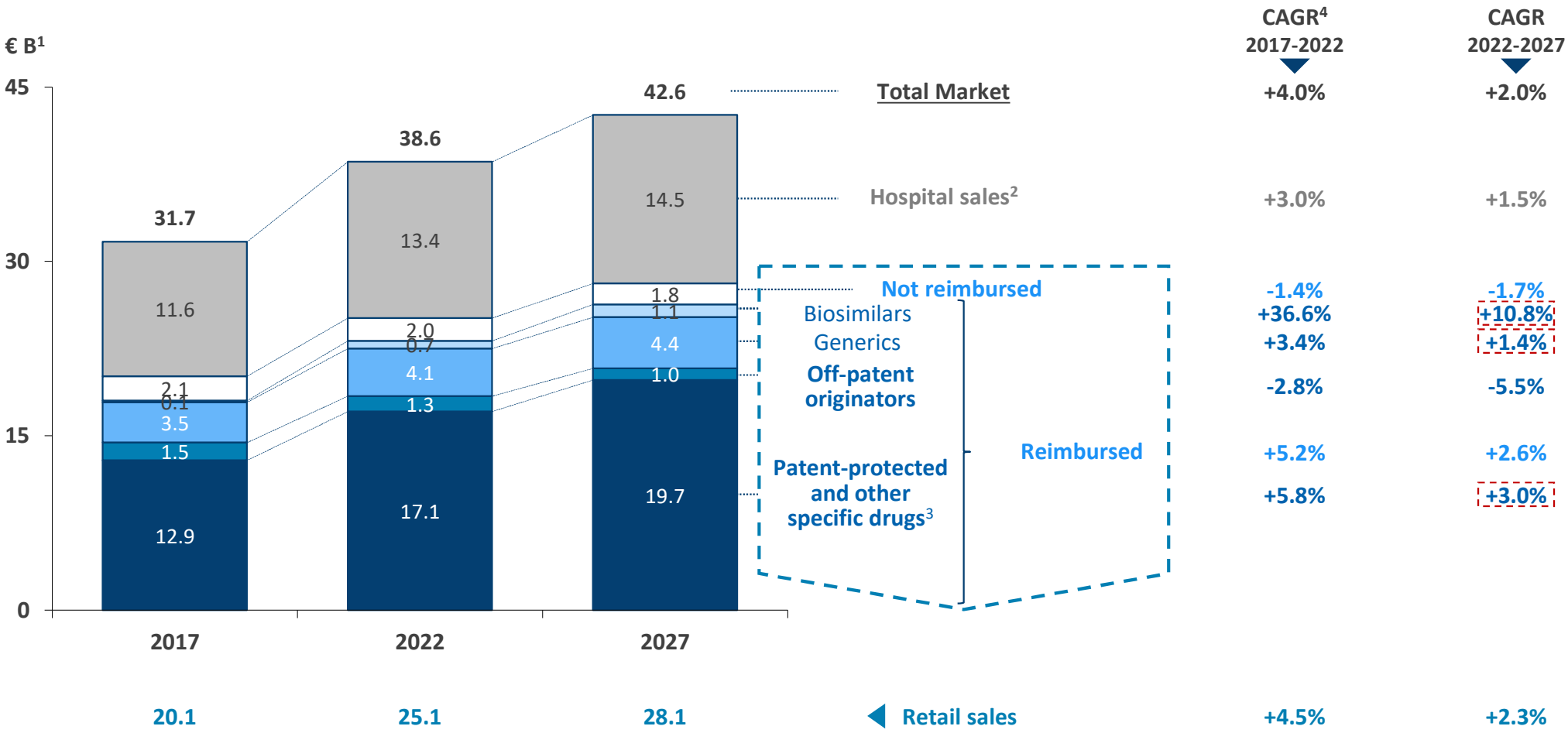
Sources: GERS – Smart Pharma Consulting analyses and estimates

[1] Non-listed, non-reimbursable products – [2] Ex-factory prices, before rebates and taxes – [3] Sanofi entity – [4] Company created in February 2022, prior to the completion of its demerger from GSK in July 2022

By 2027, the French pharmaceutical market should be mainly driven by patent-protected drugs, generics and biosimilars delivered in retail pharmacies

Drugs sales forecast by segment (2017 – 2022 – 2027)

Gross price



	CAGR[4] 2017-2022	CAGR 2022-2027
Total Market	+4.0%	+2.0%
Hospital sales[2]	+3.0%	+1.5%
Not reimbursed	-1.4%	-1.7%
Biosimilars	+36.6%	+10.8%
Generics	+3.4%	+1.4%
Off-patent originators	-2.8%	-5.5%
Reimbursed	+5.2%	+2.6%
Patent-protected and other specific drugs[3]	+5.8%	+3.0%
Retail sales	+4.5%	+2.3%

2017	2022	2027
20.1	25.1	28.1

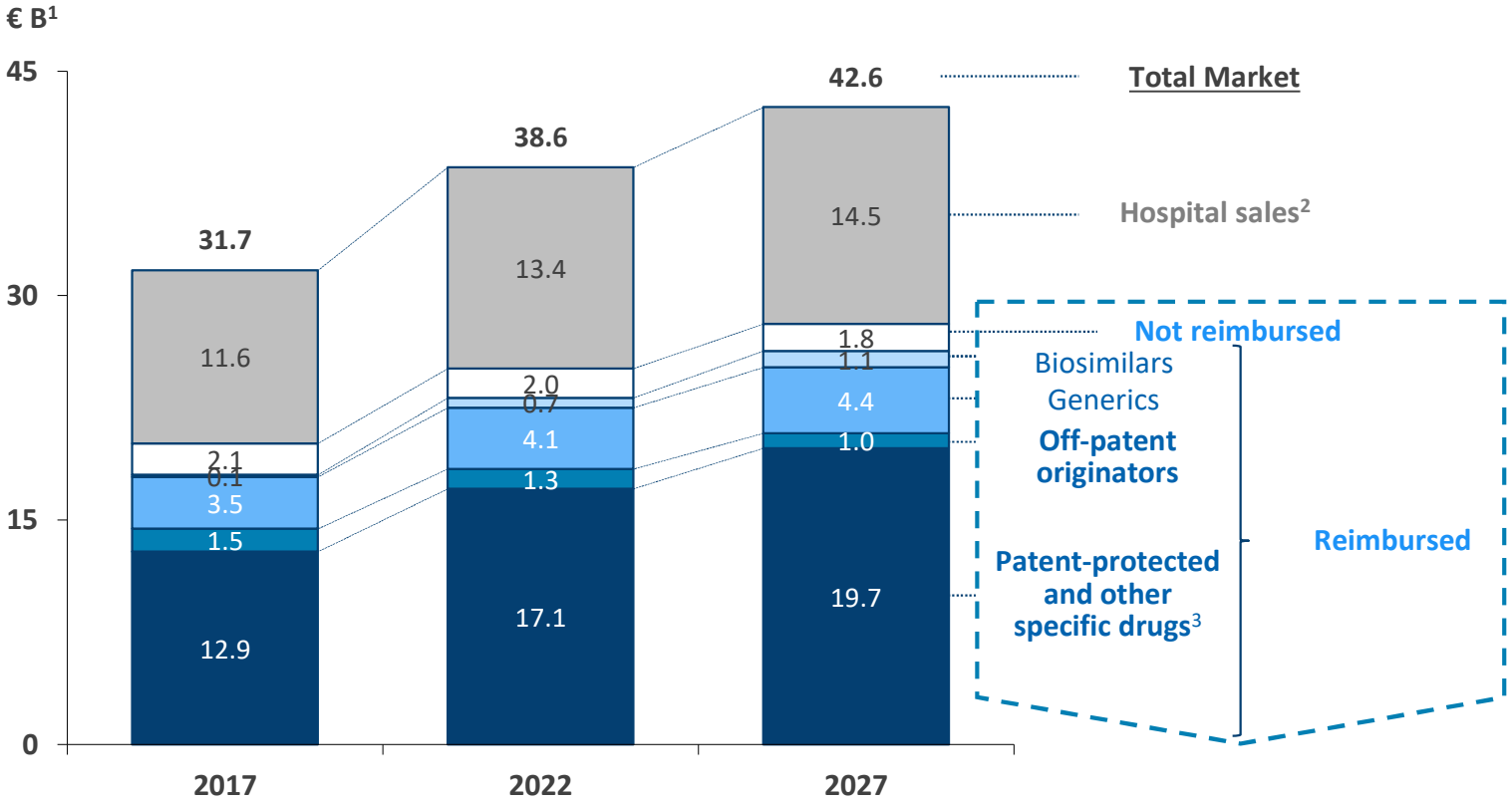
Sources: GERS dashboards – Smart Pharma Consulting estimates

[1] Constant ex-factory prices, before rebates and taxes – [2] Including hospital sales of biosimilars, products invoiced on top of "T2A" and retroceded medicines
[3] Sales of drugs whose patents have not expired and of other specific products (calcium, sodium, potassium, paracetamol, etc.) – [4] Compound annual growth rate

In net value, the French pharma market should reach ~€ 35 B in 2027, representing a +2.3% CAGR between 2022 and 2027

Drugs sales forecast by segment (2017 – 2022 – 2027)

Gross price



	CAGR[4] 2017-2022	CAGR 2022-2027
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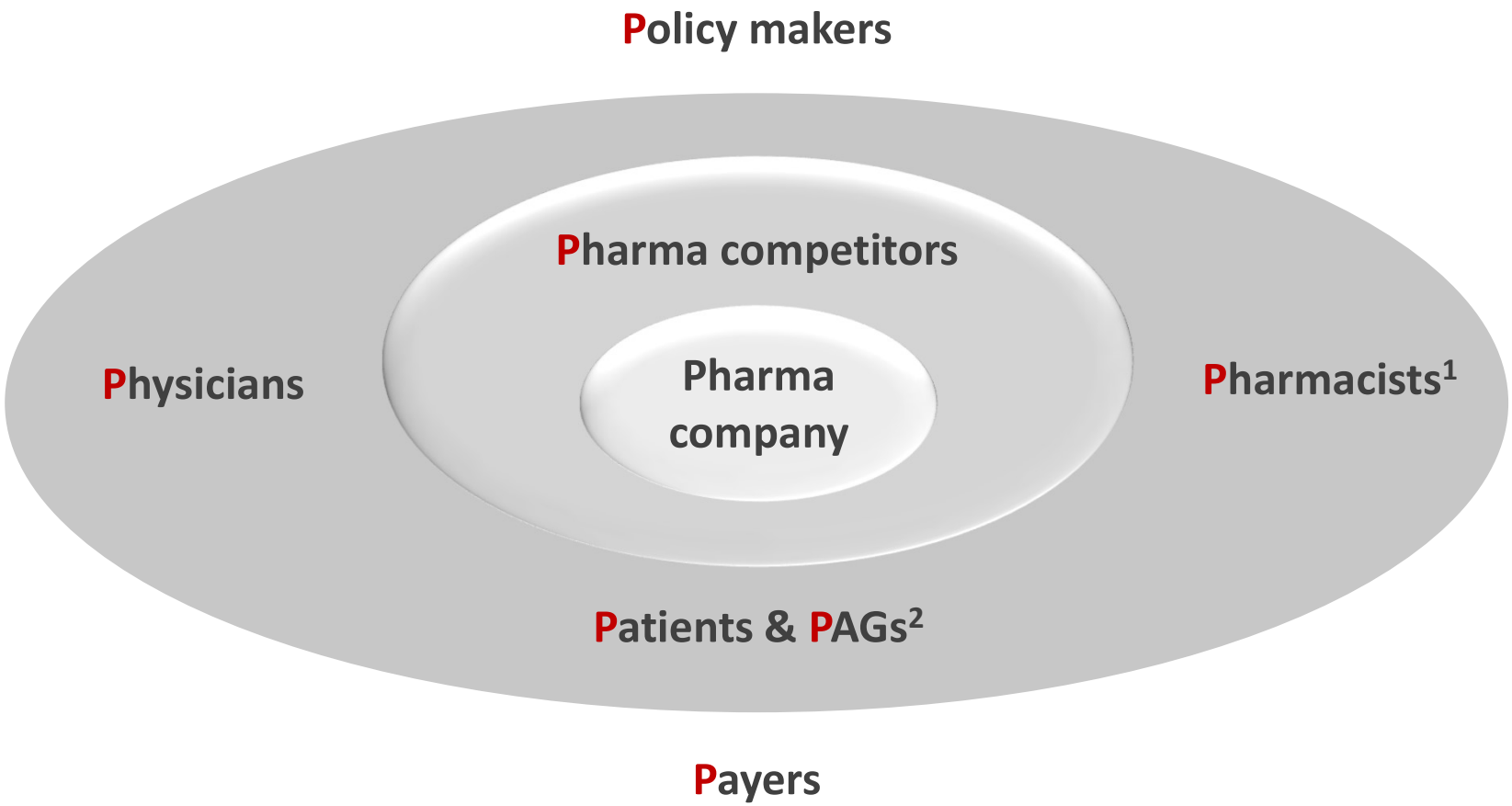
Patent-protected and other specific drugs[3]	+5.8%	+3.0%
Retail sales	+4.5%	+2.3%
20.1		
25.1		
28.1		

Sources: GERS dashboards – Smart Pharma Consulting estimates

[1] Constant ex-factory prices, after estimated rebates and before taxes – [2] Including hospital sales of biosimilars, products invoiced on top of "T2A" and retroceded medicines – [3] Sales of drugs whose patent has not expired and of other specific products (e.g., calcium, sodium, potassium, paracetamol) – [4] Compound annual growth rate

Pharmaceutical companies' strategic priorities by 2027 will be linked with the behavior of the "7 Ps" stakeholders

The 7 Ps



Sources: Smart Pharma Consulting

[1] Pharmacists also play the role of purchasers, and their importance will keep on increasing in the upcoming years, either on the open care or the hospital segments – [2] Patient Advocacy Groups

Policy makers & payers might introduce new containment measures to secure the sustainability of the healthcare system over time

Stakeholder behavioral trends: Policy makers & Payers (1/3)

2022 – 2027 Trends

Stricter control of reimbursed drugs expenditure

Measures to boost generics, biosimilars & hybrids

- Strong willingness to better control the National Health Insurance Fund deficit, over the long-term:
  - 2023 deficit set at € 7.1 B (vs. € 21.4 B in 2022)
  - 2023 ONDAM set at € 244.1 B (+3.3% vs. 2022)
  - 2023 safeguard clause triggered for a:
    - M value of € 24.6 B (+0.4% vs. 2022)
    - Z[1] value of € 2.2 B (+2.8% vs. 2022)
- More “aggressive price” regulation of marketed drugs
- Possible amendment of the T2A system
- Better cost management of on-top of T2A products

General implications

- Tighter reimbursement restrictions:
  - Number of indications
  - Volume per indication
  - Number of targeted patients
- Drug cost containment measures:
  - Managed care agreements for innovative drugs
  - Stronger pressure on established brands:
    - Accelerated price cuts over time for reimbursed drugs
    - New measures to boost generics, biosimilars and hybrids (e.g., incentives for hospital and office-based physicians to prescribe biosimilars, for retail pharmacists to substitute)
    - Will to reduce / collect high-level rebates received by retail pharmacists from generics companies
  - Faster decrease of the ceiling price set by the CEPS for on top of T2A hospital drugs

Sources: Smart Pharma Consulting analyses

[1] Financial regulation mechanism introduced by the LFSS 2020 concerning on-top of T2A medical devices

The French government will give the priority to measures to improve patients' access to care and to reinforce the efficiency of the healthcare system

Stakeholder behavioral trends: Policy makers & Payers (2/3)

2022 – 2027 Trends	General implications
Earlier and broader access to innovation ▪ Framework agreement between the CEPS and the Leem (2021–2024) ▪ Reform of the French Early Access Programs (2021) ▪ Transparency Committee doctrine update (2023) ▪ Ten-year cancer national strategy (2021–2030) ▪ Rare diseases national plan (expected in 2024)	▪ Introduction of a fast-track process to negotiate drug prices with the CEPS for the most innovative drugs ▪ Possibility to use indirect comparative data for the clinical assessment of breakthrough innovations ▪ National public health plans (e.g., oncology, rare diseases) aimed to: – Improve diagnosis of diseases – Allow earlier and broader access to drugs
Healthcare system reorganization ▪ Shift from hospital to ambulatory care ▪ Stronger medical networking ▪ Better prevention (e.g., consultations at 20-25, 40-45 and 60-65 years old) ▪ Improvement of patient management and adherence to achieve better outcomes	▪ Measures to reinforce healthcare networks and patients' follow-up ▪ Increasing importance given to: – Day care at hospital level – Home care (with the contribution of retail pharmacists, nurses, specialized health care providers[1], etc.) ▪ Redefinition and reorganization of healthcare territories to increase the efficiency of care

Sources: Smart Pharma Consulting analyses

[1] Prestataires de Santé À Domicile (PSAD)

Additional measures will be introduced to drive R&D investment and to relocate the production of essential drugs in France, or at least in EU countries

Stakeholder behavioral trends: Policy makers & Payers (3/3)

2022 – 2027 Trends

Promotion of investments in France

- Raising the attractiveness of France for pharma R&D investment (e.g., biotechnologies)
- Support to public / private partnerships between:
  - Universities
  - Teaching hospitals
  - Public research institutes (such as Curie Institute, INSERM, etc)
  - Pharma companies
- Relocation of selected essential active pharmaceutical ingredients (e.g., paracetamol)
- Better sustainability of drug supply

General implications

- Leverage of France excellence (e.g., oncology) through mobilization of public and private funds
- Advertising on French R&D set-up and know-how:
  - IHU ("Instituts Hospitalo-Universitaires"): public / private partnerships benefiting from a special grant from the government
- Simplification of procedures to partner with hospitals re. clinical studies
- Price advantage for drugs manufactured in France or at least in EU countries
- Measures to secure the availability of drugs in the national territory and avoid stock shortages

Sources: Smart Pharma Consulting analyses

Pharma companies must position their products, services and themselves to be perceived by policy makers and payers as offering superior value than competition

Strategic priorities induced by Policy makers & Payers behavioral trends

1 **Stricter control of reimbursed drugs expenditure**	Enhance the global value proposition (incl. corporate identity, product and service offering) through: – Dedicated corporate reputation programs targeted at policy makers and government – Generation of data vs. standards of care, real world data and … – … high quality medico-economic studies (whenever relevant)
2 **Measures to boost generics, biosimilars & hybrids**	
3 **Earlier and broader access to innovation**	Leverage the opportunity offered by fast-track process and public health national plans (e.g., cancer, rare diseases, etc.)
4 **Healthcare system reorganization**	Participate to working groups with health authorities and other stakeholders to: – Facilitate the change management – Ensure it will benefit or be neutral on pharma company performance
5 **Promotion of investments in France**	Increase or maintain R&D activities to be in a more favorable position to negotiate drugs' price, and weigh – very carefully – the pros and cons before deciding to produce in France

Sources: Smart Pharma Consulting analyses

The French pharmaceutical market will remain attractive despite a stronger pressure on drug prices, partly outweighed by earlier and broader access to patients

Competitive environment on the French pharma market – 2022-2027

Market Opportunities

- Despite the Covid-19, the **pharma market** should **increase by 1%** p.a., on average, over the 2020-2025 period; and remain the 6th largest market in value terms
- **Access** to **innovation** and to high **quality healthcare** is the **top priority** of the French government and citizens
- **Shift** from hospital **to ambulatory care** should **increase** the number of **patients** treated and better **protect** drug **prices**
- **Support** of **innovative projects** by the government which could **facilitate market access** and **penetration** of **new drugs**

Market Threats

- **Increasing price pressure** on reimbursed drugs, especially "me-too" and on mature products to give better prices to highly-valued innovations
- Generalization of **capping** per **product**, per **pathology** and/or **therapeutic class** to control drug costs
- Array of measures to boost prescription of low-cost copies[1]
- Increasing **difficulties** to **interact with HCPs** to inform them or create partnerships due to lack of interest and time, to regulatory constraints, and the lasting effect of the Covid-19

Implications

- The **French pharma market** will **remain** amongst the **leading markets** in the world in terms of **sales**, although its **profitability** is likely to **be** further **reduced** (unless pharma companies adjust accordingly their expenditures)
- Drastic **budget constraints** of payers and willingness of governments to give patients **early and broad access** to **innovations** will lead pharma companies to **accept lower prices** than in the past that should be partly **offset by higher volume sold**

Sources: Smart Pharma Consulting analyses

[1] *Generics, hybrids and biosimilars*

The future of pharma companies in France should remain attractive enough, provided they adopt a focused strategy, keep on improving their operational efficiency and design a lean organization

Pharma Companies Perspectives in France – 2020-2027

Pharma Companies Strengths

- **Breakthrough innovative** drugs to come by the end of 2027
- Better **clinical studies quality** and development of **real-world evidence data** contributing to optimize drugs benefit and use
- **Portfolio management** with focused strategy on the most attractive therapeutic areas and on drugs responding the best to medico-marketing and sales investments
- **Selection** of a limited number of **services** offering an important **benefit** to **HCPs**, **patients** or **healthcare settings**

Pharma Companies Weaknesses

- **Clinical developments not** often **adapted** to the needs of the French HTA[1] (i.e., controlled studies vs. standard of care)
- **Weak negotiating power** of pharma companies' vis-a-vis the drug pricing committee (CEPS)
- **Rigidity** and **complexity** of internal **processes** preventing pharma companies from optimally seizing opportunities and addressing threats
- **Underperforming marketing** and **sales** investments

Implications

- The **potential** for **efficiency** and **efficacy improvements** of pharma companies operating in France is important, especially in **market access**, **marketing** and **sales operations**
- Pharma companies' organizations should further **simplify their processes** and **become** more **agile**

Sources: Smart Pharma Consulting analyses

[1] *Commission de la Transparence (Transparency Commission)*

Best performing pharma companies will have in common to market better drugs, offer highly valued services and have a good reputation, driving the preference of their stakeholders

One-page Strategic implications

Strategic Priority: Fight for Key Stakeholders Preference

Innovative Product Portfolio

- Develop innovative drugs to address public health priorities as set by governments (e.g., cancers, neuro-degenerative, infectious and cardio-metabolic diseases) at an affordable and acceptable price for payers
- Endeavour to enter first markets with innovations and avoid me-too products with no or minimal incremental added value
- Carry out robust clinical studies to raise early confidence of key stakeholders:
  - Health authorities and payers to ease market access
  - HCPs for earlier adoption
- Complete clinical studies with RWE[1] data

Highly Valued Services

- Offer services highly valued by key stakeholders (e.g., policy makers, payers, HCPs, patients and/or PAGS[2])…
- … and related to the company products (services around the pills) to enhance the perceived value of the latter
- Thus, these services, targeted at HCPs, patients or healthcare settings, should be useful, interesting, convenient and properly executed
- Better communicate about high added-value of services proposed, so that to enhance stakeholders' preference for the drug sold by the company

Good Corporate Reputation

- Build a stronger corporate reputation[3], better than competition, by:
  - Offering highly valued drugs at an affordable price
  - Offering highly valued services to key stakeholders
  - Communicating on R&D activities and product pipeline
  - Investing in selected R&D projects[4] in France
  - Strengthening the skills and ethical behavior of collaborators
  - Developing a good working atmosphere …
  - … and possibly going beyond CSR[5] legal obligations

Sources: Smart Pharma Consulting analyses

[1] Real-world Evidence – [2] Patient advocacy groups – [3] See the position paper "How to create a superior Pharma Corporate Reputation?": https://smart-pharma.com/wp-content/uploads/2023/01/Smart-Pharma-2016-2022-Complete-collection.pdf – [4] And to a lesser extent in distribution or manufacturing facilities – [5] Corporate Social Responsibility

Smart Pharma
CONSULTING

Is France Attractive for Pharma Companies?

Comparisons & Recommendations

POSITION PAPER March 2023

1, rue Houdart de Lamotte – 75015 Paris – France
Tel. +33 6 11 96 33 78
Email: jmpeny@smart-pharma.com – Website: www.smart-pharma.com

Smart Pharma Consulting has evaluated France's attractiveness for pharma companies by comparison to key European countries and has made suggestions for improvement

introduction

- The attractiveness of a national market for pharma companies can be assessed through four key dimensions:

- Thus, Smart Pharma Consulting proposes to compare the French pharma market to Germany, Italy, UK and Spain and…

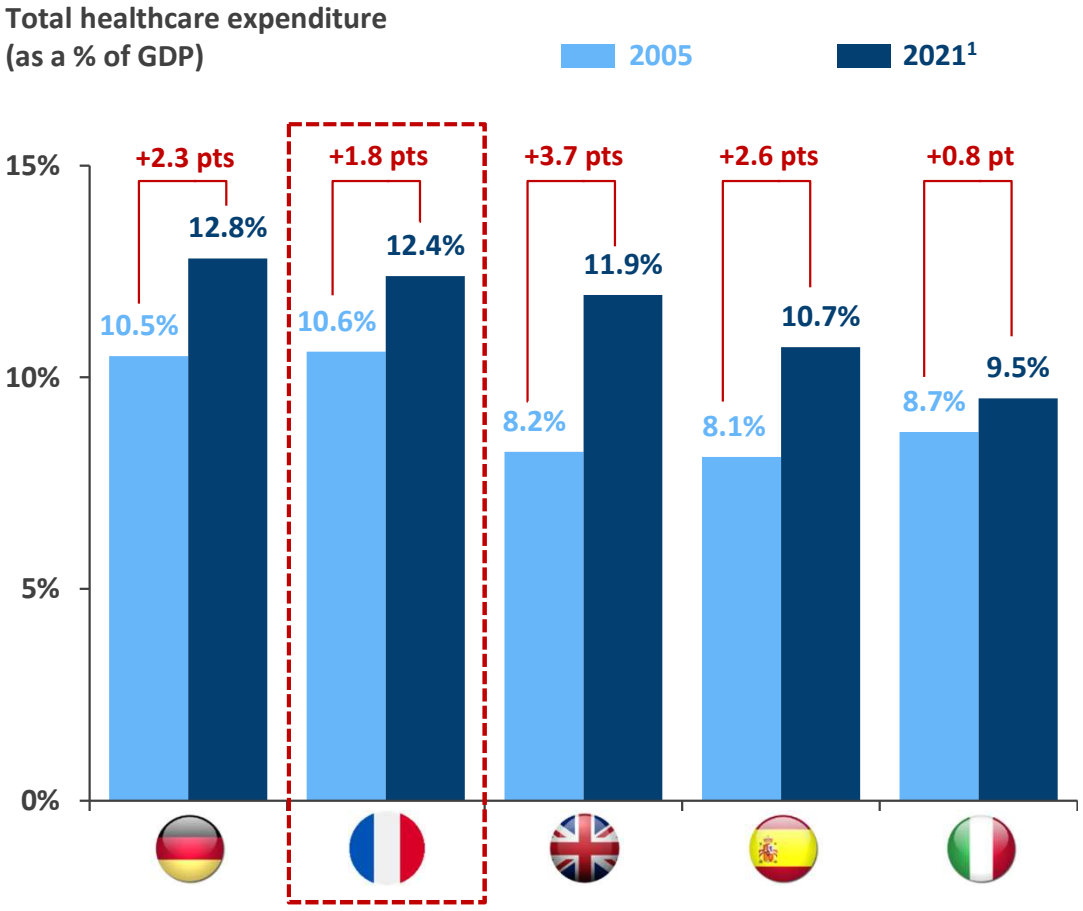
- … provides recommendations likely to enhance the attractiveness of France for pharma companies

Sources: Smart Pharma Consulting

The French healthcare expenditure to GDP ratio of 12.4% compared to other Euro-5 countries reflects the high importance devoted by citizens and the government to healthcare

Pharma market potential

Healthcare expenditure – Euro-5 comparisons (2005 – 2021)



- All Euro-5 countries have increased their share of GDP related to healthcare expenditure between 2005 and 2021
- The increase of this ratio results from:
  - National economies dynamics
  - Healthcare costs evolution
  - Public health conditions and coverage[2]
  - Governments' investment prioritization
  - Citizens' willingness to seek for care

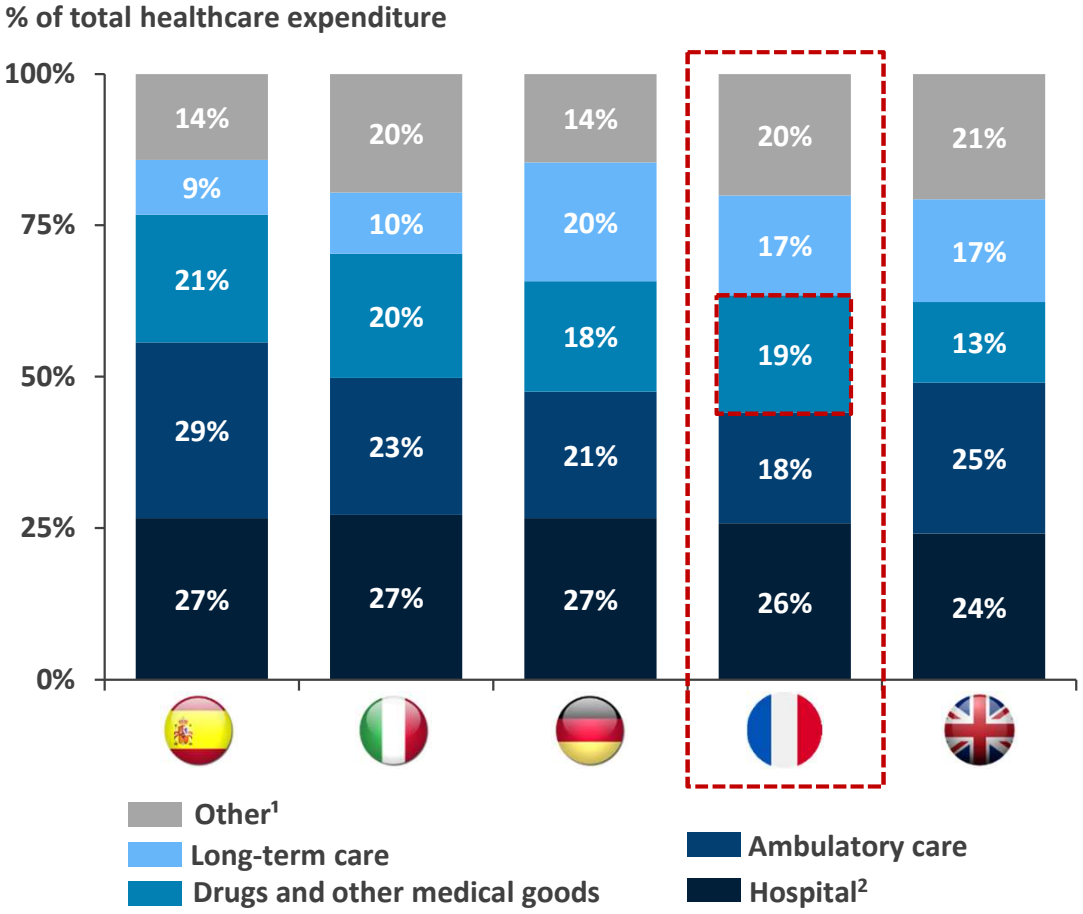
Sources: OECD database (January 2023) – Smart Pharma Consulting analyses

[1] Provisional/Estimated value, excluding for Spain – [2] Particularly affected during the period by the outbreak of the Covid-19 pandemic

Although drugs are the 2nd largest item of healthcare expenditure after hospitals, they are the main target of cost-containment due to political reasons, and will continue to be so in the future

Pharma market potential

Healthcare expenditure breakdown – Euro-5 comparisons (2021)



- Drugs[3] are the 2nd largest source of healthcare expenditure in France, while it is the 3rd in the other Euro-5 countries
- The weight of Drugs in healthcare expenditure varies from 13% in the UK to 21% in Spain
- It is typically the easiest segment to apply cost-containment measures on, as decisions are:
  - Made by payers (either public and/or private), with a limited bargaining power of suppliers
  - Much better accepted by citizens than restriction measures on the other segments
- In France, the price of reimbursable drugs fell by 48.6% between 2000 and 2021

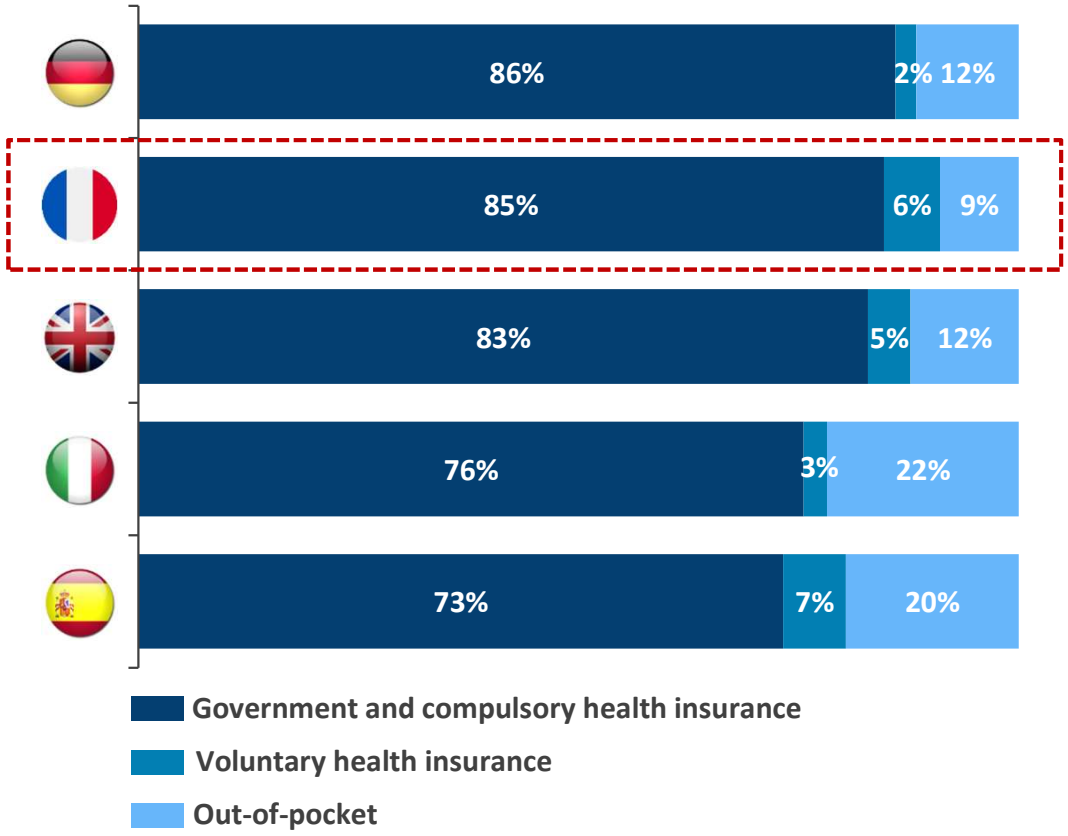
Sources: OECD database (January 2023) – Smart Pharma Consulting analyses

[1] Incl. ancillary services, preventive care and governance, healthcare system and financing administration – [2] In France, 8% on average of hospital expenditures are relative to drugs purchased by institutions, representing ~2% of total expenditures (i.e., 8% of 26%) – [3] And other medical goods such as medical devices

With 85% of healthcare expenditure covered by the National Health insurance Fund and 9% of "out-of-pocket" spending, France offers one the best healthcare protection to citizens

Pharma market potential

Share of public spending – Euro-5 comparisons (2021)*



- France is the 2nd Euro-5 country offering the most extensive national health insurance
- With 85% of the healthcare expenditure covered by the government and the National Health insurance Fund, France offers one of the best healthcare public protection, just behind Germany
- All French citizens benefit from a public health insurance and 95% of them have a complementary private one[1]
- As a result, "out-of-pocket" spending is the lowest amongst Euro-5 countries (and even in the world), representing only 9% of total healthcare expenditure

Sources: World Bank and OECD databases (January 2023) – Smart Pharma Consulting analyses

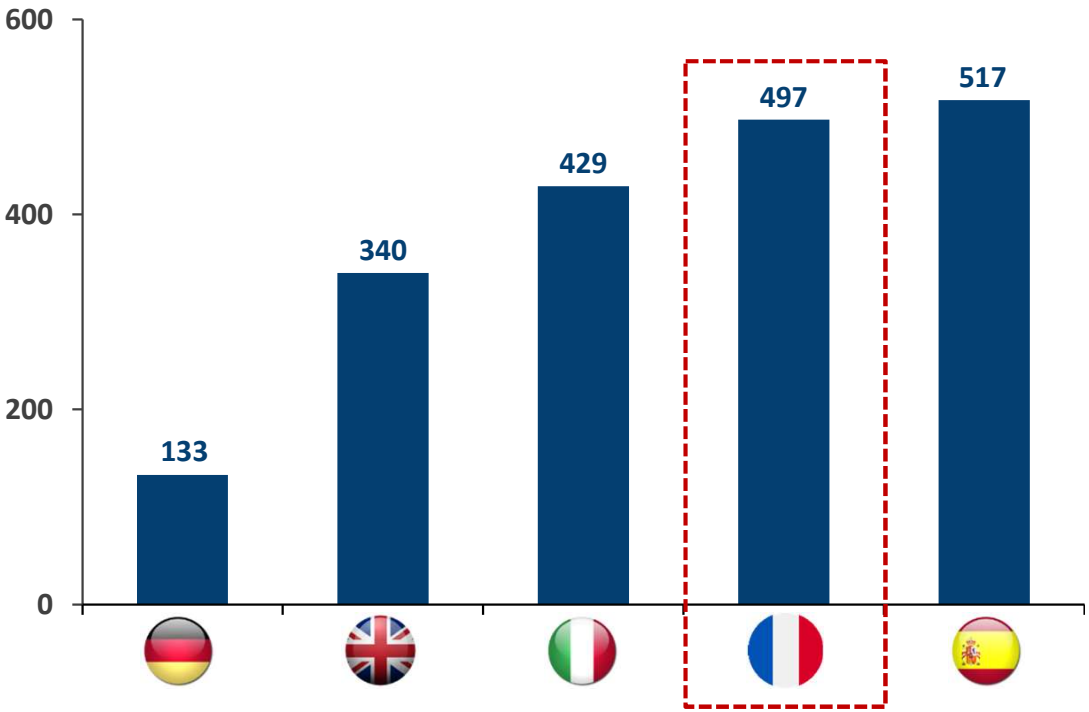
** Or latest data available –*
[1] Compulsory since January 1st,2016 for all employees, irrespective of the size of the company

In France, pharma companies and patients must wait ~16 months after marketing authorization to get a new drug reimbursed and launched, which is higher than most Euro-5 countries

Pharma market potential

Average time to market access – Euro-5 comparisons (2020)

Average time to market access (in number of days)[1]



2022 analysis based on a sample of 160 products approved by EMA between January 2017 and December 2020

- In Europe, delays between approval and market availability vary widely, due to the time required to obtain reimbursement and a price agreement
- Except for Germany, this delay exceeds in all Euro-5 countries the 180 days recommended by the European Commission
- Important delays are harmful both for patients who do not benefit from innovation and for pharma companies which face a loss of revenues
- Germany and the UK have smaller delays as price and reimbursement negotiations occur once the product is marketed
- France has recently decided to experiment this approach, called "Direct Access" under restricted conditions[2] and for a 2-year test period

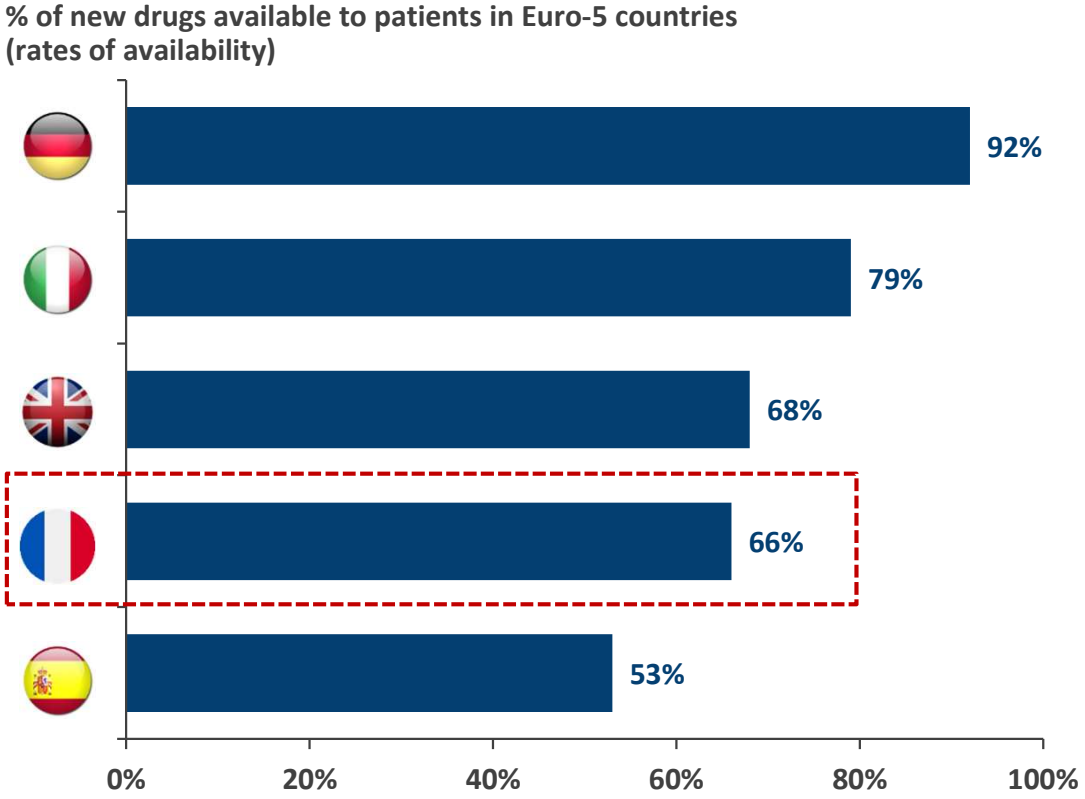
Sources: Patients W.A.I.T. Indicator – EFPIA (July 2022) – Smart Pharma Consulting analyses

[1] Time between marketing authorization and price and reimbursement, excluding early access programs for breakthrough innovations (except for France) – [2] For products assessed by the Transparency Committee as having a clinical Added Value raked I to IV

About one third of globally approved drugs is not launched in France mainly due to market access obstacles (non-reimbursed, low price, etc.)

Pharma market potential

Market access to new drugs – Euro-5 comparisons (2020)



2022 analysis based on a sample of 160 products approved by EMA between January 2017 and December 2020

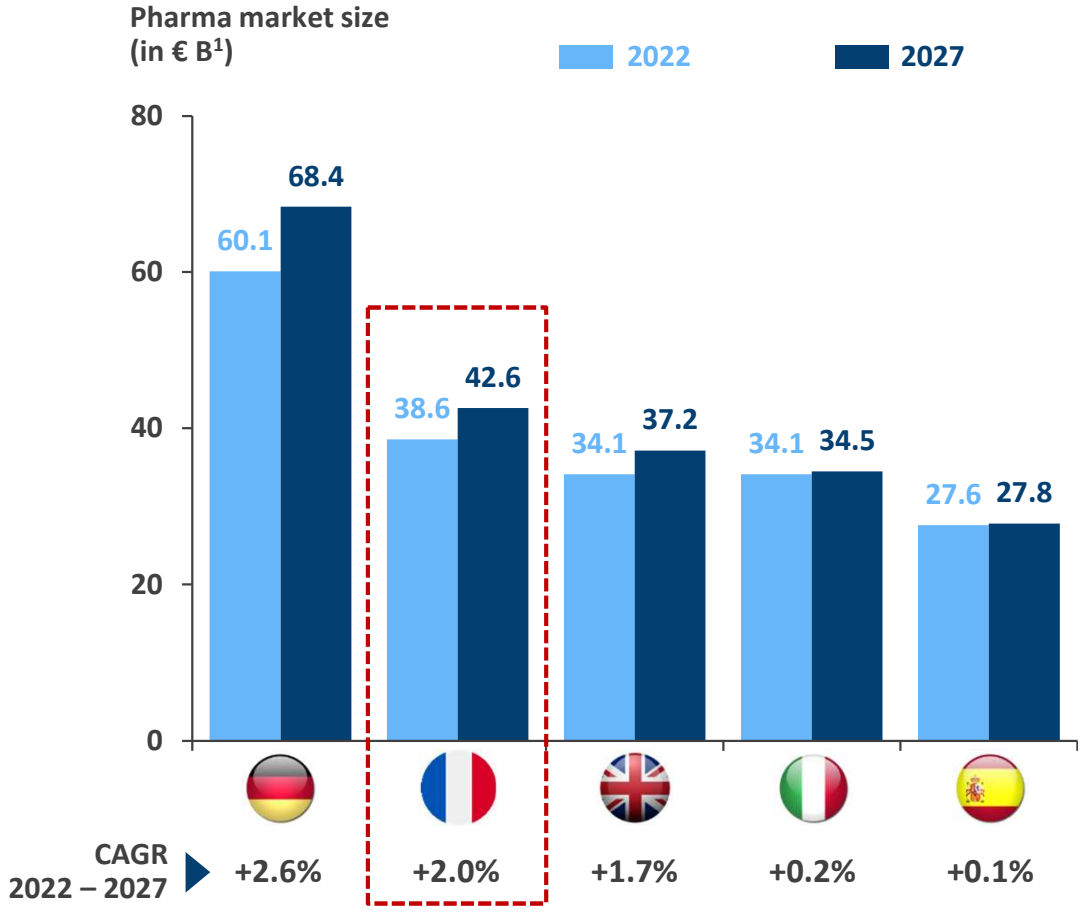
- The difference of new drugs availability according to Euro-5 countries depends on:
  - Heterogeneity of procedures
  - Regulatory requirements / constraints
  - Local pricing and reimbursement conditions that can impact product launches, even when there is a centralized approval procedure
  - Market potential (e.g., epidemiology)
- In the future, availability of new drugs might be further reduced due to stricter cost containment measures applied by governments

Sources: Patients W.A.I.T. Indicator – EFPIA (July 2022) – Smart Pharma Consulting analyses

By 2027, the French pharma market should remain the 2nd largest market in Europe, accounting for ~20% of Euro-5 countries and ~2% of the global pharma market

Pharma market potential

Pharma markets size & dynamics – Euro-5 comparisons (2022 – 2027)



- In 2022, Euro-5 countries accounted together for ~13% of the global pharma market:
  - Germany: ~4%
  - France: ~3%
  - UK: ~2%
  - Italy: 2%
  - Spain: ~2%
- Over the 2022 – 2027 period, Euro-5 countries sales should grow at a +1.6% CAGR, vs. +5.1% for the worldwide market, due to stricter cost containment measures
- The Euro-5 country weight in the global pharma market sales should drop from 13% in 2022 to ~11% in 2027 and France from the 5th to the 6th place with a market share of 2%

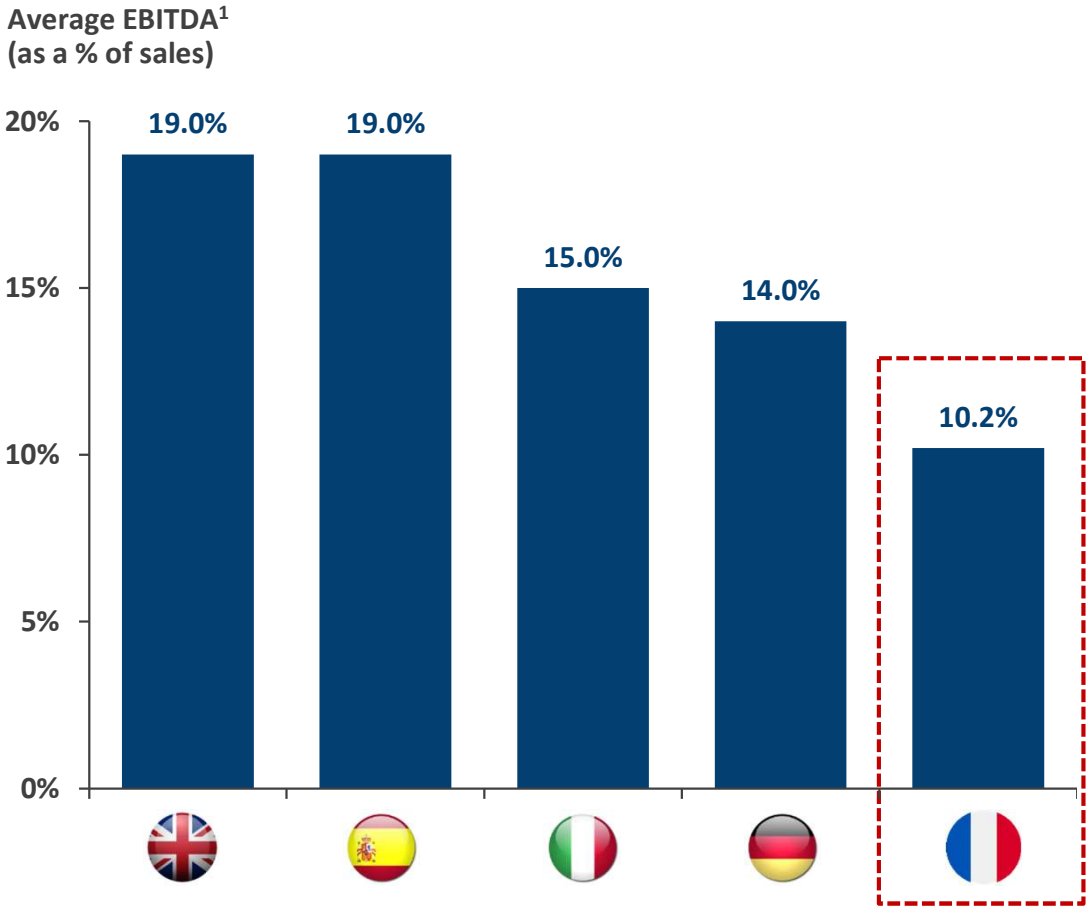
Sources: IQVIA Institute (January 2023) – Smart Pharma Consulting estimates and analyses

[1] Ex-factory price before rebates

France appears to be the least profitable Euro-5 country due to the combination of low ex-factory prices and a series of taxes imposed by health authorities on reimbursable drugs

Pharma market potential

Profitability of pharma companies – Euro-5 comparisons (2020)



- With an average EBTIDA rate of 10.2% in 2020, France was the least profitable pharma market, amongst Euro-5 countries
- This lower profitability is partly explained by lower prices of drugs, notably compared to:
  - Spain (prices 22% higher vs. France)
  - Italy (prices 19% higher vs. France)
  - Germany (prices 9% higher vs. France)
- Profitability of French pharma affiliates is also affected by several specific important taxes:
  - Safeguard clause (up to € 760 M in 2021)
  - Contribution on turnover of a total of 18.6% including different items (e.g., professional development HCPs fund, tax on promotion[2])

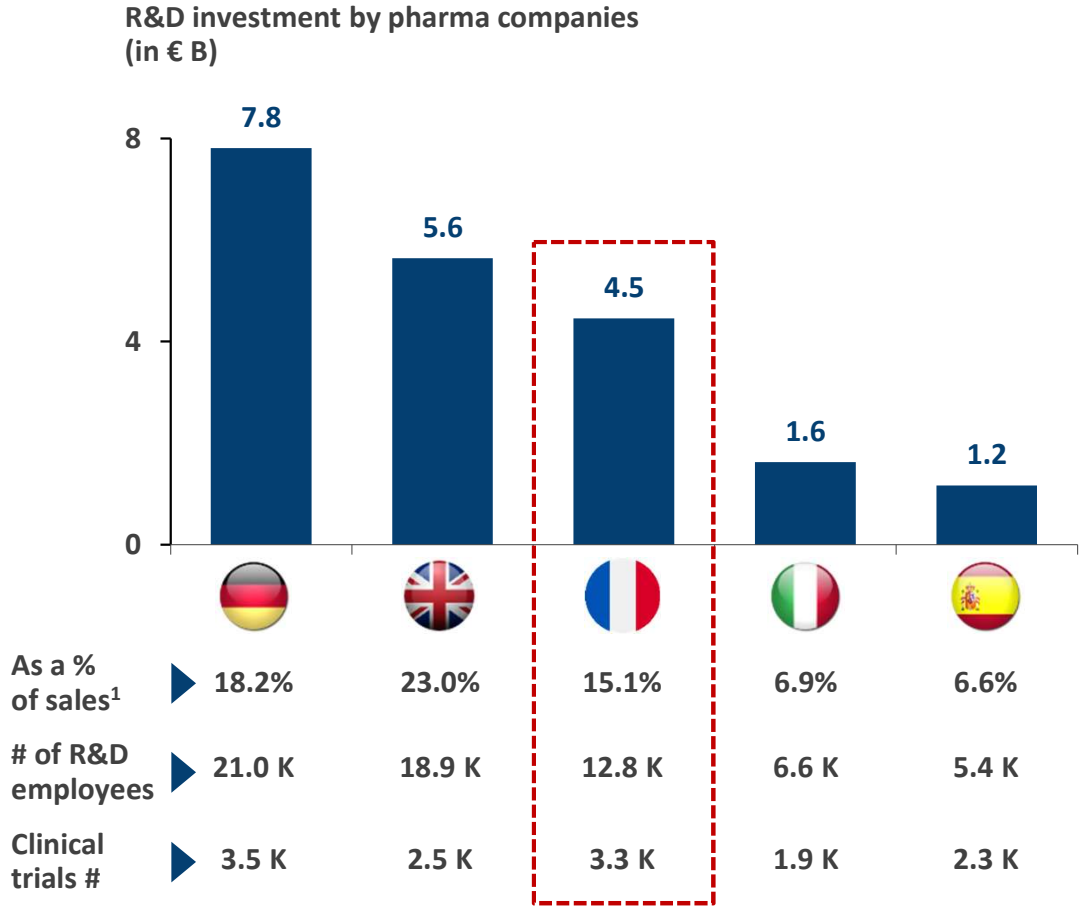
Sources: Leem (2023) – INE database (2023) – Competitive Data (2022) – Insee sector studies (2022) – Smart Pharma Consulting analyses

[1] Earning before interest, tax, depreciation and amortization – [2] € 131 M for 2021

The French government has recently set up a specific plan to attract healthcare R&D investment and make France the leading European country for clinical research by 2030

R&D capabilities

R&D investment & employment – Euro-5 comparisons (2020)



- In 2021, Euro-5 countries accounted for ~23% of the number of clinical trials carried out in the world
- The January 2022[2] European regulation on clinical research harmonization aims at strengthening European attractiveness for R&D investment…
- … to limit the increasing competition from Asia (incl. China and Korea)
- France is a leading country for clinical trials in oncology with its 20 CLCC[3] and in rare diseases with 473 Excellence and Reference Centers[4]
- In 2021, the French government has set up a plan to invest € 3.5 B to boost healthcare R&D by 2030[5]
- In addition, ~€ 800 M p.a. of tax credit are granted in France for the healthcare industry

Sources: EFPIA Key Data (2022) – VFA (2022) – The UK Pharmaceutical Sector, Enterprise Ireland (2020) – Leem (2022) – Farmindustria Italy (2019) – Farmindustria Spain (2022) – WHO website (2023) – Sante.gouv.fr (March 2023) – Smart Pharma Consulting analyses

[1] Domestic sales – [2] (EU 536/2014) A period of 3 years is foreseen for a complete transition on January 31st, 2025 – [3] Centres de Lutte Contre le Cancer (hospitals specialized in oncology research and care, brought together in a health cooperative group) – [4] Including 32 state-of-the-art University Hospitals – [5] Based on a proposition of the CSIS (Strategic Council for the Healthcare Industries)

Cellectis is a genome engineering company, developing new generation Car-T cells to cure various types of cancer with currently 6 candidates in Phase I clinical trial

R&D capabilities

French cell & gene therapy companies – Cellectis

Company description & Partnerships

- Cellectis is a **genome engineering company** specializing in the development of **immune therapies** based on CAR-T cells, **created in 1999** through a technology transfer from the **Pasteur Institute**
- In 2014, **Pfizer acquired 10% of Cellectis**, which has been listed since 2007 on the Euronext Paris and since 2015 on the Nasdaq in the US
- Cellectis is co-developing 2 of its products in partnership with **Servier** and **Allogene Therapeutics**

Products & Technologies

- The company is developing the **first-of-its-kind allogeneic approach for immunotherapies** in oncology, pioneering the concept of **off-the-shelf** and **ready-to-use** gene-edited CAR-T cells to cure cancer
- Cellectis is using its **internal gene editing technology**, Talen, and its own electroporation system, PulseAgile, showing its expertise in the field of cell therapies
- **6 candidates** are currently in **Phase I clinical trials** in various indications (e.g., multiple myeloma, acute myeloid leukemia)

Sources: Cellectis website (March 2023) – Pfizer press release – Smart Pharma Consulting analyses

OSE Immunotherapeutics is developing immune therapies, with 5 of them in clinical-stage, and the most advanced one being a therapeutic vaccine in phase III for non-small cell lung cancer

R&D capabilities

French cell & gene therapy companies – OSE Immunotherapeutics

Company description & Partnerships

- OSE Immunotherapeutics is a biotechnology company **founded in 2012**
- OSE Immunotherapeutics has signed partnerships with **Boehringer Ingelheim**, **Servier** and **Veloxis Pharmaceuticals** representing a potential of up to **€ 1.6 B of revenues** and additional royalties on future sales
- Based in Nantes (Head Office) and Paris, OSE Immunotherapeutics has more than 65 employees and is listed on the Euronext Paris

Products & Technologies

- OSE Immunotherapeutics is focused on developing **immune therapies** in 3 areas: **Immuno-oncology, Auto-immunity** and **T cell-based vaccines**
- The pipeline includes **5 clinical assets**, the most advanced one being a therapeutic vaccine that stimulates T cells to attack cancer cells, currently in **Phase III** for non-small cell lung cancer
- The company is also exploring the **potential of artificial intelligence in drug discovery** through collaboration with the **CLCC[1] Léon Bérard** (Lyon) and the French firm **MAbSilico[2]**

Sources: OSE Immunotherapeutics website (March 2023) – Company's annual report (2022) – Smart Pharma Consulting analyses

[1] Centre de lutte contre le cancer: center to fight against cancer –
[2] AI company focusing on biologic drugs discovery and development

GenSight Biologics is developing 2 gene therapies, one of which is currently being registered in Europe for a severe inherited disease of the eye

R&D capabilities

French cell & gene therapy companies – GenSight Biologics

Company description & Partnerships

- **Gene therapy company,** founded in 2012, dedicated to the discovery and development of gene therapies for the treatment of **severe inherited eye diseases**
- At the end of 2022, GenSight received different fundings:
  - **€ 35 M** from the European Investment Bank to support the launch of Lumevoq (lenadogene nolparvovec-GS010), in Europe
  - **€ 12 M** from Heights Capital, an American private equity fund
- Analysts at Belgian fund Degroof Petercam forecast **sales of up to € 310 M per year** for Lumevoq and **break-even two years after product's launch**

Products & Technologies

- GenSight Biologics, currently has **2 gene therapies in development** for a total of **7 clinical trials** (completed or ongoing)...
- ...the most advanced of which, **Lumevoq,** is currently being **registered in Europe** for **Leber's hereditary optic neuropathy**

Sources: GenSight website (March 2023) – GenSight press release – Smart Pharma Consulting analyses

Vivet Therapeutics is a clinical-stage company, developing gene therapies in rare metabolic diseases, that is supported by "big pharma" companies such as Novartis, Pfizer and Roche

R&D capabilities

French cell & gene therapy companies – Vivet Therapeutics

Company description & Partnerships

- Vivet Therapeutics is a **clinical-stage emerging biotechnology company** developing novel **gene therapy** treatments for rare, inherited metabolic diseases
- The company is supported by **international life science investors** such as Novartis Venture Fund, Pfizer and Roche Venture Fund

Products & Technologies

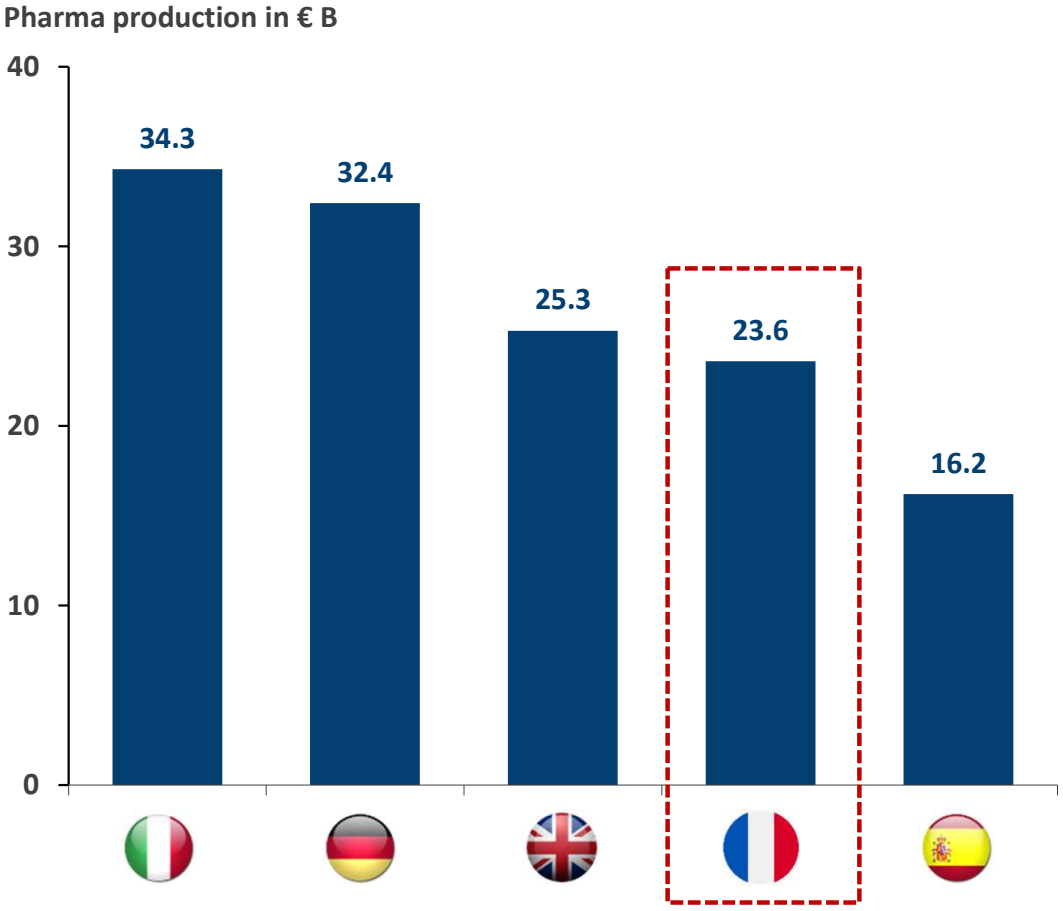
- Its portfolio is diversified and based on a **novel recombinant adeno-associated virus** as a vector
- Vivet's lead program, **VTX-801**, is currently under **Phase I/II** clinical development for Wilson Disease…
- …and has been granted **Orphan Drug designation** by the FDA and the EMA, as well as **Fast Track designation** by the FDA
- Vivet is also working on technological platforms addressing key challenges of gene therapy (e.g., sustained therapeutic gene expression, immune responses towards the viral vector)

Sources: Vivet Therapeutics website (March 2023) – Pfizer press release – Smart Pharma Consulting analyses

Despite a high know-how in drug and vaccine production, France is lagging behind other Euro-5 countries, what the French government is trying to fix with a special funding decided in 2021

Manufacturing capacities

Pharma production – Euro-5 comparisons (2020)



- French pharma production is supported by 271 sites with strong technological and logistical expertise
- 32 of them are specialized in the production of biologic substances for human or animal purposes
- However, France faces an increasing competition from other European countries. Out of the 488 drugs authorized in Europe[1] only 42 were produced in France (vs. 112 in Germany or 48 in Spain)
- With 35,171 jobs, of which ~16,000 in CDMO[2], manufacturing accounted for ~35% of pharma employment in France in 2020
- This share rises to ~44% if we add "Quality, Environment, Health and Safety" functions[3]
- The French "Healthcare Innovation 2030" plan[4] will support industrial investment with a fund of € 3.5 B

Sources: EFPIA Key Data (2022) – Leem (2023) – CDMO France website (as of March 2023)
Smart Pharma Consulting analyses

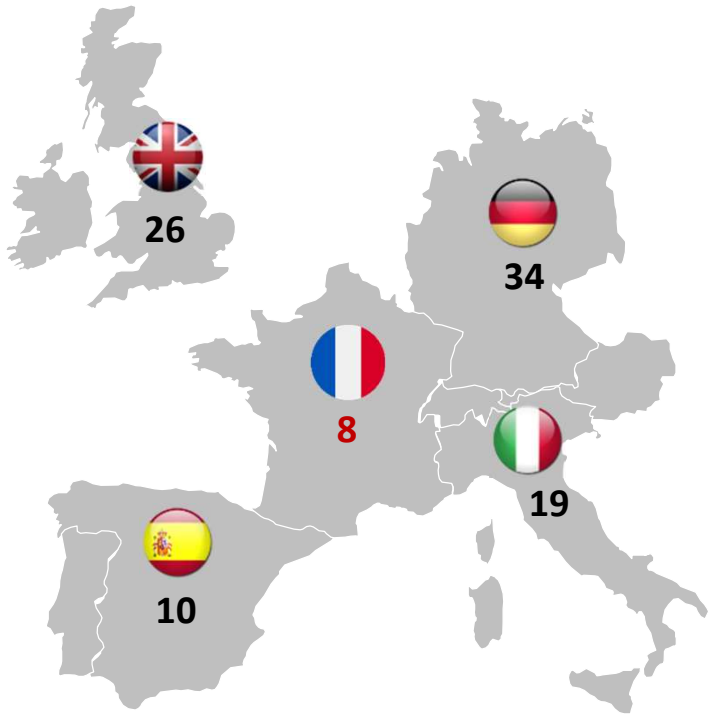
[1] Between 2016 and 2021 – [2] Contract Development and Manufacturing Organization – [3] Functions closely linked to production – [4] Based on a proposition of the CSIS (Strategic Council for the Healthcare Industries)

The financial support of the French government to the manufacturing of healthcare products, as decided in its "Healthcare Innovation 2030" plan, focuses on biotherapies

Manufacturing capacities

Biopharma production – Euro-5 comparisons (2022)

Number of biotherapies manufactured per country as of 2022[1]



- ~95% of biotherapies dispensed in French hospitals are imported
- The production of biotherapies in France is the lowest amongst the EU-5 countries
- This situation is mainly explained by a historical lack of investment in the past few decades
- The LEEM[2] proposed in 2019 the creation of a fund to strengthen the biomanufacturing capacities of pharma companies, CDMOs[3] in France
- The French government "Healthcare Innovation 2030" plan launched in 2021, includes the financial support of industrial investment through calls for projects and the financial leverage of Bpifrance[4]
- An objective of 20 biotherapies manufactured in France, by the end of 2030, has been set

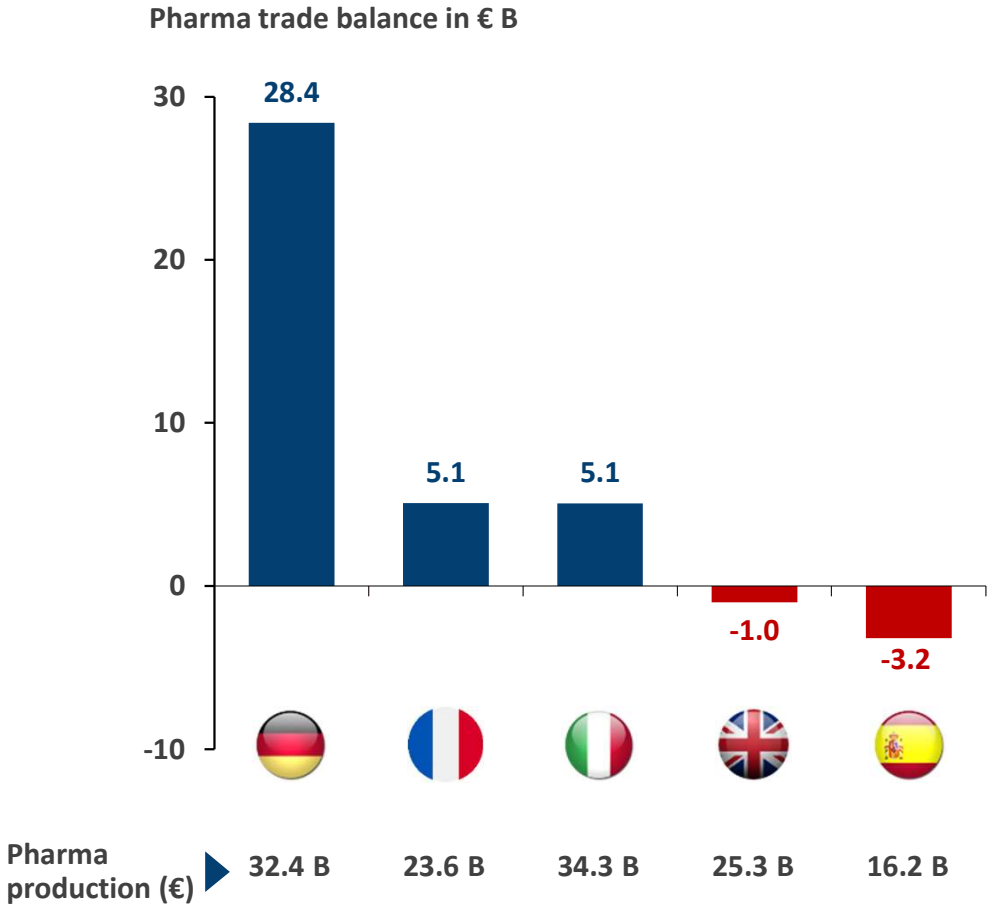
Sources: Leem (2023) – IMT Group (Passerelles 79 – January 2022) – Frenchhealthcare website (2022) – Smart Pharma Consulting analyses

[1] Out of 167 approved by the EMA between 2012 and 2019 – [2] Association of the pharmaceutical companies in France – [3] Contract Development and Manufacturing Organizations – [4] Public investment bank supporting innovative projects carried out by SMEs (Small- and Medium-sized Enterprises)

The positive French pharma trade balance does not precisely reflect the gap between production, import and export due to significant parallel exports and distribution platforms

Manufacturing capacities

Pharma trade balance – Euro-5 comparisons (2020)



- The share of French drug export in the Euro zone has fallen from 20.8% to 9.5% between 2001 and 2020 (-11.3 pts)
- Given the low prices imposed on reimbursed drugs, France is an important source of parallel exports
- France exports drugs mainly to the US, Belgium and Germany
- Germany is the largest exporter of drugs in world, which is mainly explained by its:
  - Expertise and skilled workforce
  - Favorable investment climate
  - Distribution platforms
  - Excellent infrastructures (e.g., Hamburg Port, Frankfurt Airport)
  - Geographical location, in the heart of Europe

Sources: EFPIA Key Data (2022) – LEEM export and import (2023) – The pharmaceutical industry in Germany (gtai.de) (2022) – Smart Pharma Consulting analyses

Most of the key pharma manufacturers in France are French companies and amongst the top 5 CMDOs1 the majority of their revenues come from local sales

Manufacturing capacities

Key pharma manufacturers in France

Pharma Companies

sanofi
- # of factories in France: 16
- # of employees in French production sites: 13,570[2]

Pierre Fabre
- # of factories in France: 11[3]
- # of employees in French production sites: data not available

GSK
- # of factories in France: 3
- # of employees in French production sites: 2,375

LFB L'ENGAGEMENT ÉTHIQUE
- # of factories in France: 3
- # of employees in French production sites: 1,500

AstraZeneca
- # of factories in France: 2
- # of employees in French production sites: data not available

SERVIER moved by you
- # of factories in France: 2
- # of employees in French production sites: 1,700

CDMOs

DELPHARM
- 2021 Global turnover: € 950 M
- 2021 France turnover: € 545 M
- # of factories in France: 12
- # of employees in France: 3,766

FAREVA
- 2021 Global turnover: € 900 M[4]
- 2021 France turnover: € 650 M
- # of factories in France: 13
- # of employees in France: 3,700

UNITHER PHARMACEUTICALS
- 2022 Global turnover: € 380 M
- 2021 France turnover: € 214 M
- # of factories in France: 4
- # of employees in France: 1,164

cenexi creating innovative partnerships
- 2021 Global turnover: € 180 M
- 2020 France turnover: € 158 M
- # of factories in France: 3
- # of employees in France: 1,300

Synerlab GROUP
- 2021 Global turnover: € 145 M
- 2020 France turnover: € 108 M
- # of factories in France: 5
- # of employees in France: 706

Sources: Companies websites – "Le marché du façonnage pharmaceutique et ses mutations", Xerfi (September 2022) – CDMO France.com – pharmaboardroom.com – Smart Pharma Consulting analyses

[1] Contract Development and Manufacturing Organizations – [2] Excluding employees from the Tours factory (data not available) – [3] Including dermo-cosmetic facilities – [4] Pharmaceuticals and API

France is considered as one of the most attractive countries in terms of public incentives, thanks to the wide range of incentives proposed, notably its “CIR” tax credit[1]

Public incentives

Incentives to attract investments – Euro-5 comparisons

Incentives types					
Tax credits	✓	✓	✓	✓	✓
Cash grants (for R&D or industrial projects)	✓	✓		✓	✓
Loans	✓	✓		✓	✓
Reduced tax rates	✓				✓
Reduced social security contributions	✓			✓	
Accelerated depreciation on R&D assets	✓			✓	✓
Tax deduction			✓		✓
Tax exemptions				✓	
Patent-related incentives	✓		✓	✓	✓

Sources: Worldwide R&D incentives, EY (July 2022) – PwC study for the Leem (2022) – Overview of tax incentives for health R&D, KPMG (October 2021) – Smart Pharma Consulting analyses

[1] *"Crédit Impôt Recherche" is a research tax credit on 30% of eligible R&D expenses (incl. staff costs and other operating expenses, depreciation of R&D fixed assets, etc.) up to € 100 M expenditure, and 5% of expenditure beyond that*

To strengthen its position as a global hub for health technologies, France has recently taken initiatives to foster investments in manufacturing (notably in bioproduction) and research

Public incentives

Key recent initiatives – France

Ambition

- Be recognized as a **global hub** for health technologies (e.g., digital health, AI) and the **first European country** to produce **innovative biological therapies**

Strategic priorities

- Welcome more **foreign investors**
- Attract and develop **disruptive technologies** (e.g., digital health, AI)
- Lower **bioproduction** costs
- Create a **network** of **starts-ups** and **SMEs**[1]
- Reinforce offer in **new technologies training**

Key recent initiatives to enhance France attractiveness

- **€ 3.5 B** fund to support **industrial investment** by **2030**
- **€ 1.2 B** budgetary envelope for the **decarbonation** of industry
- **€ 240 M** for **industry 4.0** projects[2] carried out by SMEs, through the funding of up to 40% of eligible equipment (e.g., robotic equipment, physical sensors collecting data, augmented reality and virtual reality equipment, software or equipment using AI)

- **€ 25 B** additional public investment in the **French research system** over **the next 10 years**
- **€ 3.5 B** fund to boost **pharma R&D** by **2030**
- **€ 800 M R&D tax credit** per year for the health industry (30% of annual R&D expenditure up to € 100 M per company)
- **€ 300 M** to facilitate bridges between private and public research through temporary placement (12 to 14 months) of private R&D personnel in public laboratories with 80% of the salary covered by the State

Sources: "Shaping France as one of the most competitive, innovative healthcare hubs", Choose France (June 2021) – Smart Pharma Consulting analyses

[1] Small- and Medium-sized Enterprises – [2] New phase in the Industrial Revolution focusing on interconnectivity, automation, machine learning and real-time data

Germany's recent initiatives aim at enhancing local manufacturing (to reduce its dependency on other countries) while fostering R&D, notably in oncology, immunology and infectious diseases

Public incentives

Key recent initiatives – Germany

Ambition

- Develop **complete value chain** to boost "**self-sufficient**" **production**
- Achieve **3.5% GDP** in **R&D expenditure** (vs. 3.2% in 2018)

Strategic priorities

- Achieve **self-sufficient** pharmaceutical production
- Foster **research** & **innovation**, while prioritizing **oncology**, **immunology** and **infectious diseases** research
- Attract **new foreign investments**
- Strengthen **partnerships** and **alliances** at **national** and **international** levels

Key recent initiatives to enhance Germany attractiveness

- **€ 1 B** invested in 2020 for economic stimulus to expand production capacity and reduce the dependency on global supply chains
- **Vaccine Production Taskforce** launched to become a major vaccine production site in the world

- > **€ 7 B** yearly investment in pharma **R&D** to strengthen Germany's research excellence position
- **Funding options** (e.g., grants, loans with attractive interest rates, public funding programs) to incentive biopharma players
- **Labor-related incentives** and **subsidies** to build strong R&D teams (e.g., financial support in recruitment, training and wages)
- **Multi-sectoral collaborations** to trigger creative R&D solutions
- Intensification of **collaborations** between international and leading German **cancer** research institutions
- Germany's large population size leveraged to attract clinical research in **orphan diseases** where participant recruitment is difficult

Sources: "Global Heath Strategy", German Federal Government (October 2020) – "The Pharmaceutical industry in Germany", Germany Trade & Invest (Issue 2021-2022) – Smart Pharma Consulting analyses

UK initiatives aim at fostering sciences and research (through increased investment in R&D, innovation fund and patient enrollment facilitation) and developing skills in AI, data and digital

Public incentives

Key recent initiatives – UK

Ambition

- Achieve **2.4% GDP** in **R&D expenditure** by **2027** (vs. 1.8% in 2019)
- Develop skills in **AI**, **data** and **digital**

Strategic priorities

- Invest in **sciences**, **research** & **discovery** to make **UK** a leading **hub** for **advanced therapies**
- Attract **long-term investments**
- Provide **access** to the largest healthcare and research **datasets worldwide**, notably in genomic, phenotypic, biological and health data

Key recent initiatives to enhance UK attractiveness

- **€ 4.6 B**[1] yearly investment in **R&D** to boost science, research & discovery in the UK (notably **fundamental biology**, **genomics** and **genetics** research)
- **€ 570 M** innovative medicines fund
- **Patient enrollment** facilitation (e.g., setting up of 5 patient recruitment centers, implementation of data-enabled processes, launch of DigiTrials, incentivizing GPs for participant identification)

- **€ 684 M** scale-up investment program in cooperation with British Business Bank and private finance partners
- "**2030 Skills strategy**" developed with a focus on R&D, medicines manufacturing and emerging technologies
- **> 6,000 doctoral** and **research fellowship awards** funded every year
- **€ 11.4 M pilot scheme** to enable NHS consultants with PhD or master's degree to participate in collaborative research partnerships
- Boosted skills in **AI** through **new PhD** and **master's programs**
- **NHS** involvement in the development of **digital skills**

Sources: Life Sciences Industrial strategy update (Gov.UK 2020) – Smart Pharma Consulting analyses

[1] *GBP 1 = € 1.14*

Several levers can be activated to strengthen France's attractiveness in an international context where more and more countries seek to boost R&D investment and relocate drugs manufacturing

How to enhance the attractiveness of France for pharma companies?

Topics	Attractiveness	Rationale	Recommendations
Pharma market attractiveness	Medium	▪ **2nd pharma market** among Euro-5 countries but with the **lowest profitability**	▪ Improve **market attractiveness** (earlier access, pricing, pay-for-performance contracts, rethinking of the tax framework)
R&D capabilities	Medium	▪ **3rd** Euro-5 country in terms of R&D investment	▪ Maintain / strengthen **R&D fiscal incentives** ▪ Stimulate **public-private collaborations** ▪ Foster **digital innovations** (e.g., AI)
Manufacturing capacities	Low	▪ **4th** Euro-5 country in terms of pharma production	▪ Take **ambitious measures to boost manufacturing** ▪ Facilitate investment in **biotherapy infrastructures**
Public incentives	High	▪ One of the **most attractive** Euro-5 countries in terms of R&D incentives	▪ **Promote existing incentives** to strengthen France's attractiveness ▪ Beyond incentives, create a **competitive fiscal landscape** (more predictable and lower taxes)

Evaluation: High Medium Low

Sources: Smart Pharma Consulting analyses

Smart Pharma
CONSULTING

French Retail Drug Supply

Special Focus on Voluntary Trade Organizations

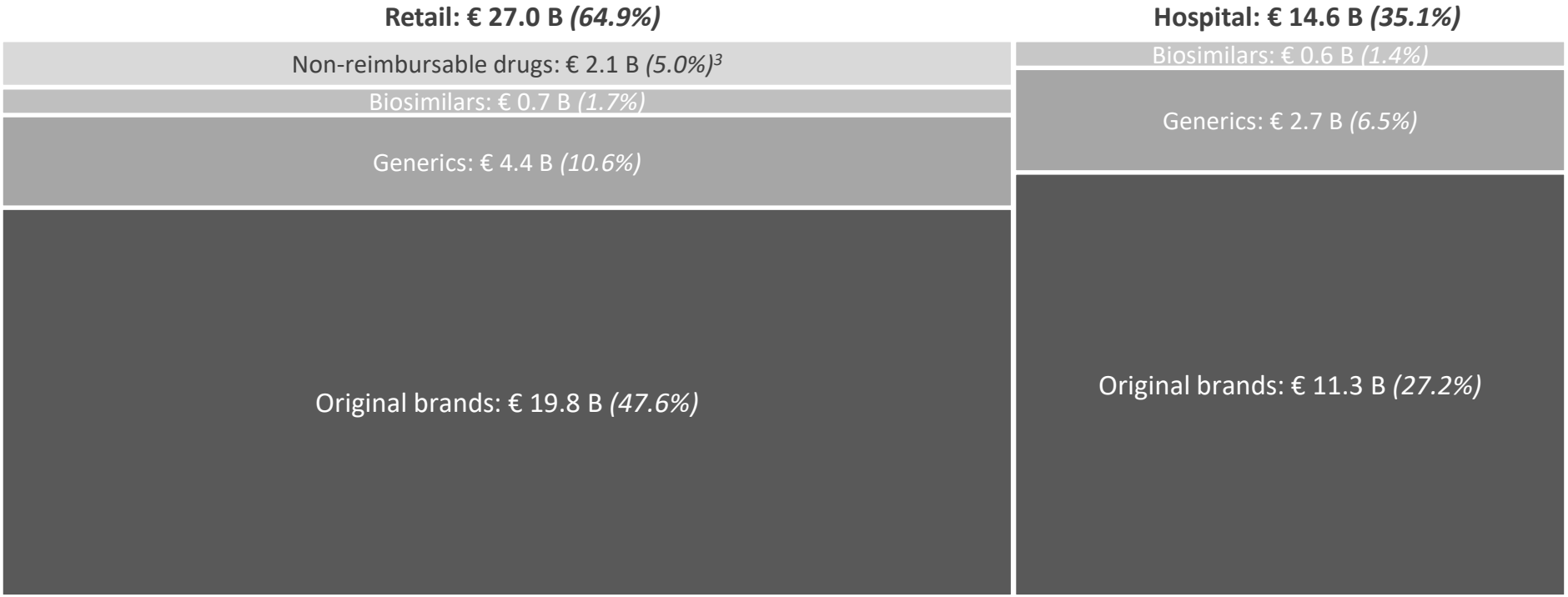
December 2024

1, rue Houdart de Lamotte – 75015 Paris – France
Tel. +33 6 11 96 33 78 – jmpeny@smart-pharma.com – www.smart-pharma.com

In 2023, the retail pharma segment accounted for ~65% of the total market in gross price[1], while original brands, on both retail and hospital segments, achieved ~75%, and even ~83% in net price[2]

Structure of the French drug market (2023)

Total pharmaceutical market[1] ~€ 41.6 B

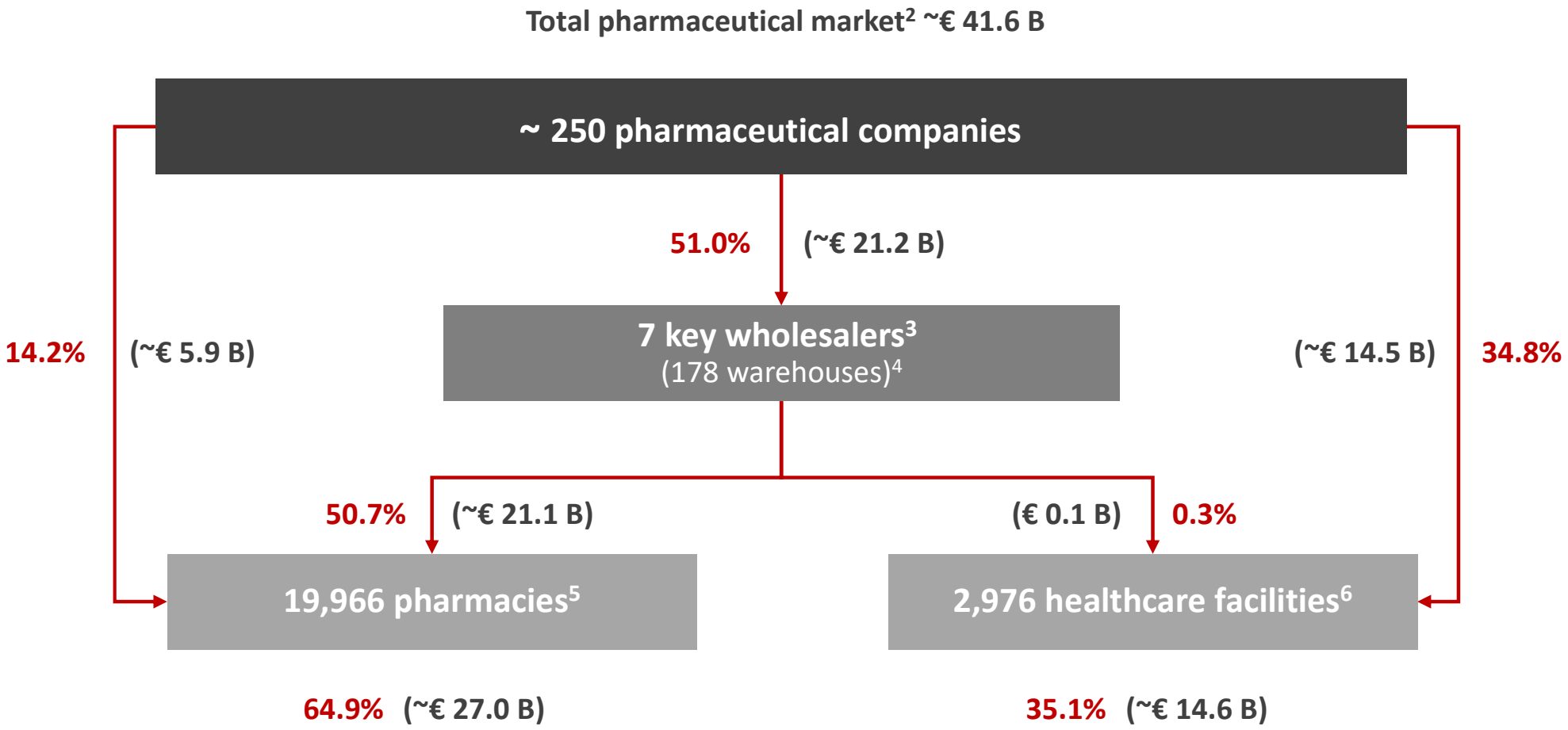


Sources: GERS (December 2023) – Smart Pharma Consulting

[1] Ex factory-price, before rebates and taxes – [2] Assuming average rebates of 7% for original drugs and 45% for generics, biosimilars and OTCs – [3] Incl. OTC drugs (€ 1.3 B) and Rx-bound drugs, either original brands (€ 0.4 B) or generics (€ 0.4 B)

Drugs sold in retail pharmacies are mainly sourced from wholesalers, while hospital drugs are usually directly sourced from pharmaceutical companies, through pre-wholesalers1

Drug supply chain in France (2023)

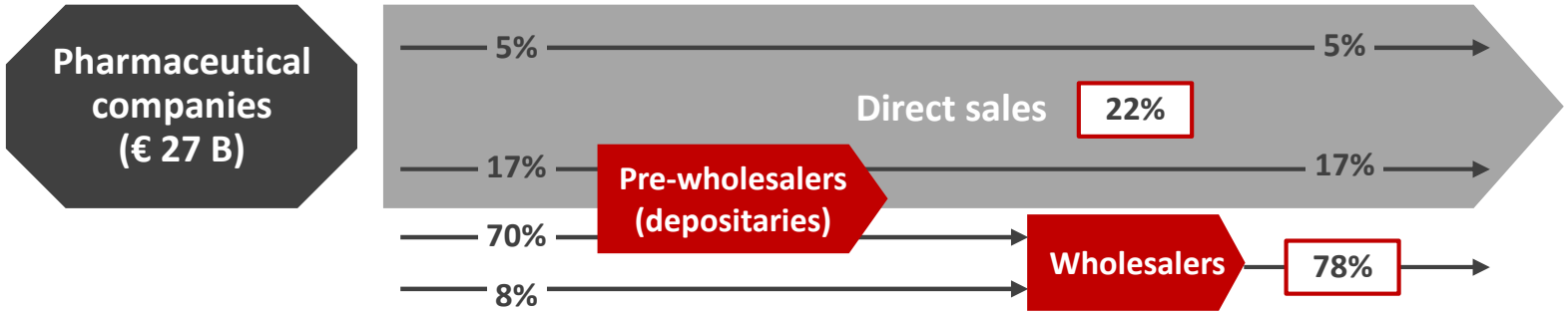


Sources: Leem ("Bilan Economique 2023") – GERS dashboard (December 2023) – SmartRx (January 2024) – Ordre National des Pharmaciens (as of January 2024) – DREES (December 2023) – Smart Pharma Consulting

[1] Depositaries / Agents – [2] Ex factory-price, before rebates and taxes – [3] Accounting for ~97% of the distribution market – [4] In mainland France. For FOTs (French Overseas Territories) there are 12 more warehouses – [5] Of which 94% are members of VTOs (Voluntary Trade Organizations) – [6] Public and private

On the retail drug market, ~78% of the value, in gross price, goes through wholesalers, who are the cornerstone of the supply chain between pharma companies and retail pharmacies

Share of direct sales in the retail pharmaceutical distribution (2023)



Pre-wholesalers (depositaries)

- **Independent family health specialist:**
  - Movianto / CSP (Walden Group[1])
- **Subsidiaries of integrated distribution groups and health specialists:**
  - Alloga / Directlog (Alliance Healthcare)
  - Eurodep (Astera – formerly CERP Rouen)
  - Welcoop Logistique (merger of Evrard-DPE and Pharmalpa)
  - IvryLab (Phoenix Pharma)
  - Sogiphar (Giphar)
- **Subsidiaries of integrated distribution groups; non health specialists:**
  - FM Health (FM Logistic)
  - Arvato Services Healthcare (Bertelsmann)
  - Geodis (SNCF group)
  - Rhenus (Rethmann)
- **Subsidiaries of pharmaceutical companies:**
  - Aguettant
  - AstraZeneca
  - Pierre Fabre
  - Sanofi
  - Servier

Wholesalers

	Market share[2]
Phoenix Group network	**39.1%**
– **OCP**	**30.8%**
– **Phoenix Pharma**	**8.3%**
CERP network	**36.1%**
– Astera (formerly CERP Rouen)*	21.5%
– CERP Rhin Rhône Méditerranée*	11.1%
– CERP Bretagne Atlantique	3.5%
Alliance Healthcare France (AmericansourceBergen)	**18.5%**
Giphar	**2.9%**
Others[3]	**3.4%**

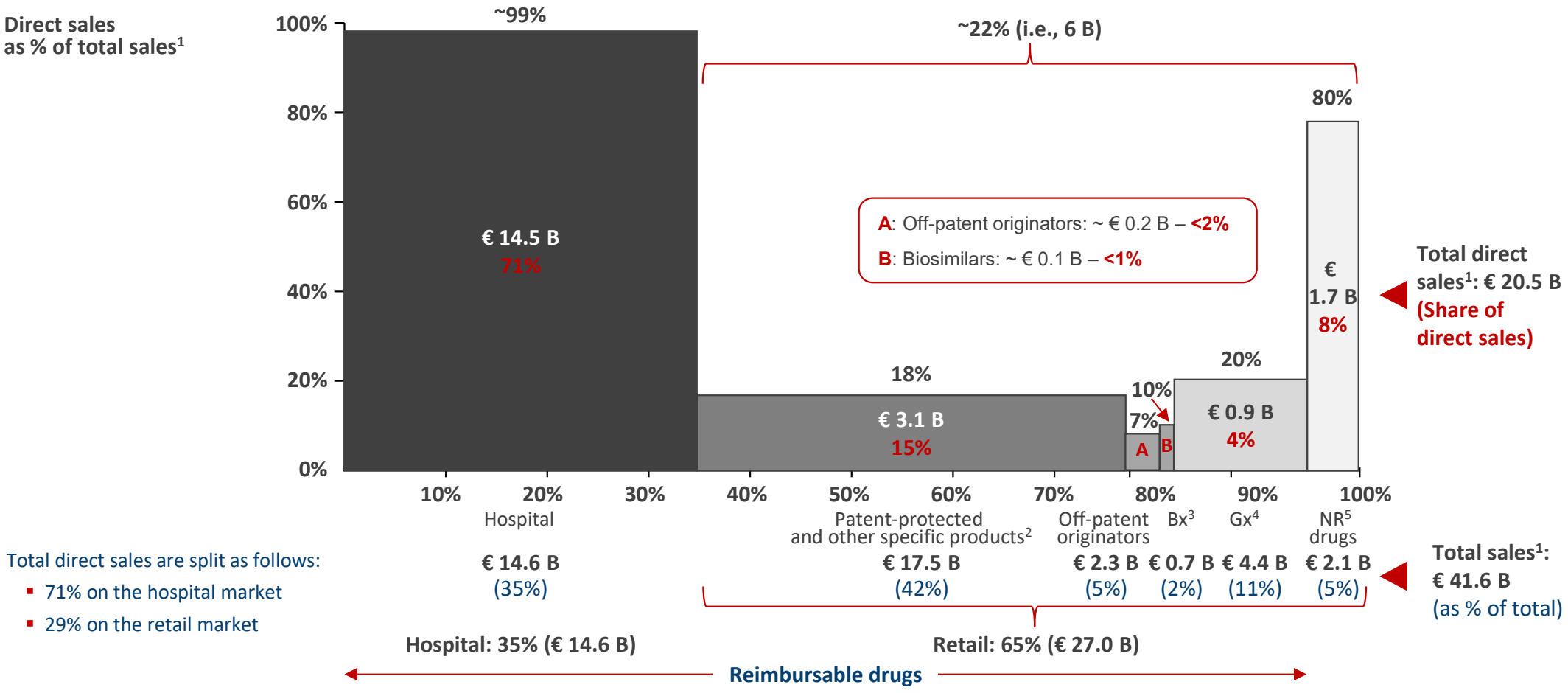
** Merger in 2024*

Sources: GERS dashboard – CSRP – Register of the French pharmaceutical establishments – ANSM – Le Moniteur des pharmacies (Dec. 2023) – Smart Pharma Consulting

[1] Founded in June 2020 by the merger of Movianto and EHDH, following the acquisition of Movianto by EHDH to Owens & Minor. Merger, on January 2022, of CSP and Movianto France – [2] Market share in value in 2022 – [3] Non-members of the "Chambre Syndicale de la Répartition Pharmaceutique (CSRP)"

On the retail drug market, 10% of biosimilars, 20% of generics and 80% of non-reimbursed drugs (incl. OTCs), in value[1], are directly distributed by pharma companies, through pre-wholesalers

Share of direct sales by segment (2023)

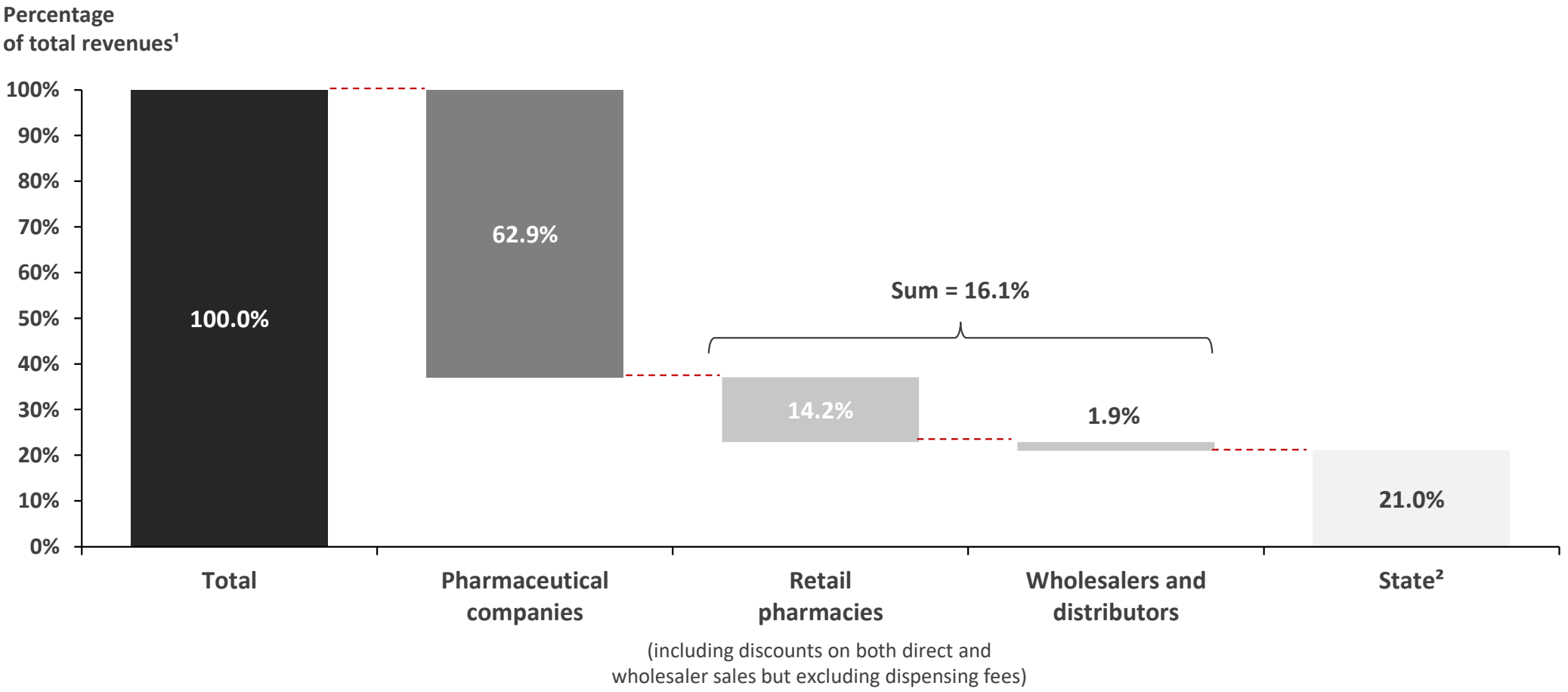


Sources: GERS dashboard (December 2023) – Smart Pharma Consulting

[1] Ex-factory prices, before rebates and taxes – [2] Sales of drugs that are not part of any generics or biosimilars group, whether patented or not, or other special products (calcium, sodium, potassium, paracetamol, etc.) – [3] Biosimilars – [4] Generics – [6] Non-reimbursable

Based on comparisons with other retail sectors, policy makers and payers consider the cost of drug distribution, which amounted to ~16% for reimbursable drugs in 2023*, as too high

Share of revenues by stakeholder for reimbursable drugs (2023*)



Estimates

Sources: Leem (Jan. 2024) – CSRP – URSSAF – ANSM – Smart Pharma Consulting

[1] Public prices including taxes – [2] Including VAT as well as taxes on direct sales promotion and charges owed to ANSM (National Agency for the Safety of Medicines and Health Products) and URSSAF (Social Security and Family Allowance Contribution Collection Offices)

The direct sales option improves generic manufacturers' profitability by ~2 points with a net price accounting for ~47% of the gross ex-factory price (vs. ~45% for indirect sales)

Bridge from ex-factory to public price – Example of reimbursable generics

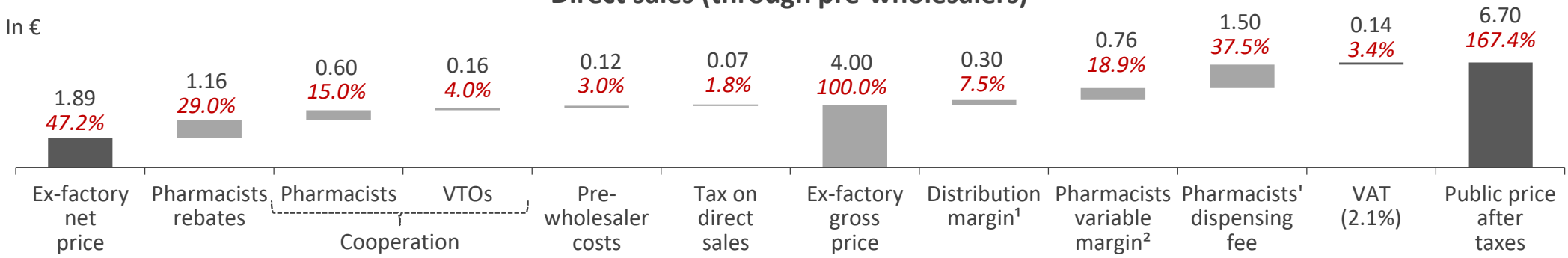
Illustrative

Example based on an ex-factory price of € 4, corresponding to the average price of a pack of generics

Gross to net price | **Ex-factory to public price**

Indirect sales (through wholesalers)

Direct sales (through pre-wholesalers)



Sources: Smart Pharma Consulting

[1] Minimum legal margin intended for wholesalers for products with an ex-factory price below € 4.33, but benefiting to pharmacists as wholesalers invoice them under the same conditions as for direct sales and are compensated by generics manufacturers through their cooperation agreement – [2] Based on an original price of € 10 (+60% vs. generics)

Pre-wholesalers[1] directly provide ~35% in volume and ~22% in value of drugs delivered to retail pharmacies, whether they are subsidiaries of wholesalers, independents or carriers

Pre-wholesalers – Role, activity and profile

	Pre-wholesalers		
Definition	▪ According to the definition of the Public Health Code, they carry out activities on behalf of one or more manufacturers for the storage and the distribution of drugs to wholesalers, hospitals and retail pharmacies		
Role	▪ Pre-wholesalers offer their services in the context of sales to wholesalers, but also directly to pharmacies		
Activity	▪ Pre-wholesalers' vocation is national or regional, depending on their structure		
Profiles	▪ Subsidiaries of wholesalers	▪ Independents	▪ Subsidiaries of carrier groups
Examples	▪ Alloga / Directlog (Alliance Healthcare) ▪ Eurodep (Astera) ▪ Welcoop Logistique ▪ IvryLab (Phoenix Pharma) ▪ Sogiphar (Giphar)	▪ Movianto / CSP (Walden Group[2])	▪ FM Health (FM Logistic) ▪ Arvato Services Healthcare (Bertelsmann) ▪ Geodis (SNCF group) ▪ Rhenus (Rethmann)

Sources: GERS 2023 – Smart Pharma Consulting

[1] Also called depositaries or agents – [2] Funded in June 2020 by the merger of Movianto and EHDH, following the acquisition of Movianto by EHDH to Owens & Minor. Merger, on January 2022, of CSP and Movianto France

The activity of wholesalers must meet five obligations derived from the "good delivery practices" guide and from European regulations

Wholesalers – Obligations

Serve all the retail pharmacies of their area of activity within 24 hours

Reference at least 90% of drugs and hold at least 15 days of inventory

In case of emergency, deliver on demand a non-client pharmacy or a pharmacy outside of the area of activity[1]

5 obligations of wholesalers

Have at their head a Chief Pharmaceutical Officer (pharmacien responsable) and one or more assistant(s)

Promptly withdraw a drug if the authorities deem it dangerous

Role of pharmacists

Pharmacists working for wholesalers must:

- Control the compliance with expiry dates
- Control the storage at low temperature or under specific conditions of certain products of biological origin (the respect of the cold chain must be effective for storage but also during the delivery of the products)
- Check the conformity of the received products, notably for the new specialties
- Ensure the compliance with regulations concerning toxic products, anabolic substances, blood derivatives and sterile products
- Track market withdrawals and destroy out-of-date products

Sources: CSRP website (April 2024) – Smart Pharma Consulting

[1] Since August 24, 2008, wholesalers have been required to participate in an on-call system on weekends and public holidays to enable the delivery of drugs in emergency situations

Membership criteria, as well as funding sources, may vary depending on the Voluntary Trade Organization (VTO)

VTOs – Presentation

Historic

- VTOs are groups of pharmacists initially created to offer economic support to their members
- Most of VTOs have diversified their activities (e.g., advice in the management of a pharmacy, electronic information system, merchandising, involvement in public health initiatives, virtual chains[1], etc.)

Legal entities

- VTOs can take different types of legal entities:
  - Economic interest groups (e.g., Giphar)
  - Law 1901 associations (e.g., Evolupharm)
  - Simplified joint-stock companies, most common entities (e.g., Apothera Group, Pharm-Upp)
  - Cooperative companies (e.g., Welcoop, Sogiphar)
- Some legal entities may coexist (e.g., Sogiphar is a cooperative company backed by Giphar)

Membership

- The selection criteria for members varies according to each VTO: minimum revenues, geographical location (for non-national groups), cooptation by VTO members, obligation to develop specific services (e.g., optics, acoustics)
- Terms of membership:
  - One- to three-year contract, with possible penalties in case of early termination
  - Entrance fee generally independent of the size of the retail pharmacy: fixed amount or acquisition of a certain number of shares
- 94% of French retail pharmacies are members of one or more VTO(s)

Funding

- Contributions (often negligible)
- Sale of products to members when VTOs have a central purchasing activity or a range of own-brand products
- Payment of listing fees by pharma companies, especially by generics suppliers
- Annual margin on purchases (recovery of a margin on the rebates related to large orders placed with pharma companies)
- Remuneration for services:
  - Billed or deferred (the group guarantees the payment of its members)
  - Sales support (e.g., merchandising, training, consulting and fitting, etc.)
- Cash management

Sources: Le Moniteur des pharmacies – Main VTOs websites – societe.com – Quotidien du Pharmacien (March 2023) – Smart Pharma Consulting

[1] Enseignes: arrangement of the retail pharmacy with the name and the colors of the virtual chain (e.g., Aprium, Leadersanté, Pharmacie Lafayette). There is no pharmacy chain, like Boots in the UK as it is illegal in France

The core activities of voluntary trade organizations are focused on listing and purchasing products that will be sold by their retail pharmacy members

VTOs – Core activities

Listing organization (all VTOs)

- Listing of products in a catalog used by members to place orders at prices negotiated by the VTO
- Delivery from suppliers through pre-wholesalers or wholesalers to members[1]
- Listing organizations can reference medicines and products out of the pharmaceutical monopoly (because they do not buy products, nor store them)

Purchasing organization (e.g., Apothera)

- Registration of orders from members of the VTO and ordering from manufacturing companies at a negotiated price
- Direct delivery from suppliers through pre-wholesalers to members or to the distribution center of the VTO
- The purchasing organization can order products out of the pharmaceutical monopoly and must have the status of a pharmaceutical company to store and sell medicines (mandate to purchase on behalf of its members)

Pre-wholesaler or Wholesaler structures (e.g., Giphar)

- Distribution of drugs
- Distribution of parapharmacy products
- Etc.

Brand operator and / or manufacturer activity (e.g., PharmaVie)

- The branded products can be manufactured by the VTO (manufacturer's activity) or by a third-party manufacturer, like a generics company or a CMO (Contract Manufacturing Organization)

Sources: Main VTOs websites (March 2024) – Smart Pharma Consulting

[1] Listing organizations do not have stock

Voluntary trade organizations may also offer services to their members in view to increase their sales and profits

VTOs – Services offering

Internal communication between members and external communication to general public

Assistance in sales optimization

- Point-of-sale advertising, merchandising, customized audits
- Management (motivation of staff, discount cards, etc.)
- Arrangement (profitability studies, prices on furniture, etc.)

Home care & home support

- Purchase of equipment and proposals of training for pharmacists
- Some VTOs develop their own structure (e.g., Gipharmad for Giphar)

Virtual chains
Retail pharmacy arranged with the name and the colors of the virtual chain[1] (e.g., Nepenthes and Pure Pharma for Apothera)

IT support
(Data concentration, statistical tools, click and collect services, development of retail pharmacies websites, etc.)

Branded products
(Distributors-own brands)

Public health campaigns
(Prevention / screening)

Installation support
(e.g., credit boosters, issue of warranties, speed dating with potential associates, support in the crafting of business plans)

Promotional offers, vouchers, savings plan, loyalty cards, etc.

Sources: Main VTOs websites (March 2024) – Smart Pharma Consulting

[1] *E.g., showcase, interior, etc.*

Branded products, loyalty programs and public health campaigns bring customers closer to their retail pharmacists, strengthening their place as a healthcare stakeholder

VTOs – Services: examples

Branded products
(Distributors-own brands)

- In 2021, 81% of national VTOs had launched their brand
- Pharmactiv has a large portfolio with over 320 SKUs, and a "bio" brand (launched in 2020)
- Lafayette pharmacies used their brand to communicate about their "fight against inflation" in 2023, by capping prices on 400 exclusive products
- Leadersanté claims the same fight, with only seven products

Public health campaigns
(Prevention / screening)

- Most VTOs communicate about screenings and vaccinations, as well as during specific prevention months (Pink October, Blue November, etc.)
- Aprium launched a campaign for the screening of cardiovascular diseases in April 2024, encouraging people to get their tension tested in their pharmacy
- Giphar regularly launches monthly campaign (e.g., Movember[1])

Installation support
(e.g., credit boosters, issue of warranties, speed dating with potential associates, support in the crafting of business plans)

- Leadersanté helps new pharmacists find a business angel among its members, after a motivation assessment and a "business plan creation" training
- CEIDO proposes a one-year long mentorship program
- Giphar offers six two-day long trainings for all pharmacy assistants, working in a Giphar pharmacy or not
- Giropharm created a "GiroAcademy", where a two-day class is taught to all new members

Promotional offers, vouchers, savings plan, loyalty cards, etc.

- EvoluPharm developed a loyalty card, counting purchases on selected products (e.g., distributor-branded products), and offering vouchers
- Leadersanté created a loyalty app, called "My privilege", sending targeted advertising to clients (based on gender, pregnancy, age, etc.) and vouchers…
- … while enabling the pharmacist to precisely analyze its clientele and better communicate to them

Sources: VTO websites – Smart Pharma Consulting

[1] Annual event organized every year, in November to raise awareness of men's health issues, such as prostate cancer

In the upcoming years, voluntary trade organizations are likely to face challenges linked with growth, retention of members and differentiation

VTOs – Challenges

1. Reach critical size

- Consolidate the network at a regional, multi-regional or national level
- Define logical, precise and discriminatory criteria for membership
- Exclude members of other VTOs

2. Engage and retain members

- Retain members / limit the attrition rate
- Increase the subscription of VTOs' members to the offered services

3. Differentiate the offer of services and the positioning

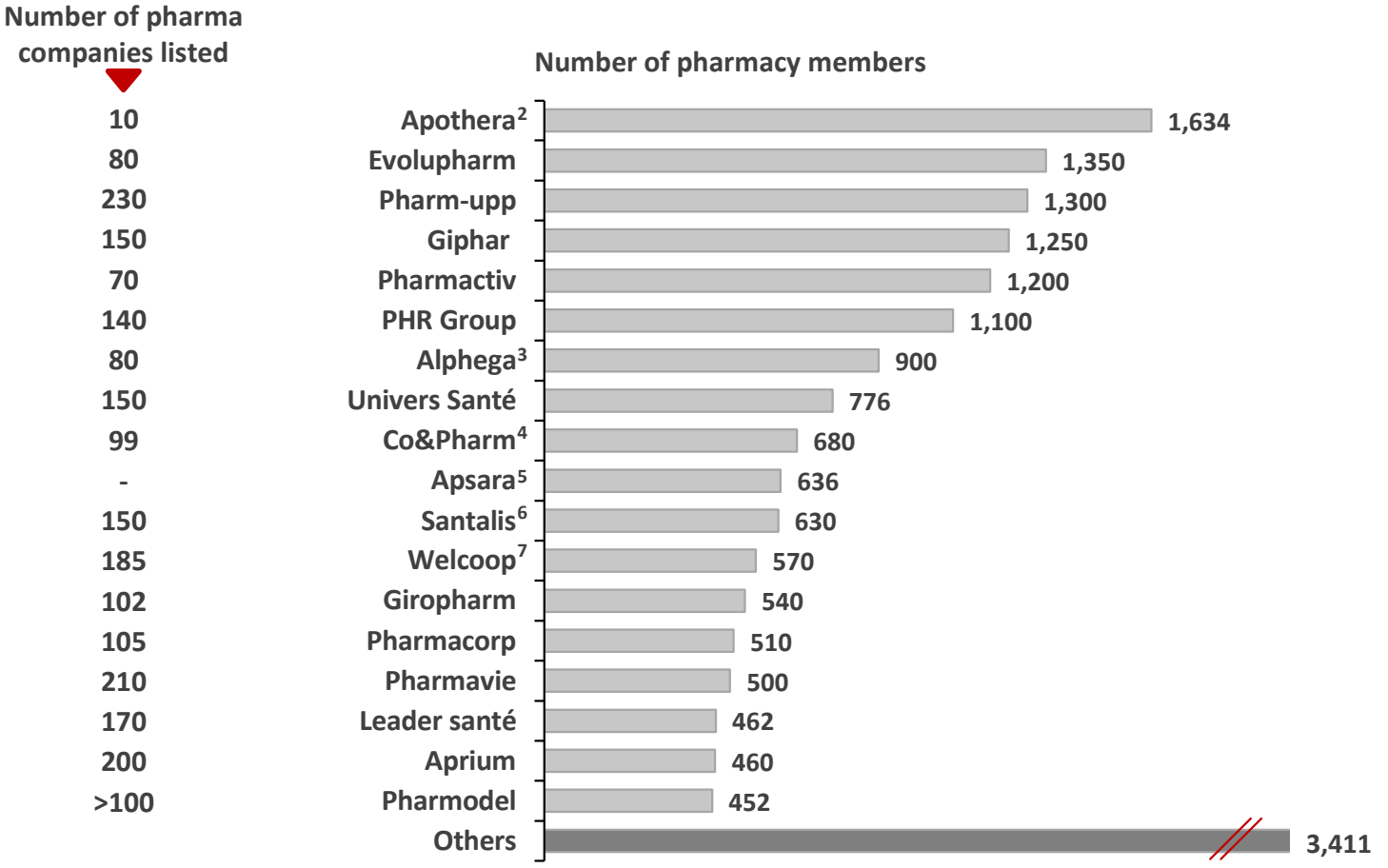
- Increase the homogeneity of pharmacy members (size, type of exercise, vision of the pharmacist, etc.) to reinforce their alignment with the VTO's strategy
- Strengthen commercial partnerships with pharma companies in all segments (originators, generics, OTCs, food supplements, parapharmacy products, etc.)
- Invest in virtual chain[1] concepts and develop existing ones by gaining visibility among retail pharmacists
- Better anticipate and accompany members in their practice evolution: teams training, etc.
- Support pharmacists in the diversification of their activities beyond the delivery of reimbursable drugs: development of activities generating higher margin levels

Sources: Main VTOs websites (March 2024) – Direct market research through interviews – Smart Pharma Consulting

[1] Enseignes: arrangement of the retail pharmacy with the name and the colors of the virtual chain

Retail pharmacies are grouped in more than 150 formal voluntary trade organizations at either regional, national, or even European level (e.g., Alphega)

VTOs – Ranking[1] and pharmacy members networks* (2024)



Other VTOs	Members
La F Santé	290
Réseau santé	270
Cofisanté	230
Totum	215
Elsie Santé	190
Well & Well	190
Mediprix	178
Excel pharma	172
Réseau P&P	150
Ceido	140
Pharmacyal	130
Les Officinales	130
Pharmavance	123
Pharmabest	120
Ipharm	120
Aptiphar	110
Suprapharm	110
Cap Unipharm	92
Hello Pharmacie	90
Pharm O'naturel	70
Mutualpharm	66
Apothical	65
Omnes Pharma	60
Synergiphar	50
Be Pharma	50

* *Mainland France*

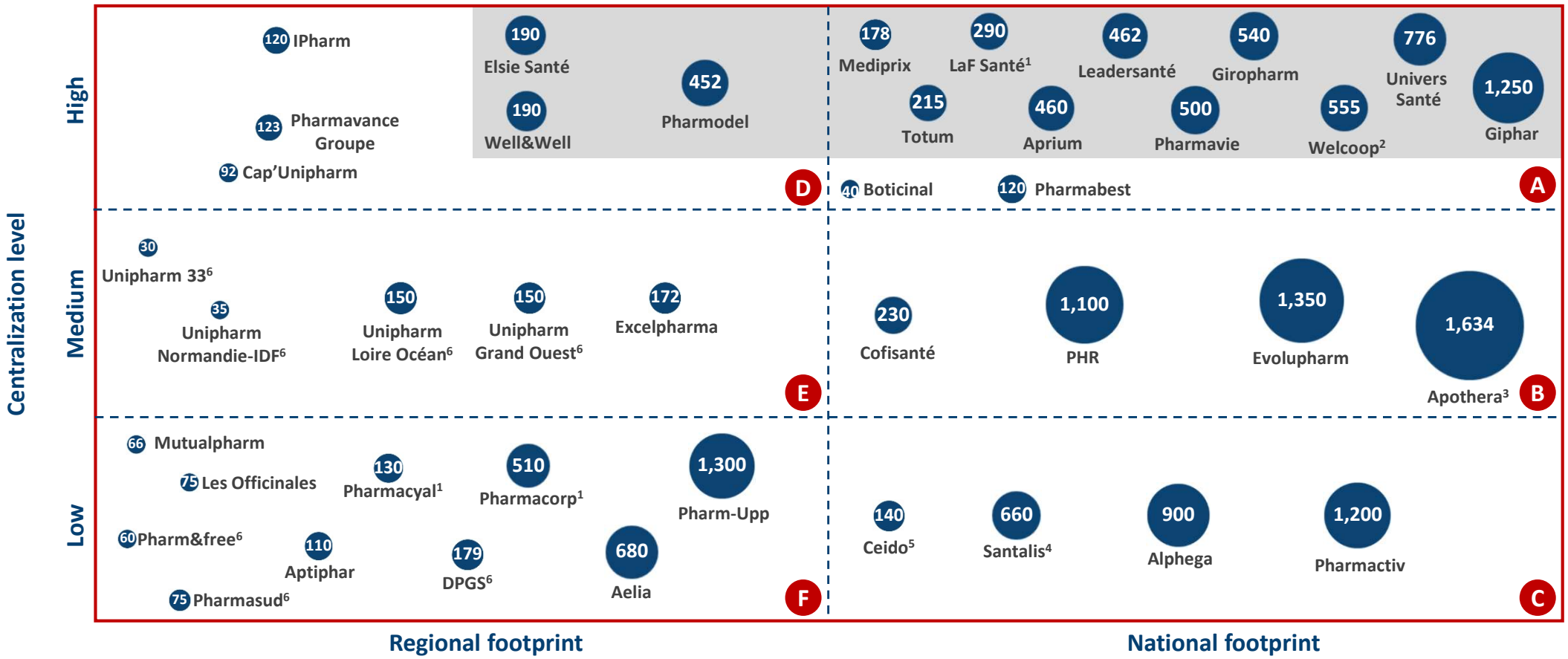
Sources: Le Quotidien du Pharmacien (November 30th, 2023) – Xerfi analysis (October 2023) – VTOs websites (June 2024) – Smart Pharma Consulting

[1] VTOs with 50 members or more – [2] Formerly, Pharma Santé Développement, incl. Pharma Group Santé, Nepenthes, G1000 Pharmacies, Optipharm – [3] Present in 9 European countries through its 6,300 members – [4] Formerly, Aelia – [5] Federation of regional VTOs incl. Pharm & Free, Pharmasud, DPGS and Unipharm – [6] Formerly, "Les Pharmaciens Associés" – [7] Incl. Objectif Pharma, Well [x]

Pharma companies should preferably partner with mid to large centralized VTOs whose members adhere to their priorities to optimize their probability to achieve their performance objective

VTOs – Segmentation based on geographical coverage and centralization* (2024)

Illustrative



* *Mainland France*

Most attractive VTOs | X Segment name | Number of retail pharmacy members

Sources: Le Quotidien du Pharmacien (November 30th, 2023) – Xerfi analysis (October 2023) VTOs websites (June 2024) – Smart Pharma Consulting

[1] Part of the holding Hygie31 – [2] Including Objectif Pharma (185 members) – [3] Including Pharma Group Santé, Nepenthes, G1000 Pharmacies, , Optipharm– [4] Formerly Les Pharmaciens Associés – [5] Part of Boticinal – Part of the federation of VTOs, Apsara which has signed in 2023 an alliance with Agir Pharma to become Apsagir

Most of VTOs offer their members the same services: what makes a difference is the type of ownership, the alignment of members in terms of business priority and outlets' average sales

VTOs – Range of services by a selection of VTOs (1/2)

VTOs	Ownership	# of members	Services to members						
			Listing center	Distributor own brands	Management control tools	Multi-channel offer	Loyalty programs	Trainings	Virtual chain (enseigne)
Apothera	Connect[1] – SofiPACA – Others[2]	1,634	✓+[3]	✓	✓	✓	✓	✓	✓
Evolupharm	Founders	1.350	✓	✓	X	✓	✓	✓	✓
PHR Group	Phoenix (Wholesaler)	1,100	✓	✓	✓	✓	✓	✓	✓
Pharmactiv	Phoenix (Wholesaler)	1,200	✓	✓	✓	✓	✓	✓	✓
Giphar	Cooperative	1,250	✓+	✓	✓	✓	X	✓	✓
Alphega	Alliance Healthcare (wholesaler)	900	✓+	✓	✓	X	✓	✓	✓
Univers Pharma	Management& Founders	776	✓+	✓	✓	✓	✓	✓	✓
Santalis[4]	Astera (wholesaler)	660	✓	✓	✓	✓	X	✓	✓

Sources: Le Quotidien du Pharmacien (November 30th, 2023) – Xerfi analysis (October 2023)
VTOs websites (June 2024) – Smart Pharma Consulting

[1] Private Equity funds – [2] Etoile ID – ACG management – [3] Purchase and/or distribution platform – [4] Formerly named "Pharmaciens associés"

Most of VTOs offer their members the same services: what makes a difference is the type of ownership, the alignment of members in terms of business priority and outlets' average sales

VTOs – Range of services by a selection of VTOs (2/2)

VTOs	Ownership	# of members	Services to members						
			Listing center	Distributor own brands	Management control tools	Multi-channel offer	Loyalty programs	Trainings	Virtual chain (enseigne)
Welcoop (Objectif Pharma)	Cooperative	555	✓	✓	✓	X	X	✓	✓
Giropharm	Cooperative	540	✓	✓	✓	✓	✓	✓	✓
Pharmavie	Members + Phoenix (Wholesaler)	500	✓	✓	✓	✓	✓	✓	✓
Pharmodel	Founders	452	✓	✓	✓	✓	✓	✓	✓
Leadersanté	Founders	450	✓		✓	✓	✓	✓	✓
Aprium	Sagard [1,2]	460	✓	✓	✓	✓	✓	✓	✓
Laf Santé	Latour Capital[1] & BpiFrance	290	✓	✓	✓	✓	✓	✓	✓
Totum	Members	215	✓	✓	✓	✓	✓	✓	✓
Boticinal	G Square[1]	40	✓	✓	✓	✓	✓	✓	✓

Sources: Le Quotidien du Pharmacien (November 30th, 2023) – Xerfi analysis (October 2023)
VTOs websites (June 2024) – Smart Pharma Consulting

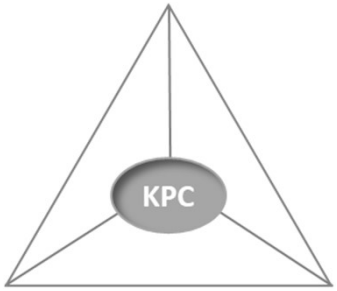
[1] Private Equity funds – [2] On-going negotiation with Ardian, BPI France and the MACSF (the mutual insurer for healthcare professionals) to divest

To provide VTOs members the same profits as the generics company "W" in euros, its competitors should offer higher rebates, according to their respective portfolio breadth & product availability

VTOs – Key purchasing criteria (KPC)

Commercial Offer

- Net prices are negotiated at VTOs level, while the members having the highest sales potential may obtain extra rebates, on top of those agreed upon



Gx Portfolio Breadth

- The larger the coverage of the ANSM repertory of generics drugs, the most important the opportunities to substitute and thus to generate better margins,…

Gx Availability Rate

- … provided the availability rate is close to 100%
- Availability meaning the right quantity of SKUs on time

Case study

Gx players	(A) Gx portfolio breath[a]	(B) Gx availability rate[b]	(AxB) Opportunity index
W	93%	89.3%	0.83
X	90%	88.7%	0.80
Y	88%	82.4%	0.73
Z	86%	78.7%	0.68

Gx players	Order (illustrative)	Opportunity index	Equalized global rebates…	… to generate the same profits to VTOs members
W	€ 100 K	0.83	50%	€ 83.05
X		0.80	52%	
Y		0.73	57%	
Z		0.68	61%	

Note: Corporate reputation has a very limited positive impact but may have, in certain cases, a certain negative impact

Sources: a) Coverage of the Gx repertory as per GERS data 2023 Sept. MAT –
b) GERS data 2023 Sept. MAT – Smart Pharma Consulting

Several VTOs have recently completed acquisitions to increase their negotiating power vis-a-vis suppliers and their service offering to boost their performance and that of their members

VTOs acquisitions / alliances (2021 – 2024)

Buying / allied companies	Date of acquisition / alliance	Acquired / allied VTOs	Number of members in the acquired / allied VTOs	Total number of pharmacies in 2023
Apothera (Formerly PSD)	December 2021	Optipharm	600	~2,400
Hygie31[1]	March 2022	Pharmacorp (Gener+)	520	1,189
	April 2023	Pharmacyal	135	
	December 2023	Magdaléon	100	
Boticinal (renamed Evecial Group after the deal)	Partial acquisition in the first semester of 2022	Dynamis	40	~400
	October 2022	CEIDO	130	
Astera	August 2023	Paraph	100	~6,800[2]
Univers Santé[3]	October 2023	Escale Santé	125	450
		Pharm'O Naturel	68	
APSAGIR (12 regional VTOs)	October 2023	Alliance between Apsara[4] & Agir Pharma[5]	Apsara: ~600	~1,000
			Agir Pharma: ~400	
Pharmavance	November 2023	Hexapharm	85	~255
	March 2024	Pharma'Gen	44	

Sources: Le Quotidien du Pharmacien – Companies' press releases – fusacq.com – Smart Pharma Consulting

[1] including the 296 pharmacies Lafayette – [2] Associate members, owning 99% of the cooperation – [3] Ex-Univers Pharmacie – [4] Federation of 7 regional VTOs incl. Pharm & Free, Pharmasud, DPGS and Unipharm – [5] Federation of 5 regional VTOs incl. Cap'Unipharm, Excel Pharma, Les Officinales (formerly PUC Pharma, Objectif Santé, Tag Pharm

If VTOs consolidation should not increase the current level of global rebates on generics, it will however raise the importance to be the preferred generics provider in larger and centralized ones

VTOs key strategic moves and implications for generics companies

Current situation

- Characteristics of VTOs:
  - National vs. regional coverage
  - Centralized vs. decentralized management
  - Small vs. big organization[1]
  - Privately owned (founders, PEs[2], management) vs. cooperative
- More than 150 structured VTOs
- Strong impact of inflation and decrease of revenues linked to the Covid-19 crisis
- Progressive trends in favor of concentration (M&A, alliances)
- Wide range of services provided to VTOs members

VTOs key strategic moves

- M&A and alliances are going to increase at a moderate speed (practical and cultural barriers) to:
  - Generate economies of scale (e.g., purchasing power) and…
  - … economies of scope (e.g., distributors own brands)
  - Provide more and better services to members in terms of management and…
  - … competitive position[3]
- Focus on the development of distributors own brands as a solution to combat inflation
- Support to an efficient execution of new pharmacists' missions[4]

Implications for Gx players

- VTOs managers know that they would not get much better net prices from Gx companies which do not make profits, or very little
- VTOs expect from Gx suppliers, beyond good prices:
  - A broad portfolio
  - A high availability rate

  so that to maximize their possibilities to substitute
- It is unlikely that VTOs will launch their own Rx-bound generics products due to past failure, but…
- … they might offer non-Rx-bound generics products, but this would not represent a strong threat

Sources: Le Quotidien du Pharmacien – Companies' press releases – Choisirmongroupement.com (June 2024) – Interviews (April to June 2024) – Smart Pharma Consulting

[1] More or less than 400 members – [2] Private Equity funds – [3] Vis-a-vis other retail pharmacies in the same catchment area, but also other distribution channels (e.g., supermarkets, online marketplaces), knowing that the French government would like to deregulate the distribution of non-Rx-bound drugs, like it is yet the case in several other European countries (e.g., Germany, UK, Italy) – [4] Vaccination, diagnosis of certain pathologies, etc.

VTOs are essential for generics companies which should favor mid-sized ones, whose members are willing to grow and are particularly engaged to rigorously implement the cooperation agreements

Recommendations for generics companies regarding VTOs

Overview of VTOs

- 94% of retail pharmacies are members of VTOs to get:
  - Better purchasing prices, especially with generics companies, suppliers of free-priced goods (e.g., OTCs, food supplements, parapharmacy) and wholesalers
  - Front-office support to increase the customer / patient traffic and purchasing basket
  - Back-office services to improve the management efficiency
- There are more than 150 structured VTOs, the smaller of them trying to reach a critical size arbitrarily estimated at ~1,000 members, mainly through M&As or alliances

Preferred VTOs

- The most attractive VTOs for pharma companies are those able to engage the great majority of their members to implement rigorously the agreements signed
- Besides, pharma companies, and especially generics suppliers, should partner preferably with regional or national mid size VTOs of ~400 – 600 members which are:
  - Striving to grow their business
  - Willing to adhere to performance-based cooperation agreements that are expressed as sales growth and/or market share level or growth
- In case of extra rebates – on top of those negotiated by VTOs – that are essential to get the best of the highest potential members, pharma reps should be empowered and well-trained to do so

Sources: Smart Pharma Consulting

Pharma companies should preferably partner with mid to large centralized VTOs whose members adhere to their priorities to optimize their probability to achieve their performance objective

Key Takeaways

1. ~78% of drug value, in gross price, is distributed through wholesalers, who are the cornerstone of the supply chain between pharma companies and retail pharmacies

2. Based on comparisons with other retail sectors, policy makers and payers consider drug distribution cost for reimbursable drugs as too high

3. Voluntary trade organizations (VTOs) focus on listing and purchasing products that will be sold by their retail pharmacy

4. Voluntary trade organizations may also offer services to their members in view to increase their sales and profits

5. If VTOs consolidation should not increase the level of rebates on generics, it will raise the importance to be the preferred generics provider in larger and centralized ones

6. VTOs are essential for generics companies which should favor mid-sized ones, whose members are willing to grow and engaged to implement the cooperation agreements

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Retail Distribution of High-priced Drugs…

… on the French Retail Market

POSITION PAPER October 2023

This position paper evaluates the distribution alternatives for high-priced drugs on the French retail pharma market, based on Smart Pharma Consulting know-how and external interviews

Context, objectives and approach

Context & objectives

- In a context of increasing number of high-priced drugs available in the pharma retail market, we decided to evaluate the distribution alternatives from the following concerned stakeholders' perspective:
  - Pharma companies – Retail pharmacists – Patients

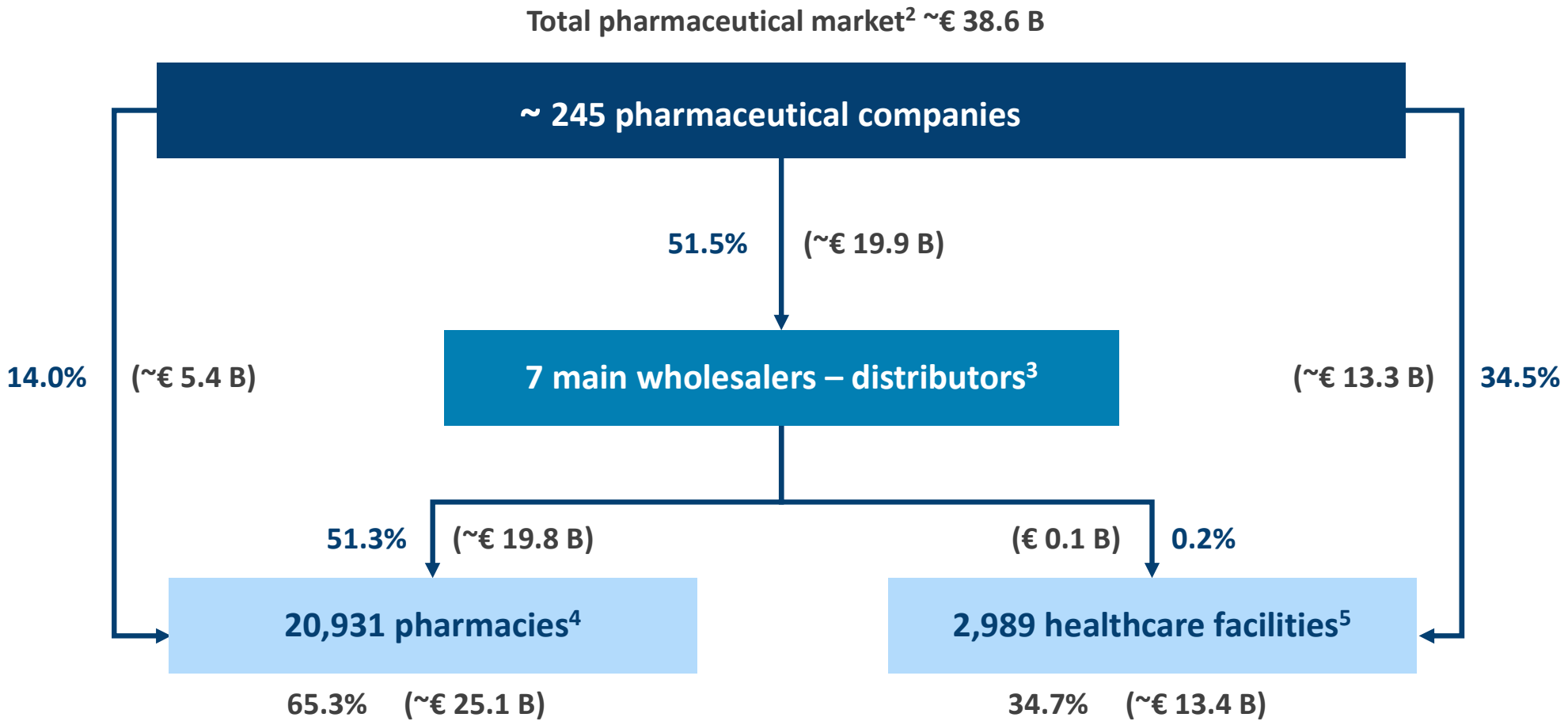
Approach

- Desk research and review of former Smart Pharma Consulting publications
- External interviews with representatives from:
  - 7 pharma companies
  - 2 wholesalers
  - 2 agents (pre-wholesalers)
- Analysis of the collected insights
- Evaluation of the distribution alternatives

Sources: Smart Pharma Consulting

Drugs sold in retail pharmacies are mainly sourced from wholesalers / distributors, while hospital drugs are usually directly sourced from pharmaceutical companies, through agents[1]

Drug supply chain (2022)

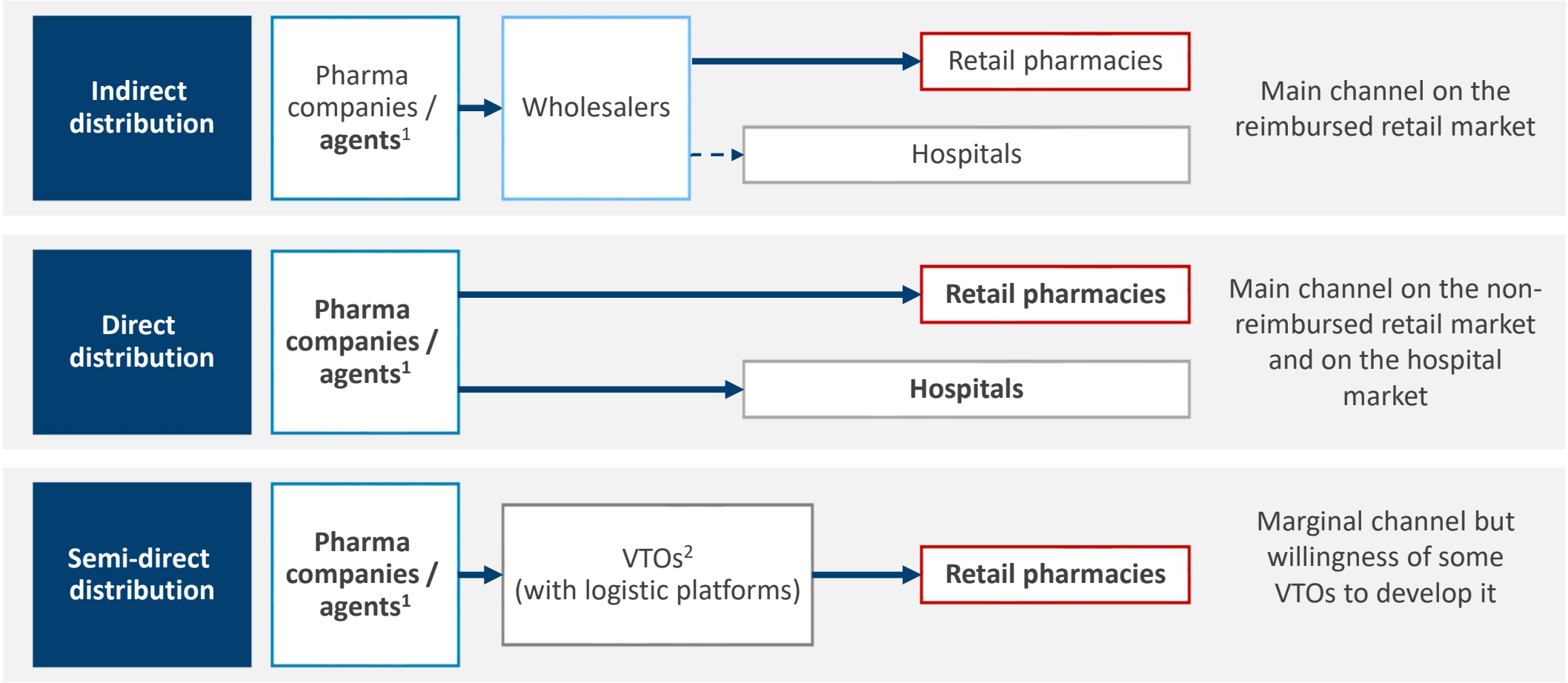


Sources: Leem ("Bilan Economique 2022") – GERS dashboard (December 2022) – Ordre National des Pharmaciens (as of January 2022) – Smart Pharma Consulting estimates

[1] Pre-wholesalers – [2] Ex factory-price, before rebates and taxes – [3] Accounting together for 96.6% of the market – [4] Of which more than 90% are members of VTOs (Voluntary Trade Organizations) – [5] Public and private

The supply of retail pharmacies by wholesalers remains important, despite the recent multiplication of players on the other channels

Drug distribution channels

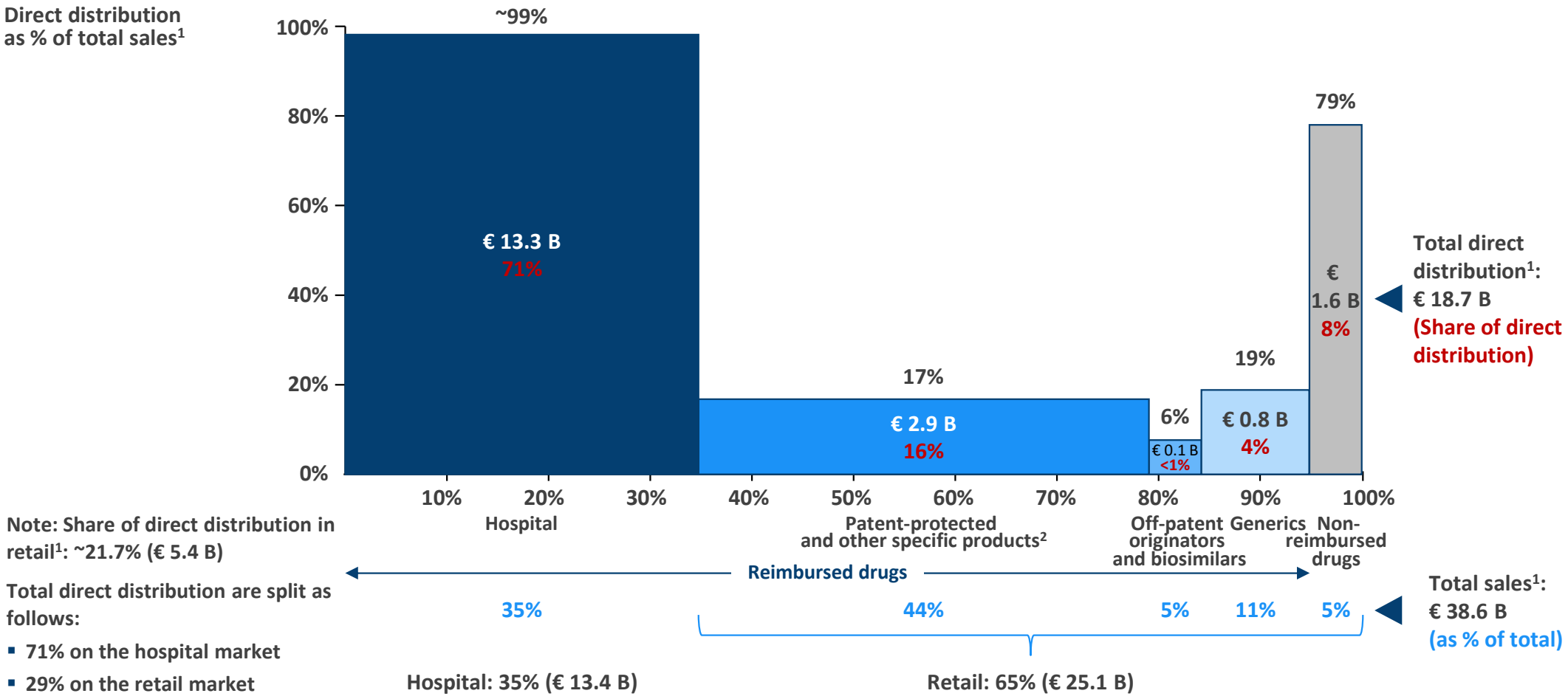


Sources: Smart Pharma Consulting analyses

[1] Pre-wholesalers – [2] Voluntary trade organizations

99% of hospital and ~22% of retail sales are directly distributed by pharma companies, through agents (pre-wholesalers)

Share of direct distribution by segment (2022)



Note: Share of direct distribution in retail[1]: ~21.7% (€ 5.4 B)

Total direct distribution are split as follows:

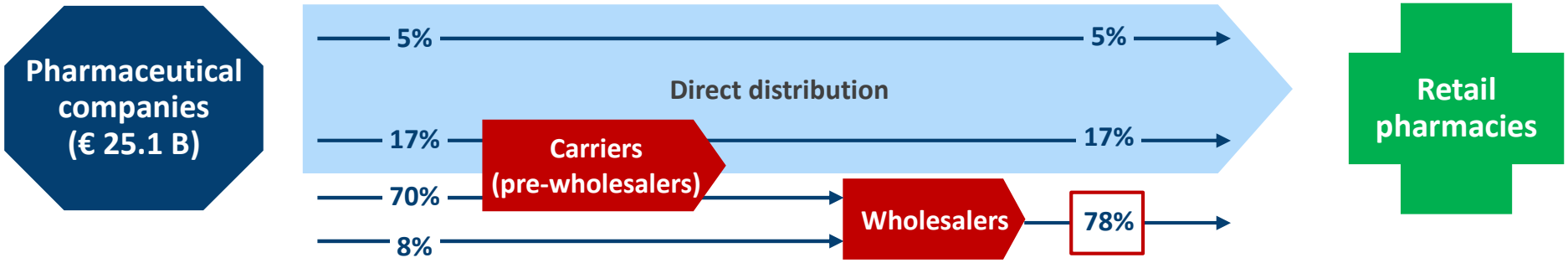
- 71% on the hospital market
- 29% on the retail market

Sources: GERS dashboard (December 2022) – Smart Pharma Consulting estimates

[1] Ex-factory prices, before rebates and taxes – [2] Sales of drugs that are not part of any generic group, whether patented or not, or other special products (calcium, sodium, potassium, paracetamol, etc.)

In the retail market, ~78% of the value goes through wholesalers, who are the cornerstone of the supply chain between pharma companies and retail pharmacies

Distribution alternatives on the retail market (2022)



Agents / Pre-wholesalers

- **Independent family health specialist:**
  - **CSP / Movianto (Walden Group[1])**
- **Subsidiaries of integrated distribution groups and health specialists:**
  - Alloga / Directlog (Alliance Healthcare)
  - Eurodep (Astera – formerly CERP Rouen)
  - **Evrard DPE – Pharmalpa (Welcoop)**
  - IvryLab (PharmaVie / Phoenix Pharma)
  - Sogiphar (Giphar)

- **Subsidiaries of integrated distribution groups; non health specialists:**
  - FM Health (FM Logistic)
  - Arvato Services Healthcare (Bertelsmann)
  - Pharmalog (Geodis)
  - Rhenus (Rethmann)
- **Subsidiaries of pharmaceutical companies:**
  - Aguettant
  - AstraZeneca
  - Pierre Fabre
  - Sanofi Pasteur
  - Servier

Wholesalers

	Market share[2]
Phoenix Group network	**39.1%**
– **OCP**	**30.8%**
– **Phoenix Pharma**	**8.3%**
CERP network	**36.1%**
– Astera (formerly CERP Rouen)	21.5%
– CERP Rhin Rhône Méditerranée	11.1%
– CERP Bretagne Atlantique	3.5%
Alliance Healthcare France (AmericansourceBergen)	**18.5%**
Giphar	**2.9%**
Others[3]	**3.4%**

Sources: GERS dashboard – CSRP – Register of the French pharmaceutical establishments – ANSM – Le Moniteur des pharmacies (December 3, 2022) – Smart Pharma Consulting analyses

[1] Funded in June 2020 by the merger of Movianto and EHDH, following the acquisition of Movianto by EHDH to Owens & Minor. Merger, on January 2022 of CSP and Movianto France – [2] Market share in value in 2022 – [3] Non-members of the "Chambre Syndicale de la Répartition Pharmaceutique (CSRP)"

Agents[1] directly provide ~35% of the volume of drugs delivered to retail pharmacies, whether they are subsidiaries of wholesalers, independents or agents

Agents / Pre-wholesalers – Role, activity and profile

	Agents		
Definition	▪ According to the definition of the Public Health Code, agents carry out activities on behalf of one or more manufacturers for the storage and the distribution of drugs to wholesalers, hospitals and retail pharmacies		
Role	▪ Agents offer their services in the context of direct distribution to pharmacies but also to wholesalers		
Activity	▪ Agents' vocation is national or regional, depending on their structure ▪ In 2022, they directly distributed ~35% of the volume and ~22% of the value of drugs delivered to retail pharmacies		
Profiles	▪ Subsidiaries of wholesalers	▪ Independents	▪ Subsidiaries of carrier groups
Examples	▪ Alloga / Directlog (Alliance Healthcare) ▪ Eurodep (Astera) ▪ Evrard DPE – Pharmalpa (Welcoop) ▪ IvryLab (PharmaVie / Phoenix Pharma) ▪ Sogiphar (Giphar)	▪ CSP / Movianto (Walden Group[2])	▪ FM Health (FM Logistic) ▪ Arvato Services Healthcare (Bertelsmann) ▪ Pharmalog (Geodis) ▪ Rhenus (Rethmann)

Sources: GERS dashboard (December 2022) – Smart Pharma Consulting analyses

[1] Pre-wholesalers – [2] Funded in June 2020 by the merger of Movianto and EHDH, following the acquisition of Movianto by EHDH to Owens & Minor. Merger, on January 2022 of CSP and Movianto France

The activity of wholesalers must meet five obligations derived from the "good delivery practices" guide and from European regulations

Wholesalers – Obligations

Serve all the retail pharmacies of their area of activity within 24 hours

Reference at least 90% of drugs and hold at least 15 days of inventory

In case of emergency, deliver on demand a non-client pharmacy or a pharmacy outside of the area of activity[1]

5 obligations of wholesalers

Have at their head a Chief Pharmaceutical Officer (pharmacien responsable) and one or more assistant(s)

Promptly withdraw a drug if the authorities deem it dangerous

Sources: CSRP website (February 2023) – Smart Pharma Consulting analyses

[1] *Since August 24, 2008, wholesalers have been required to participate in an on-call system on weekends and public holidays to enable the delivery of drugs in emergency situations*

The prices, margins and level of rebates are regulated by the drug pricing committee (CEPS) throughout the value chain of the reimbursable products, either originators or generics

Prices, margins and rebates on the retail market for reimbursable drugs

	Originator without TFR[1]	Originator with TFR	Generic without TFR	Generic with TFR
Ex-factory price	▪ Price negotiated / set by the CEPS ▪ Generics are priced 60% below originator price at patent expiry ▪ Originator price is cut by 20% after generics entry or at patent expiry			
Wholesalers' margins	▪ Minimum of € 0.30 per pack if ex-factory price below € 4.33 ▪ 6.93% of ex-factory price if ex-factory price from € 4.33 to € 468.97 ▪ 0% beyond € 468.97, representing a maximum of € 32.50 margin per sold unit			
Pharmacists' margins	▪ Variable margin: – 10.0% of ex-factory price below € 1.92 – 7.0% from € 1.92 to € 22.90 – 5.5% from € 22.91 to € 150.00 – 5.0% from € 150.01 to € 1,930.00 – 0% above € 1,930.00 ▪ Dispensing fees (VAT excluded): – € 1.00 per pack (for monthly packs) – € 2.70 per pack (for quarterly packs) – € 0.50 per prescription including at least 1 reimbursable drug – € 3.50 for specific drugs (e.g., immunosuppressive drugs) – € 1.55 if the patient is under 3 years or over 70 years old – € 0.30 per prescription with at least 5 medicines	Margin in absolute terms identical to the corresponding originator	Calculation identical to the originator's one	
Pharmacists' rebates[2]	▪ Maximum legal rebate: 2.5% of ex-factory price	▪ Maximum legal rebate: 40% of ex-factory price, since September 2014 (17% before)		
	▪ Possibility to add up to 100% of the wholesaler margin in case of direct distribution			

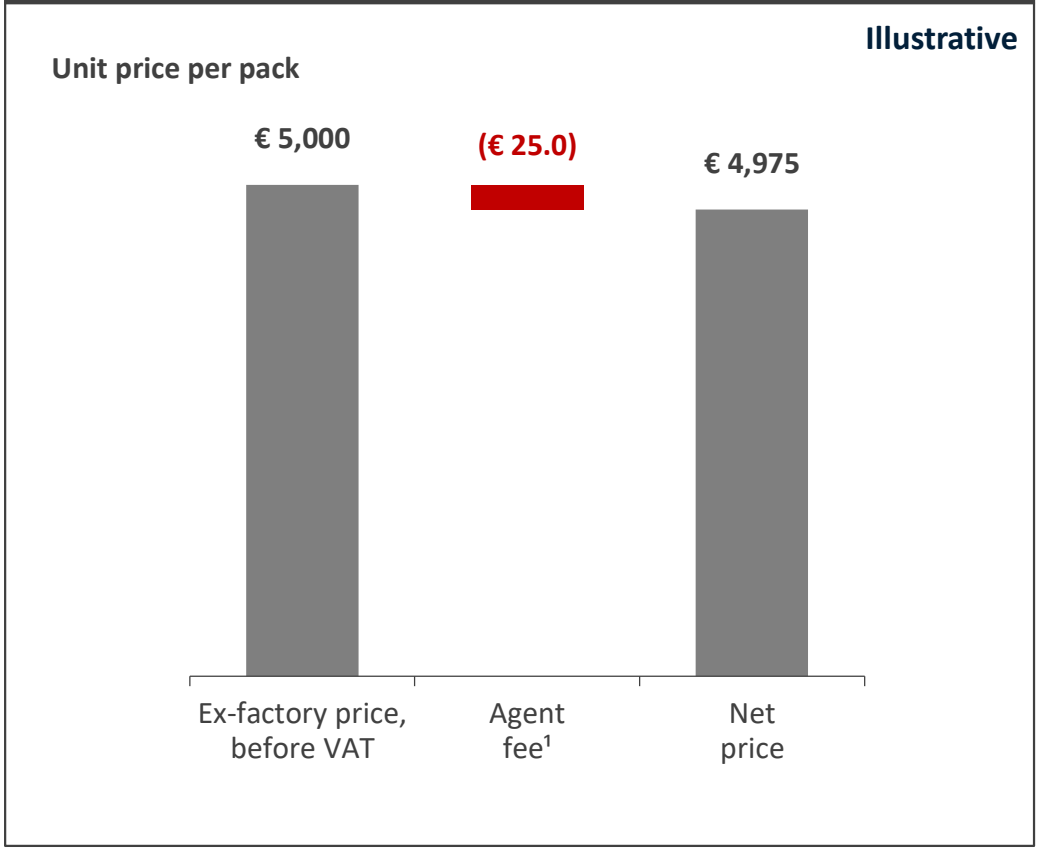
Sources: CEPS annual report (December 2022) – National pharmaceutical agreement (March 2022) – Legifrance – Ameli – Leem – Smart Pharma Consulting analyses

[1] Tarif Forfaitaire de Responsabilité (Reference price) – [2] Including cooperation and other commercial rebates

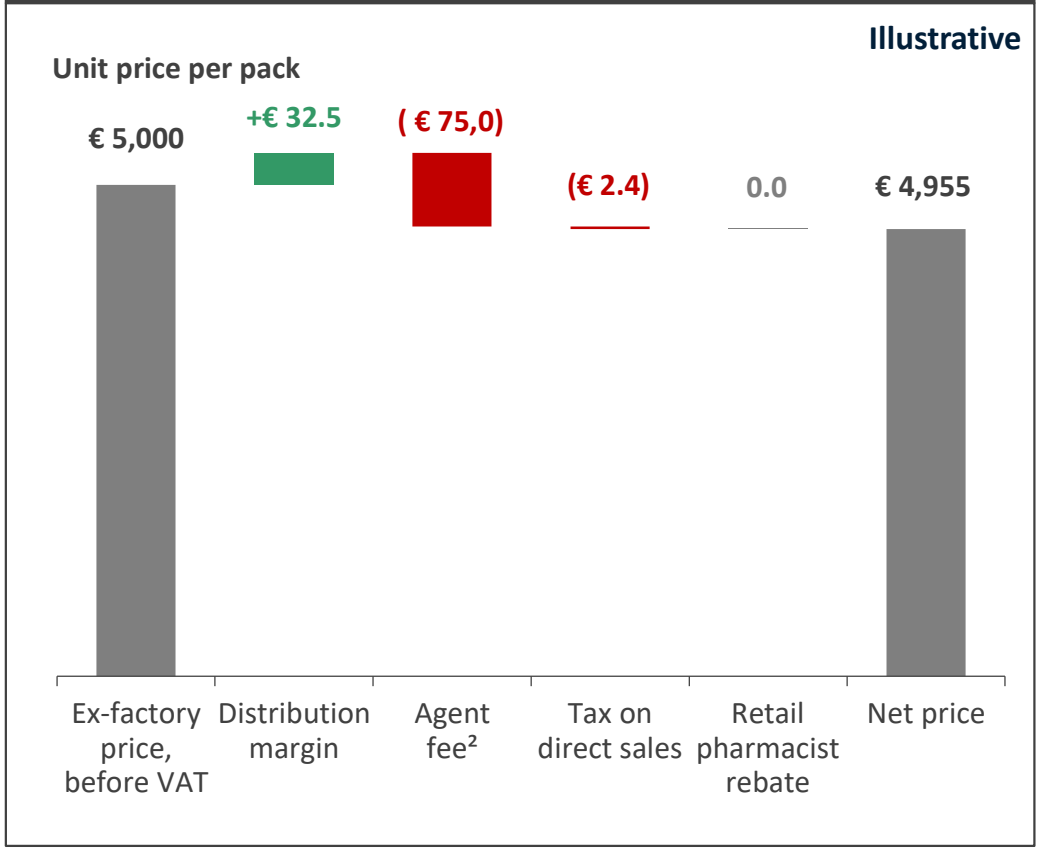
Assuming an ex-factory price of € 5,000 per pack, pharma companies would generate a net price of € 4.975 in indirect distribution vs. € 4,955 in direct distribution (- € 25 / - 0.4%)

Pharma companies' net price* – Indirect vs. direct distribution

Indirect distribution



Direct distribution



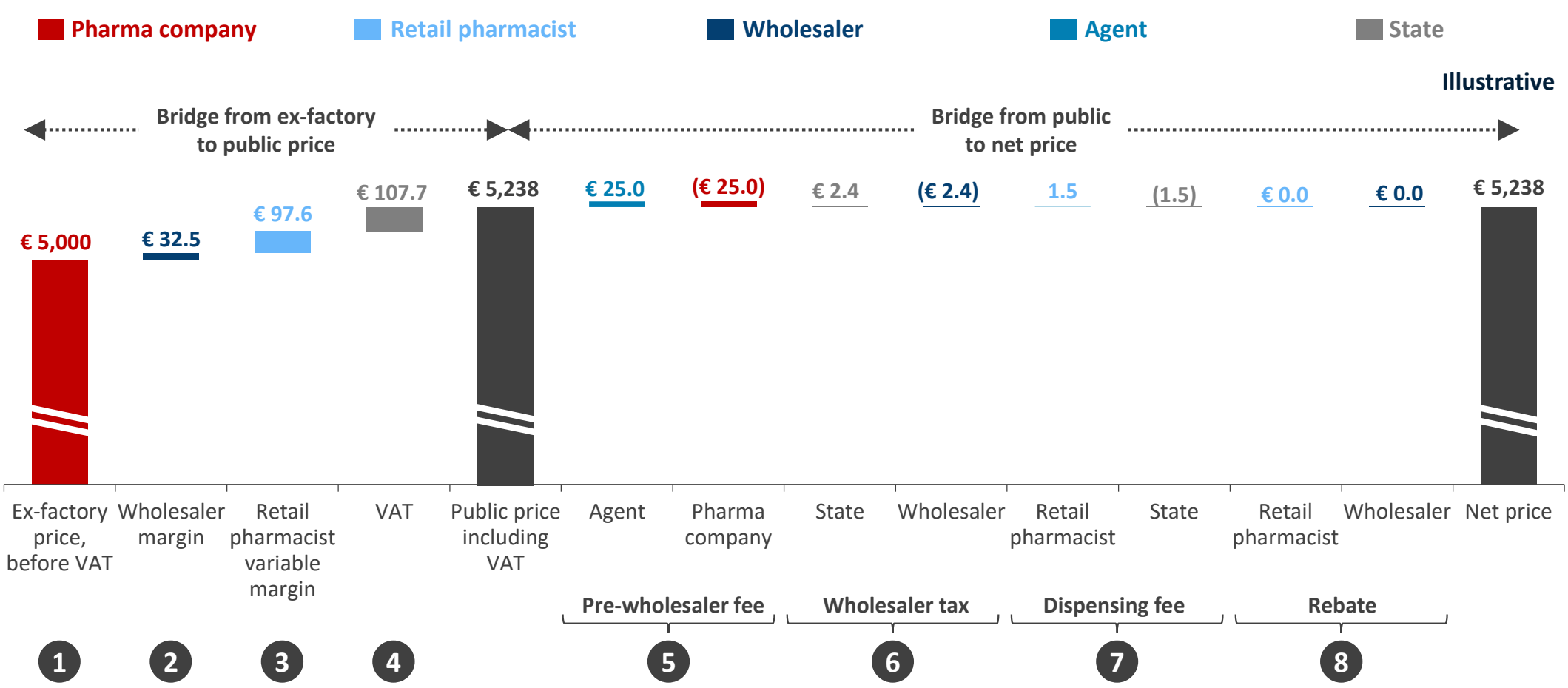
** For reimbursed drugs in metropolitan France*

Sources: Legifrance – External interviews (September – October 2023) – Smart Pharma Consulting analysis

[1] Acting as a pre-wholesaler – [2] In case of full service from order to cash to retail pharmacies

In case of distribution through wholesalers, pharma companies net price corresponds to the ex-factory price (€ 5,000 per pack) minus the distribution paid to the agent[1] (€ 25 per pack)

Net price distribution across drug value chain* – Indirect distribution (1/2)



** For reimbursed drugs in metropolitan France*

Sources: Legifrance – External interviews (September – October 2023) – Smart Pharma Consulting analysis

[1] Fee paid to the agent to ensure the distribution from the pharma company warehouse to the wholesalers

Almost all prices, margins and rebates are regulated, but pharma companies distributing through wholesalers should also negotiate with agents for their "pre-wholesaler" activities

Net price distribution across drug value chain* – Indirect distribution (2/2)

Item	Price component	Assumption	Flexibility
1	**Ex-factory price, before VAT**	▪ Price negotiated / set by the CEPS	
2	**Wholesaler margin**	▪ Margin regulated, with a maximum margin of € 32.5 per pack for drugs with an ex-factory price above € 468.97 per pack	
3	**Retail pharmacist variable margin**	▪ Margin regulated, with a maximum margin of € 97.6 per pack for drugs with an ex-factory price above € 1,930 per pack	
4	**VAT**	▪ 2.10% of the price before VAT (as applied for all reimbursable drugs)	
6	**Agent fee (pre-wholesaler)**	▪ Fee negotiated with the agent for its pre-wholesaler activities (~0.5% of pharma company's ex-factory price for a € 5,000 ex-factory price per pack)	
7	**Wholesaler tax due to URSSAF**	▪ Set by the URSSAF[1]: € 2.4 per pack for drugs with a wholesaler price above € 160.4 per pack (that could be adjusted depending on wholesaler sales evolution vs. previous year)	
5	**Retail pharmacist dispensing fee**	▪ Set in the National Convention for Retail Pharmacies (dated March 2022): at least € 1.0 per dispensation and € 0.5 per prescription with ≥ 1 reimbursable drug	
8	**Wholesaler rebate to pharmacist**	▪ Could reach up to 2.5% of the wholesaler price for reimbursed originators, but quite never proposed to retail pharmacists for non-substitutable Rx-bound drugs	

From low: ◔ *to high:* ●

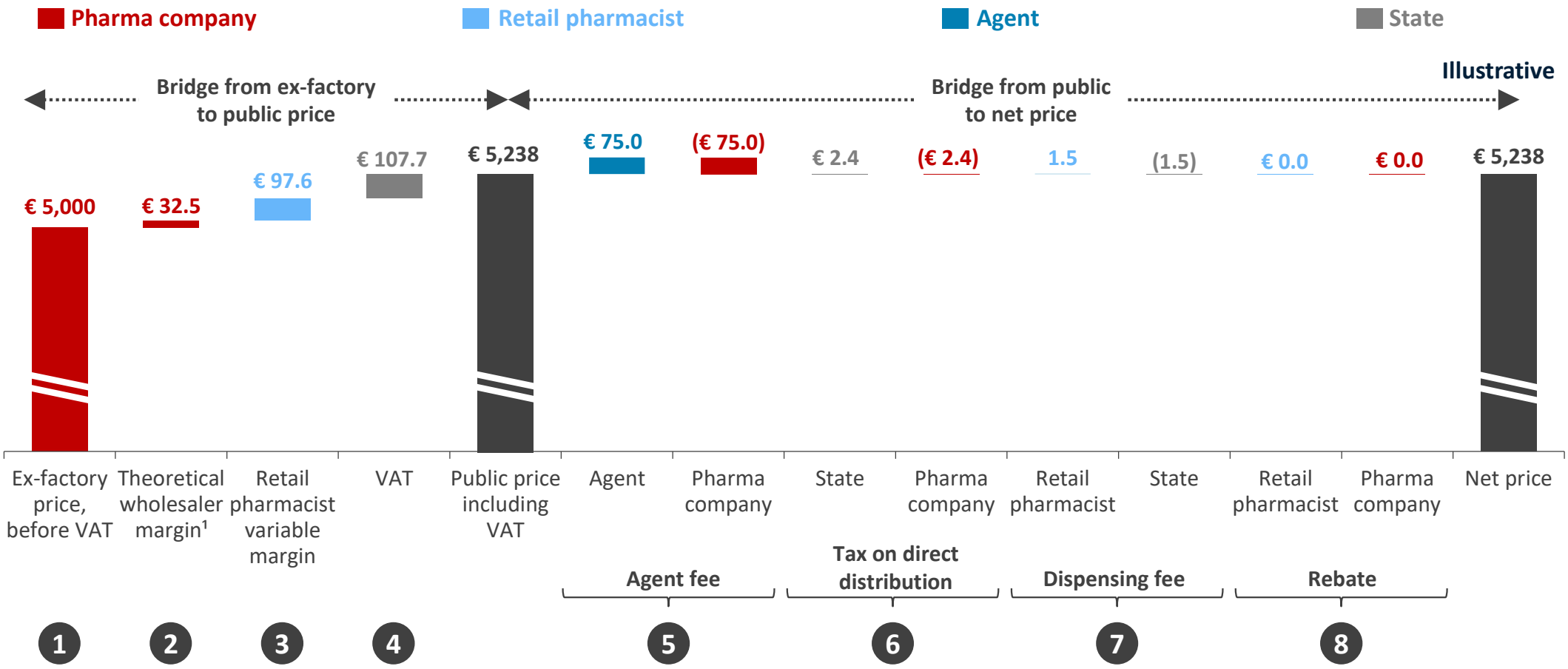
** For reimbursed drugs in metropolitan France*

Sources: Legifrance – External interviews (September – October 2023) – Smart Pharma Consulting analysis

[1] "Union de Recouvrement des cotisations de Sécurité Sociale et d'Allocations Familiales": Organization for the collection of social security and family benefit contributions (formerly ACOSS)

In case of direct distribution, pharma companies "retain" the wholesaler margin (~€ 32.5) from which should be deducted agent fee (~€ 75) and tax on direct distribution (~€ 2.4)

Net price distribution across drug value chain* – Direct distribution (1/2)



** For reimbursed drugs in metropolitan France*

Sources: Legifrance – External interviews (September – October 2023) – Smart Pharma Consulting analysis

[1] Margin which would have benefited the wholesaler in the case of indirect distribution, and which will be shared between the pharma company and the retail pharmacist in the case of direct distribution

In case of direct distribution, pharma companies can retain up to 100% of the wholesaler margin, but would have to negotiate fee for services with their agent and to pay tax on direct sales

Net price distribution across drug value chain* – Direct distribution (2/2)

Item	Price component	Assumption	Flexibility
1	**Ex-factory price, before VAT**	▪ Price negotiated / set by the CEPS	
2	**Wholesaler margin**	▪ The pharma company most often keeps the theoretical wholesaler margin and does not share it with retail pharmacists for non-substitutable Rx-bound drugs	
3	**Retail pharmacist variable margin**	▪ Margin regulated, with a maximum margin of € 97.6 per pack for drugs with an ex-factory price above € 1,930 per pack	
4	**VAT**	▪ 2.10% of the price before VAT (as applied for all reimbursable drugs)	
6	**Agent fee**	▪ Fee negotiated with the agent for its services (~1.5% of pharma company's ex-factory price, assuming a full service from order to cash. This fee could vary depending on volumes)	
7	**Tax on direct distribution**	▪ Set by the URSSAF[1]: € 2.4 for drugs with a price invoiced to retail pharmacists above € 160.4 (that could be adjusted depending on pharma company's sales evolution vs. previous year)	
5	**Retail pharmacist dispensing fee**	▪ Set in the National Pharmacies Convention (dated March 2022): at least € 1.0 per dispensation and € 0.5 per prescription	
8	**Pharma company rebate to pharmacist**	▪ Could reach up to 2.5% of the ex-factory price for reimbursed originators, but quite never proposed to retail pharmacists for non-substitutable Rx-bound drugs	

From low: ◔ to high: ●

** For reimbursed drugs in metropolitan France*

Sources: Legifrance – External interviews (September – October 2023) – Smart Pharma Consulting analysis

[1] "Union de Recouvrement des cotisations de Sécurité Sociale et d'Allocations Familiales": Organization for the collection of social security and family benefit contributions (formerly ACOSS)

Indirect distribution (through wholesalers) – Metropolitan France

Pros	1 to 5*
Pharma companies	
▪ Outsourcing of distribution risks (e.g., preparation errors, breakage in transport, unsold items, unpaid invoices)	4
▪ Wholesalers' maturity	4
▪ Slightly lower logistic costs (vs. direct distribution)	2
▪ Environmentally friendly (optimized shipments)	2
Retail pharmacists	
▪ Wholesalers' presence in all retail pharmacies	5
▪ Easy ordering (limitation of order-taking platforms)	4
▪ Stocking of expensive drugs avoided	4
▪ Limitation of the number of daily supplier deliveries	3
Patients	
▪ Drug availability secured (deliveries twice a day)	3
▪ Precise knowledge of product availability time	2

Cons	1 to 5*
Pharma companies	
▪ More difficult access to data to monitor parallel exports, especially for products at risk of shortage	4
▪ Multiplication of stocks at each agency for wholesalers that do not propose a national centralized platform	4
▪ Does not exempt pharma companies from signing an agreement with an agent	4
▪ Each service outside the framework contract is chargeable (e.g., data on sales / stocks, information to pharmacists)	3
▪ Need to sign with at least the top 6 wholesalers to cover the pharmacy network (each distributor has its own clients)	2
Retail pharmacists	
▪ Risk of local shortages if the wholesaler has not properly distributed its volumes by agency	4
▪ Remote learning only (no face-to-face)	3
Patients	
▪ N/A	

*** Importance for high-priced drugs – From 1 = Low to 5 = High**

Sources: External interviews (September – October 2023) – Smart Pharma Consulting analysis

Direct distribution (through agents) – Metropolitan France

Pros	1 to 5*
Pharma companies	
▪ Particularly relevant for low-moving secondary care drugs	5
▪ Sales monitoring at each retail pharmacy level enabling to: – Better prevent / limit parallel exports, especially for products at risk of shortage – Get insights on Rx habits (e.g., initiations vs. renewals)	5
▪ Agent services customizable to pharma company needs (e.g., orders, storage, delivery, invoicing, cash collection)	4
▪ Easier management of shortage vs. indirect distribution	4
▪ Very few in-house resources[1] required by pharma companies in case of agent full-service offer	4
▪ Possibility to retain up to 100% of the wholesaler margin	2
Retail pharmacists	
▪ Customizable services by retail pharmacy (e.g., questionnaires, trainings, information kits)	3
▪ Possibility to benefit from part of the "wholesaler margin"[2]	1
Patients	
▪ Better information from the retail pharmacist leading to better use and greater compliance by the patient	4

Cons	1 to 5*
Pharma companies	
▪ Non-outsourcing of certain risks (e.g., preparation errors, breakage in transport, unsold items, unpaid invoices)	4
▪ Variability of agent fee (inflation of storage and transportation costs recharged to pharma companies)	3
▪ Longer implementation of contracts (from 2 to 3 months vs. ~ 20 days with wholesalers), unless there is yet an existing agreement	2
▪ Slightly higher logistic costs (vs. indirect distribution)	2
Retail pharmacists	
▪ Higher complexity (e.g., lack of a single order-taking platform, increase in the number of supplier deliveries to manage each day)	4
Patients	
▪ Longer supply times (D+2 vs. D+1) but no impact for non-urgent drugs	1

*** Importance for high-priced drugs – From 1 = Low to 5 = High**

Sources: External interviews (September – October 2023) – Smart Pharma Consulting analysis

[1] Only 1 collaborator in charge of the relationship with the agent –
[2] Quite never proposed by pharma companies to retail pharmacists for non-substitutable Rx-bound drugs

Indirect distribution (through wholesalers) – Overseas France

Pros	1 to 5*
Pharma companies	
▪ Costs (e.g., transportation, clearance, storage, logistics) and risks (e.g., preparation errors, breakage in transport, unsold items, unpaid invoices) outsourced to wholesalers	5
▪ Wholesalers' expertise in each territory	4
▪ Outsourcing of complexity (e.g., relationship with local carriers, cash collection)	4
Retail pharmacists	
▪ Access to all retail pharmacies (~230 in La Reunion, ~140 in Guadeloupe and ~130 in Martinique)	4
Patients	
▪ Product availability secured by wholesalers	4

Cons	1 to 5*
Pharma companies	
▪ No tracking of sales and prescriptions	4
▪ Wholesalers' reluctance to build up stocks of new expensive drugs (pharma companies most often asked to take over all unsold items during the first six months after product launch)	4
▪ Individual contracts to be signed with each wholesaler subsidiary (one per territory)	3
▪ No transfer of products between wholesalers' subsidiaries	3
Retail pharmacists	
▪ N/A	
Patients	
▪ N/A	

*** Importance for high-priced drugs – From 1 = Low to 5 = High**

Sources: External interviews (September – October 2023) – Smart Pharma Consulting analysis

Direct distribution (through carriers) – Overseas France

Pros	1 to 5*
Pharma companies	
▪ Monitoring of sales at retail pharmacy level	4
▪ Direct relationship with retail pharmacists (e.g., information gathering / training)	3
▪ Possibility to retain up to 100% of the wholesaler margin	2
Retail pharmacists	
▪ N/A	
Patients	
▪ N/A	

Cons	1 to 5*
Pharma companies	
▪ Need to sign contracts with carriers (e.g., DHL, FedEx, Géodis)… … Or to have deported stocks (as there is no agent in Overseas France)	5
▪ Logistics complexity (e.g., unforeseen events, local partners heterogeneity, need for a specific follow-up of each delivery)	5
▪ Risk of unpaid invoices	4
Retail pharmacists	
▪ N/A	
Patients	
▪ N/A	

*** Importance for high-priced drugs – From 1 = Low to 5 = High**

Sources: External interviews (September – October 2023) – Smart Pharma Consulting analysis

Eurapharma (CFAO, Toyota Tsusho Corporation), Ubipharm (Planet Pharma) and CERP Bretagne Atlantique are the 3 main wholesalers leading the distribution market in Overseas France

Mapping of main distributors present in Overseas France

	The Caribbean & Guyana	Indian ocean	Pacific ocean
eurapharma cfao group	sopharma eurapharma; spg eurapharma	soredip eurapharma	tahitipharm eurapharma
PLANET PHARMA	UbiPharm Guadeloupe; UbiPharm Guyane; UbiPharm Martinique	UbiPharm Mayotte	*No presence identified*
CERP Bretagne - Atlantique	GPG Groupe CERP Bretagne-Atlantique	Pharmar Groupe CERP B.A.; Copharmay	Cerpol
Other distributors	BI Pharma	BI Pharma; Groupe SIPR Société d'Importation des Pharmaciens de la Réunion	BI Pharma; MédiPac; UniPharma

Sources: External interviews (September – October 2023) – Smart Pharma Consulting analysis

The preferred distribution strategy of pharma companies would depend on volumes to be distributed, parallel export and drug shortage risks, as well as patient program priorities

Recommendations for pharma companies

Metropolitan France

- There is no clear benefits of direct distribution through an agent vs. indirect distribution through a wholesaler
- The net price difference for high-priced drugs is marginal (<0.5%) and not perceived as a key decision-making criteria
- The decision to adopt a direct distribution strategy in Metropolitan France will mainly depend on:
  - The risk of parallel exports[1]
  - The need to limit the stock in distribution[2] if there is a risk of shortage
  - The willingness to partner with retail pharmacists to carry out patient usage and compliance programs

"Direct distribution is a bit more expensive, but it enables to:

- *Limit parallel exports*
- *Better manage the stocks in distribution"*

"We decided to change our distribution strategy from direct to indirect distribution for two main reasons:

- *Externalize the risks associated to drug distribution*
- *Build a lean and agile distribution organization"*

Sources: External interviews (September – October 2023) – Smart Pharma Consulting analysis

[1] Especially as agents can set up alerts based on co-defined orders thresholds –
[2] No need to multiply the stock by the number of agencies

Distribution through wholesalers should be preferred in Overseas France due to the fragmentation of the territories, the limited population, and the associated complexity and extra costs

Recommendations for pharma companies

Overseas France

- Direct distribution would lead to too much complexity in Overseas France for high-priced drugs that are in general indicated for a limited number of patients
- Therefore, it is preferable to select local distributors having a strong presence in the retail pharmacy network
- Such a strategy allows to outsource many:
  - Costs (e.g., transportation, clearance, storage, logistics)
  - Risks (e.g., preparation errors, breakage in transport, unsold items, unpaid invoices)

"Going through wholesalers is the most economically viable solution for pharma companies in Overseas France,…

… in particular for expensive drugs that retail pharmacists are not ready to stock"

"The wholesalers' lobby is very strong in these territories, where they have always preserved their monopoly"

Sources: External interviews (September – October 2023) – Smart Pharma Consulting analysis

Smart Pharma
CONSULTING

Economics of French Retail Pharmacies

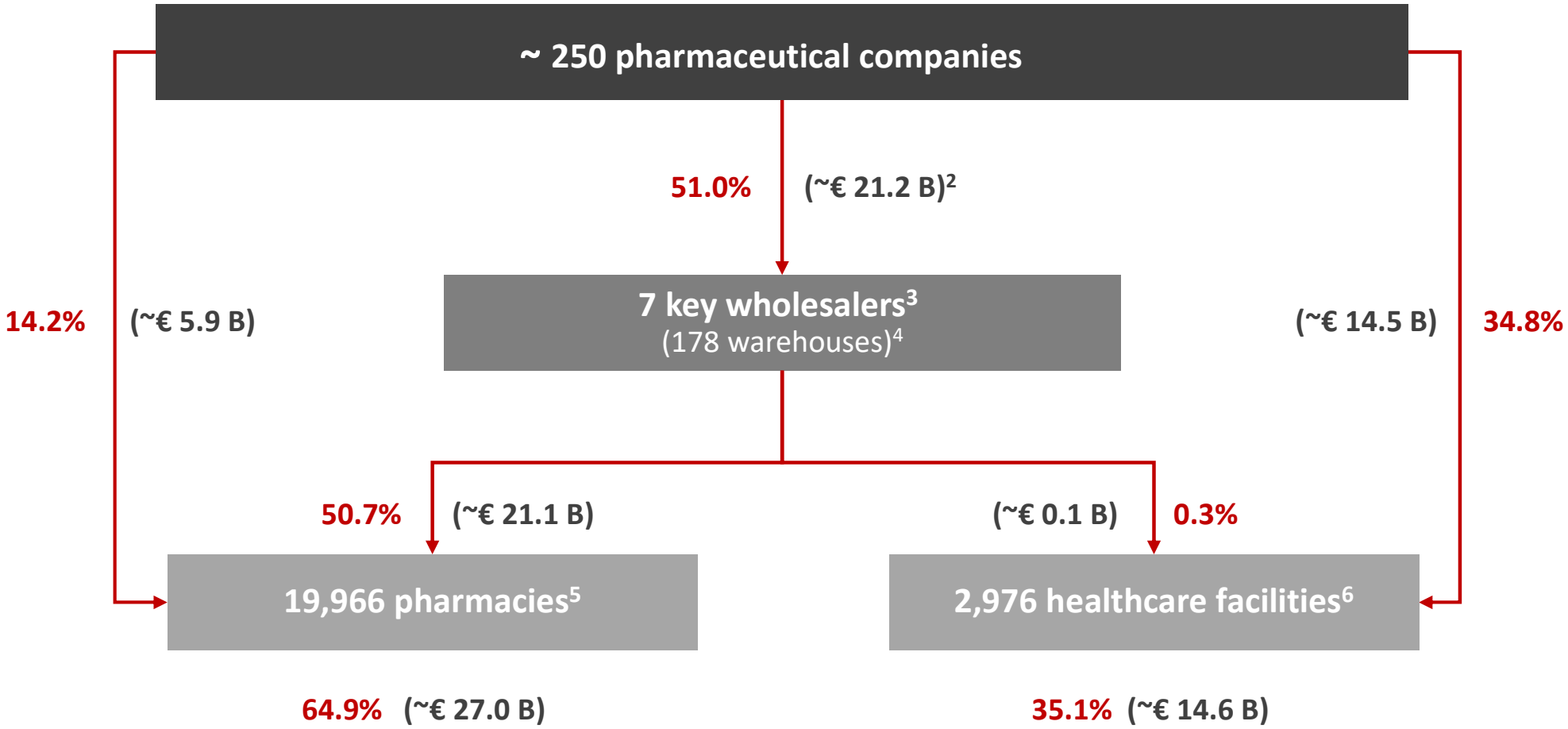
What to know & understand
to better decide

November 2024

1, rue Houdart de Lamotte – 75015 Paris – France
Tel. +33 6 11 96 33 78 – jmpeny@smart-pharma.com – www.smart-pharma.com

Drugs sold in retail pharmacies are mainly sourced from wholesalers, while hospital drugs are usually directly sourced from pharmaceutical companies, through pre-wholesalers[1]

Drug supply chain in France (2023)



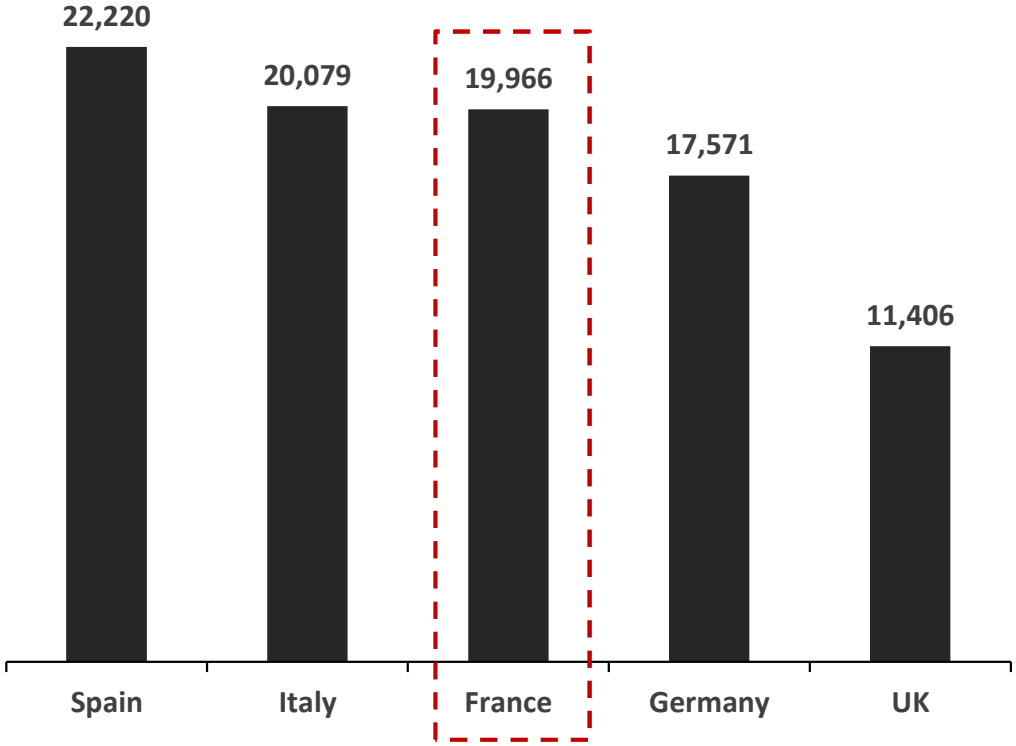
Sources: Leem ("Bilan Economique 2023") – GERS dashboard (December 2023) – SmartRx 2024 (January 2024) – Ordre National des Pharmaciens (January 2024) – DREES (December 2023) – Smart Pharma Consulting estimates

[1] Depositaries / Agents – [2] Ex factory-price, before rebates and taxes – [3] Accounting for ~97% of the distribution market – [4] In mainland France. For FOTs (French Overseas Territories) there are 12 more warehouses – [5] Of which 94% are members of VTOs (Voluntary Trade Organizations) – [6] Public and private

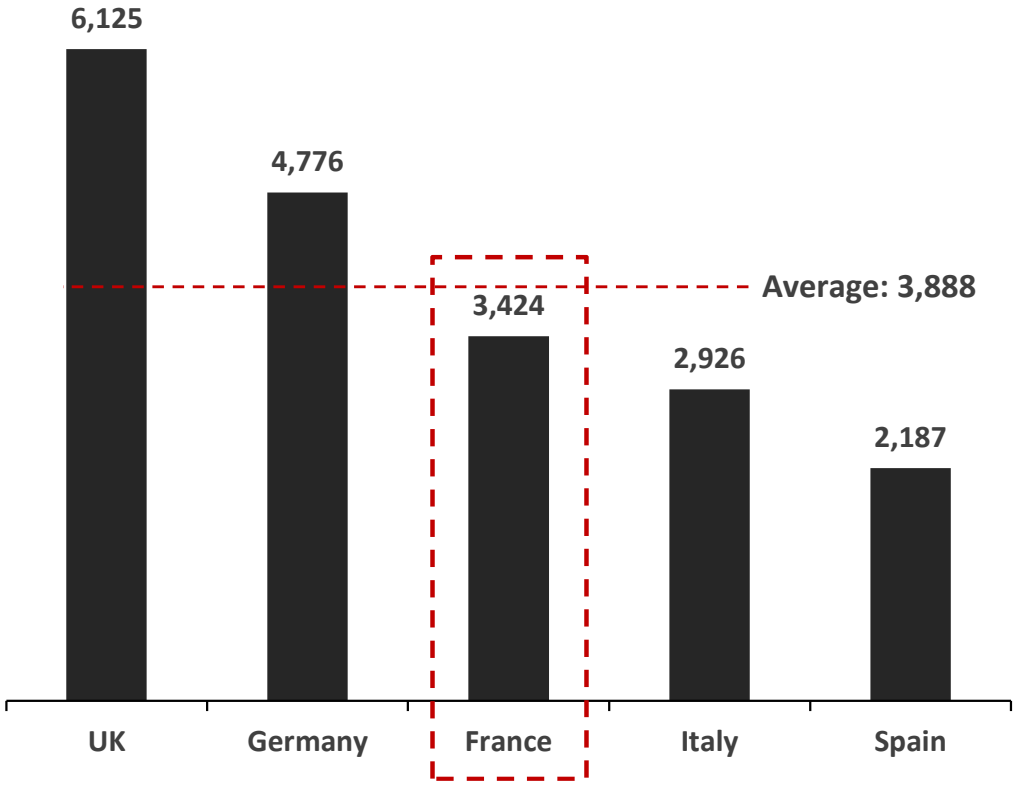
The relatively low turnover of retail pharmacies in France[1] is explained by a high density of outlets, the low prices of reimbursed drugs[2] and a narrow list[3] of items allowed to be sold

Retail pharmacies across Euro-5 countries

Number of retail pharmacies (2023)



Number of inhabitants per pharmacy (2023)



Sources: Ordre National des Pharmaciens, France (January 2024) – ABDA, Germany (January 2024) – CGCOF, Spain (July 2023) – NHS database, UK (January 2024) – Federazione nazionale unitaria titolari di farmacia, Italy (November 2024) – Smart Pharma Consulting analyses

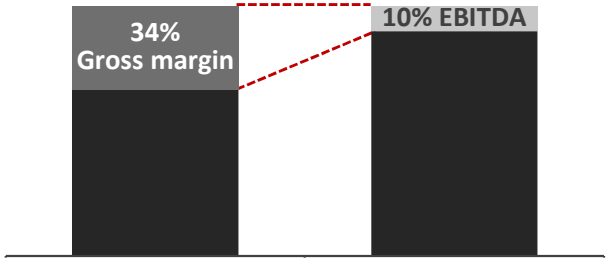
[1] € 2.4 M in 2023 – [2] The average price of reimbursed drugs, accounting for 72% of their sales, is lower than in most of the largest EU countries – [3] Unlike in the UK, for instance, the list of products that can be sold, beyond drugs, food supplements, medical devices and parapharmacy products, is very restricted and defined by law

Euro-5 retail pharmacies have an EBITDA rate ranging from 9% and to 12%, with a high difference of sales level between the highest (€ 3.9 M in the UK) and the lowest (€ 1.0 M in Spain)

Retail pharmacies performance in Euro-5 countries (2023)

UK

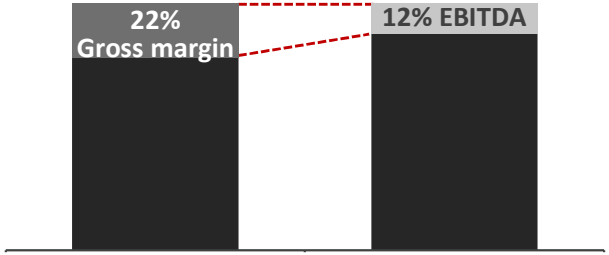
Average sales per outlet: **€ 3.9 M**



# outlets	**11,406**
# inhabitants/ outlet	**6,125**

Germany

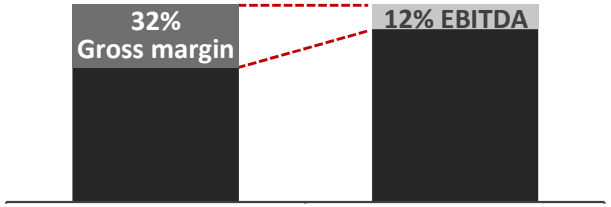
Average sales per outlet: **€ 3.2 M**



# outlets	**17,571**
# inhabitants/ outlet	**4,776**

France

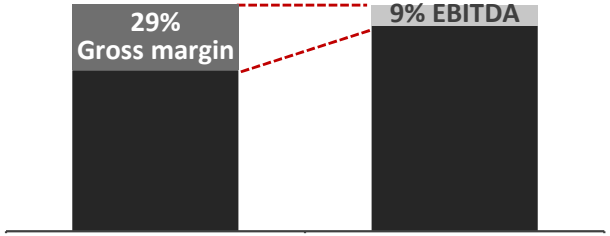
Average sales per outlet: **€ 2.4 M**



# outlets	**19,966**
# inhabitants/ outlet	**3,424**

Italy

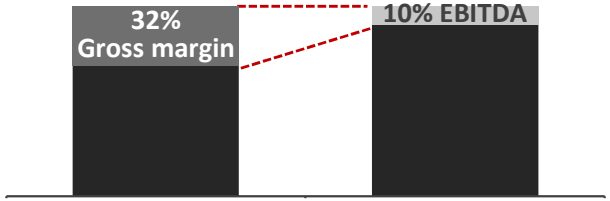
Average sales per outlet: **€ 1.2 M**



# outlets	**20,079**
# inhabitants/ outlet	**2,926**

Spain

Average sales per outlet: **€ 1.0 M**

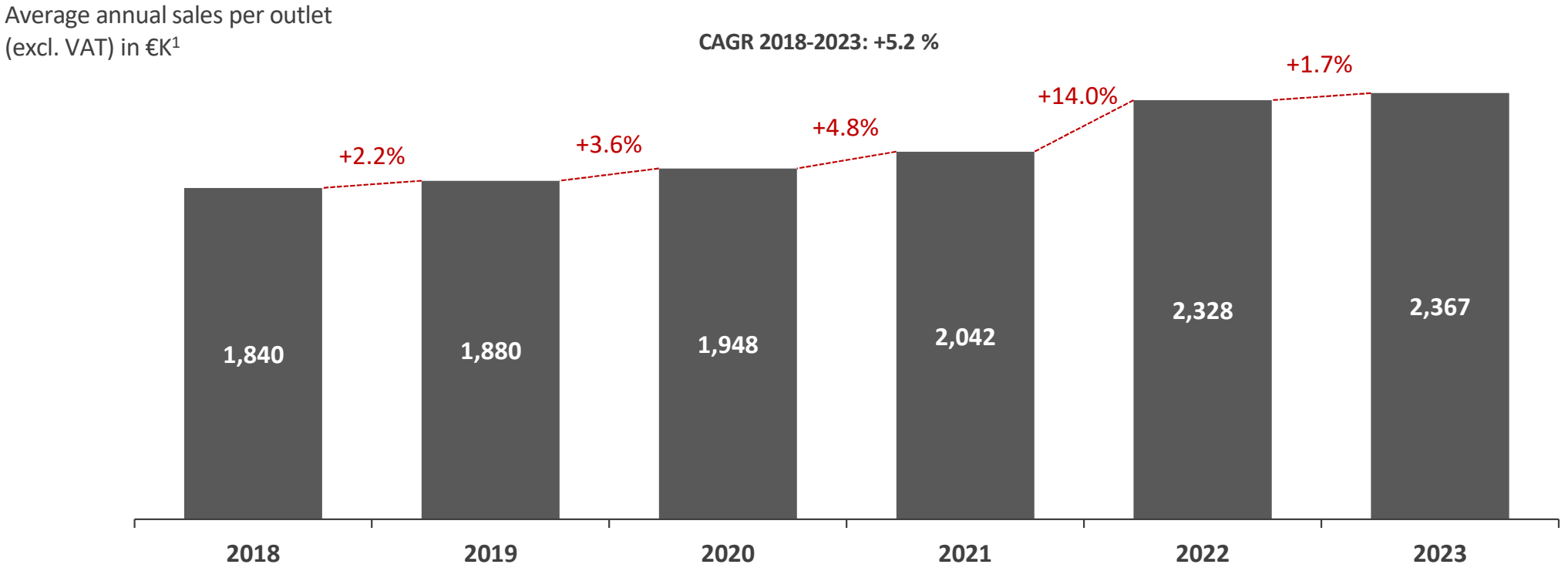


# outlets	**22,220**
# inhabitants/ outlet	**2,187**

Sources: Le Moniteur des Pharmaciens (March 2024) – Hutchings UK market report update (2024) – Informe Aspime (March 2023) – World Bank data – Smart Pharma Consulting analyses

Retail pharmacies growth has jumped in 2022 due to extra sales directly linked to the Covid-19 pandemics which generated extra activities (e.g., vaccination, antigenic testing)

Retail pharmacies sales evolution (2018 – 2023)



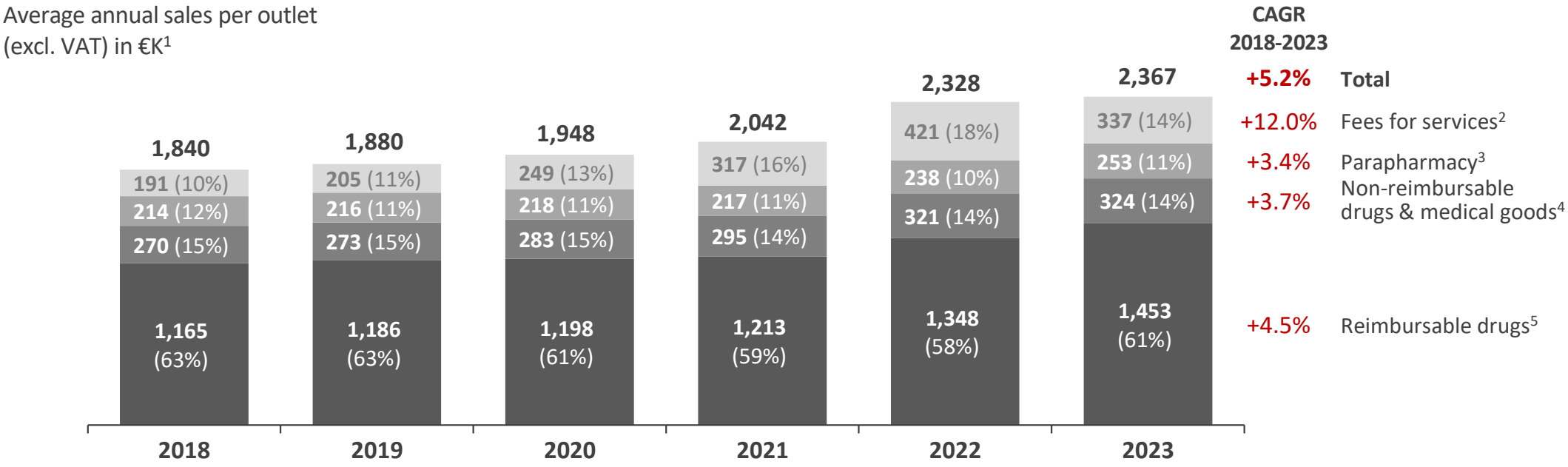
- The 2022 sales have been strongly boosted by antigenic tests and vaccines against the Covid-19 sold, along with the vaccination at outlets
- If one excludes the 2022 sales due to the Covid-19, the 2023 growth would have been of +5.9%

Sources: CGP Experts Comptables (2024) – Smart Pharma Consulting analyses

[1] Based on the 1,832 retail pharmacies analyzed in 2023 by CGP Experts Comptables. The sample of retail pharmacies analyzed in the previous years is not necessarily the same

The strong reimbursable segment growth is driven by the expensive drugs despite regular price cuts imposed by the CEPS, while fees dynamics correspond to the development of services

Structure of retail pharmacies sales (2018 – 2023)



- Fees for services include dispensing- and prescription-related fees that are associated to reimbursed drugs, vaccination for Covid-19, antigenic testing, as well as cooperation agreements signed with different suppliers[6]
- The inflation has had an impact on the evolution of the non-reimbursed segments (drugs, medical goods, and parapharmacy) since retail pharmacists have partly or totally transferred their purchasing price increase to their customers to maintain their margin level in percentage
- Reimbursable drugs have grown by +7.8% in 2023 vs. 2022, 80% of this growth being due to expensive drugs (ex-factory price > € 500 per pack)

(x): % of the total sales of the year (excl. VAT)

Sources: CGP Experts Comptables (2024) – Smart Pharma Consulting analyses

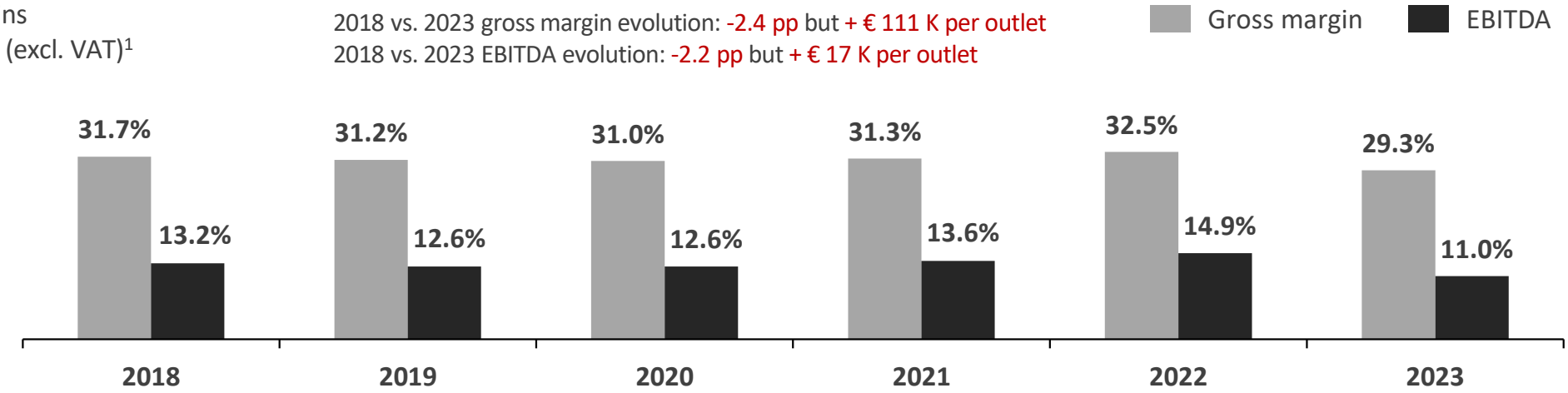
[1] Based on the 1,832 retail pharmacies analyzed in 2023 by CGP Experts Comptables. The sample of retail pharmacies analyzed in the previous years is not necessary the same – [2] Including dispensing fee – [3] Including para-pharmacy products, animal health, etc.– [4] Including OTC drugs and "lifestyle" Rx-bound drugs, baby milk, medical material for disabled people, masks and disinfectant gel, etc – [5] Either prescribed or not – [6] Such as generics and biosimilars companies, OTC, food supplements and parapharmacy companies

If one observes a slight deterioration of retail pharmacies profitability over the period as a percentage of their sales, their gross margin and EBITDA have been maintained in absolute terms

Retail pharmacies margins evolution (2018 – 2023)

Average margins
as a % of sales (excl. VAT)[1]

2018 vs. 2023 gross margin evolution: -2.4 pp but + € 111 K per outlet
2018 vs. 2023 EBITDA evolution: -2.2 pp but + € 17 K per outlet



	2018	2019	2020	2021	2022	2023
Gross margin (€K)[2]	583	587	604	639	757	694
EBITDA (€K)[2]	243	237	245	278	347	260
Annual sales, excl. VAT (€K)[2]	1,840	1,880	1,948	2,042	2,328	2,367

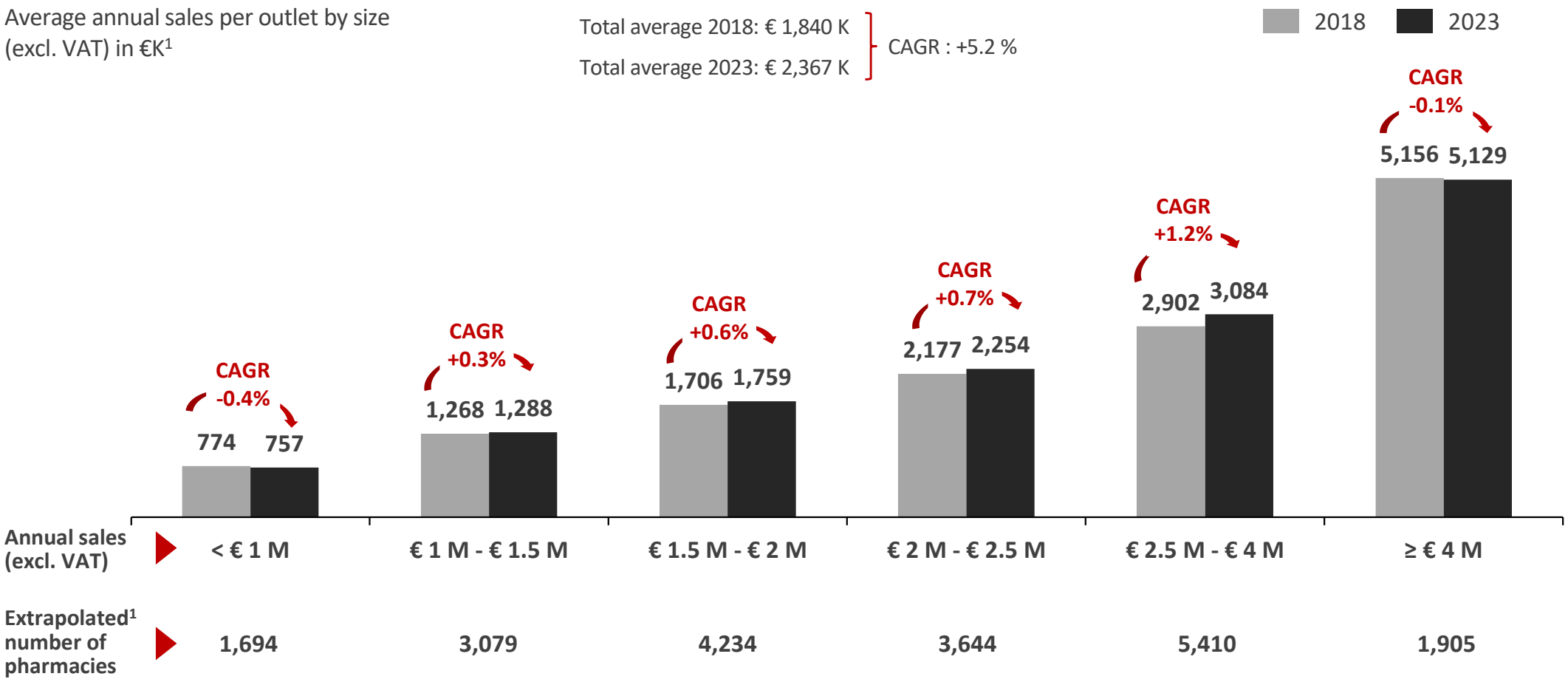
- **Gross margin:** the 2023 decrease is due to the drop of products associated to the Covid-19, such as masks and antiseptic gels with margins of 80%, the strong growth of high-priced reimbursed drugs with margins capped by the CEPS, the shortage of generics obliging pharmacists to buy from multiple suppliers, reducing their level of rebates
- **EBITDA:** the year 2023 has been mainly impacted by the staff costs due to inflation and continuous manpower shortage

Sources: CGP Experts Comptables (2024) – Smart Pharma Consulting analyses

[1] Based on the 1,832 retail pharmacies analyzed in 2023 by CGP Experts Comptables. The sample of retail pharmacies analyzed in 2018 is not necessarily the same – [2] Average per outlet

Smaller outlets poor performance is due to their lower attractiveness compared to larger ones, while the biggest outlets have been more impacted by inflation on their free-priced products

Retail pharmacies sales by size (2018 – 2023)

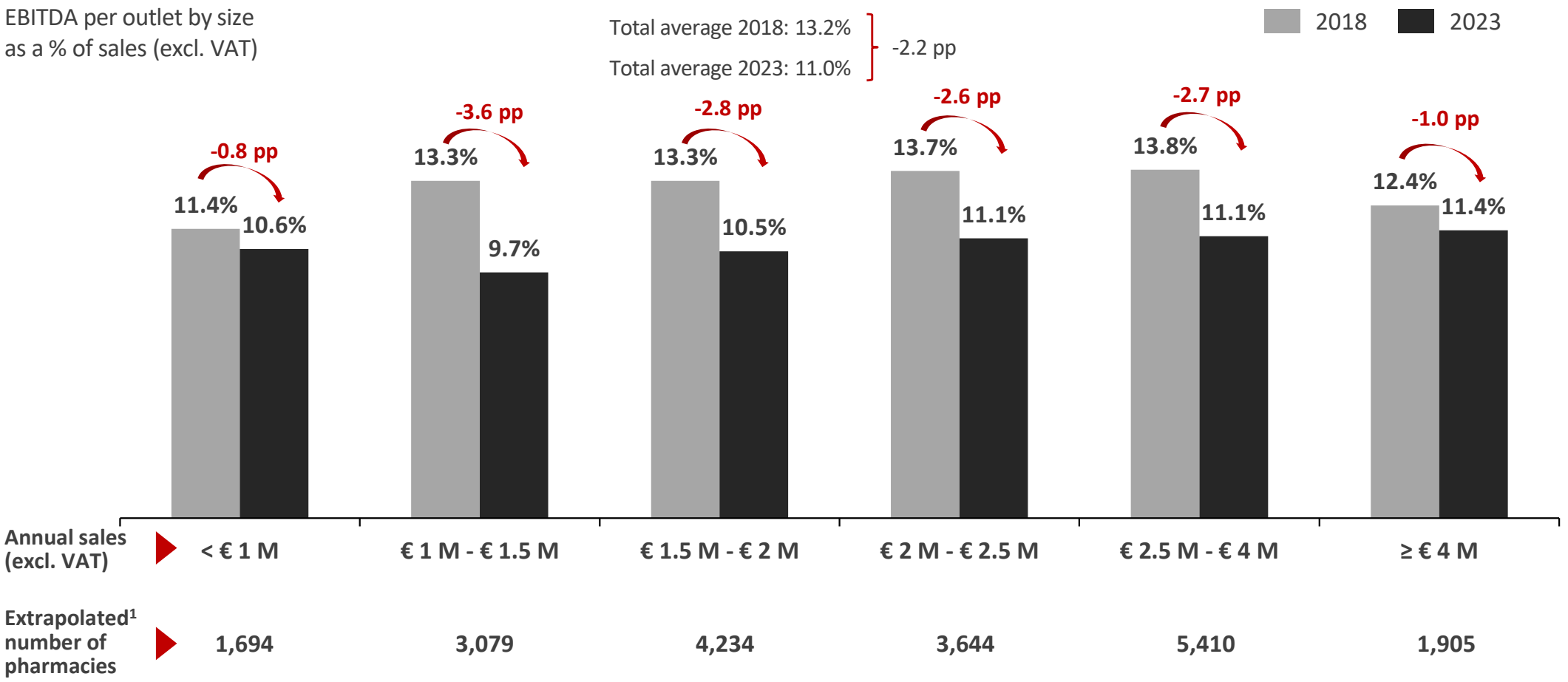


Sources: CGP Experts Comptables (2024) – Smart Pharma Consulting analyses

[1] Extrapolation to 19,966 based on the 1,832 retail pharmacies analyzed in 2023 by CGP Experts Comptables. The sample of retail pharmacies analyzed in 2018 is not necessarily the same

The EBITDA of retail pharmacies has decreased over the 2018-2023 period, especially for the small to medium ones having a turnover ranging from € 1 M to € 4 M

Retail pharmacies EBITDA by size (2018 – 2023)

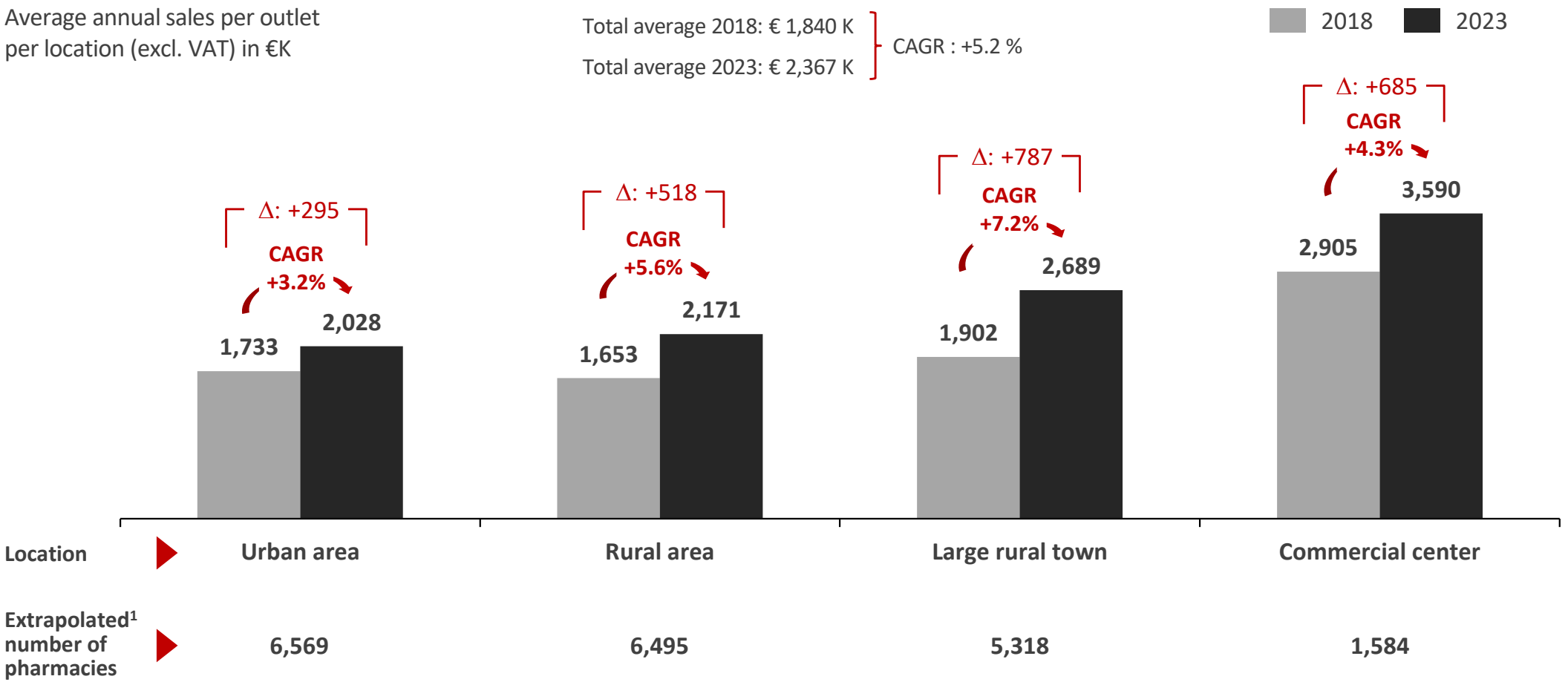


Sources: CGP Experts Comptables (2024) – Smart Pharma Consulting analyses

[1] Extrapolation to 19,966 based on the 1,832 retail pharmacies analyzed in 2023 by CGP Experts Comptables. The sample of retail pharmacies analyzed in 2018 is not necessarily the same

Sales of retail pharmacies located in commercial centers were 77% higher than those in urban areas in 2023 (vs. 68% in 2028), and their growth in euros has been 2.3 times higher

Retail pharmacies sales by location (2018 – 2023)



Sources: CGP Experts Comptables (2024) – Smart Pharma Consulting analyses

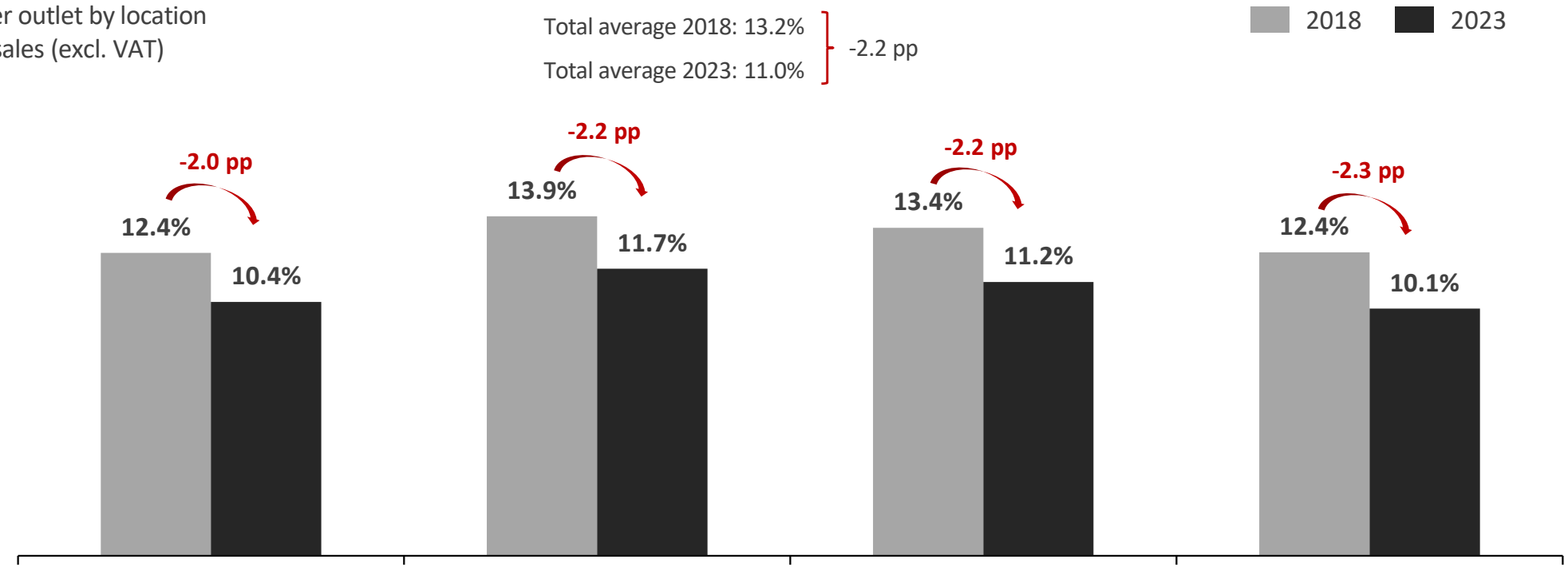
[1] Extrapolation to 19,966 based on the 1,832 retail pharmacies analyzed in 2023 by CGP Experts Comptables. The sample of retail pharmacies analyzed in 2018 is not necessarily the same

Between 2018 and 2023, the retail pharmacies EBITDA decreased moderately, with little differences across locations, in terms of level and evolution

Retail pharmacies EBITDA by location (2018 – 2023)

EBITDA per outlet by location as a % of sales (excl. VAT)

Total average 2018: 13.2%
Total average 2023: 11.0%
-2.2 pp



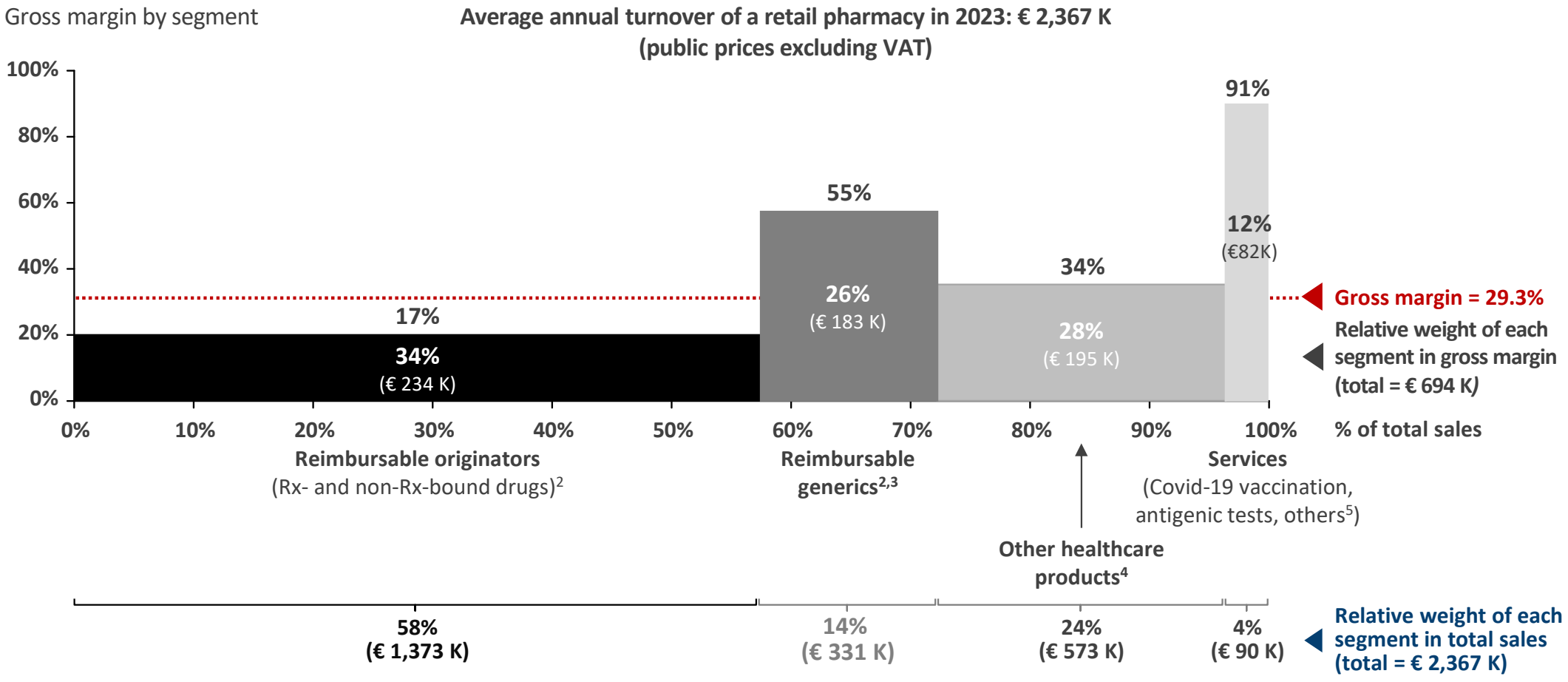
Location	Urban area	Rural area	Large rural town	Commercial center
Extrapolated[1] number of pharmacies	6,569	6,495	5,318	1,584

Sources: CGP Experts Comptables (2024) – Smart Pharma Consulting analyses

[1] Extrapolation to 19,966 based on the 1,832 retail pharmacies analyzed in 2023 by CGP Experts Comptables. The sample of retail pharmacies analyzed in 2018 is not necessarily the same

The preferred generics supplier, contributing to ~23%[1] of retail pharmacies gross margin, is well positioned to develop cross-selling with substitutable biosimilars and/or non-Rx-bound products

Structure of retail pharmacies economics (2023)*



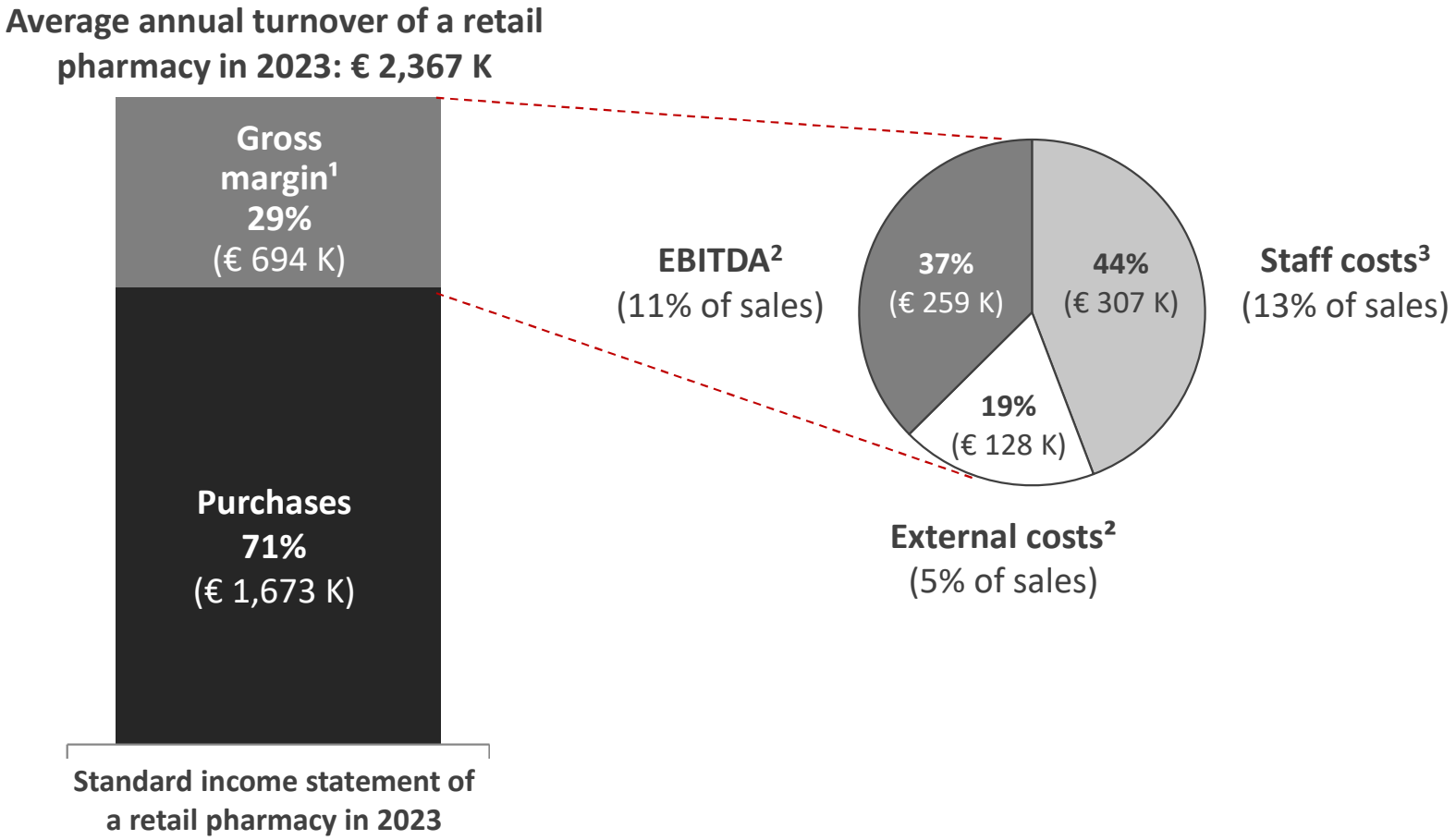
** Data estimated based on a sample of 1,832 retail pharmacies*

Sources : CGP Experts Comptables (2024) – Interviews with accounting experts (July 2023) – Smart Pharma Consulting estimates

[1] Estimating that it accounts for ~90% of the 26% of the generics' contribution to gross margin – [2] Including dispensing fee – [3] Including commercial cooperation with generic companies. The preferred generics supplier ensures ~90% of total segment, making him the 1st contributor to the retail pharmacies' profits – [4] Including OTC and "lifestyle" Rx products, medical devices, food supplements, para-pharmacy products, etc. – [5] Remuneration for services corresponding to public health objectives (ROSP), new missions, etc.

The revitalization of sales (through the expansion of products and services offer) as well as the optimization of purchasing cost are the key levers to protect / increase retail pharmacies' profits

Standard income statement of retail pharmacies (2023)*



** Data estimated based on a sample of 1,832 retail pharmacies*

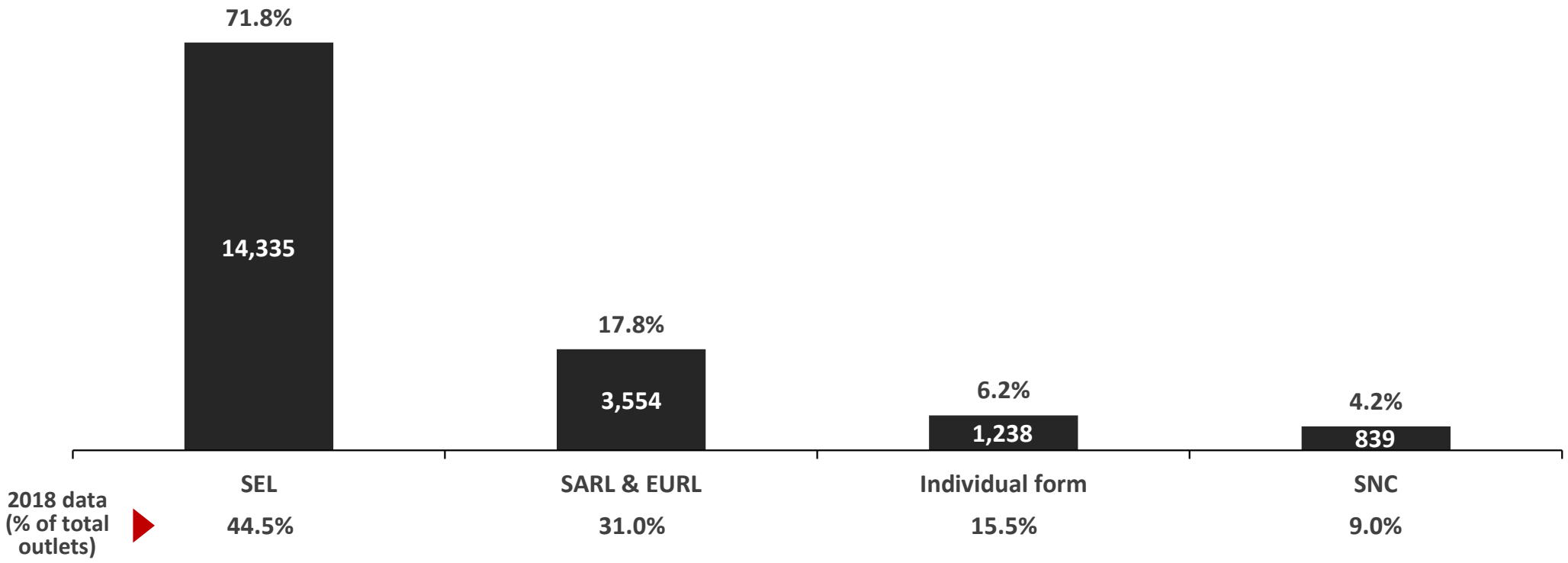
Sources : CGP Experts Comptables (2024) – Interviews with accounting experts (July 2023) – Smart Pharma Consulting estimates

[1] Including rebates and commercial offers – [2] Before amortization, financial expenses and dues paid by the pharmacist owner – [3] Including social charges

In France, retail pharmacies are mostly organized as private companies (i.e., "SEL") or companies with limited legal liability (i.e., "SARL" or "EURL")

Breakdown of retail pharmacies by legal form (2018 – 2023)

As a % and extrapolated[1] number of retail pharmacies (2023)



SEL: "Société d'Exercice Libéral" (private practice company) – SARL: "Société A Responsabilité Limitée" (private company with limited liability) – EURL: "Entreprise Unipersonnelle à Responsabilité Limitée" (individual company with limited liability) – SNC: "Société en Nom Collectif" (collective partnership)

Sources: CGP Experts Comptables (2024) – Smart Pharma Consulting analyses

[1] Extrapolation to 19,966 based on the 1,832 retail pharmacies analyzed in 2023 by CGP Experts Comptables.

The room for improvement of retail pharmacies performance is important, but requires to rethink and reshape the role and the organization of pharmacies

Levers and solutions to improve pharmacies profits

Sources: Smart Pharma Consulting analysis

Retail pharmacies sales by product segment can be boosted by rigorously and systematically activating a certain number of levers

Levers and solutions to improve pharmacies profits

1 Increase of the product sales

Exemples of levers

Reimbursable drugs

- **Partnership with EHPADs** (Medico-social facilities housing the elderly dependent patients for whom care at home is no longer possible)

Non-reimbursable drugs

- **Self-medication:**
  - **Free access**
  - **Pharmaceutical advice**

Non-prescription-bounds (i.e. OTX and OTC)

- **Online sales**

Other healthcare products (non-drugs)

- Orthopedics
- Compression stockings
- Pregnancy tests
- Baby products
- Self-tests
- First aid
- Veterinary products
- Food supplements
- Hygiene and dermo-cosmetics
- Pain patches and compresses
- Urinary incontinence
- Medical devices (e.g., insulin pumps)
- Connected objects (e.g., electronic pillbox)
- Acoustics and Optics
- Home support (MAD)

Sources: Interviews with retail pharmacists and representatives from VTOs and professional unions – Smart Pharma Consulting analyses

In addition to their core business which is focused on drugs dispensation, pharmacists should carry out new missions, notably for patients suffering from chronic diseases

Levers and solutions to improve pharmacies profits

2 Expansion of the services offering

Extension of services

- **Regulatory framework:**
  - HPST law (2009)
  - National Pharmaceutical Agreement (2012)
  - National agreement on inter-professionality (2018)
  - "My Health 2022": Territorial reorganization of care (2019)

- **Supports** (tools – means – structures)**:**
  - Shared patient file (DP[1])
  - Connected health / Telemedicine / Telecare
  - Multidisciplinary Health Centers (MSP)
  - Healthcare networks

Prevention – Screening – Vaccination – Therapeutic education – Follow-up

- **For patients suffering from chronic diseases** (e.g., patients receiving anti-vitamin K treatments (AVK) or direct-acting oral anticoagulants (AOD), long-term illness (ALD), diabetes, asthma, high blood pressure, COPD, overweight, etc.)
- **Services paid by various stakeholders:**
  - National Health Insurance Fund / Private health insurers / Mutual health organizations
  - Regional health agencies (ARS)
  - Regional unions of HCPs (URPS)
  - Pharma companies

Sources: Interviews with retail pharmacists and representatives from VTOs and professional unions – Smart Pharma Consulting analyses

[1] *Dossier Patient*

With SRAs and CAPs, the lawmaker proposed a solution to regularize retrocession practices between retail pharmacies

Levers and solutions to improve pharmacies profits

3 Decrease of the purchasing expenses

	SRA[1]	CAP[2]	SRA + CAP
	Grouped procurement structure	**Buying group**	**SRA supported by a CAP**
Principle	▪ The SRA has no delivery points	▪ The CAP has delivery and storage points	▪ The SRA negotiates and invoices ▪ The CAP stores and delivers
Negotiation	▪ The agent negotiates maximum purchasing conditions	▪ The CAP sales manager negotiates purchasing conditions	▪ The commissioner / agent negotiates maximum purchasing conditions
Procurement	▪ The agent purchases on behalf of its pharmacy members	▪ The CAP purchases on its own behalf	▪ The commissioner / agent purchases on behalf of its pharmacy members
Delivery	▪ The pharma company delivers each retail pharmacy	▪ The pharma company delivers the CAP	▪ The pharma company delivers the CAP
Billing	▪ The pharma company invoices the SRA	▪ The pharma company invoices the CAP	▪ The pharma company invoices the SRA
Relationship with members	▪ The SRA invoices each pharmacy member	▪ The CAP delivers and invoices each pharmacy member	▪ The SRA relies on the CAP to store, delivers and invoices each pharmacy member

Note: The current regulations do not allow a retail pharmacist to buy large quantities of drugs to resell to colleagues

Sources: Interviews with retail pharmacists and representatives from VTOs and professional unions – Smart Pharma Consulting analyses

[1] Structure de Regroupement à l'Achat – [2] Centrale d'Achat Pharmaceutique

Retail pharmacists can improve the operating result of their pharmacy by professionalizing their management methods

Levers and solutions to improve pharmacies profits

4 Optimization of the management

1. Margin and price strategy

- Do not limit it to a linear multiplying coefficient policy by product class and apply:
  - A **lower coefficient** on **"sensitive" products** whose price is well known by customers, particularly those in free access
  - A **higher coefficient** on **prestige** products or on products requiring pharmaceutical **advice**
- The selling price must include a **profitability objective** and consider the **competition** on the **catchment area**

2. Rationalization of the activity and organization according to the catchment area

- **Adapt** the **offer** of products and services
- Adapt **opening hours** to customer expectations and competition
- **Optimize** the **layout** of the retail pharmacy to boost sales and improve circulation of customers in the selling point, based on supermarkets and hypermarkets model
- **Streamline staffing**, organization and staff time
- Assess the opportunity of **automating inventory management** (i.e., robots)

3. Professionalization of pharmacy management

- **Monitor the performance** of retail pharmacies thanks to few relevant KPIs[1]
- Follow, if needed, a postgraduate **training** of **retail pharmacy management** (e.g., MBA, master, university diploma, certificate)

4. Financial, accounting and tax optimization

- Improve **control** over **operating costs** and **stock rotation**
- Reduce **borrowing costs** (individual contribution, short-term loan, renegotiation of the loan, if needed)
- Evaluate **tax optimization** opportunities

5. Cost sharing

- **Mutualize the cost** of **support functions** (e.g., procurement, IT, quality management, management control, treasury) with other retail pharmacies thanks to:
  - The membership in VTOs
  - The creation of holdings of SELs[2] (e.g., SPFPL[3])

Sources: Interviews with retail pharmacists and representatives from VTOs and professional unions – Smart Pharma Consulting analyses

[1] Key Performance Indicators – [2] Société d'Exercice Libéral" (private practice company) – [3] Société de Participations Financières de Professions Libérales (holding for liberal professions)

French retail pharmacists are currently experiencing a transformation which is turning them from drugs dispensers to providers of high-quality health and wellness services

Strategic priorities for retail pharmacists (1/2)

Trends

1. **Government pressure** on **prices** and **volumes** of **reimbursable drugs**
2. Progressive **transfer** of the **pharmacist regulated margin** on the **price of drugs** to **fees for service**
3. **Younger generations** of **physicians** seeking to **limit** the **number** of **drugs prescribed**

Implications for retail pharmacists

1

- Shift from "**neighborhood pharmacists**" focused on **drug delivery**…
- … to "**health center pharmacists**" delivering **high quality services**:
  - **Prevention** / **screening** (e.g., colorectal cancer)
  - **Education** and **monitoring** of **patients** (e.g., interviews on compliance, safety, etc.)
  - **Vaccination** (e.g., influenza)
- …offering **attractive prices** for non reimbursed products (e.g., OTC, hygiene and cosmetic products)
- … and developing **customer loyalty programs** (for non-reimbursed products purchase) to retain their customers

Sources: Interviews with retail pharmacists and representatives from VTOs and professional unions – Smart Pharma Consulting analyses

Pharmacists will be more and more at the cornerstone of a coordinated management of patients, notably in rural areas deserted by physicians

Strategic priorities for retail pharmacists (2/2)

Trends

4 **Shift** from **hospital** to **ambulatory** care

5 **Aging** of the population / Increase of **chronic diseases**

6 **Medical desertification** in some **rural** areas

7 **IT developments** (e.g., shared patient file, telemedicine, telecare)

2

Implications for retail pharmacists

- Need for an **efficient coordination** of pharmacists with **all key stakeholders** involved in the management of patients at **local** level, notably:
  - Physicians (GPs and specialists)
  - Nurses
  - Physiotherapists
  - Occupational therapists
  - Medical devices providers
- **Business extension** on dynamic segments, such as:
  - Home care
  - Home delivery
  - Insulin pumps
  - Treatments for sleep apnea
- Partnership with **EHPADs**[1]

Sources: Interviews with retail pharmacists and representatives from VTOs and professional unions – Smart Pharma Consulting analyses

[1] *Etablissements d'Hébergement pour Personnes Agées Dépendantes (residential care homes for the elderly)*

To reinforce their economic performance, pharmacies should boost the sales of their free-pricing products, along with selected paying services, such as vaccination, if they have available staff

Key Takeaways

1. Relatively low turnover of retail pharmacies in France due to a high density of outlets, low prices of reimbursed drugs and a narrow list of items allowed to be sold

2. Strong reimbursable segment growth driven by expensive drugs despite CEPS[1] price cuts, and fees dynamics corresponding to the development of services

3. Although retail pharmacies' profitability slightly decreased as a percentage of their sales over the 2018-2023 period, their profits were maintained in absolute terms

4. If larger retail pharmacies exhibit higher EBITDAs, the latter decreased from 12.4% to 11.4% between 2018 and 2023

5. Retail pharmacists are experiencing a transformation which is turning them from drugs dispensers to providers of high-quality health and wellness services

6. Pharmacists will be more and more at the cornerstone of a coordinated management of patients, notably in rural areas deserted by physicians

Sources: Smart Pharma Consulting

[1] French drug pricing committee

Smart Pharma
CONSULTING

Rare Diseases on the French Market

Case study: Narcolepsy

March 2024

Smart Pharma Consulting proposes a review of rare diseases management on the French Market with the implications for pharma companies and the specific study of the narcolepsy

Introduction

Context

- With 3 million people affected in France (i.e., 4.4% of the population), rare diseases are a major public health issue
- 50% of people concerned benefit from a proper diagnosis
- 25% of them must wait, on average, 4 years before getting a reliable diagnosis
- For 95% of the ~7,000 rare diseases identified, there is no curative treatments

Objectives

- The objectives of this study are to:
  - Review the conditions of rare diseases management…
  - … and of market access for orphan drugs in France
  - Analyze the organization of the different stakeholders
  - Illustrate the current situation through the study of one rare disease: the narcolepsy

Methodology

- Overview of the rare disease market in France:
  - Rare diseases prevalence
  - Rare disease management and healthcare organization
  - Market access conditions of orphan drugs
  - Market challenges and KSFs for pharma companies
- Case study: Narcolepsy :
  - Disease definition
  - Stakeholders: mapping and analysis
  - Market size, structure and dynamics (2019 – 2023)
  - Market drivers and limiters

Sources: Agence Nationale de la Recherche (website 2024) – Smart Pharma Consulting analyses

Rare diseases prevalence is defined as < 1/2,000 affected individuals, corresponding to ~3,000 patients in France, for which pharma companies try to develop orphan drugs

Definitions

	European Union	France
Rare diseases	▪ Definition: population **< 1/2,000** ▪ Prevalence: ~ **36 million** patients	▪ Definition: population **< 1/2,000** ▪ Prevalence: ~ **3 million** patients
Orphan drugs	▪ Drugs for **prevention**, **diagnosis** or **treatment** of **rare diseases**, which respond to **public health need** ▪ **Low expected sales** may **prevent** pharma companies to **develop** orphan drugs under **normal market conditions** ▪ **European regulation**[1] promotes **research**, **development** and **marketing** of orphan drugs	
Orphan diseases	▪ Diseases **not adopted** by pharma companies as they provide **little financial incentive** for the private sector: – **Rare diseases** – **Common diseases** that have been **ignored** (e.g.; tuberculosis, cholera, typhoid, malaria) as they are more prevalent in developing countries than in the developed world	

Sources: Orphanet (March 2024) – French Ministry of Labor, Health and Solidarities (July 2023) – European Commission (March 2024) – Smart Pharma Consulting analyses

[1] *N° 141/2000 voted by the European Parliament in December 1999*

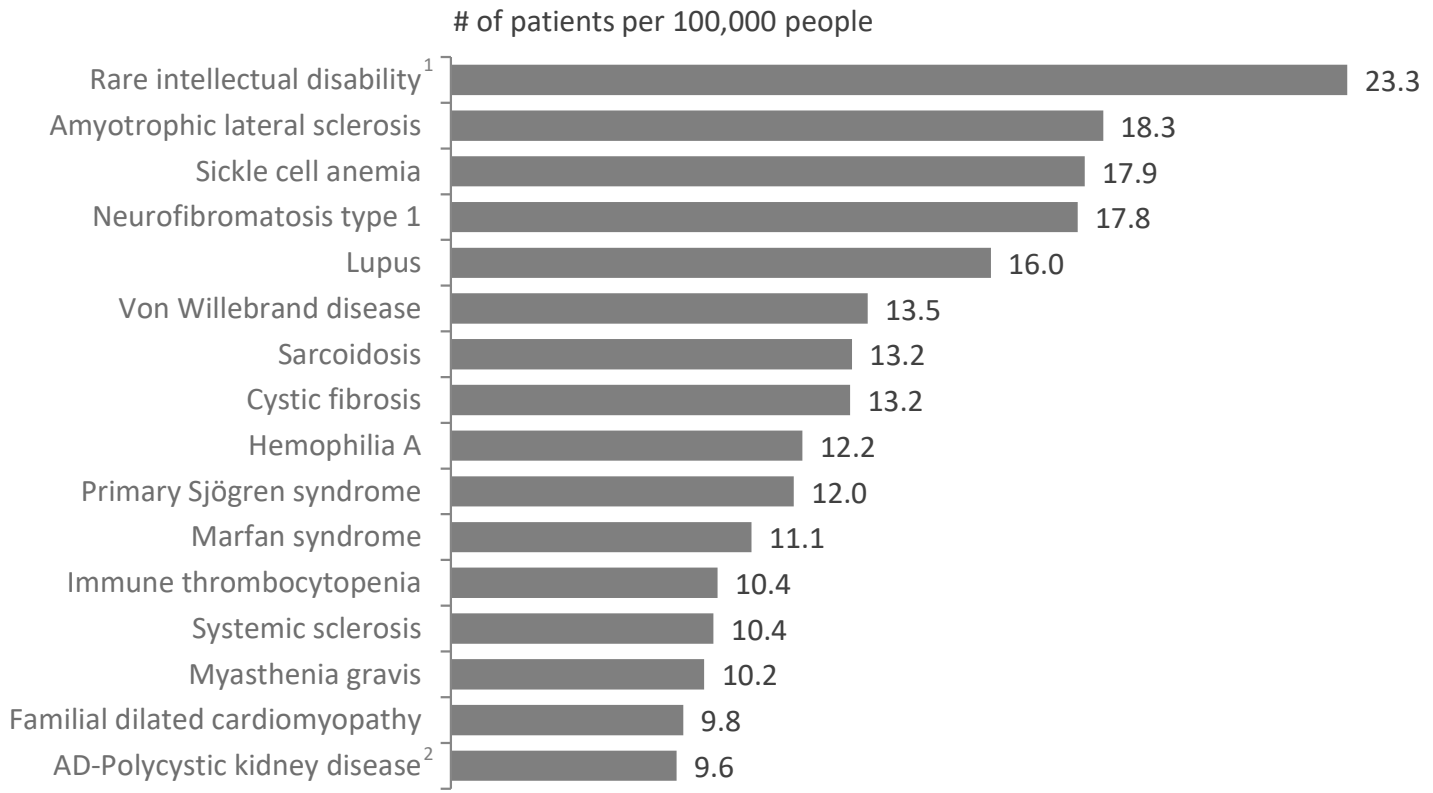
Prevalence rates per condition are low and may be underestimated due to difficult diagnosis, but their collective impact on population and healthcare systems is significant

Rare diseases overview

EU key figures (2023)

- **~36 million** patients
- **~7,000** existing rare diseases
- **~80%** of rare diseases are of **genetic** origin
- **~5%** of rare diseases treated with **~ 200 approved** drugs
- **~70%** of rare diseases starting in **childhood**
- **60%** of **approved orphan drugs** are for **pediatric** use

Most prevalent rare diseases in France (2023)



Note: ~400 million patients suffering of rare diseases in the world

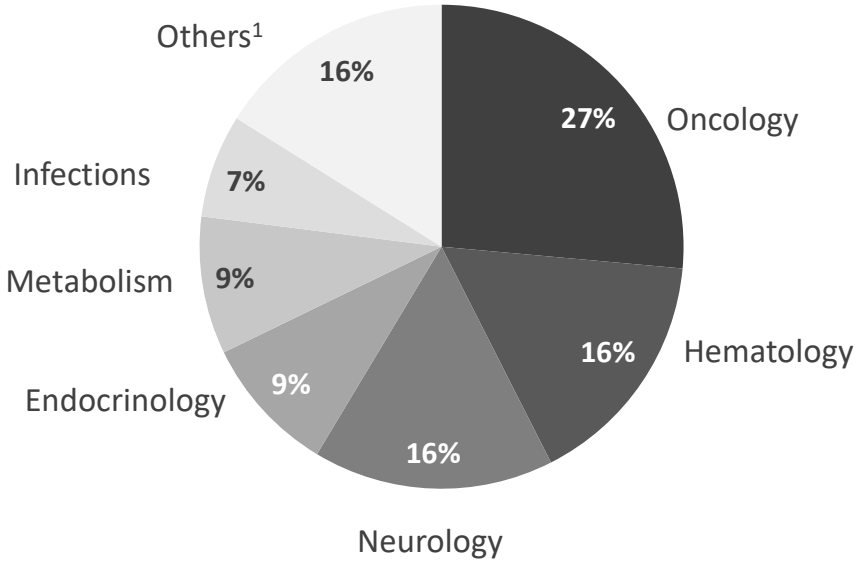
Sources: Banque Nationale de Données Maladies Rares (Nov. 2023) – European Commission (March 2024) – Global Genes (March 2024) – Smart Pharma Consulting analyses

[1] Non-syndromic – [2] Autosomal dominant polycystic kidney disease

Oncology, hematology and neurology are the three top therapeutic areas of rare diseases treated, accounting for ~59% of EMA orphan drugs approvals between 2019 and 2023

Main therapeutics areas covered by orphan drugs (2019-2023)

Distribution of 2019-2023 EMA orphan drugs approvals by therapeutic area



Rare diseases – by therapeutic areas – for which orphan drugs have been approved

- **Oncology:** most approvals concern drugs for blood cancers (e.g.; AML[2], CML[3], DLBCL[4], MCL[5]), gastrointestinal cancers, glioma or multiple myeloma
- **Hematology:** anemia, hemophilia, myelofibrosis or sickle cell disease
- **Neurology:** Duchenne muscular dystrophy, Friedreich's ataxia, Lennox-Gastaut syndrome, generalised myasthenia gravis or spinal muscular atrophy
- **Endocrinology:** acromegaly, acute hepatic porphyria, chronic hypoparathyroidism, Cushing's syndrome or growth hormone deficiency
- **Metabolism:** acid sphingomyelinase deficiency, Hutchinson-Gilford progeria syndrome, hyperargininemia or phenylketonuria
- **Infections:** chronic long-term hepatitis delta virus, cytomegalovirus, inhalational anthrax or invasive candidiasis

Sources: "Human medicines highlights", EMA (2019-2023) – Eurordis (March 2024) – Smart Pharma Consulting analyses

[1] Incl. allergology, dermatology, gastroenterology, hepatology, immunology, nephrology, ophthalmology, pneumology, rheumatology, transplantation and uro-nephrology – [2] Acute Myeloid Leukemia – [3] Chronic Myeloid Leukemia – [4] Diffuse large B-cell lymphoma – [5] Mantle cell lymphoma

Drugs should be granted the orphan designation by the COMP[1] (EMA[2]), then a centralized market authorization, before being approved by the ANSM[3] (which can also authorize an early access)

Market access – Marketing authorization

EMA

- On December 16, 1999, the European Parliament established the **COMP**, EMA's responsible **committee** for evaluating **applications** for **orphan designation**
- The COMP is committed to evaluate within 90 days whether the **orphan designation criteria** are met:
  - The drug must **treat**, **prevent** or **diagnose life-threatening** or **chronically debilitating** conditions
  - The **prevalence** of the disease must be ≤ **1 in 2,000** in the EU or it is **unlikely** that marketing the drug would generate sufficient **returns** to justify the required **investment**
  - The drug **must be of significant benefit** to the patients
- Drugs designated as **orphan[4] benefit from:**
  - **Protocol assistance**
  - **10-year** marketing **exclusivity[5]**
- Marketing application is then submitted to the EMA's CHMP (Committee for Medicinal Products for Human Use)

ANSM

- On March 31, 2004, the European Parliament determined that **all marketing authorizations** for **orphan medicines** in the EU had to follow the **centralized authorization**
- However, although the centralized procedure grants authorization in all European Union members, there is **no obligation** to market the drug in every Member State
- In France, the **ANSM** is responsible for issuing **marketing authorization**, based on a **benefit/risk** assessment
- Since July 2021, an **Early Access Authorization** (AAC[6]) can be granted to innovative drugs by the HAS[7], based on the ANSM's opinion on the presumptions of efficacy and security of the product
- Innovative **orphan** drugs are concerned by this AAC if there is **no other appropriate treatment available**, and if the **treatment cannot be delayed**

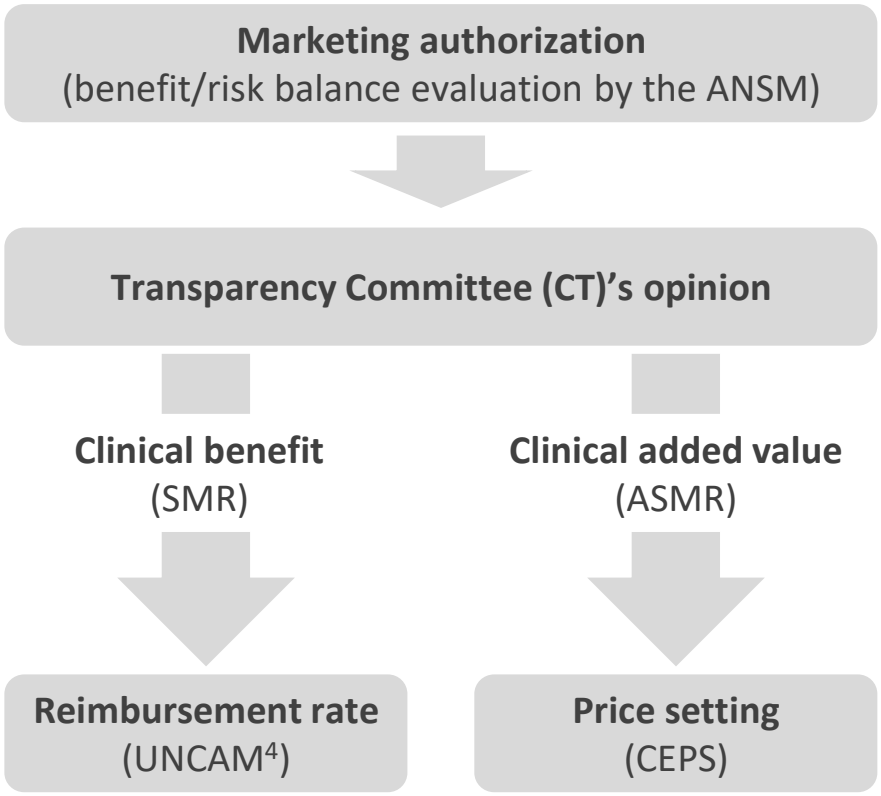
Sources: EMA website (March 2024) – Orphanet website (March 2024) – ANSM website (March 2024) – Smart Pharma Consulting analyses

[1] Committee of Orphan Medicinal Products – [2] European Medicines Agency – [3] Agence Nationale de Sécurité du Médicament – [4] Reassessment every 6 years – [5] In case of pediatric use, which corresponds to 60% of the orphan drugs, the marketing exclusivity is extended to 12 years – [6] Autorisation d'Accès Compassionnel – [7] Haute Autorité de Santé

After being granted their marketing authorization by the ANSM[1], orphan drugs should be evaluated by the Transparency Committee[2] before negotiating their price with the CEPS[3]

Market access – Pricing and reimbursement

Market access process in France



Transparency Committee (CT)

- In France, an orphan drug benefits from an **accelerated procedure**, reduced from **90** to **30 days** after dossier depot
- Orphan drugs **do not have** to present a **direct comparison** to another drug in their clinical trial to get the CT's opinion
- Regardless of the clinical added value (ASMR), orphan indications are covered by the **long-term illness provision** (ALD[5]) which grants full reimbursement of treatment

Economic Committee on Healthcare Products (CEPS)

- The **amendment** of the **framework agreement** signed in **April 2022** between the **CEPS** and the **LEEM**[6] streamlined pricing negotiations for **orphan drugs**:
  - **Relevant pricing comparators**[7] clarification
  - Possibility to set a **capped budget**[8]
  - **Price revision** if the number of patients evolves
  - **CEPS** authorization to be supported by **medical experts**

Sources: Transparency Committee website (March 2024) – CEPS website (March 2024) – National Health Insurance website (March 2024) — Smart Pharma Consulting analyses

[1] Agence Nationale de Sécurité du Médicament – [2] Commission de Transparence – [3] Comité Economique des Produits de Santé – [4] Union Nationale des Caisses d'Assurance Maladie – [5] Affections Longue Durée – [6] Les Entreprises du Médicament – [7] They must have the same indication as the orphan drug and be patent-protected – [8] To allow patient access to innovation while guaranteeing pharma companies list prices consistent with international prices

The rare diseases plans (PNMRs[1]) introduced by French health authorities for almost 2 decades aim to improve the diagnosis and the management of patients suffering from rare diseases

Rare diseases plans

2003

Law establishing PNMRs

PNMR2

- Improvement of **patient journey**
- Establishment of **rare diseases healthcare networks** …
- … Through the labeling of 23 **FSMRs**[2]
- Setting up of **European networks**

PNMR4*

- **Office-based HCPs' information** & **training**
- **Reduction** of **diagnostic wandering**
- Improved **life** and **care journey**
- **Access** to **treatments** and **innovations**
- **Database interoperability**

2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024

PNMR1

- Identification of **expert centers** in rare diseases
- Establishment of **orpha.net**, portal dedicated to rare diseases

PNMR3

- **Observatory** to fight against diagnostic wandering
- Creation of the national rare disease database (**BNDMR**[3]) to register patients
- Renewal of the labeling of **reference** and **competence centers**[4]

** PNMR4 launch expected in 2024*

Sources: French Ministry of Labor, Health and Solidarities (March 2024) – filieresmaladiesrares.fr (March 2024) – Smart Pharma Consulting analyses

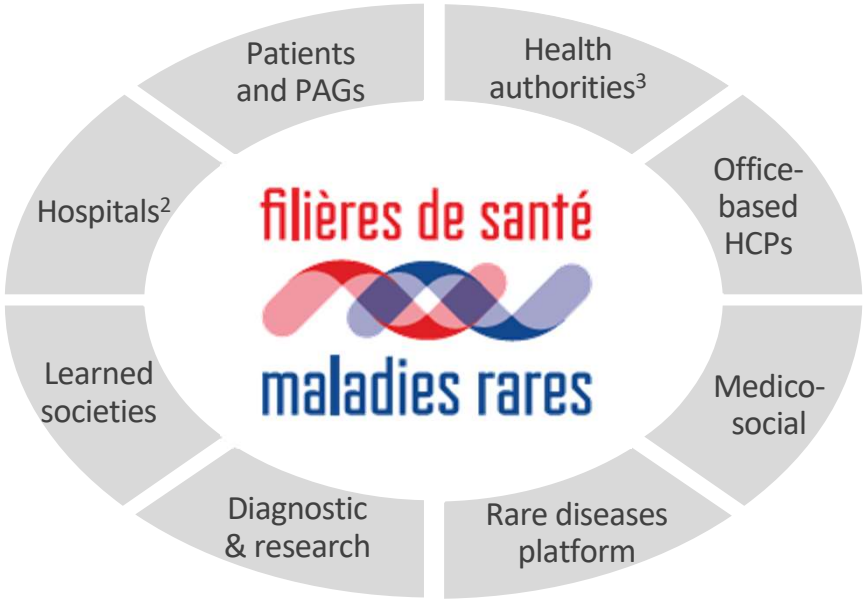
[1] Plan National des Maladies Rares – [2] Filières de Santé Maladies Rares – [3] Banque Nationale de Données Maladies Rares – [4] 2,311 centers as of March 2024 (in both mainland and overseas France)

Rare diseases healthcare networks (FSMRs[1]) ensure the coordination between each key stakeholder involved in the management of patients suffering from rare diseases

Rare diseases healthcare networks – Introduction

Description

- As part of the **PNMR2**, **23 FSMRs** are labelled in France
- Attached to **hospitals** and placed under the responsibility of **medical managers**, they **coordinate** a set of actors involved in the management of rare diseases patients:



Missions

#1	**Improve patient management** (e.g., development of epidemiological databases, initiatives to increase diseases awareness, medical practices harmonization, directories of experts)
#2	**Coordinate and encourage research** (e.g., fundamental, translational or clinical research)
#3	**Inform and train** (e.g. seminars or e-training to HCPs, communication to the general public, patients or their relatives)
#4	**Participate in European healthcare networks** (e.g. collaboration with rare diseases healthcare networks of other European countries)

Sources: filieresmaladiesrares.fr (March 2024) – Smart Pharma Consulting analyses

[1] Filières de Santé Maladies Rares – [2] Incl. reference and competence centers – [3] Incl. French Ministry of Labor, Health and Solidarities or regional health agencies

Each of the 23 rare diseases healthcare networks (FSMRs[1]) labeled in France has been built around a set of rare diseases with common aspects

Rare diseases healthcare networks – Mapping

filières de santé maladies rares

1 AnDDI-Rares — Development anomalies & intellectual disabilities

2 BRAIN-TEAM Filière Nationale de Santé — Rare diseases of the central nervous system

3 cardiogen — Hereditary or rare heart diseases

4 DéfiScience Maladies Rares du Neurodéveloppement FILIÈRE NATIONALE DE SANTÉ — Brain development & intellectual disabilities

5 fai2r — Autoinflammatory & autoimmune diseases

6 FAVA-MULTI — Vascular diseases with multisystem involvement

7 FILFOIE FILIÈRE DE SANTÉ MALADIES RARES DU FOIE DE L'ADULTE ET DE L'ENFANT — Rare liver diseases in children and adults

8 Filnemus Filière Neuromusculaire — Neuromuscular diseases

9 FILSLAN — Amyotrophic lateral sclerosis

10 fimarad — Rare dermatological diseases

11 FIMATHO Filière Santé Maladies Rares — Abdomino-thoracic malformations

12 FIRENDO — Rare endocrine diseases

13 G2M — Hereditary metabolic diseases

14 MaRIH — Rare immuno-hematological diseases

15 MCGRE — Red blood cells & erythropoiesis diseases

16 MHEMO — Constitutional Hemorrhagic diseases

17 Filière MUCO CFTR — Cystic fibrosis & CFTR[2] abnormality

18 NeuroSphinx FILIÈRE SANTÉ MALADIES RARES — Rare pelvic & spinal cord malformations

19 ORKiD — Rare kidney diseases

20 OSCAR — Rare diseases of bone, calcium & cartilage

21 RespiFIL Filière Maladies Respiratoires Rares — Rare respiratory diseases

22 SENSGENE Maladies Rares Sensorielles — Rare sensory diseases

23 FILIÈRE SANTÉ MALADIES RARES TeteCou MALFORMATIONS RARES TÊTE COU DENTS — Rare diseases of the head, neck & teeth

Sources: filieresmaladiesrares.fr (March 2024) – Smart Pharma Consulting analyses

[1] Filières de Santé Maladies Rares – [2] Cystic Fibrosis Transmembrane conductance Regulator

Founded in 2001 and financially supported by the AFM-Téléthon and French public funds, the rare diseases platform promotes synergies to advance the fight against rare diseases

Rare diseases platform

Description

- Platform **created in 2001** and **financially supported** by:
  - The **AFM-Téléthon**
  - The **French Ministry of Labor, Health and Solidarities**
- It **brings together** at the **Hospital Broussais** in **Paris**:
  - **Health** and **research professionals**[1]
  - Representatives of **PAGs**
  - Over a hundred of **employees** and many **volunteers**[2]
- Its **objectives** are to:
  - Have rare diseases recognized as a **public priority**
  - Support the creation and activity of rare diseases **PAGs** (e.g., training, information sharing and mutual support)
  - Develop **knowledge** and **information** for all audiences
  - Support and strengthen **research** on rare diseases
  - Offer **meeting-** and **work-spaces** for all stakeholders involved in the fight against rare diseases (e.g., ~450 meetings held in 2022 with ~6,000 participants)

Members

- **Six autonomous entities** form the platform:

AFMTÉLÉTHON INNOVER POUR GUERIR
Founder of the platform and main funding entity

Alliance maladies rares UNIS POUR VAINCRE
French collective of 240 PAGs

EURORDIS RARE DISEASES EUROPE
European federation of over 1,000 PAGs from 74 countries

FONDATION maladies rares
Foundation bringing together researchers & HCPs

MALADIES RARES INFO SERVICES
French service providing support & information on rare diseases

orphanet Inserm
Reference portal for rare diseases and orphan drugs

Sources: Rare disease platform website (March 2024) – Alliance Maladies Rares website (March 2024) – Eurordis website (March 2024) – Smart Pharma Consulting analyses

[1] E.g., physicians, geneticists, epidemiologists – [2] Specializing in the support for patients and families, information, IT, communication, support for associations, etc.

Narcolepsy which is characterized by excessive daytime sleepiness, with or without cataplexy, if properly diagnosed, can be treated by more or less specific drugs

Narcolepsy: Definition & Guidelines

CASE STUDY

Definition & Diagnosis

- **Chronic** disease, often starting during **childhood**
- Caused by **the loss of hypocretin neurons** and **low orexin A levels** in the cerebrospinal fluid
- Several **symptoms** can lead to suspicion of narcolepsy[1]:
  - Consistent ones: excessive daytime sleepiness
  - Inconsistent ones: hallucinations, sleep paralysis
- Narcolepsy are of two types:
  - **Type 1**: with cataplexy (loss of muscle tone)
    → Daily willingness to sleep during daytime for at least 3 months and tests
    → Cataplexy revealed by polysomnography or cerebrospinal fluid analyses
  - **Type 2**: without cataplexy
    → Diagnosis of exclusion based on at least a polysomnography and a Multiple Sleep Latency Test

Treatment

- Pharmacological solutions:
  - **Psychostimulants** and **antidepressants**[2] indirectly increase the levels of neurotransmitters (e.g., dopamine, noradrenaline)
    → Improve wakefulness & reduce sleepiness
  - **H3 histamine receptor antagonists** increase histamine concentration and activity in the brain
    → Improve wakefulness & reduce the frequency of cataplexy attacks
  - **CNS depressants** slow down brain activity by increasing the production of GABA neurotransmitter
    → Reduce the frequency of cataplexy attacks
- Non-pharmacological solutions: **lifestyle modifications**
- **Comorbidities** (metabolic, psychiatric, obstructive sleep apnea) are also to be treated

Sources: Plan National de Diagnostic et de Soins (Sept. 2021) – Smart Pharma Consulting analyses

[1] Diagnosis in children is based on the changes of habits of sleep and behavior (usually a hyperactivity disorder arises) – [2] Such as venlafaxine, fluoxetine and citalopram

Narcolepsy which affects ~20K-30K patients in France, is handled in specialized centers by neurologists and psychiatrists who have a limited number of drugs at their disposal

Narcolepsy: Stakeholders mapping

CASE STUDY

Market Access

- Marketing authorization:
  - Granted by the **EMA** (European Medicines Agency) for EU countries and then…
  - … transposed by the **ANSM**[1] for France
- Health technology assessment carried out by the **HAS**[2] based on the:
  - Clinical benefit (SMR)
  - Clinical added value (ASMR)
- Pricing decision by the **CEPS**[3]
- Reimbursement decision by the **UNCAM**[4]

Drugs prescribed

Mode of action	Type 1 narcolepsy	Type 2 narcolepsy	Hypersomnia & type 1 or 2 narcolepsy
Psycho-stimulant	▪ Methylphenidate[7] ▪ Amphetamines[7] ▪ Solriamfetol[8]		Modafinil
CNS depressant	Na oxybate		
Histamine receptor antagonist	Pitolisant		

Healthcare professionals (HCPs)

- 7 Centers of **Reference** for Rare Diseases (CRMR[5])
- 10 Centers of **Competencies** for Rare Diseases (CCMR[6])
- HCPs, mostly **neurologists** and **psychiatrists**

Patients

- Prevalence: **~20,000-30,000** – Incidence: **900 p.a.**
- **One national** PAG, the French Association of Narcolepsy-Cataplexy and Rare Hypersomnia (ANC[9])

Sources: French Ministry of Labor, Health and Solidarities (March 2024) – ANC and INSV websites (March 2024) – Smart Pharma Consulting analyses

[1] Agence Nationale de Sécurité du Médicament et des produits de santé – [2] Haute Autorité de Santé, via la Commission de la Transparence – [3] Comité Economique des Produits de Santé – [4] Union Nationale des Caisses d'Assurance Maladie – [5] Centre de Référence Maladies Rares – [6] Centre de Compétences Maladies Rares – [7] Indicated for pediatric Attention-Deficit/Hyperactivity Disorder, except for methylphenidate immediate-release, which is indicated for type 1 and 2 narcolepsy – [8] Also indicated for Obstructive Sleep Apnea – [9] Association Française de Narcolepsie Cataplexie et Hypersomnies Rares

The French Society of Sleep Research and Medicine promotes research and communicates guidelines to experts, while the National Institute of Sleep and Vigilance educates the public

Narcolepsy: Learned societies

CASE STUDY

French Society of Sleep Research and Medicine (SFRMS[1])

SFRMS
La Société Française de Recherche et Médecine du Sommeil

- Mission: to promote **fundamental** and **clinical research** through diverse fundings
- Members: **physicians**, other HCPs and **researchers**
- Key activities:
  - Organizes an annual Congress of Sleep
  - Communicates to experts their recommendations, guidelines and discoveries on sleeping disorders
- Part of:
  - The European Sleep Research Society (ESRS)
  - The World Association of Sleep Medicine (WASM)

National Institute of Sleep and Vigilance (INSV[2])

INSTITUT NATIONAL DU SOMMEIL ET DE LA VIGILANCE

- Mission: to ensure **prevention** and **education**
- Members: **association** of physicians and PAGs
- Key activities:
  - Communicates to authorities
  - Organizes the annual “Day of Sleep” throughout the French territory to raise awareness about sleep disorders
  - Offers an open access library of eBooks about sleep disorders, lifestyle advice, and educative supports for children and adults

Sources: National Plan of Diagnosis and Treatments (PNDS) for type 1 and 2 narcolepsy (Sept. 2021) – Respective websites – Smart Pharma Consulting analyses

[1] Société Française de Recherche et Médecine du Sommeil – [2] Institut National du Sommeil et de la Vigilance

Narcolepsy, once diagnosed, is treated in specialized centers, present throughout France, mostly by neurologists and psychiatrists

Narcolepsy: Centers of Excellence & Specialists

CASE STUDY

Hospitals & Specialists

- The French Society of Sleep Research and Medicine (SFRMS) issued approvals for **58 "Centers of Sleep"**[1] (mostly in hospitals and pluridisciplinary centers)
- Those centers can realize overnight polysomnographic recordings and evaluate patients' quality of sleep

Centers of Reference (CRMR[2]) & Competencies (CCMR[3])

- The national Center of Reference for Rare Diseases (CRMR) specialized in Narcolepsies & Rare Hypersomnia, located in Montpellier, elaborates the **National Plan** of **Diagnosis** and **Treatment** (PNDS[4]) for type 1 and type 2 narcolepsies and…
- … coordinates **16 experts centers** throughout France…
- …of which 6 of **Reference** and 10 of **Competencies**

Local HCPs (pre-diagnosis)

- Referring physician
- School nurse
- Psychologist…

Hospitals & Specialists (pre-diagnosis)

- Neurologists & neuropediatricians
- Psychiatrists & child psychiatrists

CRMR & CCMR (treatment and follow-up[4])

- Neurologists & neuropediatricians
- Psychiatrists & child psychiatrists
- Neurophysiologists
- Pulmonologists

Sources: National Plan of Diagnosis and Treatments (PNDS) for type 1 and 2 narcolepsy (Sept. 2021) – BRAIN Team website – SFMS website – Smart Pharma Consulting analyses

[1] As of March 2024 – [2] Centre de Référence Maladies Rares – [3] Centre de Compétences Maladies Rares – [4] Plan National de Diagnostic et de Soins – [5] Including treatment for comorbidities (e.g., metabolic, neuropsychiatric, sleep apnea)

There is one national PAG for narcolepsy, structured around local antennas, and complementary to associations for rare diseases

Narcolepsy: PAGs

CASE STUDY

French Association of Narcolepsy-Cataplexy and Rare Hypersomnia (ANC[1])

- **One national PAG** only, created in the national Center of Reference for Rare Diseases (CRMR[2]) of Montpellier
- The association acts through **local antennas** around **three missions**:
  - **Inform the public**, the diagnosed patients and their families on every aspect of the disease
  - **Help patients** in their lifestyle changes (e.g., work life adjustments)
  - **Promote research** of causes and solutions against the disease

Other associations

- Global, European and national associations for **rare diseases** (e.g., Rare Diseases Alliance[3] in France and Eurordis at the European level):
  - **Promote** better **information** and **diagnosis** pathways
  - **Organize meetings** for various stakeholders
  - **Contribute** to **research** through **fundraising**
- Certain Regional Health Authorities (ARS[4]) finance **regional associations**, such as the Morpheus Network[5] in the Parisian area

Sources: ANC, Alliance Maladies Rares and Réseau Morphée respective websites – Smart Pharma Consulting analyses

[1] Association Française de Narcolepsie Cataplexie et Hypersomnies Rares – [2] Centre de Référence Maladies Rares – [3] Alliance Maladies Rares – [4] Agence Régionale de Santé – [5] Réseau Morphée

Most EMA-approved drugs are CNS depressants or psychostimulants, indicated for narcolepsy with or without cataplexy, or ADHD[1] drugs used off-label

Narcolepsy: Competitors

CASE STUDY

Drug name	Sunosi	Wakix	Xyrem & Generics	Modiodal[5] & Generics	Ritalin[6] & Generics	Multiple[9]
INN	**solriamfetol**	**pitolisant**	**Na oxybate** (SXB)	**modafinil**	**Methyl-phenidate**	**amphetamines**
Mode of action	Psychostimulant	Histamine-3 receptor antagonist / inverse agonist	CNS depressant	Psychostimulant	Psychostimulant	Psychostimulant
Pharmaco-logical target	Dopamine & noradrenaline	Histamine H3	GABA-B	Dopamine & noradrenaline	Dopamine	Dopamine, noradrenaline & serotonin
Company	Pharmanovia[2]	bioprojet	UCB[4]	teva	NOVARTIS	*Multiple*
EMA approval	**2020**	**2016**	**2005**	**~1992**	**~1955**	**~2012**
Indications	Type 1 and 2 narcolepsy or OSA[3]	Type 1 and 2 narcolepsy	Type 1 narcolepsy	Type 1 and 2 narcolepsy	Type 1 and 2 narcolepsy[7] / Pediatric ADHD[8]	Pediatric ADHD[8]

Sources: HAS (March 2024) – Smart Pharma Consulting analyses

[1] Attention-Deficit/Hyperactivity Disorder – [2] In-licensing agreement with Axsome Therapeutics (Feb. 2023) – [3] Obstructive Sleep Apnea: Syndrome d'Apnées-Hypopnées Obstructives du Sommeil – [4] Licensing agreement for Europe with Jazz Pharmaceuticals (July 2008) – [5] Trade names include Provigil, Modasomil, Modalert – [6] Trade names include Concerta, Quasym, Medikinet, Rubifen – [7] Methylphenidate immediate-release has the MA for type 1 and 2 narcolepsy – [8] Used off-label for narcolepsy – [9] Including Elvanse and Vyvanse

Among the potential new entrants, the TAK-861 (Takeda) for type 1 narcolepsy, has an innovative mode of action, agonizing the orexin receptor 2, and has shown promising results in a Phase IIb

Narcolepsy: Potential new entrants

CASE STUDY

Mazindol ER[1] (Quilience)

- Mode of action: CNS suppressant (dopamine & norepinephrine)
- For type 1 and type 2 narcolepsy
- Anorectic developed for obesity by Sandoz in the 60s

- POLARIS study, phase IIa completed (Jan. 2023) in the USA with 67 patients
  → Improvement of **cataplexy severity** and **EDS[2] reduction**
- **Two** ongoing **phase III** studies (AMAZE program)
  Estimated completion: January 2025

Samelisant (SUVN-G3031)

- Mode of action: histamine H3 receptor inverse agonist
- For cognitive impairment in type 1 and type 2 narcolepsy, Parkinson disease, Alzheimer's disease, schizophrenia

- **Phase II completed** (Oct. 2023) in the USA and Canada with 190 patients
  → Statistically significant and clinically meaningful **EDS[2] reduction**

TAK-861

- Mode of action: orexin receptor 2 agonist (OX2R)
- For type 1 narcolepsy

- Phase IIb completed with 112 patients (February 2024)
  → Statistically significant and clinically meaningful at 8 weeks of **wakefulness** shown with the **Maintenance of Wakefulness Test**, of **sleepiness** shown with the **Epworth Sleepiness Scale**, of the frequency of **cataplexy** shown with the **Weekly Cataplexy Rate**
- **Phase III** trials **to be initiated** in **2024**
- No Phase III for type 2 narcoleptic patients, but ongoing research to determine a possible use of TAK-861 for other indications

Enerisant (TS-091)

- Mode of action: histamine H3 receptor antagonist / inverse agonist
- For excessive daytime sleepiness in narcolepsy

- No optimal dose determined despite the completion of two Phase II trials (February 2022)

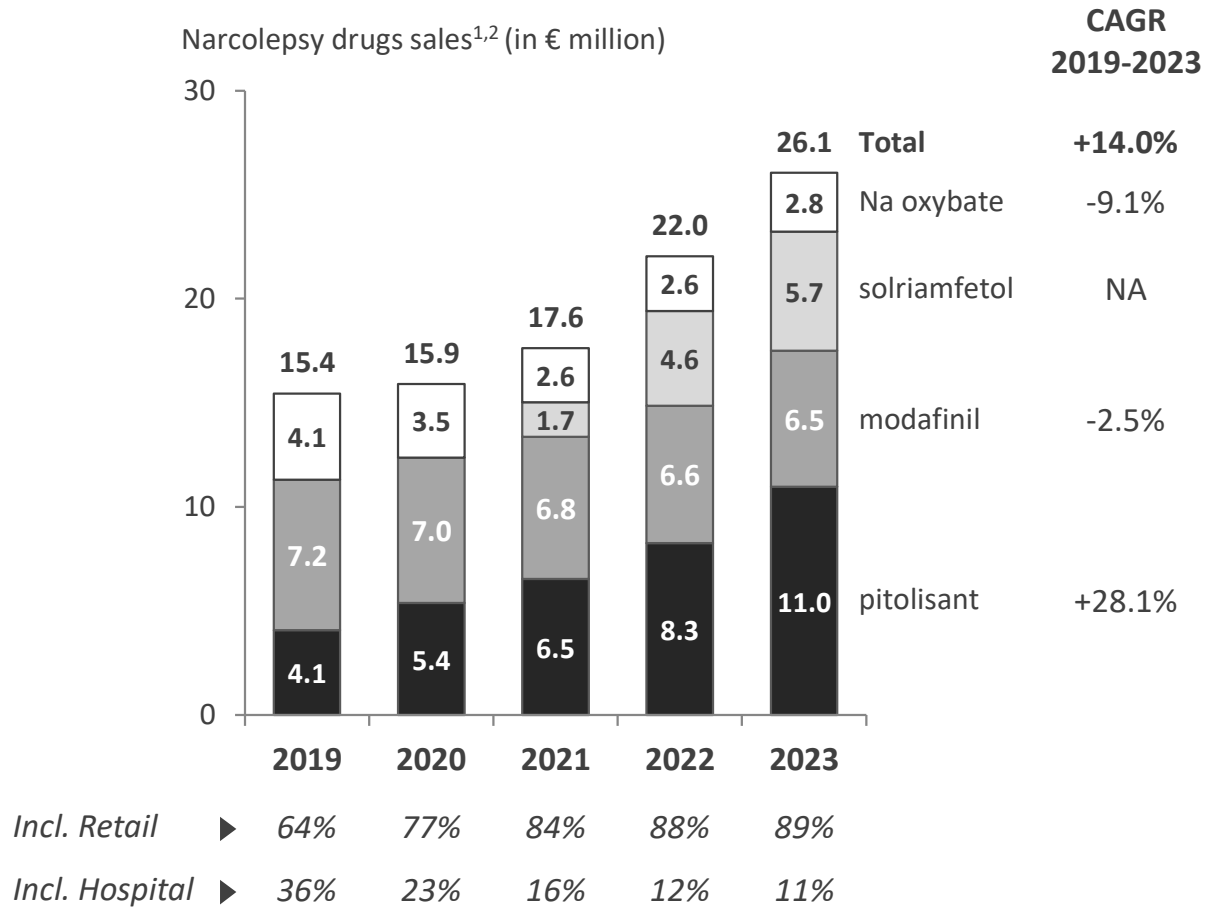
Sources: clinicaltrials.gov – Respective companies announcements – Smart Pharma Consulting analyses

[1] Extended release – [2] Excessive Daytime Sleepiness, based on the Epworth Sleepiness Scale (ESS) total score compared to placebo at day

The French narcolepsy market reached € 26 million in 2023, and its historical CAGR of +14.0% over the 2019-2023 period indicates a strong potential for new entrants

Narcolepsy: Market size – structure & dynamics (2019-2023)

CASE STUDY



- The French narcolepsy market is **growing** with a **CAGR** of **+14.0%** over the 2019-2023 period
- The **retail distribution** is an increasingly important part of the total sales, with an **89% penetration rate** in 2023:
  - Na oxybate is sold only in hospitals
  - >99% of pitolisant, modafinil and solriamfetol sales are through retail distribution
- **Pitolisant** shows the highest market share (42% in 2023) and the fastest 2022-2023 growth (+32.5%)
- A certain percentage of Solriamfetol sales comes from its indication for obstructive sleep apnea

Sources: GERS (2019-2023) – Smart Pharma Consulting analyses

[1] Ex-factory sales before rebates and taxes – [2] Excluding products prescribed off-label

The success in the orphan drugs market depends on the capacity of pharma companies to develop creative and hands-on approaches focused on HCPs, patients and caregivers needs

Market challenges & implications for pharma companies

Rare disease market challenges

Each disease specificity

Implications

- Develop **in-dept market insights**:
  - What is the disease **prevalence**?
  - What is the **patient journey** (from symptoms to treatment)?
  - What **treatment centers** and type of **physicians** handle the disease?
  - Are there international or national **PAGs**[1]?
  - Is there a **patients' network**?
  - Are there any decent **sources of information** available to these patients?
  - What are the **barriers** patients might face in accessing treatment?
- Adopt a **holistic approach** by developing close relationships **with** involved **stakeholders**[2]

Under-diagnosis

Implications

- Pharma companies should help **HCPs**, **PAGs** and **patients** collect information that might be useful to characterize **typical symptoms** of the disease which is **not yet diagnosed**
- **Map** the **patient journey** to identify points in care management to educate **physicians** on their **patient profile**
- In case of low **diagnostic rate**, pharma companies could distribute **free diagnostic tests**
- Other possible **disease awareness initiatives**:
  - **Medical congresses**
  - **Forums** and **websites** to share data
  - Quality **interactions** with **medical community**
  - **Early access** programs

Strong patients' engagement

Implications

- Propose a **tailor-made approach** – around & beyond the drug – as unmet needs of **rare diseases stakeholders** are high
- **Co-create services** such as:
  - **Information** re. patients' **condition** and current **treatment options**
  - **Connection** with **KOLs** / **specialists**
  - Building of the **medical community**
  - Development of **early access programs**
- Provide **comprehensive** information and **address** the following **topics**:
  - Therapy access
  - Patients-assistance programs
  - Clinical nursing support
  - Disease education
  - Lifestyle management

Sources: "How to successfully launch a rare disease drug", McKinsey (2018) – "A nuanced message: marketing to the rare diseases community", Pharma Voice (2017) – Smart Pharma Consulting analyses

[1] Patient advocacy groups – [2] Payers, policy markers, HCPs, PAGs, patients, care givers, etc.

Pharma companies operating on the orphan drugs market in France should adopt a "start-up spirit", offer their stakeholders[1] second to none services, around and beyond their drugs

Key success factors on the orphan drugs market

Business Strategy & corresponding tactics

Market access

- Early stage interactions with **EMA** and French **health technology assessment (HTA) bodies** to agree on **clinical protocols** and **medico-economic evaluation**, respectively, are particularly important

Medical Affairs – Marketing & Sales

- **Close interactions** with academics, clinicians, PAGs and health authorities **are imperative** to be **successful** on the **rare diseases** market, so that **to join forces for earlier diagnosis** and **better** patient **management**
- Medico-marketing and sales teams should **focus** on **generating** and **disseminating data**, while **adopting** a **holistic approach** by offering specific **around / beyond** the **drug services** for HCPs and patients

Organization

- Operating on **rare diseases markets** requiring **specific skills** and a **strong engagement** with various key stakeholders …
- … it is essential for pharma companies to set up a fully dedicated organization, with a **certain degree of autonomy**[2]
- The **structure** should remain **lean** and the **processes simple**
- **Cross-functional** operating mode and **excellence** in **execution** should be a **cultural priority** to **ensure operational efficiency**

Sources: Smart Pharma Consulting analyses

[1] Payers, policy markers, HCPs, PAGs, patients, care givers, etc. – [2] Ideally for the R&D, medico-marketing and sales activities. Other functions such as regulatory and governmental affairs, market access, finance, human resources, legal affairs, etc. should be shared

Rare diseases management being a governmental priority, despite healthcare budget constraints, the orphan drugs market will remain attractive for companies mastering the codes of the segment

Key Takeaways: Rare diseases market in France

- Rare disease prevalence: 3 M
- Sales: € ~4.3 B in 2023[1,2]
- Sales growth: 2023 – 2028: +9.5% p.a.

- Orphan drug designation and marketing authorizations are granted by the EMA[3]…
- … and this marketing authorization is then transposed in France by the ANSM[4]
- Orphan drugs can benefit from early access authorization granted by the HAS[5]
- Direct comparators are not required for orphan drugs clinical evaluation
- Rare diseases plans have been introduced by health authorities to improve diagnosis and patient management
- 23 rare diseases healthcare networks have been set to better coordinate the actions of involved stakeholders

- Key success factors for pharma companies:
  - Establishment of early and close links with stakeholders directly concerned with the rare disease
  - Development of services to facilitate an earlier diagnosis and a better management of patients treated by orphan drugs
  - Orphan drugs should preferably be managed in fully dedicated rare disease business unit, if part of a big pharma company

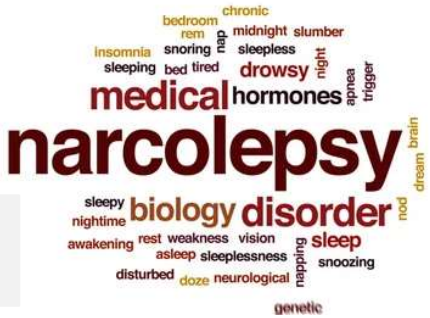
Sources: Smart Pharma Consulting analyses

[1] Ex-factory price – [2] The French orphan drug market represents 2.5% of the worldwide market – [3] European Medicines Agency – [4] Agence Nationale de Sécurité du Médicament – [5] Haute Autorité de Santé

The narcolepsy market in France is small but dynamic, and the unmet needs important, making it still attractive for newcomers with new mode of actions, such as TAK-861

Key Takeaways: Narcolepsy market in France

- Narcolepsy prevalence: 20K to 30K
- Narcolepsy incidence: 900 p.a.
- Sales: € ~26.1 M in 2023[1,2]
- Growth: 2019 – 2023: +14% p.a.
- Two learned societies: SFRMS[3] & INSV[4]
- One dedicated PAG: ANC[5]



- Disease pre-diagnosed by referring physician, school nurse, psychologists
- Disease treated by neurologists, neuro-pediatricians, psychiatrists, child psychiatrists…
- 17 expert centers for Narcolepsies and rare hypersomnia and 58 Centers of Sleep
- The drugs market is shared by 4 molecules, of which pitolisant is the leader with 42% market share in value
- Amongst the newcomers, Mazindol which is the most advanced should be followed by Samelisant and TAK-861

Sources: Smart Pharma Consulting analyses

[1] Ex-factory price – [2] The narcolepsy drug market represents 0.6% of the French orphan drug market – [3] Société Française de Recherche et Médecine du Sommeil – [4] Institut National du Sommeil et de la Vigilance – [5] Association Française de Narcolepsie Cataplexie et Hypersomnies Rares

Smart Pharma
CONSULTING

French
Biosimilars Market

Key Success Factors

POSITION PAPER June 2019

This position paper provides key information and analyses to evaluate the French biosimilars market dynamics and the key success factors for pharma companies

Context & objectives

Masterclass

- Sandoz, Teva or Hospira (Pfizer), which have pioneered the biosimilars market in France, have placed great hopes in its development
- However, 12 years down the road, the achievement of these precursors and of the followers can be regarded as somewhat below expectations
- *Smart Pharma Consulting*, which has developed a robust experience at analyzing and advising pharma companies on the biosimilars market, proposes to:
  1. Analyze the biosimilars market structure and dynamics
  2. Review the French regulatory environment
  3. Share insights regarding customers behaviors
  4. Evaluate the competitive landscape and the key success factors
  5. Estimate 2018 – 2023 market growth

Sources: Smart Pharma Consulting

The biosimilars development on the French market is driven by the prescription of physicians who are encouraged by health authorities and certain hospital managers

Stakeholders involved in the French biosimilars market

Health Authorities & Payers[1]

- Health authorities and payers have introduced a series of measures to convince hospital and office-based physicians to prescribe more biosimilars, either as an initial treatment or as a switch
- The Ministry of Health has set the objective of achieving 80% biosimilar penetration by 2022

Office

Hospital

Pharmacists

Physicians

- Physicians' prescription of biosimilars is very different according to the product considered
- Hospital pharmacists play a role in purchasing

Rx

Dispensation

Patients

- Patients and PAGs are still wary regarding the prescription of biosimilars
- They want to be informed in a transparent manner

Retail pharmacists

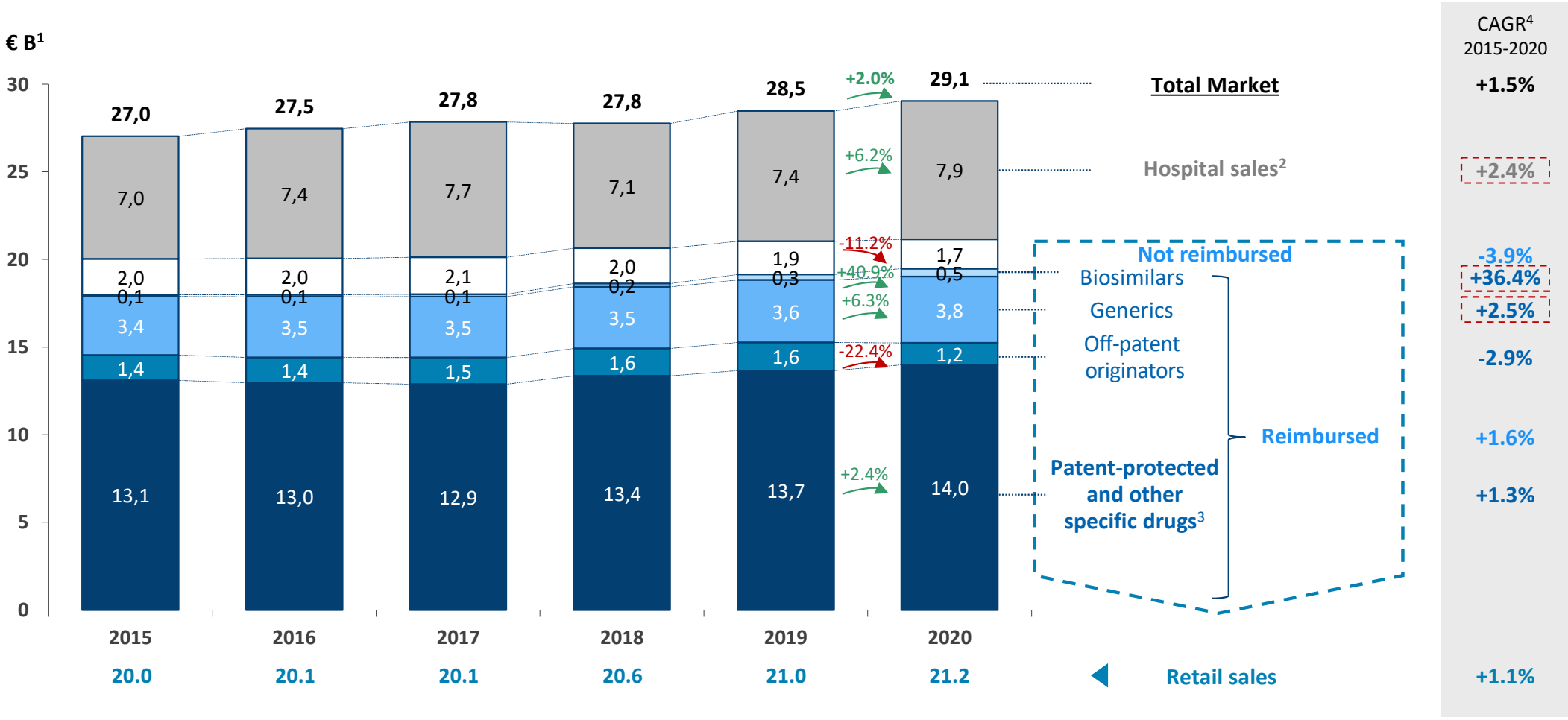
- Retail pharmacists are divided regarding the substitution of biological drugs

Sources: Smart Pharma Consulting

[1] *National Health Insurance Fund*

Since 2015, spending on drugs has been mainly driven by hospital sales and by generics and biosimilars delivered in retail pharmacies

Evolution of drugs sales by segment (2015 – 2020)

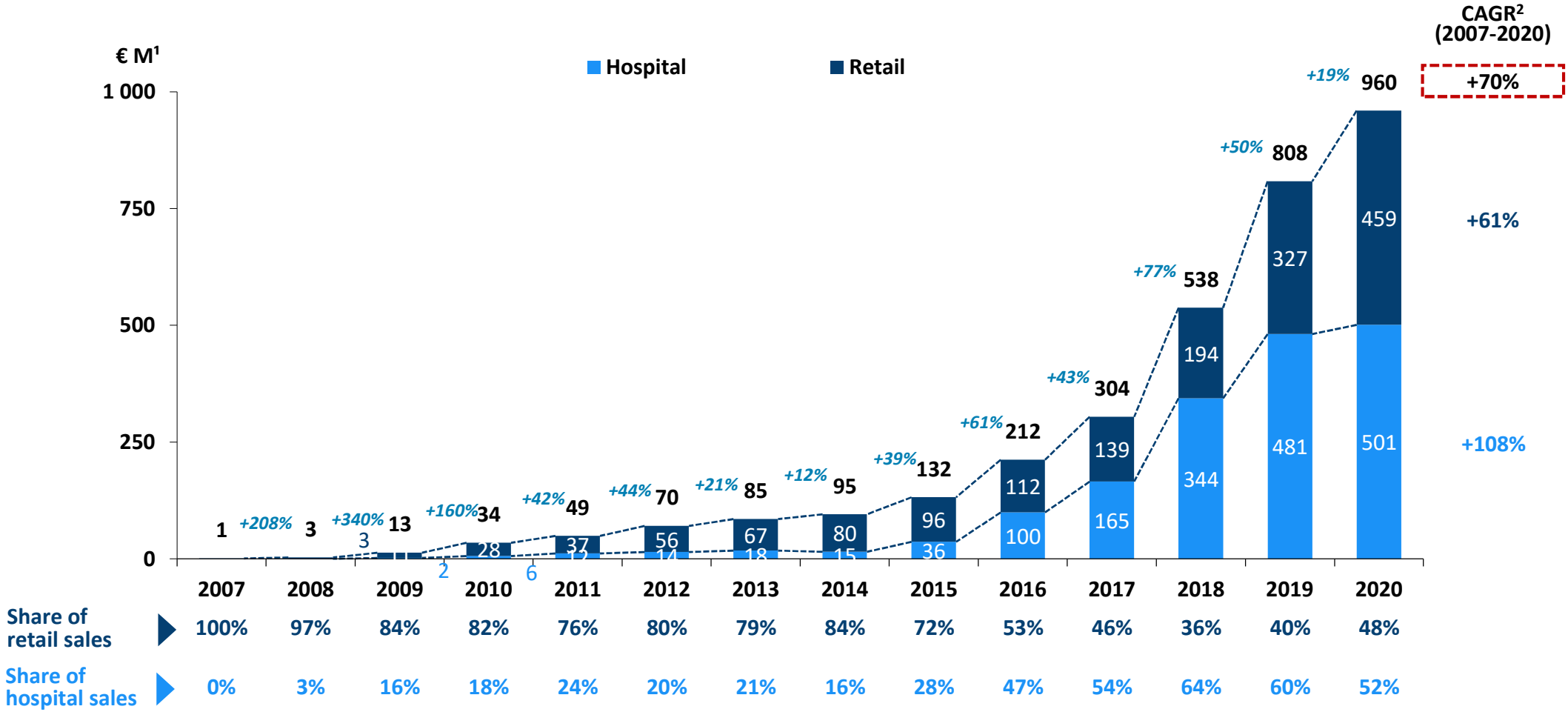


Sources: GERS – Smart Pharma Consulting analyses

[1] Constant ex-factory prices – [2] Estimated rebated sales including hospital sales of biosimilars, products invoiced on top of "T2A"and reassigned medicines – [3] Sales of drugs whose patent has not expired and of other specific products (e.g., calcium, sodium, potassium, paracetamol) – [4] Compound annual growth rate

Biosimilars, whose first products were launched in France in 2007, achieved sales for a total amount of € 960 M in 2020

Evolution of the biosimilars market (2007 – 2020)

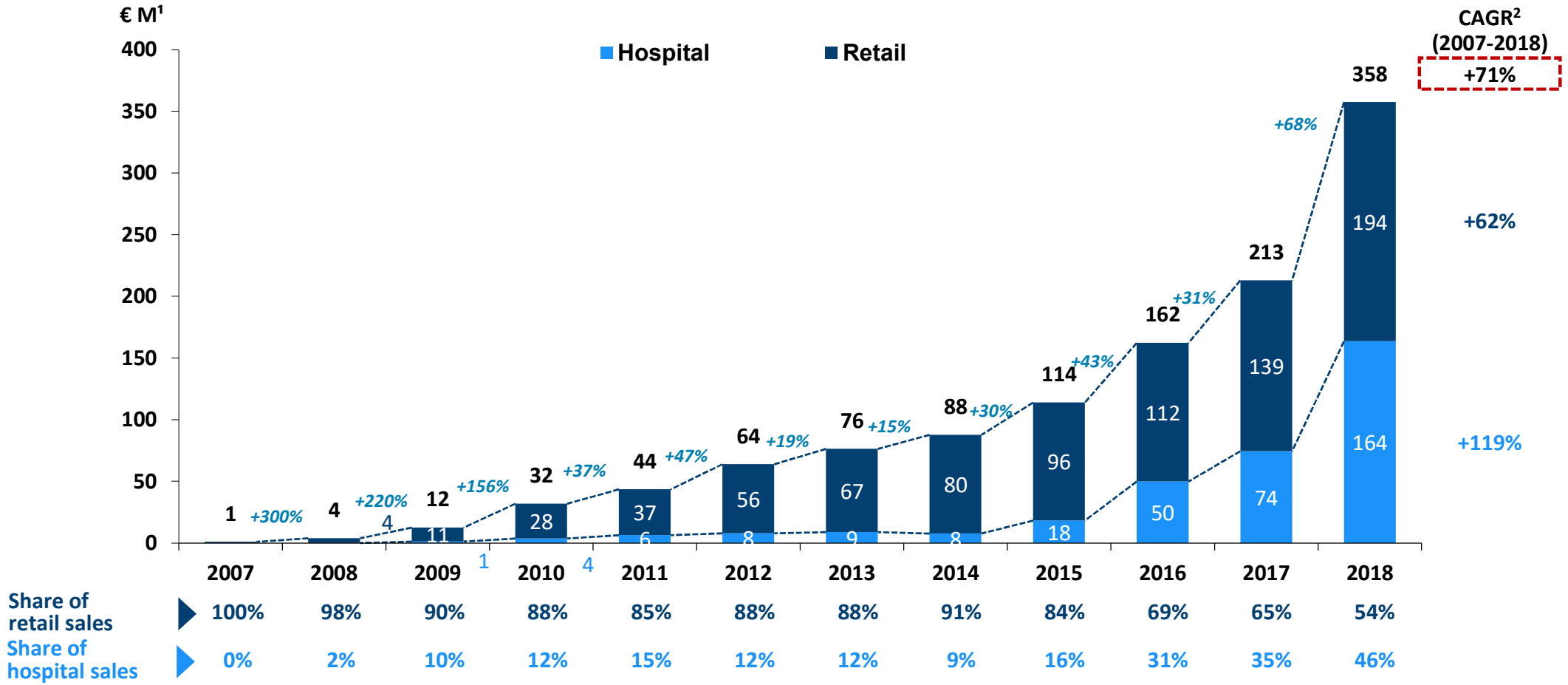


Sources: GERS – Smart Pharma Consulting analyses

¹ Ex-factory prices excluding rebates and taxes – ² Compound annual growth rate

When considering the rebates granted to hospitals on list prices, the 2018 biosimilars market reached € 358 M and the hospital sales are reduced to 46% of the total

Evolution of the biosimilars market (2007 – 2018) – Net prices



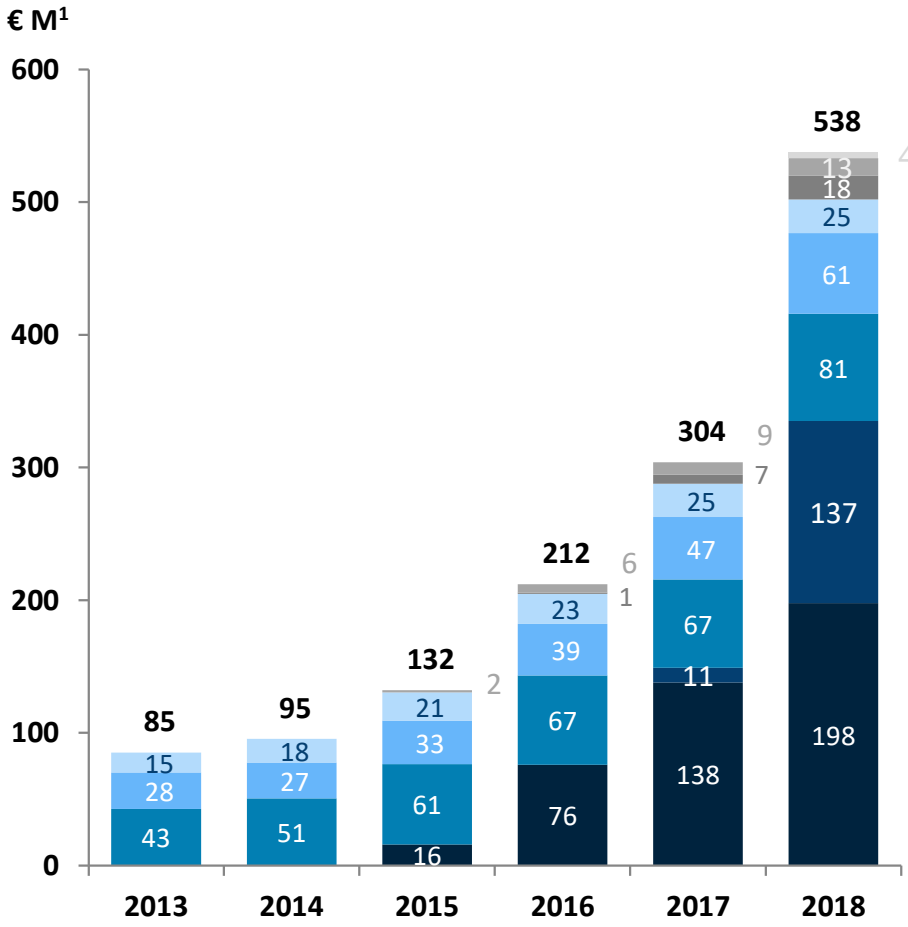
Note: In 2016, 2017 and 2018, the net prices were respectively 50%, 55% and 52% lower than the ex-factory prices excluding taxes and rebates (mainly through tenders) on the hospital market. The rebates granted in the retail market are considered as negligible

Sources: GERS – Smart Pharma Consulting analyses

¹ Net prices = Ex-factory prices excluding taxes and including rebates – ² Compound annual growth rate

In terms of therapeutic classes, anti-TNFs dominate the French biosimilars market, followed by monoclonal antibody antineoplastics and colony-stimulating factors

Distribution of the biosimilars market by therapeutic class (2013 – 2018)



	CAGR[2] 2013-2018	2017-2018 growth	Market share 2013	Market share 2018
Total market	**+44.5%**	**+76.9%**		
Fractionated heparins[3]	N/A	N/A	0.0%	0.8%
Gonadotrophins[4]	N/A	+39.6%	0.0%	2.5%
Human insulins[5]	N/A	+161.9%	0.0%	3.3%
Growth hormones[6]	+11.2%	+1.9%	17.6%	4.7%
Erythropoiesis-stimulating agents[7]	+17.1%	+29.0%	32.4%	11.3%
Colony-stimulating factors[8]	+13.7%	+21.5%	50.0%	15.0%
Monoclonal antibody antineoplastics[9]	N/A	N/A	0.0%	25.5%
Anti-TNFs[10]	N/A	+43.3%	0.0%	36.8%

Sources: GERS – Smart Pharma Consulting analyses

[1] Ex-factory prices excluding rebates and taxes – [2] Compound annual growth rate – [3] Enoxaparin sodium – [4] Follitropin alfa – [5] Insulin glargine – [6] Somatropin – [7] Epoetin – [8] Filgrastim and pegfilgrastim – [9] Rituximab and trastuzumab – [10] Adalimumab, etanercept and infliximab

With 3 biologic originators whose patent has expired, 10 biosimilars launched by 7 pharma companies, anti-TNF biosimilars sales reached € ~307 M in 2020

Anti-TNF biosimilar drugs marketed in France (2020)

INN[1] (Originator)	Product name	Pharma company	Launch date	Hospital sales[2]	Retail sales[2]	Total sales[2]	Biosimilars penetration[3]
Infliximab (Remicade, MSD)	▪ Inflectra	▪ Pfizer	▪ Feb. 2015	€ 85.3 M	€ 0.0 M	€ 85.3 M	80.6%
	▪ Flixabi	▪ Biogen	▪ Jan. 2017	€ 44.0 M	€ 0.0 M	€ 44.0 M	
	▪ Remsima	▪ Biogaran / Celltrion	▪ Feb. 2015	€ 36.8 M	€ 0.0 M	€ 36.8 M	
	3 biosimilars	3 companies		€ 166.1 M	€ 0.0 M	€ 166.1 M	
Adalimumab (Humira, AbbVie)	▪ Amgevita	▪ Amgen	▪ Oct. 2018	€ 1.6 M	€ 45.8 M	€ 47.4 M	30.5%
	▪ Imraldi	▪ Biogen	▪ Oct. 2018	€ 0.3 M	€ 17.1 M	€ 17.4 M	
	▪ Hulio	▪ Viatris	▪ Feb. 2019	€ 0.1 M	€ 15.5 M	€ 15.6 M	
	▪ Idacio	▪ Fresenius Kabi	▪ Sep. 2019	€ 0.1 M	€ 5.6 M	€ 5.7 M	
	▪ Hyrimoz	▪ Sandoz	▪ Mar. 2019	€ 0.0 M	€ 4.2 M	€ 4.2 M	
	5 biosimilars	5 companies		€ 2.2 M	€ 88.2 M	€ 90.4 M	
Etanercept (Enbrel, Pfizer)	▪ Benepali	▪ Biogen	▪ Oct. 2016	€ 0.1 M	€ 39.4 M	€ 39.5 M	38.4%
	▪ Erelzi	▪ Sandoz	▪ Nov. 2017	€ 0.1 M	€ 10.4 M	€ 10.5 M	
	2 biosimilars	2 companies		€ 0.2 M	€ 49.8 M	€ 50.0 M	
Total	10 biosimilars	7 companies		€ 168.5 M	€ 138.0 M	€ 306.5 M	

Sources: GERS – Smart Pharma Consulting analyses

[1] International non-propriety name – [2] Ex-factory prices excluding rebates and taxes – [3] Biosimilar penetration in equivalent units in December 2020

With 3 biologic drugs from Roche whose patent has expired, 10 biosimilars launched by 6 companies, rituximab, trastuzumab & bevacizumab biosimilars sales reached € ~288 M in 2020

Monoclonal antibody antineoplastics biosimilar drugs marketed in France (2020)

INN[1] (Originator)	Product name	Pharma company	Launch date	Hospital sales[3]	Retail sales[3]	Total sales[3]	Biosimilars penetration[4]
Rituximab (MabThera, Roche)	▪ Truxima	▪ Biogaran / Celltrion	▪ Sep. 2017	€ 83.4 M	€ 0.0 M	€ 83.4 M	93.6%[5]
	▪ Rixathon	▪ Sandoz	▪ Jan. 2018	€ 38.5 M	€ 0.0 M	€ 38.5 M	
	2 biosimilars	2 companies		€ 121.9 M	€ 0.0. M	€ 121.9 M	
Trastuzumab (Herceptin, Roche)	▪ Trazimera	▪ Pfizer	▪ Jul. 2019	€ 45.3 M	€ 0.0 M	€ 45.3 M	95.8%[6]
	▪ Ontruzant	▪ MSD / Samsung Bioepsis	▪ Sep. 2018	€ 25.4 M	€ 0.0 M	€ 25.4 M	
	▪ Kanjinti	▪ Amgen / Allergan[2]	▪ Aug. 2018	€ 13.6 M	€ 0.0 M	€ 13.6 M	
	▪ Herzuma	▪ Biogaran / Celltrion	▪ Jul. 2018	€ 10.0 M	€ 0.0 M	€ 10.0 M	
	▪ Ogivri	▪ Viatris	▪ Apr. 2019	€ 6.3 M	€ 0.0 M	€ 6.3 M	
	5 biosimilars	5 companies		€ 100.6 M	€ 0.0 M	€ 100.6 M	
Bevacizumab (Avastin, Roche)	▪ Zirabev	▪ Pfizer	▪ Jul. 2020	€ 34.2 M	€ 0.0 M	€ 34.2 M	77.9%
	▪ Mvasi	▪ Amgen / Allergan[2]	▪ Jun. 2020	€ 31.1 M	€ 0.0 M	€ 31.1 M	
	▪ Aybintio	▪ MSD / Samsung Bioepsis	▪ Nov. 2020	€ 0.0 M	€ 0.0 M	€ 0.0 M	
	3 biosimilars	3 companies		€ 65.3 M	€ 0.0 M	€ 65.3 M	
Total	10 biosimilars	6 companies		€ 287.8 M	€ 0.0 M	€ 287.8 M	

Sources: GERS – Smart Pharma Consulting analyses

[1] International non-propriety name – [2] Acquired by AbbVie since May 8, 2020 – [3] Ex-factory prices excluding rebates and taxes – [4] Biosimilar penetration in equivalent units in December 2020 – [5] Excluding MabThera 1,400 mg subcutaneous form, which is not subject to biosimilars competition – [6] Excluding Herceptin 600 mg subcutaneous form, which is not subject to biosimilars competition

With 2 biologic drugs from Amgen whose patent has expired, 9 biosimilars launched by 7 pharma companies, G-CSF biosimilars sales reached € ~180 M in 2020

Colony-stimulating factors biosimilar drugs marketed in France (2020)

INN[1] (Originator)	Product name	Pharma company	Launch date	Hospital sales[2]	Retail sales[2]	Total sales[2]	Biosimilars penetration[3]
Filgrastim (Neupogen, Amgen)	▪ Zarzio	▪ Sandoz	▪ Oct. 2009	€ 13.5 M	€ 45.1 M	€ 58.6 M	95.6%
	▪ Nivestim	▪ Pfizer	▪ Jun. 2011	€ 5.2 M	€ 24.3 M	€ 29.5 M	
	▪ Tevagrastim	▪ Teva	▪ Mar. 2010	€ 0.2 M	€ 4.3 M	€ 4.5 M	
	▪ Accofil	▪ Accord Healthcare	▪ Feb. 2016	€ 1.3 M	€ 1.3 M	€ 2.6 M	
	4 biosimilars	4 companies		€ 20.2 M	€ 75.0 M	€ 95.2 M	
Pegfilgrastim (Neulasta, Amgen)	▪ Pelmeg	▪ Mundipharma	▪ Apr. 2019	€ 0.6 M	€ 41.3 M	€ 41.9 M	70.3%
	▪ Pelgraz	▪ Accord Healthcare	▪ Nov. 2018	€ 1.5 M	€ 24.9 M	€ 26.4 M	
	▪ Ziextenso	▪ Sandoz	▪ Apr. 2019	€ 1.8 M	€ 13.6 M	€ 15.4 M	
	▪ Fulphila	▪ Viatris	▪ Jun. 2020	€ 0.3 M	€ 1.0 M	€ 1.3 M	
	▪ Cegfila	▪ Biogaran / Celltrion	▪ Aug. 2020	€ 0.0 M	€ 0.1 M	€ 0.1 M	
	5 biosimilars	5 companies		€ 4.2 M	€ 80.9 M	€ 85.1 M	
Total	9 biosimilars	7 companies		€ 24.4 M	€ 155.9 M	€ 180.3 M	

Sources: GERS – Smart Pharma Consulting analyses

[1] International Non-propriety Name – [2] Ex-factory prices excluding rebates and taxes – [3] Biosimilar penetration in volume in December 2020

Epoetin and somatropin biosimilars, whose first products were launched ~13 years ago, reached in 2020 penetration rate of ~59% and ~57%, respectively

Other biosimilar drugs marketed in France (2020)

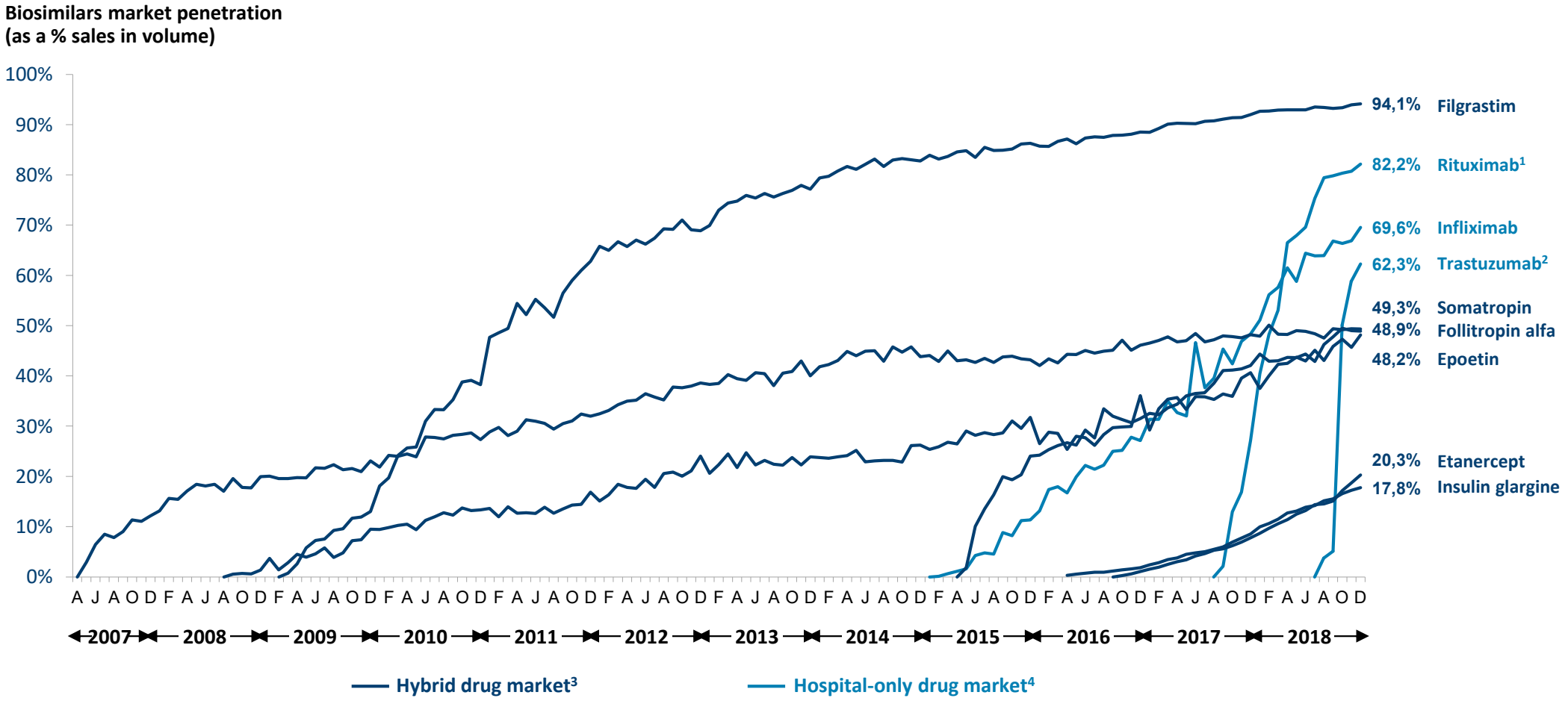
EPhMRA 4 therapeutic class	INN[1] (Originator)	Product name	Pharma company	Launch date	Hospital sales[2]	Retail sales[2]	Total sales[2]	Biosimilars penetration[3]
Erythropoiesis-stimulating agents	Epoetin (Eprex, Janssen)	▪ Binocrit ▪ Retacrit ▪ Eporatio[4]	▪ Sandoz ▪ Pfizer ▪ Teva	▪ Jul. 2008 ▪ Mar. 2009 ▪ May 2010	€ 14.8 M € 0.6 M € 0.4 M	€ 43.5 M € 27.2 M € 7.5 M	€ 58.3 M € 27.8 M € 7.9 M	68.9%
		3 biosimilars	3 companies		€ 15.8 M	€ 78.2 M	€ 94.0 M	
Human insulins	Insulin glargine (Lantus, Sanofi)	▪ Abasaglar	▪ Lilly	▪ Jan. 2016	€ 4.0 M	€ 30.7 M	€ 34.7 M	33.6%
		1 biosimilar	1 company		€ 4.0 M	€ 30.7 M	€ 34.7 M	
Growth hormones	Somatropin (Genotonorm, Pfizer)	▪ Omnitrope	▪ Sandoz	▪ Jan. 2008	€ 0.0 M	€ 27.3 M	€ 27.3 M	62.1%
		1 biosimilar	1 company		€ 0.0 M	€ 27.3 M	€ 27.3 M	
Fractionated heparins	Enoxaparin sodium (Lovenox, Sanofi)	▪ Enoxaparin Crusia ▪ Inhixa ▪ Enoxaparin Arrow	▪ Biogaran ▪ Viatris ▪ Arrow[5]	▪ Sep. 2018 ▪ Oct. 2019 ▪ Nov. 2020	€ 0.3 M € 0.0 M € 0.0 M	€ 11.3 M € 2.0 M € 0.0 M	€ 11.6 M € 2.0 M € 0.0 M	5.7%
		3 biosimilars	3 companies		€ 0.3 M	€ 13.3 M	€ 13.6 M	
Gonadotrophins	Follitropin alfa (Gonal-F, Merck)	▪ Bemfola ▪ Ovaleap	▪ Gedeon Richter ▪ Teva	▪ May. 2015 ▪ May. 2016	€ 0.0 M € 0.0 M	€ 8.8 M € 4.1 M	€ 8.8 M € 4.1 M	34.0%
		2 biosimilars	2 companies		€ 0.0 M	€ 12.9 M	€ 12.9 M	
Parathyroid hormone & analogs	Teriparatide (Forsteo, Lilly)	▪ Movymia ▪ Terrosa	▪ EG Labo (Stada) ▪ Arrow[5] / Gedeon Richter	▪ Aug. 2019 ▪ Nov. 2020	€ 0.0 M € 0.0 M	€ 2.3 M € 0.0 M	€ 2.3 M € 0.0 M	14.3%
		2 biosimilars	2 companies		€ 0.0 M	€ 2.3 M	€ 2.3 M	

Sources: GERS – Smart Pharma Consulting analyses

[1] International non-propriety name – [2] Ex-factory prices excluding rebates and taxes – [3] Biosimilar penetration in equivalent units in December 2020 – [4] Eporatio is not a biosimilar per se but rather a "me-too" product – [5] Part of Aurobindo, since its acquisition of Actavis in 2014

Biosimilar penetration is faster and faster, notably in the hospital market where it ranged from ~62% (for trastuzumab) to ~82% (for rituximab) in December 2018

Biosimilars market penetration



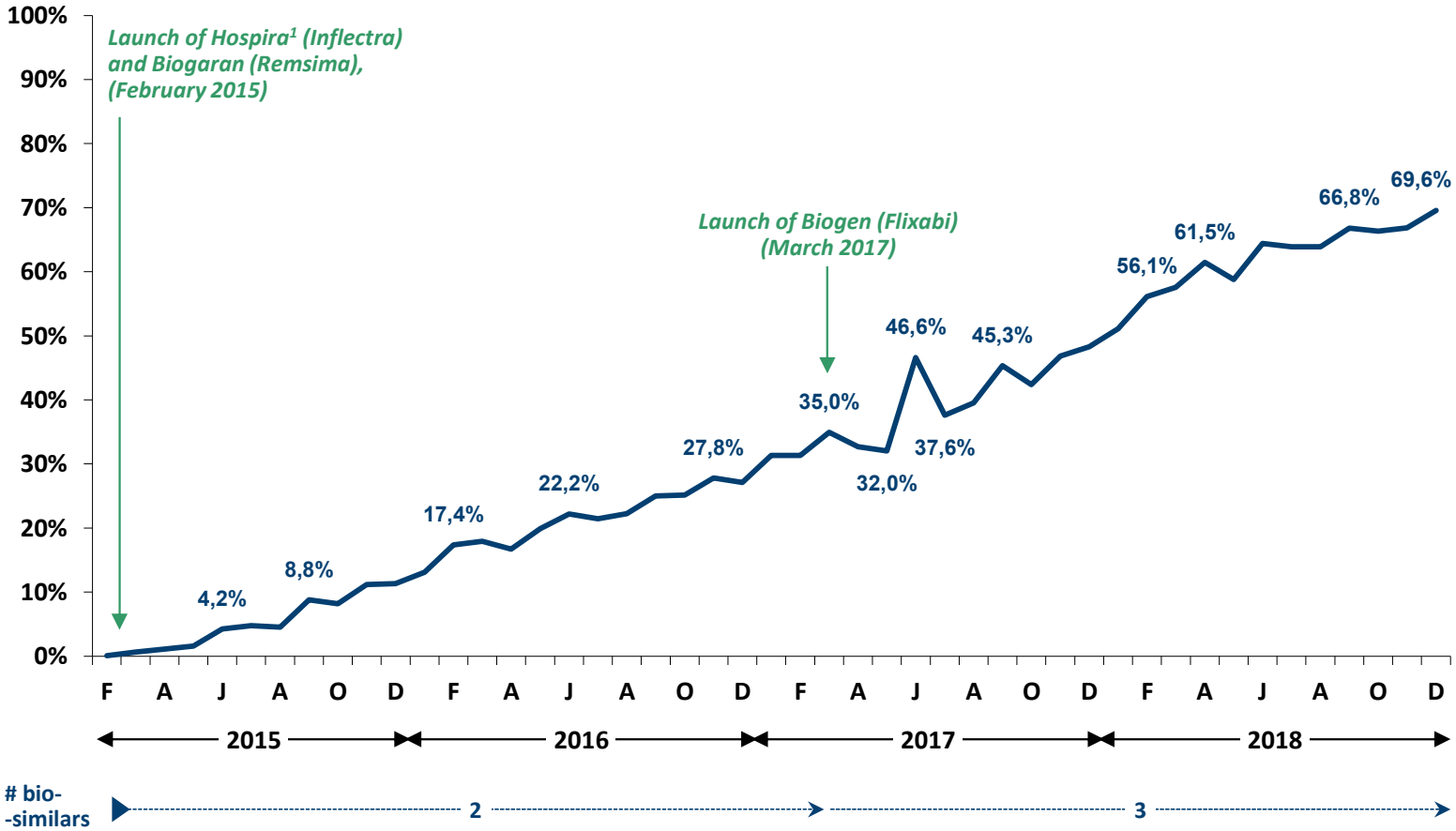
Sources: GERS – Smart Pharma Consulting analyses

[1] Excluding the 1,400 mg subcutaneous form, that is not yet subject to biosimilars competition – [2] Excluding the 600 mg subcutaneous form, that is not yet subject to biosimilars competition – [3] Products bought and/or delivered at hospitals and retail pharmacies – [4] Products exclusively bought and delivered at hospitals

Infliximab biosimilars penetration reached ~70% of the market in volume, ~4 years after biosimilar entry, despite MSD competitive price offering

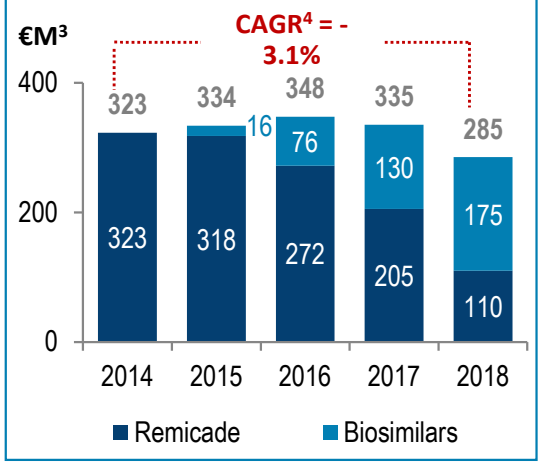
Penetration rate in volume – Infliximab case study

Biosimilars penetration as a % of infliximab sales in standard units



Comments	
Originator	Remicade (MSD)
Status	On-top of T2A[2] biologic drug
EPHMRA class	Anti-TNFs (L04B)
Indications	Ulcerative colitis, Crohn's disease, rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis and psoriasis

Sales dynamics (2014 – 2018)



Sources: GERS – Thériaque – Smart Pharma Consulting analyses

[1] Acquired by Pfizer in September 2015 – [2] Activity-based costing – [3] Ex-factory price, excluding VAT and rebates – [4] Compound annual growth rate

The French biosimilars market is split in two different segments that require, from pharma companies, different strategies, tactics and organizational models to succeed

The biosimilars market segments

Hospital-only market segment		Hybrid market segment
▪ Prescribed, purchased and delivered at hospitals (e.g., infliximab, rituximab, trastuzumab)	Definition	▪ Prescribed by hospital and/or office-based specialists, purchased and delivered by hospital and retail pharmacies (e.g., epoetin, filgrastim) or retail pharmacies only (e.g., follitropin alfa, somatropin)
▪ Free pricing for drugs included in T2A system[1] ▪ Responsibility tariff set by the CEPS[2] for drugs on-top of the T2A list[3] (e.g., infliximab, rituximab)	Pricing	▪ Ex-factory price set by the CEPS initially at -30% or -40% below the original biologic on the hospital and the retail market segments, respectively
▪ Mainly purchased through tenders and/or to a lower extent through negotiated agreements ▪ Possibility to grant rebates to hospitals ▪ Strong price pressure	Purchasing	▪ The level of rebates to retail pharmacies is legally limited to a maximum of 2.5% of the ex-factory price which is in general granted by wholesalers[4] ▪ Limited price pressure on retail sales
▪ Medical activity carried out by MSLs to reassure prescribers about the quality of the biosimilars ▪ Key account management activity carried out by KAMs to win tenders and set up a follow up plan	Medico-marketing activities	▪ Medical activity carried out by MSLs to reassure prescribers about the quality of the biosimilars ▪ Promotional activity carried out by marketers and medical reps to be prescribed to in- and out-patients
▪ Market size 2018: € 164 M (net price) ▪ Market growth 2007 – 2018: + 119% (net sales) ▪ Leading players profitability: medium	Market size & profit level	▪ Market size 2018: € 194 M (net price = price list) ▪ Market growth 2007 – 2018: + 62% (net sales) ▪ Leading players profitability: high

Sources: Smart Pharma Consulting

[1] Activity-based costing system similar to a diagnosis-related group-based funding system – [2] Drug pricing committee – [3] Includes the most expensive drugs for which the CEPS sets a maximum reimbursed price called "Responsibility tariff" which is 30% (for hospital-only drugs) below the price of the original biologic before its price is cut, following biosimilars entry – [4] Pharma companies are not used to giving discounts to retail pharmacists for their biosimilars

Substitution of biosimilars by retail pharmacists, is possible, in practice, since 2022, for two products: filgrastim and pegfilgrastim

Regulations specific to biosimilars

Biosimilar drugs[1]

- A biosimilar drug is any biological drug that has the same qualitative and quantitative composition of active substance and the same pharmaceutical form as a biological originator…
- … but does not fulfill the conditions for being regarded as a generic due to differences related to raw material variability or manufacturing processes requiring the achievement of additional preclinical and clinical data under regulatory conditions…
- … demonstrating that the biosimilar:
  - Is similar to the biological originator
  - Does not differ significantly from the biological originator in terms of quality, efficacy and safety

Biosimilar register	▪ The ANSM[2] has created in 2017 similar biologic groups, each of them defined by a reference biologic and its corresponding biosimilars, listed by brand name
Biosimilar substitution right	▪ France was the first European country to allow the substitution of biosimilars, in December 2013 but in the absence of a decree defining the conditions of substitution, this law has never been implemented ▪ After having been abrogated in 2020, the substitution right has been reintroduced in 2022, with a decree authorizing the substitution by retail pharmacists for 2 products only: the filgrastim and the pegfilgrastim ▪ This substitution is possible, provided: – The biological products belong to the same similar biologic group – The prescriber has not explicitly prohibited and motivated, in writing, the substitution of the prescribed drug – The pharmacist has informed the prescriber and recorded the details of the biosimilar dispensed – The biological product delivered does not induce higher costs for the National Health Insurance Funds
Inter-changeability	▪ The ANSM has specified in May 2016 that inter-changeability was possible between biologic drugs belonging to the same similar biologic group

Sources: Public Health Code – Official Gazette – ANSM – Smart Pharma Consulting analyses

[1] A specific legal framework for biosimilar medicines was introduced in Europe on March 31st, 2004, and the first biosimilar was authorized by the European Commission in April 2006 – [2] "Agence nationale de sécurité du médicament": National Agency for the Safety of Medicines and Health Products

The health authorities are strongly determined to accelerate the penetration of biosimilars, but remain relatively cautious to avoid any potential public health issue

Health authorities measures to boost biosimilars

LFSS 2018 – Focus on the CAQES

- Since January 2018, contracts between hospitals, health regional agencies and health insurance named CAQES[1], have set prescription targets for biosimilars

Objective

- Achieve 70% penetration of hospital biosimilars in units, at national level[2]

Implementation

- Promotion of biosimilars prescriptions in the reference list
- Remuneration of hospitals: 20% of the price difference between reference and biosimilar products

2017 – Ministerial Order

- The DGOS[3], DSS[4], DGS[5] and the UNCAM[6] published an order on October 12th, 2017, to require the Regional Health Agencies (ARS) to promote the use of biosimilar drugs
- As a result, ARS are invited to promote the use of biosimilars by:
  - Informing patients
  - Harmonizing prescribers' practices in favor of biosimilars
  - Helping hospitals organize tenders as soon as biosimilars are on the market
  - Developing financial tools to measure the savings related to biosimilars
- The DGOS has informed that physicians are authorized to switch one biological drug by another similar one during a treatment

LFSS 2018 – Article 51

- In August 2018, the Ministry of Health launched an experiment with 45 selected hospitals to stimulate their prescription of biosimilars delivered in retail pharmacies

Objective

- 15-points increase in biosimilar prescription rates vs. non-experimental hospitals

Implementation

- Duration: 3 years
- Scope: etanercept and insulin glargine at national level[7]
- Remuneration of hospital services: 30% of the price difference between reference and biosimilar products

ROSP

- This bonus program, which encourages physicians to comply with "best prescribing practices" for a better efficacy/cost ratio, includes, since 2017, the prescription of the insulin glargine biosimilar

Sources: Decree related to CAQES and setting quality and efficiency reference objectives – Smart Pharma Consulting analyses

[1] CAQES: contract for healthcare quality and efficiency enhancement – [2] In December 2017, the government has set the global (hospital and retail markets) objective of 80% biosimilar penetration by 2022 – [3] Directorate of Health Care Supply – [4] Directorate of Social Security – [5] Directorate General for Health – [6] National Union of Health Insurance Funds – [7] Adalimumab has entered in the scope of the experiment in the second quarter 2019

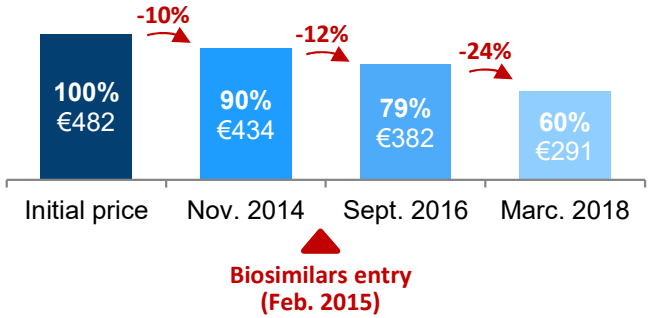
Excepted for trastuzumab and etanercept, whose first biosimilars were launched in 2018 and 2016 respectively, the CEPS dropped all reference prices by ~40%

Historical imposed price cuts over time

Hospital-only products

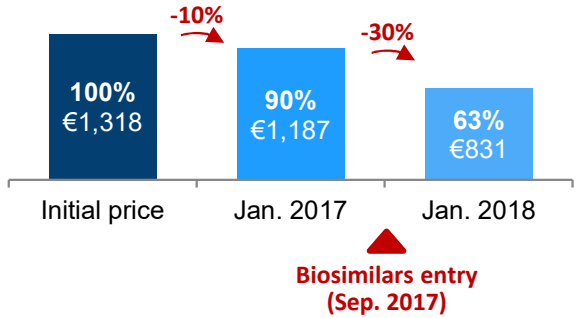
Infliximab (Remicade)

Infliximab 100 mg unit price[1]



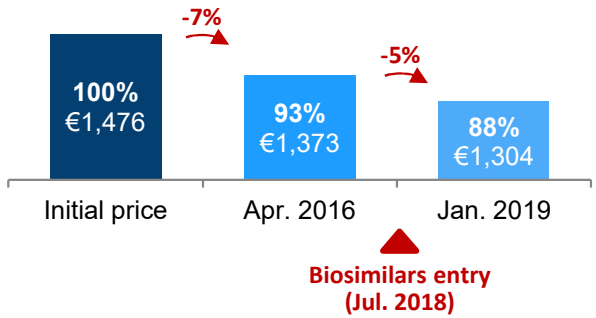
Rituximab (MabThera)

Rituximab 500 mg unit price[1]



Trastuzumab (Herceptin)

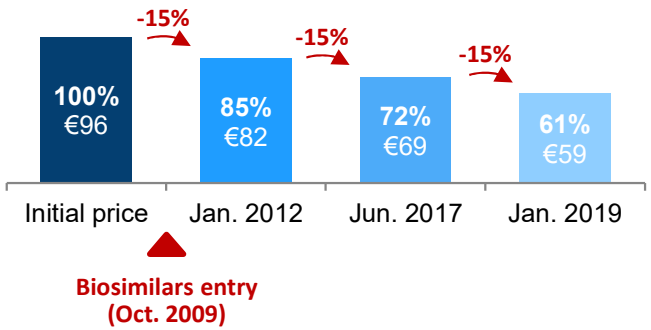
Trastuzumab 600 mg unit price[1]



Hybrid products[2]

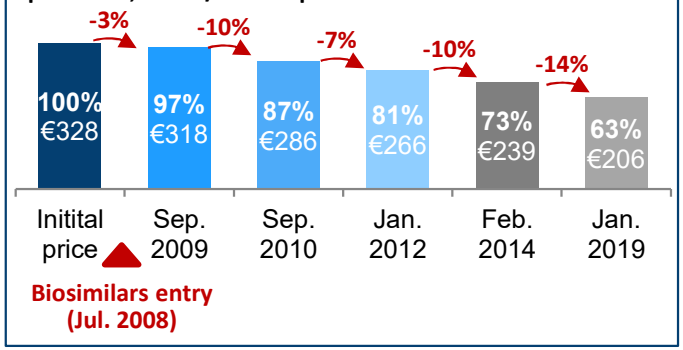
Filgrastim (Neupogen)

Filgrastim 30 MU (0.6 mg/ml) unit price[1]



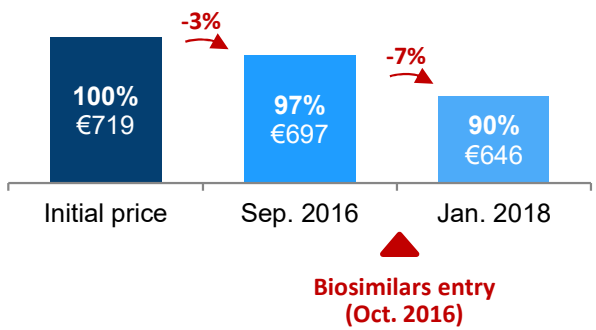
Epoetin (Eprex)

Epoetin 40,000 UI/ml unit price[1]



Etanercept (Enbrel)

Etanercept 50 mg unit price[1]



Sources: French National Health Insurance prices database – Smart Pharma Consulting analyses

[1] Ex-factory price per standard unit, excluding rebates and taxes –
[2] Products with sales at hospital levels and retail pharmacies

Biosimilars prices on the hospital market are either free or set by the drug pricing committee (CEPS), while on the ambulatory market they are always regulated

Biosimilars price regulation – New Health Authorities Doctrine

Hospital market segment

- If the reference biological drug is included in the T2A (activity-based costing system), thus its price, as well as its corresponding biosimilars ones, will be unregulated
- If the reference biological drug is on:
  - The top of T2A hospital drug list[1] or
  - The reassigned drug list[2]

  the CEPS (drug pricing committee) applies the following pricing principles, when the first biosimilar enters the market:
  - A 30% price cut for the originator and its biosimilars
  - 24 months and 48 months later, 10% to 30% additional price cuts depending on difference observed between actual net prices and prices set by the CEPS

Ambulatory market segment

- At the entry date of biosimilars:
  - The CEPS sets the price of biosimilars 40% below the price of the originator
  - The originator is imposed a price cut of 20%
- 24 months and 42 months after the entry of the first biosimilar:
  - Additional price cuts aimed at price convergence…
  - … and depending on the respective market shares of the originator and of its biosimilars

  will be imposed

Sources: CEPS Activity Reports – LEEM – IRDES – Decree of March 25th, 2016, regarding modalities of inscription to the on top of T2A list – Smart Pharma Consulting analyses

[1]This list includes expensive products which are funded on top of the hospital service tariffs (hospital budget) to improve patients access to innovation – [2] These products, which are on the retrocession list, can be sold to outpatients by the hospital pharmacies and, in such a case, are funded by the National Health Insurance Fund

Cost containment policies tend to make hospital prescribers increasingly concerned about costs induced by their prescriptions, providing opportunities for biosimilars

Biosimilars and cost of hospital prescriptions

Drugs dispensed at hospitals

- Since 2007, hospital expenditures are covered by the National Health Insurance Fund according to their activity level, based on a fixed fee-for-service model, called T2A[1]
- As a result, hospitals have a strong incentive to pay the lowest price, as possible, for drugs and for the other goods they purchase, to achieve a balanced budget
- For drugs on "the top of T2A" and/or on the reassigned list, hospitals are reimbursed by the National Health Insurance Fund, at the reference price set by the CEPS[2]
- However, hospitals may obtain a lower price, and in such a case, the saving will be equitably distributed between hospitals and the National Health Insurance Fund

Biosimilars may contribute to reduce hospitals costs, but in a relatively limited proportion, knowing that drugs account for ~6% of total hospital budget[3]

Drugs dispensed at retail pharmacies

- The article 47 of the Social Security Act for 2010 introduced a new measure to contain the cost of drugs dispensed in retail pharmacies, but prescribed at hospitals, as this cost was increasing much faster than that related to primary care prescriptions
- This measure sets an annual maximum growth rate (+4.0% for 2018 and +3.3% for 2019) of drug expenditure related to hospital prescriptions that are bought at retail pharmacies by patients
- If exceeded, the ARS[4] may place the offending hospital under its supervision to compel it to improve prescribing practices, and may possibly demand financial penalties

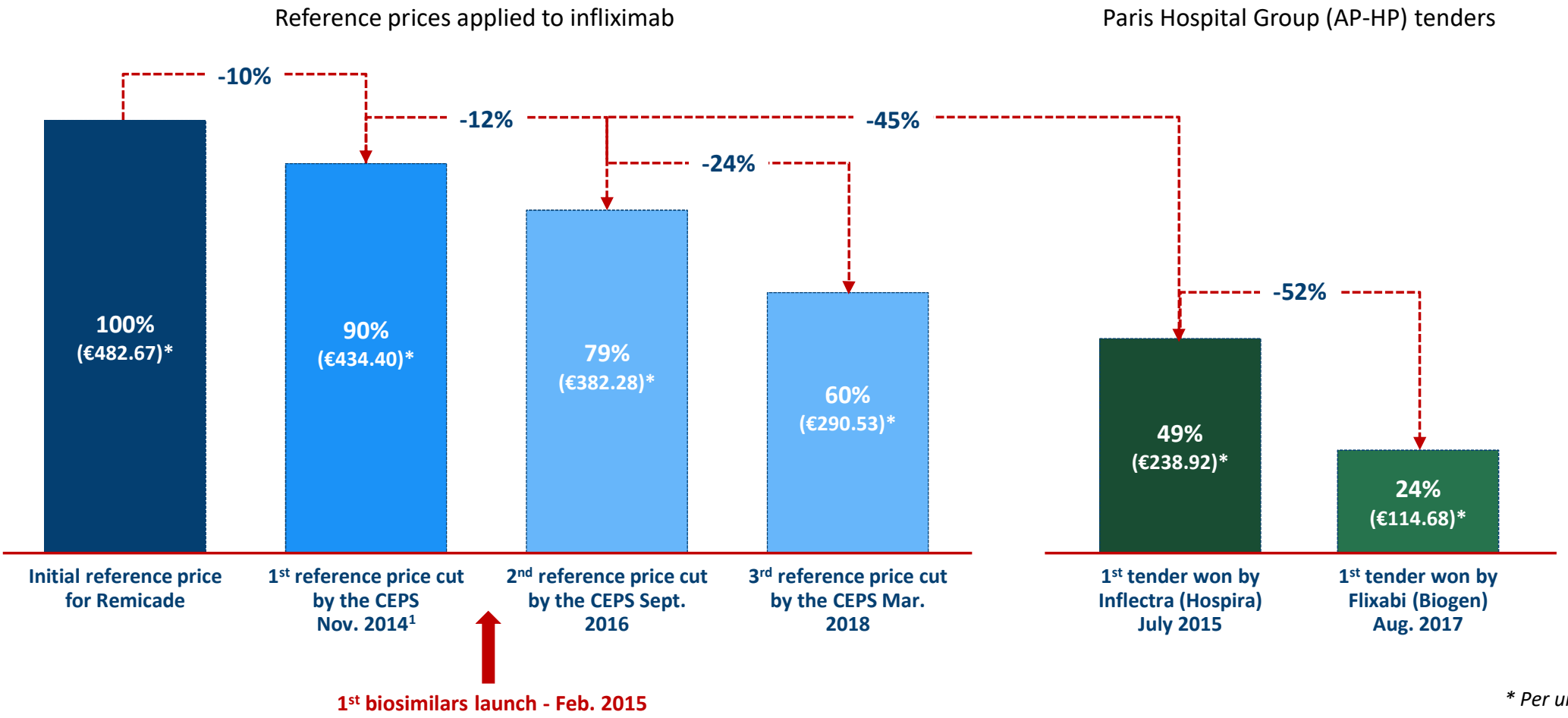
Prescription of biosimilars may help better control the cost evolution of drugs prescribed in hospital and dispensed in retail pharmacies

Sources: www.sante.gouv.fr/tarification-a-l-activite.html – Article 47, "LFSS 2010" Official Gazette, (December 27th, 2009) – Smart Pharma Consulting analyses

[1] Tarification à l'activité – [2] Drug pricing committee – [3] Salaries account for ~70%, general & administrative expenses for ~18% and medical devices for ~6% – [4] Regional health agency

2.5 years after biosimilars entry, the net price of infliximab (ex-factory price minus hospital rebates) has been reduced by ~76%

Hospital pricing evolution – Infliximab case study



** Per unit*

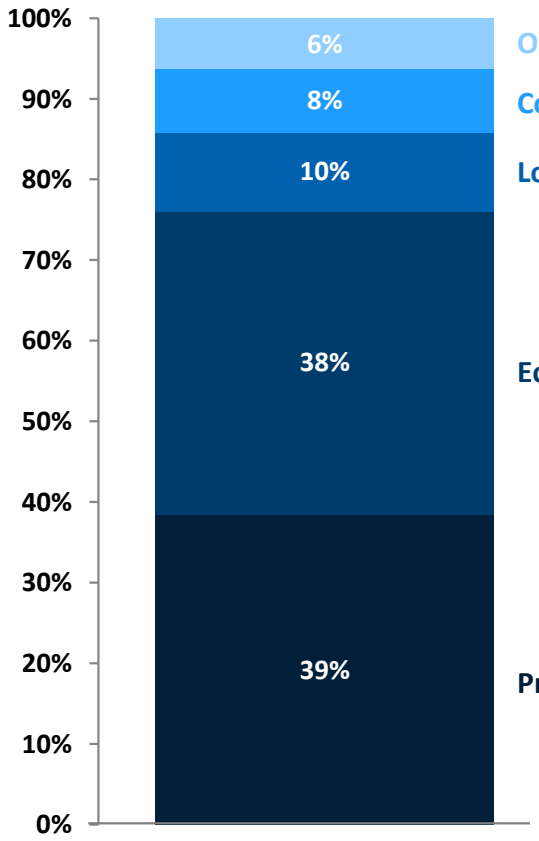
Sources: Desk research – APM News – Interviews – Smart Pharma Consulting analyses

[1] Applied to all infliximab brands, including biosimilars

The main criteria that will determine biosimilars listing in hospitals are product characteristics and economic aspects according to this pilot study

Listing procedures and protocols in hospitals

Criteria driving preference to list drugs subject to biosimilars competition at hospitals



Other services

- *"Could be of interest (e.g., support during the implementation of treatments, help in organizing the services of hospitals)" (2)*

Corporate reputation

- *"We have more confidence in the most reputable pharmaceutical companies because we know the quality of their products and their ability to meet their commitments in terms of delivery times" (2)*

Logistics aspects

- *"Are to be considered even when the volumes of drugs in hospitals remain low such as for G-CSF" (2)*

Economic aspects

- *"Important criterion given the current context of willingness to control health expenditure" (2)*
- *"One of the most important criteria for biosimilars" (2)*

Product characteristics

- *"The methods of conservation of the products are important. For example, products which do not need the respect of the cold chain are favoured" (2)*
- *"The ease of use and the safety of injection of the device is important" (1)*
- *"The bioequivalence studies are essential to adopt a biosimilar" (1)*

(X): Number of quotes

Source: Interviews with 4 hospital pharmacists (October 2018) – Smart Pharma Consulting analyses

HCPs would adopt biosimilars provided their bioequivalence to the originator is proven and their pricing generates savings

Expectations from HCPs for biosimilars

"What factors might convince you to prescribe a biosimilar once the molecule has fallen into the public domain?"

+

- *"A drop in pricing" (10)*
- *"Bioequivalence to the original brand" (2)*
- *"An optimal presentation of the product: no reconstitution, already packaged in the syringe!" (1)*
- *"That the treatment is in adequacy with the challenges and prescription goals of the CAQES[1] plan" (1)*
- *"That the treatment be listed within the Unicancer[2] market" (1)*

"What would be the barriers to use a biosimilar?"

-

- *"If there is an uncertainty about the true biosimilarity of the product due to fewer clinical studies and a lack of perspective on its use" (4)*
- *"If it is not listed within my hospital" (3)*
- *"If the packaging is less convenient to use" (2)*

"What would you recommend pharma companies to do to reinforce your preference?"

- *"To offer competitive prices where the savings made by the healthcare facility are substantial" (4)*
- *"To perform clinical bioequivalence trials for biosimilar products with follow-up over time, and injection site tolerance tests" (2)*
- *"To provide field monitoring services to ensure proper use of products" (2)*
- *"To develop long-acting forms and to target product conservation issues" (2)*
- *"To stop focusing on medico-economics only and to invest in clinical studies too" (1)*

Number of respondents: 10

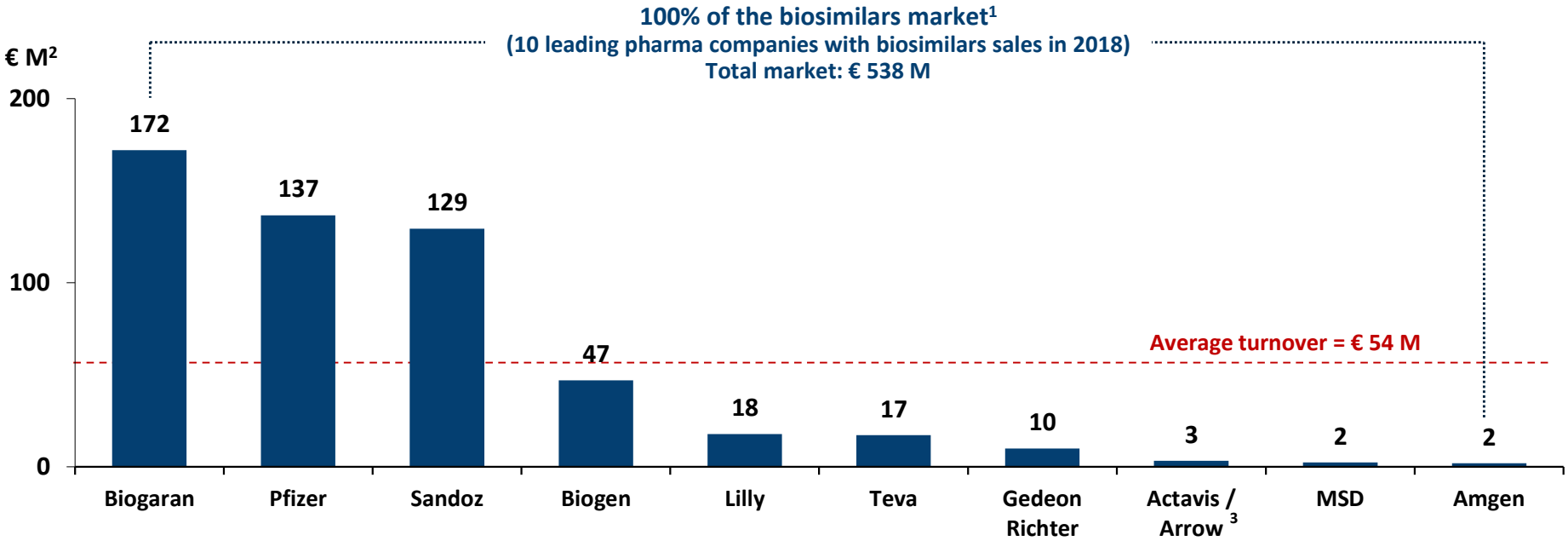
(X): Number of quotes

Source: Interviews with 6 hospital physicians and 4 hospital pharmacists (October 2018) – Smart Pharma Consulting analyses

[1] Contract for the improvement of quality and efficiency of care – [2] Hospital network regrouping the 18 regional centers for the fight against cancer (CRLCC) entirely dedicated to oncology and including a national purchasing unit

In 2018, Biogaran, Pfizer and Sandoz generated individually more than € 100 M sales and represented together ~82% of the French biosimilars market in value terms

Top 10 companies on the biosimilars market – In value[1] (2018)



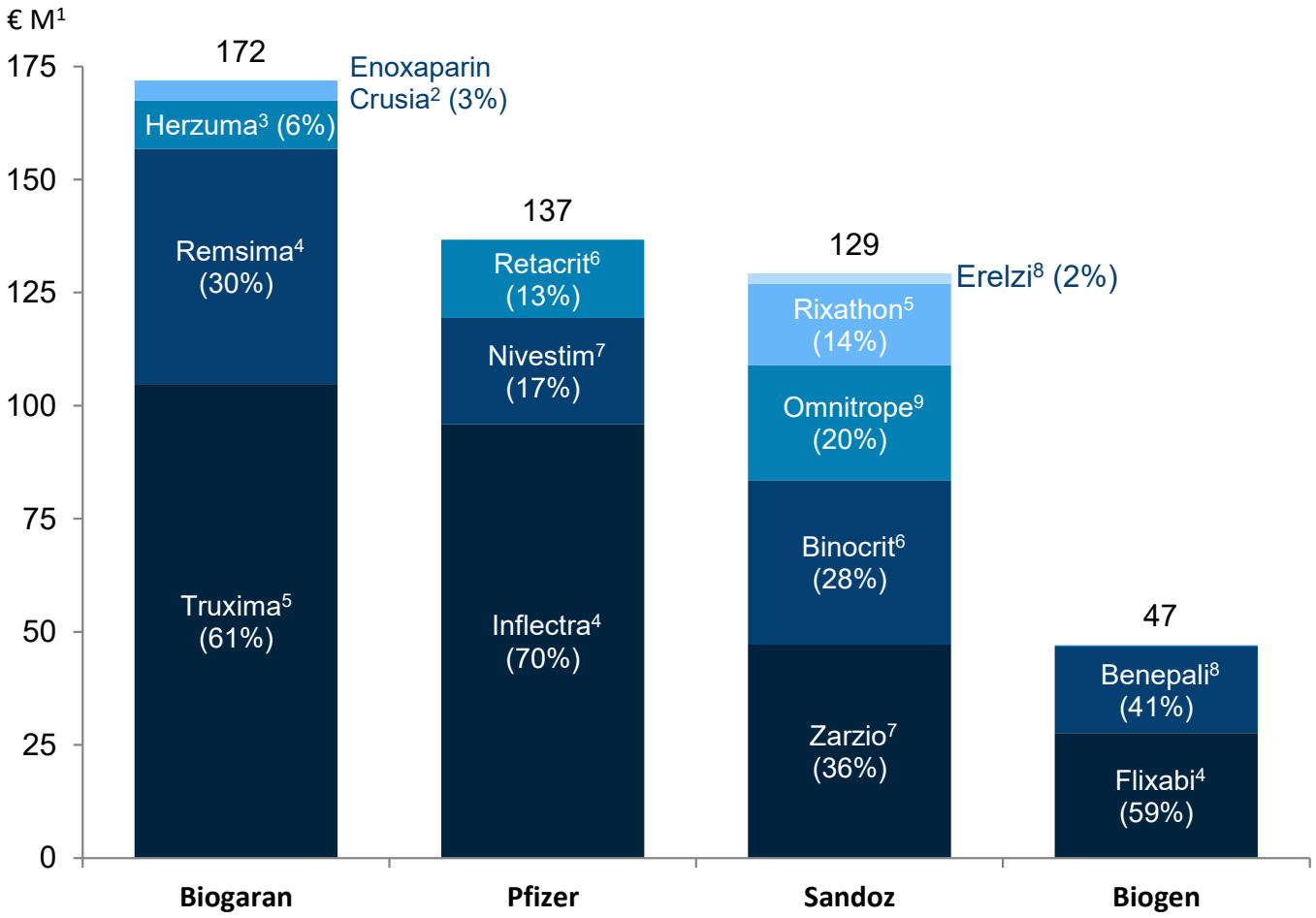
	Biogaran	Pfizer	Sandoz	Biogen	Lilly	Teva	Gedeon Richter	Actavis / Arrow [3]	MSD	Amgen
Market share	32.0%	25.4%	24.1%	8.7%	3.3%	3.2%	1.9%	0.6%	0.4%	0.4%
Biosimilars weight in the portfolio	14.2%	10.0%	19.2%	12.3%	5.0%	2.5%	66.9%	0.7%	0.2%	0.3%
2017-2018 evolution	+277.5%	+7.2%	+46.4%	+277.4%	+161.9%	+11.3%	+38.6%	+311.4%	N/A	N/A

Sources: GERS – Smart Pharma Consulting analyses

[1] Both retail and hospital sales – [2] Ex-factory price, excluding taxes and rebates – [3] Part of Aurobindo, since its acquisition of Actavis in 2014

In 2018, the top 4 companies operating on the French biosimilars market had from 2 to 5 brands, and sales split on the hospital and retail market segments

Top 4 companies on the biosimilars market – Portfolio structure (2018)



- Biogaran:
  - ~97% of prescriptions and sales come from hospital-only drugs (i.e., Truxima, Remsima and Herzuma) which are prescribed and dispensed at hospital
- Pfizer:
  - All biosimilars are either prescribed or initiated by hospital physicians
  - 26% of the corresponding sales are purchased at retail pharmacies
- Sandoz:
  - All biosimilars are either prescribed or initiated by hospital physicians
  - ~72% of Sandoz sales are generated at retail pharmacies
- Biogen:
  - All biosimilars are either prescribed or initiated by hospital physicians
  - ~40% of sales are bought at retail pharmacies

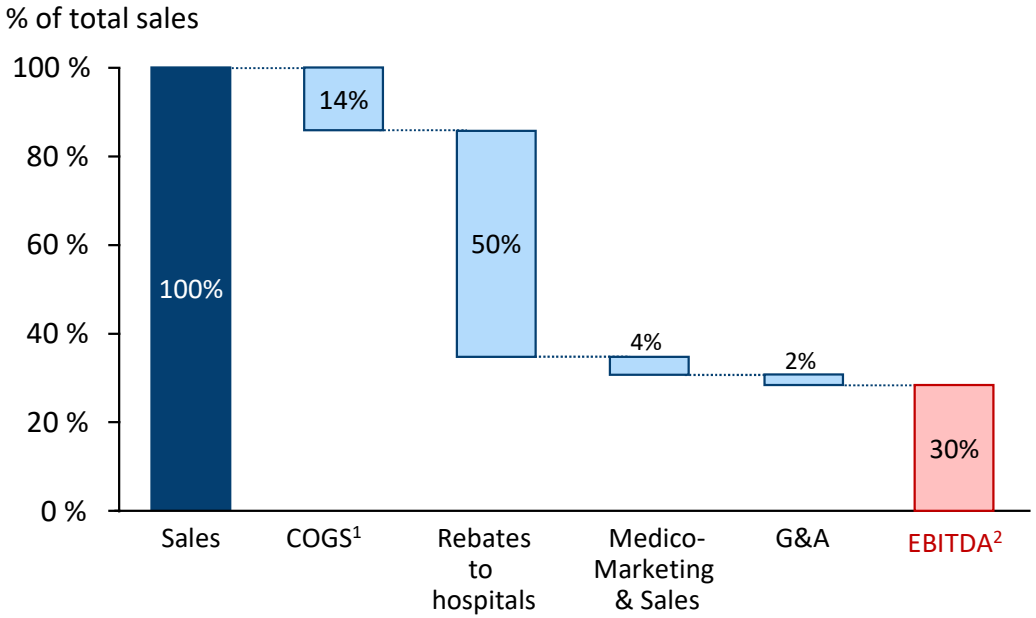
Sources: GERS – Smart Pharma Consulting analyses

[1] Both retail and hospital sales, in ex-factory price, excluding taxes and rebates – [2] Enoxaparin sodium – [3] Trastuzumab – [4] Infliximab – [5] Rituximab – [6] Epoetin – [7] Filgrastim – [8] Etanercept – [9] Somatropin

The hospital-only biosimilar model appears to be less profitable than the hybrid one due to a much higher level of rebates granted by pharma companies

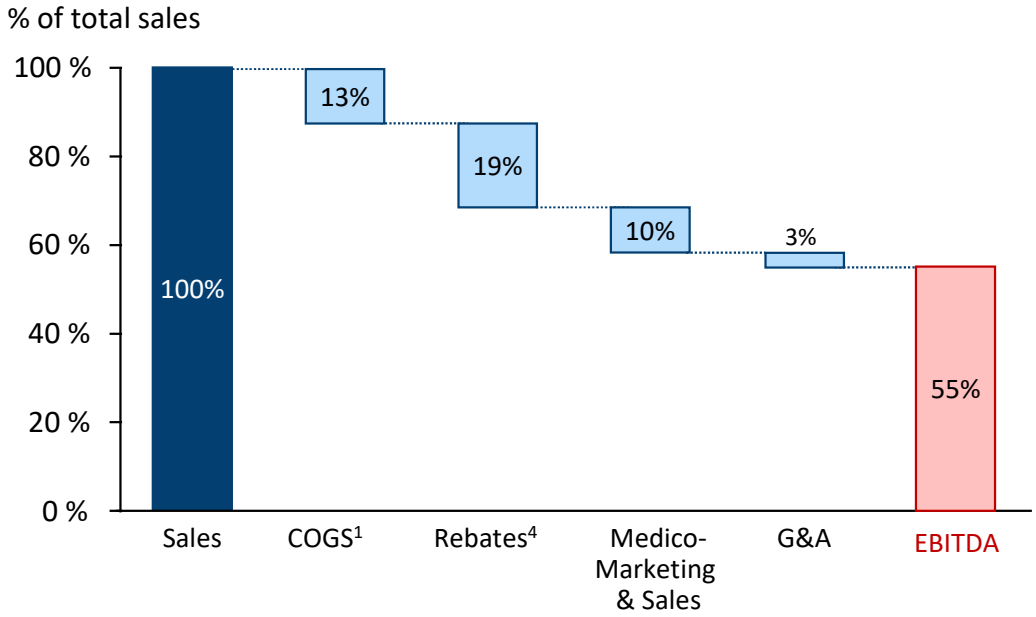
Estimated profitability of leading pharma companies on the biosimilars market (2018)

Hospital-only biosimilar model



- Estimates based on annual sales of € ~150 M generated by hospital-only biosimilars, with an average price list of 30% below the price of original brands before they enter the market
- Average discounts to hospitals: -50% on price list (ex-factory price)
- Medico-marketing and sales costs, incl.: 5 KAMs and 5 MSLs
- All other costs included in G&A[3]

Hybrid biosimilar model



- Estimates based on total annual sales of € ~130 M of which € ~90 M (72%) sold on the retail market, with an average price list of 40% below the price of original brands before they enter the market
- Average discounts to hospitals: -50% to -90% on price list[4]
- Medico-marketing and sales costs, incl.: 3 KAMs, 40 Reps and 4 MSLs
- All other costs included in G&A

Sources: Smart Pharma Consulting interviews with 5 General Managers of companies operating in the biosimilars market – Smart Pharma Consulting estimates

[1] Cost of goods sold, including licensing fees and distribution costs – [2] Earnings before interest, taxes, depreciation and amortization – [3] Registration costs, head office costs, management costs, support functions – [4] ~50% to hospital-only drugs, ~90% to non-hospital-only drugs. No significant rebates granted to retail pharmacies

The most important success factor on the biosimilars market is to be the 1st market entrant and remain the only biosimilar, for several months

Key success factors on the biosimilars market

#1 – Be the 1st entrant

- The historical analysis of the French market shows that the first entrants have a bigger market share than the followers
- When a biosimilar benefits from a temporary period of monopoly, the probability it wins hospital tenders vs. the originator is very high
- Once a market has been won, it is locked for two to three years and the following biosimilars must wait

#2 – Offer the best price

- The lowest the price offer, the highest the probability to win the tenders, especially for hospital-only products for which the savings for the hospital can be important, unlike for the biosimilars which are mainly bought at retail pharmacies
- Superior product attributes and/or services may help a biosimilar win a tender, in certain cases, only if its price offer is not superior to 10% to 15% than the lowest bidder

Key Success Factors

#4 – Develop services

- Services proposed to hospital pharmacists, physicians, nurses and patients to facilitate the procurement, the prescription, the patient education and the drug usage may play a significant role to get preferred by hospital HCPs[4]
- Market insights (knowledge and understanding) of in-field collaborators are a prerequisite to deliver highly valued services
- The quality of services will reinforce the reputation of the biosimilars company and preference of HCPs for its products

#3 – Propose a better product

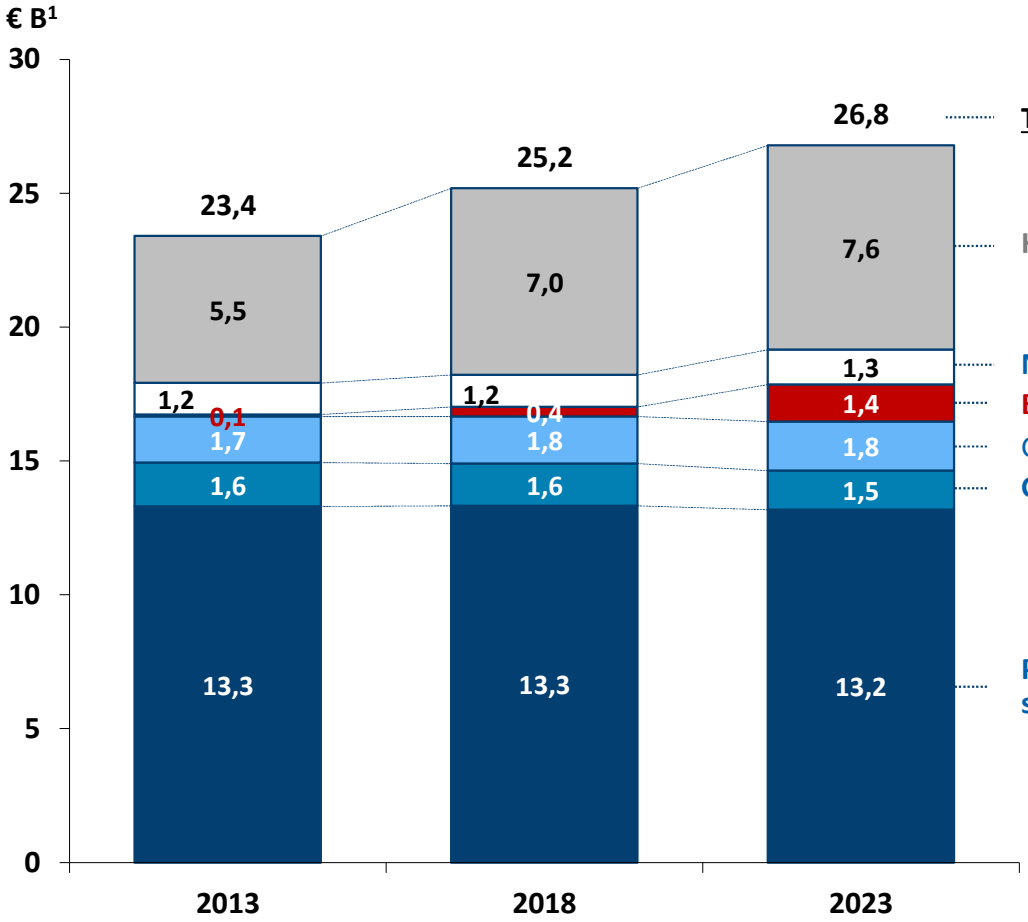
- There are possibilities to differentiate biosimilars amongst themselves and vs. the corresponding original biologic:
  - Amgevita (Amgen) and Hulio (Viatris) propose a citrate-free version of adalimumab, as Humira (AbbVie)[1] does since 2018, associated with less injection site-related pain[2]
  - Benepali (Biogen), a biosimilar of etanercept, has shown in a European study[3] that its autoinjector was easier to operate and more intuitive to use compared with the Enbrel (Pfizer) one, according to 86% of the 149 nurses who had been interviewed

Sources: Smart Pharma Consulting interviews with 5 General Managers of companies operating in the biosimilars market – Smart Pharma Consulting analyses

[1] Which is not the case for Imraldi (Biogen) and Hyrimoz (Sandoz) – [2] Peter Nash, Rheumatol Ther (2016) 3:257-270 – [3] Kunal Thaku, Rheumatol Ther (2016) 3:77-89 – [4] Especially for products that are used in home care (e.g., subcutaneous anti-TNFs). It is essential at the launch phase to put in place observational studies in the key centers to boost the adoption of the biosimilar brand by the HCPs

The biosimilars market should reach € 1.4 B in net value in 2023, with 1/3 of the growth driven by new biosimilars and 2/3 by increasing penetration of existing ones

Drugs sales forecast by segment (2013 – 2018 – 2023) – Net price



	CAGR[5] 2013-2018	CAGR 2018-2023
Total Market (Net price)	**+1.5%**	**+1.2%**
Hospital sales[2]	+4.9%	+1.8%
Non reimbursed	**+0.5%**	**+1.5%**
Biosimilars (hospital & retail)	**+36.2%**	**+31.0%**
Generics[3]	+0.4%	+0.9%
Genericized originators	**-0.9%**	**-1.5%**
Patent-protected and other specific drugs[4]	**+0.0%**	**-0.2%**

Note: In 2023, The biosimilars sold on the retail market should account for 68% of the total vs. 54% in 2018. The growth will be driven by new biosimilars* for 1/3 and by increasing penetration of existing ones for 2/3

** Such as: teriparatide, secukinumab, eculizumab, belimumab, certolizumab, ipilimumab, bevacizumab, ranibizumab, liraglutide, cetuximab, natalizumab, abatacept, insulin lispro*

Sources: GERS dashboards – Smart Pharma Consulting estimates

[1] Constant ex-factory prices including estimated rebates to hospital and retail pharmacists– [2] Excluding hospital sales of biosimilars but including all other products on the hospital budget and products invoiced in addition of the hospitalization charges (on top of T2A) and reassigned medicine sales – [3] Reimbursable generics and quasi-generics – [4] Sales of drugs whose patents have not expired and of other specific products (calcium, sodium, potassium, paracetamol, etc.) – [5] Compound annual growth rate

The future growth of biosimilars will be mainly driven by health authorities' measures introduced to boost HCPs[1] prescriptions and by LOE[2] of several high sales biologics

Drivers & limiters of the biosimilars market (2013 – 2018 – 2023)

	Drivers	Limiters
Health authorities & Payers	▪ Biosimilars can increase access to treatments by: – Decreasing the overall treatment costs and thus – Increasing affordability (treatment of larger populations) ▪ Increasing body of evidence showing the reliability, efficacy and quality of biosimilars	▪ "Precaution principle": high cautiousness due to major public health issues in the past (e.g., blood transfusions contaminated with HIV, growth hormone case, sudden increase of pure red cell aplasia (PRCA) with Eprex[3]) ▪ Substitution permitted by law since Dec. 2013 but not implemented, in the absence of the corresponding decree
Hospital HCPs	▪ They contribute to improve hospitals financial balance ▪ Objective of penetration set at hospital level (CAQES) ▪ Financial incentives proposed by heath authorities for prescribing biosimilars (i.e., insulin glargine, etanercept, adalimumab) through the "article 51" experiment ▪ For physicians, biosimilars are an alternative to reference products (in case of shortage for instance)	▪ No guarantee of perfect equivalence with the reference product ▪ Physicians generally have close relationships for many years with original brand companies, which may discourage some of them to use (extensively) biosimilars
Patients	▪ None, except in cases where patients might have to bear (totally or partially) the cost of biological drugs	▪ Preference for originators, on principle, especially in the case of serious and/or chronical diseases
Biosimilar companies	▪ Increasing number of biosimilar products per molecule accelerates market penetration and reduces hospital prices ▪ ~13 biologics with high sales levels will lose their market exclusivity and face biosimilar competition from 2018 to 2023	▪ The intensification of competition drives biosimilar prices down and jeopardizes biosimilar companies' profitability… ▪ … rendering the market much less attractive for new players

Sources: IQVIA PharmaStat (as of February 2019) – Smart Pharma Consulting analyses based on external interviews

[1] Healthcare professionals – [2] Loss of exclusivity – [3] Increase in PRCA explained by an increase in the immunogenicity of Eprex following a formulation change in 1998, in which the human serum albumin stabilizer was replaced with polysorbate 80 and glycine

The market of biosimilars will benefit from the launch of new products in existing classes and in new classes by 2023

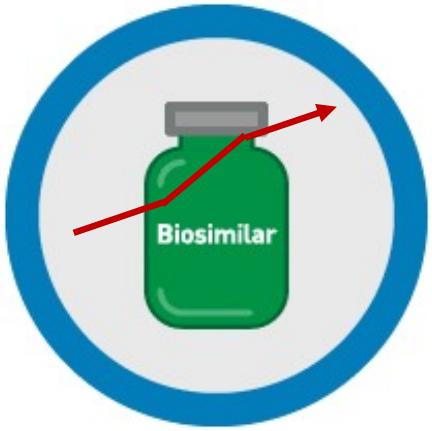
Executive summary

1. The market structure and dynamics

- From 2014 to 2018, the market has increased four-fold[1]
- The penetration of hospital-only biosimilars is must higher than the one of biosimilars which are also delivered on the retail market

2. The French regulatory environment

- Since 2017, health authorities have multiplied the initiatives to boost the biosimilars market
- They have also developed a doctrine defining the decrease of biosimilars price over time



3. The customers behaviors

- Hospital listing and prescribing depend mainly on product attributes and price
- Despite authorization for retail pharmacists to substitute filgrastim and pegfilgrastim, physicians remain the key driver

4. The competitive landscape

- The top 3 leading players[3] have generated more than € 100 M gross sales in 2018, accounting for ~82% of the market in value
- They have generated EBITDA[4] rates ranging from 30% to 60% of gross sales

5. The key success factors

- Enter first the market
- Be the lowest-priced bidder…
- … and/or offer superior services
- Offer a better product than competitors

6. The 2018 – 2023 market growth

- The market should increase by € 1 B, thanks to the LOE of blockbusters (e.g., Avastin, Lucentis) and the increasing market penetration of recent biosimilars (e.g., Humira, Herceptin)

Sources: Smart Pharma Consulting analyses

[1] In net value – [2] The implementation decree which is required to apply the law voted in December 2013 is still pending. No change is expected in the short term. The health authorities are not in favor of substitution at retail level for public health security and responsibility

Smart Pharma
CONSULTING

The French Biosimilars Market

2027 Perspectives

February 2024

Leveraging its expertise and experience re. biosimilars market specificities, Smart Pharma Consulting has analyzed the current French situation and estimated its likely evolution

Introduction

Smart Pharma Consulting expertise regarding the biosimilars market

- Strategic and management missions carried out regarding the biosimilars business of 12 pharma companies in France and abroad:
  - Accord Healthcare – Amgen – Biogen – Fresenius Kabi
  - Gedeon Richter – Hospira – Mundipharma
  - Organon – Pfizer – Sandoz – Teva – Viatris
- Position papers and reports published about biosimilars:
  - The French Healthcare System & Pharmaceutical Market (2012 – 2013 – 2014 – 2015 – 2017)
  - The Global Biosimilars Market Outlooks (2015)
  - The French Generics Market (incl. Biosimilars) (2018)
  - French Biosimilars Market – Key success factors (2019)
  - The French Pharma Market Prospects (2019 – 2021 – 2023)

Context – Objective – Methodology

- As it has been the case with generics over the past 25 years, the French government intents – cautiously – to facilitate the development of the biosimilars market by:
  - Encouraging physicians' prescriptions with incentives
  - Expending the number of substitutable biological drugs by retail pharmacists
- This position paper analyzes the current biosimilars market situation with a differentiation of the hospital and retail segments and…
- … estimates their 2027 gross and net sales perspectives
- To do so, the consultants have capitalized on their long experience and strong expertise re. this strategic segment

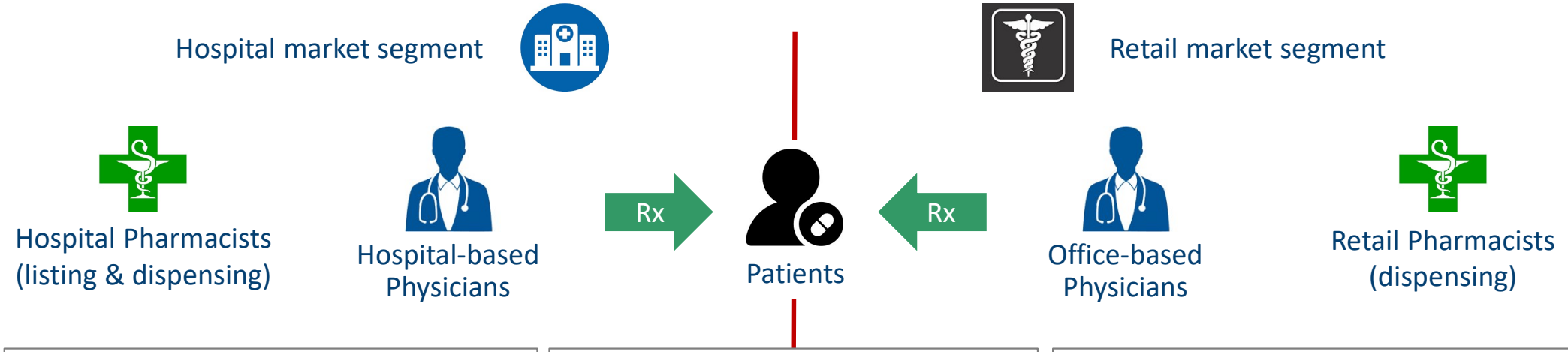
Sources: Smart Pharma Consulting

So far, the development of the biosimilars market has been mostly driven by the prescription of physicians which is encouraged by health authorities and certain hospital managers

Stakeholders involved in the French biosimilars market

Health Authorities & Payers[1]

- Health authorities and payers have introduced a series of measures to convince hospital and office-based physicians to prescribe more biosimilars, either as an initial treatment or as a switch



- Hospital pharmacists play a key role in:
  - Listing biosimilars
  - Purchasing biosimilars, being responsible for calls for tenders

- Physicians' Rx of biosimilars vary according to the products
- Patients and PAGs still wary re. the Rx of biosimilars

- Retail pharmacists are divided re. the substitution of biological drugs…
- … which is only allowed for filgrastim and pegfilgrastim as of February 2024

Sources: Smart Pharma Consulting

[1] *National Health Insurance Fund*

The French biosimilars market is split in two different segments that require, from pharma companies, different strategies, tactics and organizational models to succeed

Specificities of biosimilars market segments

	Hospital market segment	Retail market segment
Definition	▪ Prescribed, purchased and delivered at hospital (e.g., bevacizumab, infliximab IV, rituximab, trastuzumab)	▪ Prescribed by hospital and/or office-based specialists, purchased and delivered by retail pharmacies only (e.g., follitropin alfa, somatropin) or by hospital pharmacies too (e.g., epoetin, filgrastim)
Pricing	▪ Free pricing for drugs included in the T2A system[1] ▪ Responsibility tariff set by the CEPS[2] at -30% for drugs on-top of the T2A list[3] (e.g., infliximab IV, rituximab)	▪ Ex-factory price initially set by the CEPS at -40% below the price of the original biologic before its price is cut, following biosimilars entry
Purchasing	▪ Mainly purchased through tenders or to a lower extent through negotiated agreements ▪ Possibility to grant rebates to hospitals ▪ Strong price pressure	▪ The level of rebates to retail pharmacies is legally limited to a maximum of 2.5% of the ex-factory price which is in general granted by wholesalers[4] ▪ Limited price pressure on retail sales
Medico-marketing activities	▪ Medical activity carried out by MSLs to reassure prescribers about the quality of the biosimilars ▪ Key account management activity carried out by KAMs to win tenders and set up a follow up plan	▪ Medical activity carried out by MSLs to reassure prescribers about the quality of the biosimilars ▪ Promotional activity carried out by marketers and med reps to be prescribed to in- and out-patients

Sources: Smart Pharma Consulting analyses

[1] Activity-based costing system similar to a diagnosis-related group-based funding system – [2] Drug pricing committee – [3] Includes the most expensive drugs for which the CEPS sets a maximum reimbursed price called "Responsibility tariff" which is 30% (for hospital-only drugs) below the price of the original biologic before its price is cut, following biosimilars entry – [4] Pharma companies are not used to giving discounts to retail pharmacists for their biosimilars

Biosimilars prices on the hospital market are either free or set by the drug pricing committee (CEPS), while on the ambulatory market they are always regulated

Biosimilars price regulation – The CEPS Doctrine

Hospital market segment

- If the reference biological drug is included in the T2A (activity-based costing system), thus its price, as well as its corresponding biosimilars ones, will be unregulated
- If the original biologic is on:
  - The top of T2A hospital drug list[1] or
  - The reassigned drug list[2]

  The CEPS applies the following pricing principles, when the first biosimilar enters the market:
  - A 30% price cut for the original biologic and its biosimilars
  - 24 months and 48 months later, 10% to 30% additional price cuts depending on differences observed between actual net prices and prices set by the CEPS

Retail market segment

- At the entry date of biosimilars:
  - The CEPS sets the price of biosimilars 40% below the price of the originator
  - The original biologic is imposed a price cut of 20%
- 24 months and 42 months after the entry of the first biosimilar:
  - Additional price cuts from 5% to 15% aimed at price convergence…
  - … and depending on the respective market shares of the original biologic and of its biosimilars

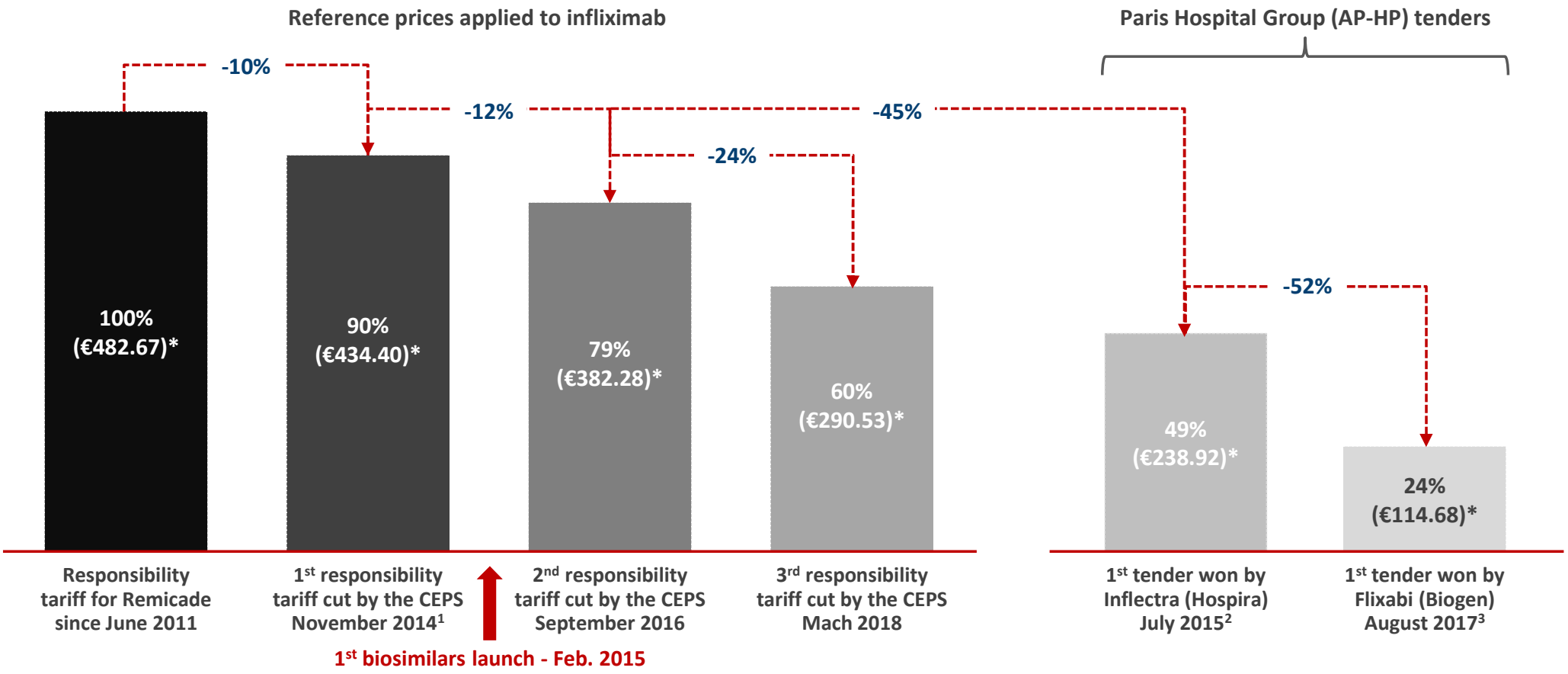
  will be imposed

Sources: CEPS Activity Reports – LEEM – IRDES – Decree of March 25th, 2016, regarding modalities of inscription to the on top of T2A list – Smart Pharma Consulting analyses

[1]This list includes expensive products which are funded on top of the hospital service tariffs (hospital budget) to improve patients access to innovation – [2] These products, which are on the retrocession list, can be sold to outpatients by the hospital pharmacies and, in such a case, are funded by the National Health Insurance Fund

2.5 years after the entry of the first biosimilars, the net price of infliximab (ex-factory price minus hospital rebates) has been reduced by ~76%

Hospital biosimilars pricing: Example of infliximab (Remicade)



Note: Infliximab being on the top of T2A hospital drug list, has a maximum reimbursed price called "Responsibility tariff" set by the CEPS (drug pricing committee) – As of February 2024, the responsibility tariff is set at 109.9€*

** Per unit*

Sources: Desk research, APM News, Business Intelligence, Smart Pharma Consulting analyses

[1] Applied to all infliximab, including biosimilars – [2] In 2015, the average level of discounts for biosimilars was estimated at 30% at the national level – [3] This discount rate was estimated to reach 50% in 2018 for the original biologic and the biosimilar manufacturers. This explained why the penetration of biosimilars was still quite limited 3.5 years after biosimilars entry

Substitution of biosimilars by retail pharmacists is allowed for two products (filgrastim and pegfilgrastim) since April 2022

Regulations related to biosimilars

Biosimilar drugs[1]

- A biosimilar drug is any biological drug that has the **same qualitative** and **quantitative** composition of **active substance** and the same pharmaceutical **form** as an original biologic…
- … but does not fulfill the conditions for being regarded as a generic due to differences related to **raw material variability** or **manufacturing processes** requiring the achievement of additional **preclinical** and **clinical data** under regulatory conditions…
- … demonstrating that the biosimilar:
  - Is **similar** to the original biologic
  - **Does not differ** significantly from the originator in terms of **quality**, **efficacy** and **safety**

Inter-changeability	▪ The ANSM has specified in **May 2016** that **inter-changeability** was **possible** between biologic drugs belonging to the **same similar biologic group**
Biosimilar register	▪ The ANSM[2] has created in 2017 **similar biologic groups**, each of them defined by an **original biologic** and its corresponding **biosimilars**, listed by brand name
Biosimilar substitution right	▪ France **allowed** the **substitution** of biosimilars, in **December 2013**, but in the absence of implementation decrees, this law has never been implemented ▪ After having been abrogated in 2020, the substitution right has been reintroduced in 2022, with a decree authorizing the substitution by retail pharmacists of 2 products: **filgrastim** and **pegfilgrastim** ▪ The Article 54 of the PLFSS 2024 stipulates that **two years after** the publication of the **reimbursement** listing of the **first biosimilar**, in a given group, a **decree** will **authorize** the **substitution by retail pharmacists** within this group, **unless the ANSM issues** an **opinion to the contrary** before the end of these two years ▪ **Substitution** is possible, provided: – The biological products belong to the **same similar biologic group** – The **prescriber** has **not explicitly prohibited**, in writing, the substitution of the prescribed drug – The **retail pharmacist** has **informed the prescriber, the patient** and **recorded the details** of the biosimilar delivered – The biological product delivered **does not induce higher costs**[3]

Sources: Public Health Code – Official Gazette – ANSM – Smart Pharma Consulting analyses

[1] A specific legal framework for biosimilars was introduced in Europe on March 31st, 2004, and the first biosimilar was authorized by the European Commission in April 2006 – [2] "Agence nationale de sécurité du médicament": National Agency for the Safety of Medicines and Health Products – [3] For the National Health Insurance Fund

Health Authorities are strongly determined to accelerate the penetration of biosimilars, but remain relatively cautious to avoid any potential public health issue

Health Authorities measures to boost biosimilars

2017 – Ministerial Order

- The DGOS[1], DSS[2], DGS[3] and the UNCAM[4] published an order on October 12th, 2017, to require the Regional Health Agencies (ARS) to promote the use of biosimilar drugs
- To do so, ARS are invited to:
  - Inform patients about biosimilars
  - Harmonize prescribers' practices in favor of biosimilars
  - Help hospitals organize tenders as soon as biosimilars are on the market
  - Develop financial tools to measure the savings related to biosimilars
- The DGOS has indicated that physicians are authorized to switch one biological drug by another similar one during a treatment

LFSS 2018 – Focus on the CAQES

- Since January 2018, CAQES[5], signed between hospitals, ARS and the local branch of the National Health Insurance Fund, have set prescription targets for biosimilars

Objective

- Achieve a 70% biosimilars penetration in units at hospital, at national level[6]

Implementation

- Promotion of biosimilars prescriptions in the reference list
- Remuneration of hospitals: 20% of the price difference between the original biologic and its biosimilars

LFSS 2018 – Article 51

- In August 2018, the Ministry of Health launched a call for application to foster the hospital prescription of biosimilars delivered in retail pharmacies

Objective

- 15-points increase in Rx rates in the 45 experimental vs. non-experimental hospitals

Implementation

- Duration: 3 years
- Scope: etanercept and insulin glargine at national level[7]
- Remuneration of hospital services: 30% of the price difference between the original biologic and its biosimilars

ROSP[8] (since 2017)	▪ Bonus program encouraging office-based physicians to comply with "best prescribing practices", and thus to prescribe the insulin glargine biosimilar
9th amendment of the medical Convention (2021)	▪ Incentives for office-based physicians to Rx seven biosimilars through initiations or switches: adalimumab, enoxaparin, etanercept, follitropin alpha, insulin aspartate, ranibizumab and teriparatide ▪ Maximum threshold incentive per office-based physician: € 7,000 p.a.

Sources: Decree related to CAQES and setting quality and efficiency reference objectives – Smart Pharma Consulting analyses

[1] Directorate of Health Care Supply – [2] Directorate of Social Security – [3] Directorate General for Health – [4] National Union of Health Insurance Fund – [5] Contract for healthcare quality and efficiency enhancement. For 2023-2024 new CAQES have been set and objectives are now determined at regional levels only – [6] In December 2017, the government had set the global (hospital and retail markets) objective of a 80% biosimilar penetration by 2022 – [7] Adalimumab has entered in the scope of the experiment in the second quarter 2019, involving 40 hospitals – [8] Remuneration on public health objectives for a better efficacy/cost ratio

The outcomes of the "Borne Mission", published in August 2023, made several recommendations to the government to boost the use of biosimilars in the retail market

" Borne Mission"[1] recommendations re. the retail biosimilars market

Current situation

- Penetration: 80% on the hospital market but only 31% on the retail market[2]

Objective

- To actively boost the use of biosimilars on the retail market – while considering patients' expectations – to reach a level similar to the hospital one

Recommendations

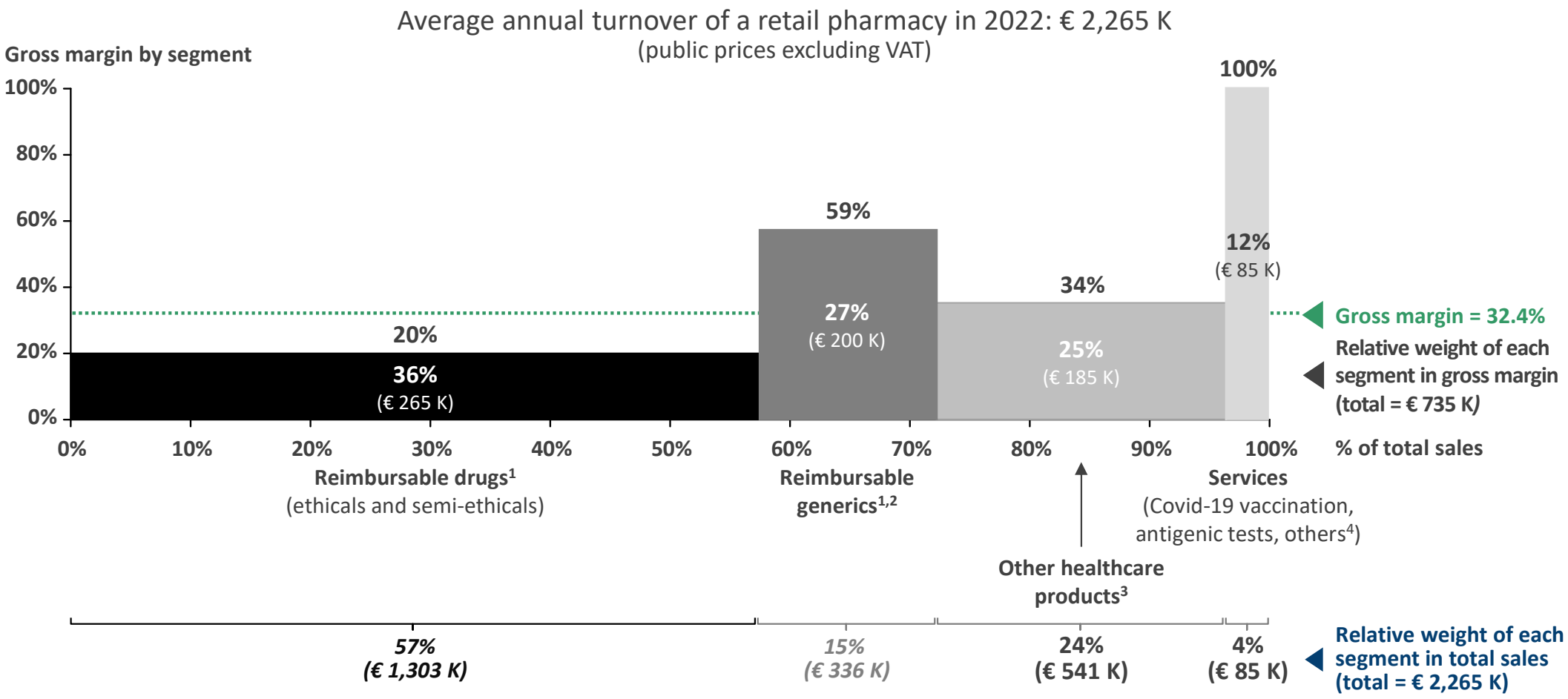
- Initiations by GPs could be accelerated through a binding mechanism
- Substitution should be decided on a case-basis, depending on the disease, the patient, the traceability
- Fees paid to retail pharmacists should come from a reallocation of incentives yet given for generics, and capped
- Extension of the substitutable biosimilars list decided by the ANSM in conjunction with the Leem, physicians' associations and PAGs[3]
- The biosimilars margin made by retail pharmacists should be equalized to that of originators until the penetration objective is reached
- Retail pharmacists should be committed to ensure the continuity of delivered biosimilars, especially in case of chronic diseases
- Information campaign targeted at retail pharmacists first, and then at patients, should be launched
- Information of GPs about the existing financial incentives that will be maintained
- Previous consent to be obtained from the National Health Insurance Fund when a treatment is initiated by an original biologic although biosimilars are available

Sources: Report of the "Mission Borne" August 2023 – Smart Pharma Consulting analyses

[1] Properly named "Healthcare products regulation" mission – [2] Based on interviews carried out by the working group – [3] To do so, the ANSM has set up a working group in February 2024

The preferred generics suppliers, contributing to ~27% of retail pharmacies total gross margin, are the best positioned to take advantage of the substitution right granted to biosimilars

Weight of generics in the economic structure of retail pharmacies (2022)*



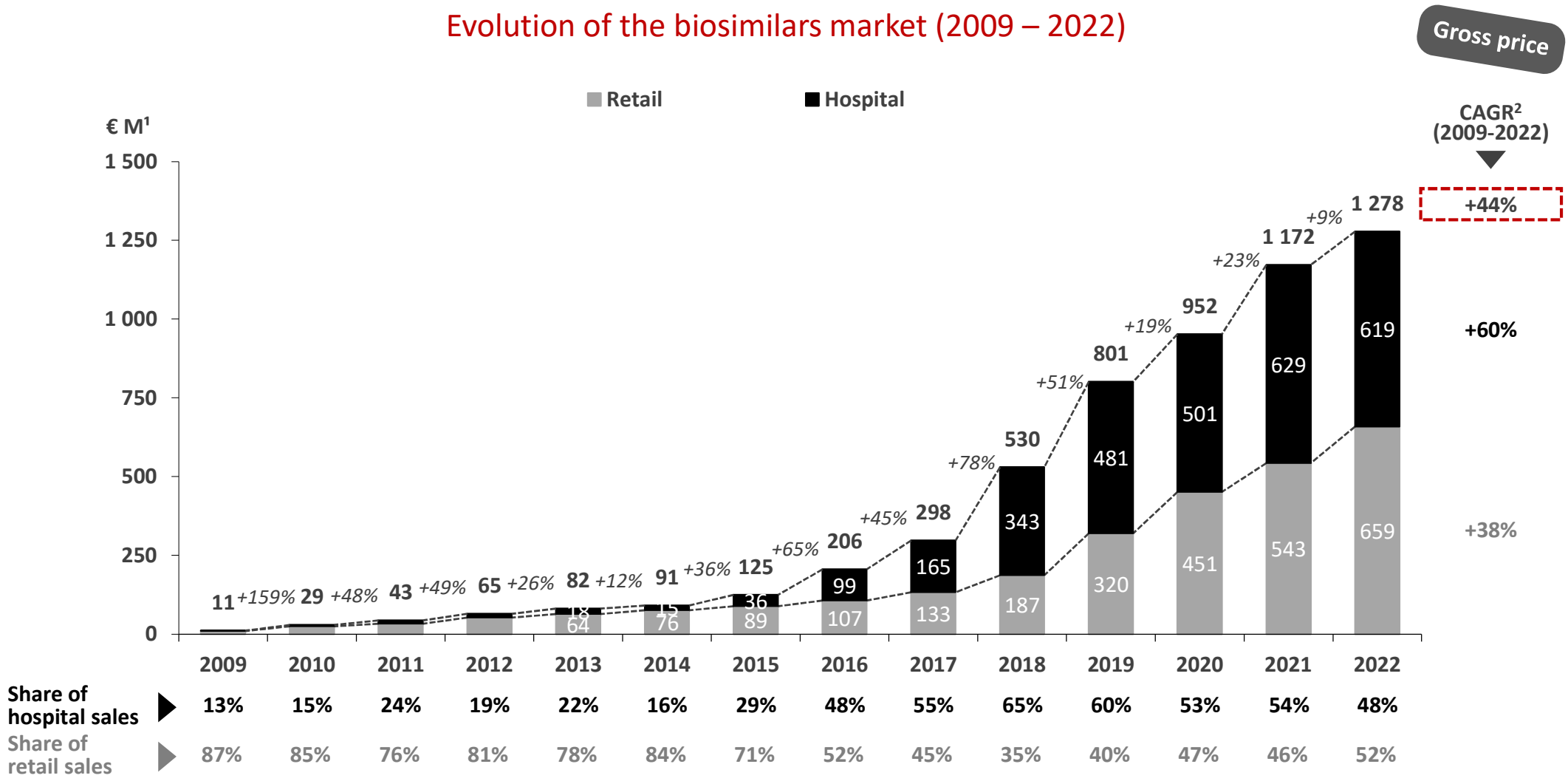
** Data estimated based on a sample of 1,807 retail pharmacies*

Sources : CGP Experts Comptables (2023) – External interviews with accounting experts (July 2023) – Smart Pharma Consulting estimates

[1] Including dispensing fee – [2] Including commercial cooperation with generic companies. The preferred generics supplier ensures ~90% of total segment, making him the 1st contributor to the retail pharmacies' profits – [3] Including OTC and "lifestyle" Rx products, medical devices, food supplements, para-pharmacy products, etc. – [4] Remuneration for services corresponding to public health objectives (ROSP), new missions, etc.

Biosimilars, whose first products were launched in France in 2007, achieved gross sales of € 1.3 B in 2022, almost equally split between the hospital and the retail market segments

Evolution of the biosimilars market (2009 – 2022)

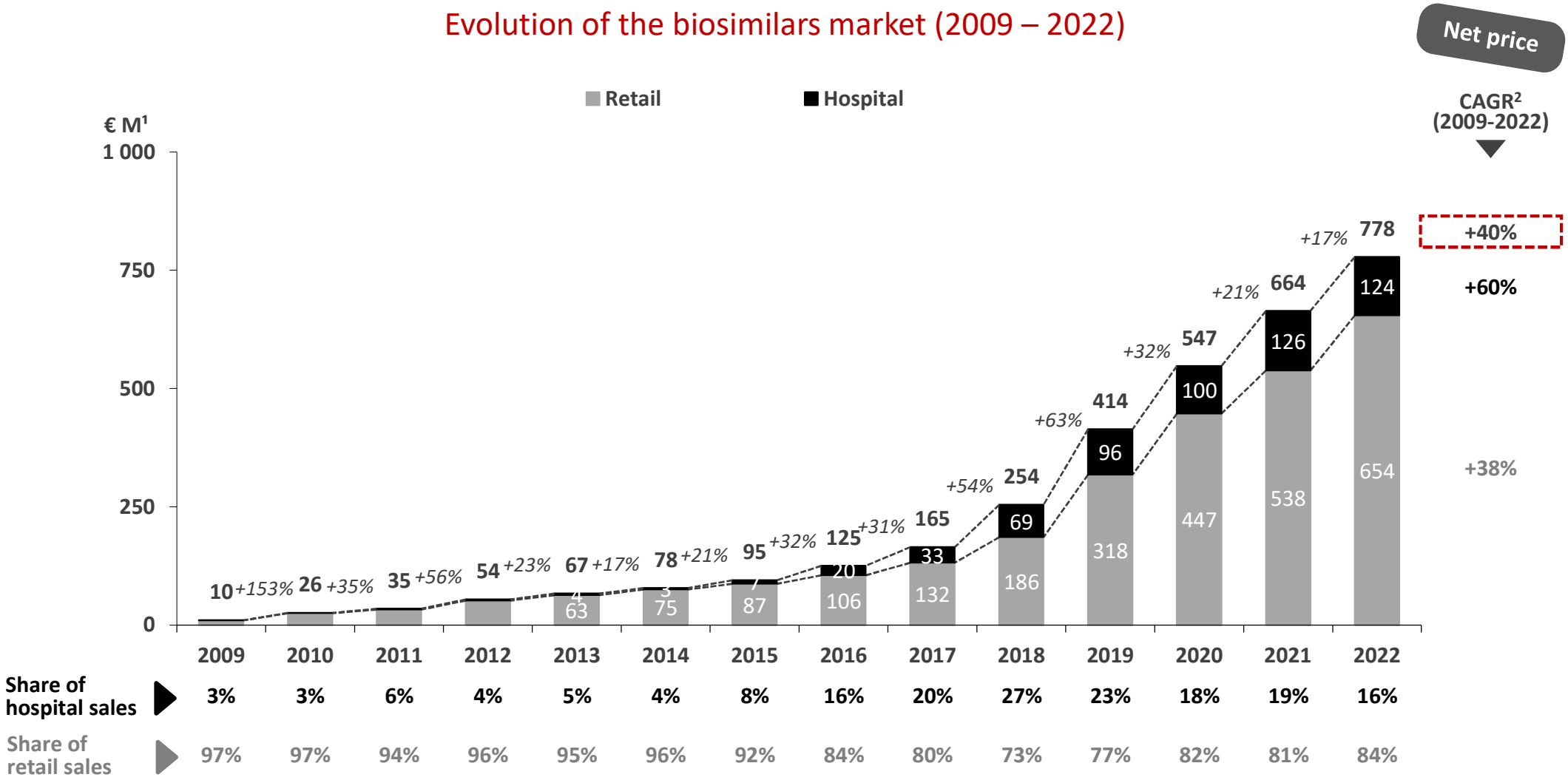


Sources: GERS – Smart Pharma Consulting analyses

¹ Ex-factory prices before rebates and taxes – ² Compound annual growth rate

After rebates, the biosimilars market reached € 778 M in 2022, with retail sales accounting for ~84% of the total market in net value, reflecting the low profitability of the hospital market

Evolution of the biosimilars market (2009 – 2022)

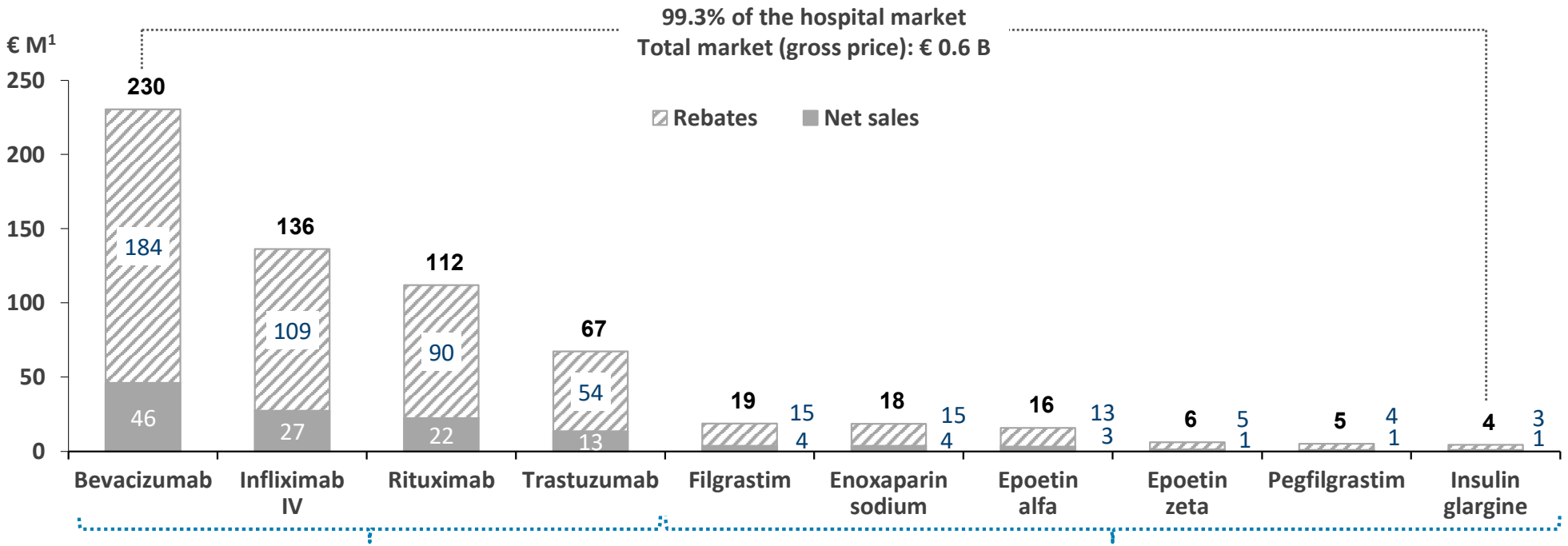


Sources: GERS – Smart Pharma Consulting analyses

¹ Ex-factory prices after estimated rebates and before taxes – ² Compound annual growth rate

In 2022, hospital-only drugs (i.e., bevacizumab, infliximab IV, rituximab and trastuzumab) accounted together for ~88% of the hospital biosimilars market in value

Top 10 INNs – Hospital biosimilars market (2022)



	Bevacizumab	Infliximab IV	Rituximab	Trastuzumab	Filgrastim	Enoxaparin sodium	Epoetin alfa	Epoetin zeta	Pegfilgrastim	Insulin glargine
Market share	37.2%	22.0%	18.1%	10.9%	3.0%	3.0%	2.6%	1.0%	0.8%	0.7%
Number of biosimilars	4	4	3	6	5	5	1	1	6	1
Rebates rate	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%

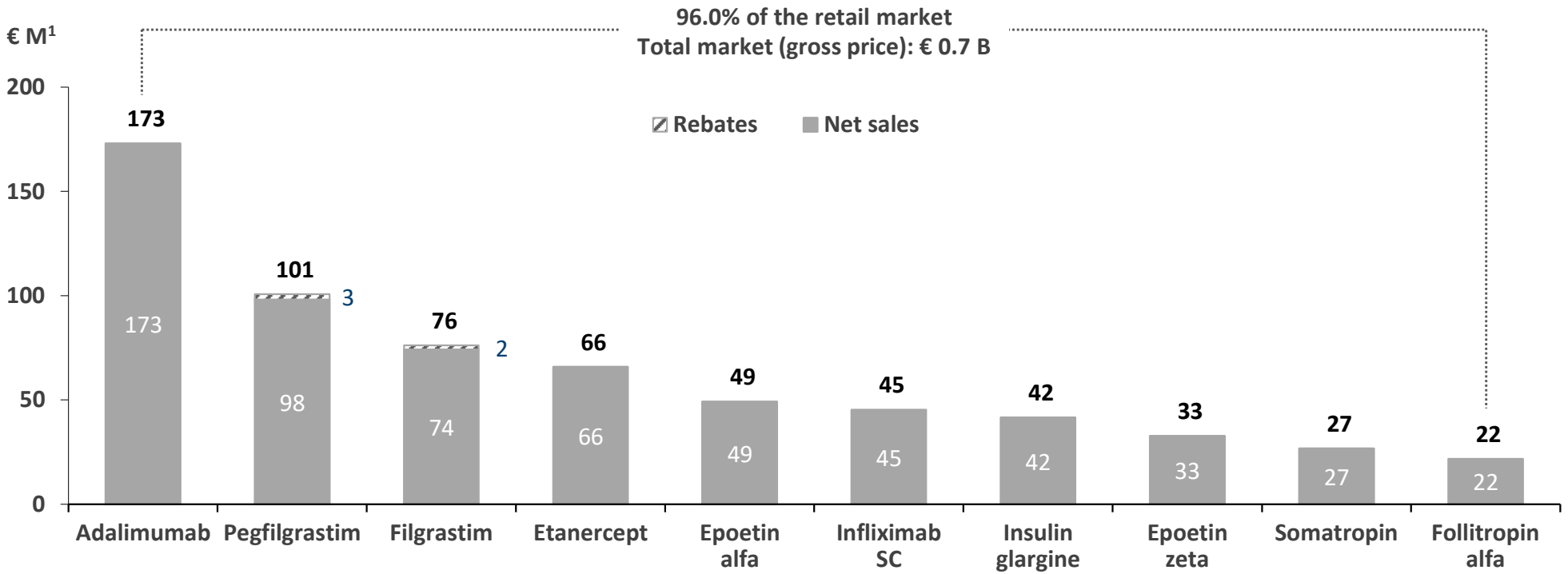
Note: Additional biosimilars available on the hospital market, as of February 2024: eculizumab, follitropin alpha, insulin aspartate, ranibizumab, somatropin, teriparatide

Sources: GERS – Assurance Maladie (Dec. 31, 2023) – Smart Pharma Consulting analyses

[1] Ex-factory prices before taxes – [2] Products delivered whether at hospital or in retail pharmacies

In 2022, adalimumab, pegfilgrastim and filgrastim led the French biosimilars retail market, accounting together for ~53% of the market in value

Top 10 INNs – Retail biosimilars market (2022)



	Adalimumab	Pegfilgrastim	Filgrastim	Etanercept	Epoetin alfa	Infliximab SC	Insulin glargine	Epoetin zeta	Somatropin	Follitropin alfa
Market share	26.3%	15.3%	11.6%	10.0%	7.5%	6.9%	6.3%	5.0%	4.0%	3.3%
Number of biosimilars	8	9	5	3	1	1	1	1	1	2
Rebates rate	0.0%	2.5%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Note: Additional biosimilars available on the retail market as of February 2024: enoxaparin sodium, insulin aspartate, ranibizumab, teriparatide

Sources: GERS – Assurance Maladie (Dec. 31, 2023) – Smart Pharma Consulting analyses

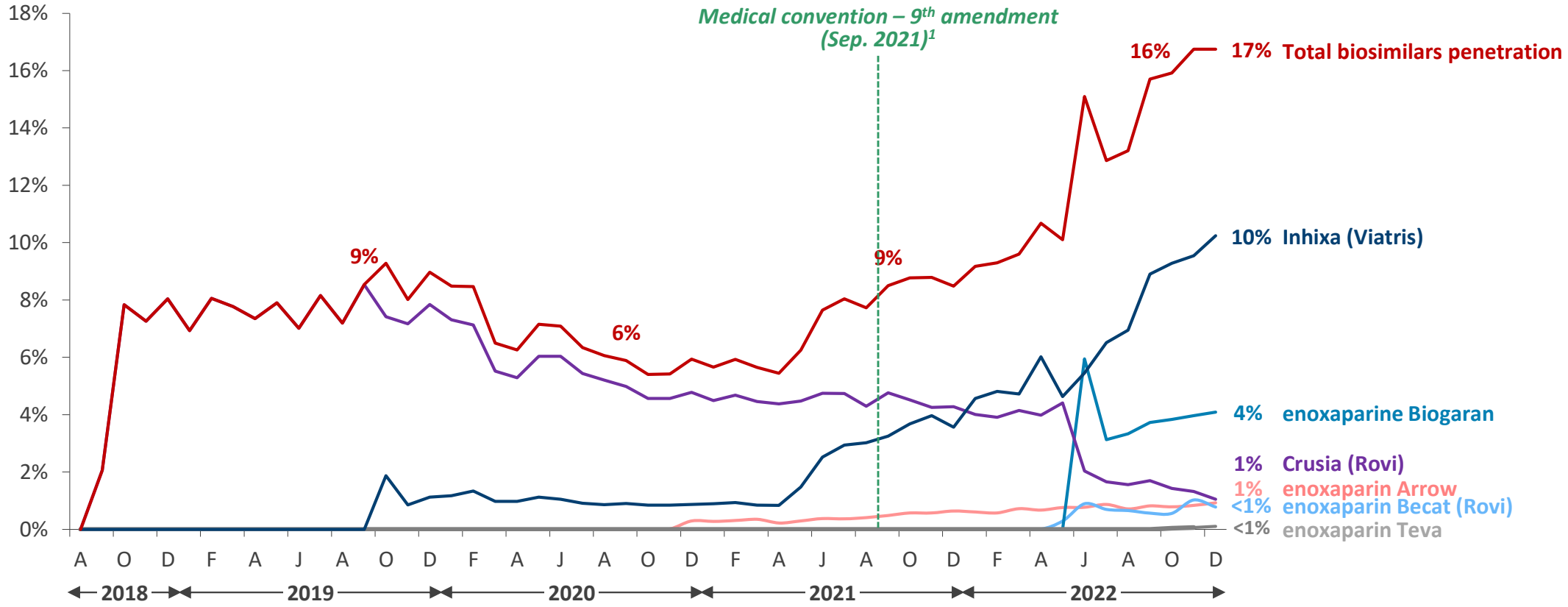
[1] Ex-factory prices before taxes

4 years after the 1st enoxaparin biosimilar entry, the biosimilar penetration remains limited to 17% with Viatris and Biogaran accounting together for 83% of the biosimilars market in Dec. 2022

Enoxaparin biosimilars penetration – (Hospital* & retails markets)

Biosimilars and generic market penetration
(as a % sales in volume)

Illustrative



** The hospital market segment accounted for ~51% of the volume sold in 2022*

Sources: GERS (December 2022) – Smart Pharma Consulting analyses

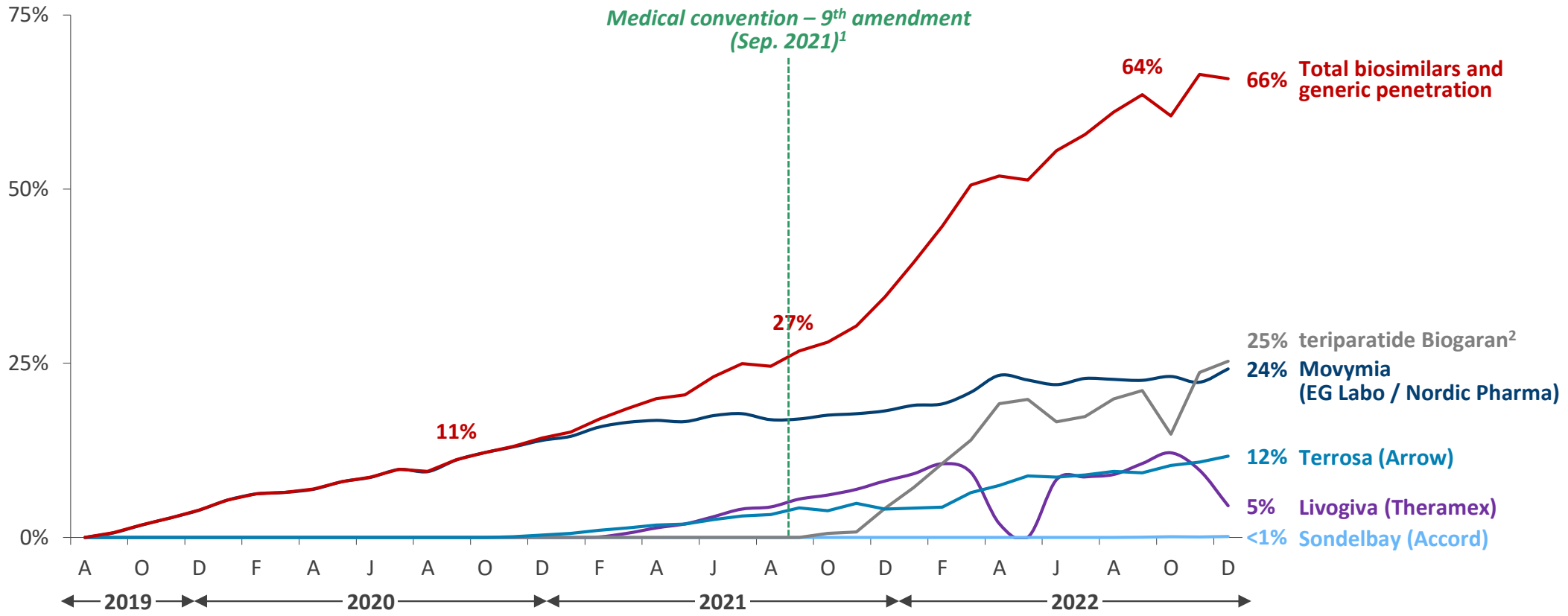
[1] Incentives introduced to encourage office-based physicians' prescription of enoxaparin biosimilars

~3 years after the 1st teriparatide biosimilar entry, biosimilar and generic penetration share reached together 66% in Dec. 2022, with Biogaran generic and Movymia leading the market

Teriparatide biosimilars and generic penetration – (Hospital* & retails markets)

Biosimilars and generic market penetration
(as a % sales in volume)

Illustrative



** The hospital market segment accounted for ~4% of the volume sold in 2022*

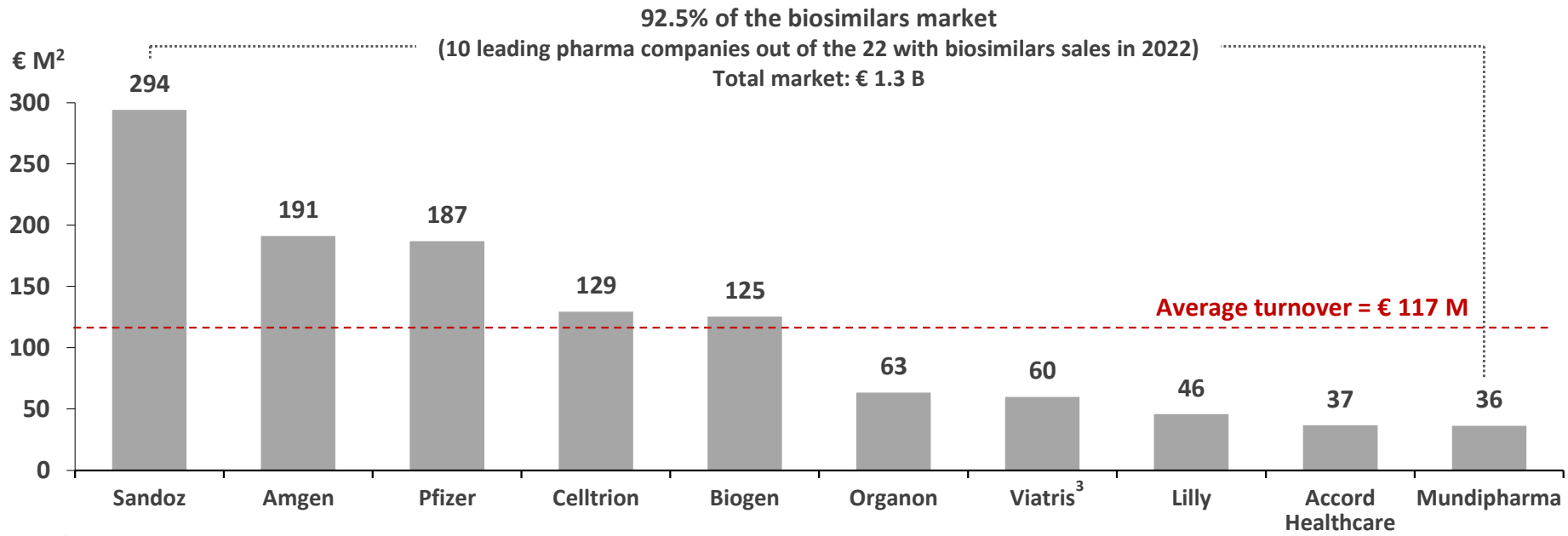
Sources: GERS (December 2022) – Smart Pharma Consulting analyses

[1] Incentives introduced to encourage office-based physicians' prescription of teriparatide biosimilars –
[2] Generic in shortage since beginning of 2023

In 2022, Sandoz, Amgen, Pfizer, Celltrion and Biogen generated individually more than € 100 M sales and represented together ~73% of the French biosimilars market in value

Top 10 companies on the biosimilars market – In value[1] (2022)

Gross price



	Sandoz	Amgen	Pfizer	Celltrion	Biogen	Organon	Viatris[3]	Lilly	Accord Healthcare	Mundipharma
Market share	23.0%	15.0%	14.6%	10.1%	9.8%	5.0%	4.7%	3.6%	2.9%	2.8%
Biosimilars weight in the portfolio	36.1%	23.2%	12.0%	100.0%	27.0%	21.7%	2.4%	8.1%	8.7%	65.4%
2021-2022 evolution	+16.85	+16.4%	-19.8%	-2.6%	+5.5%	+29.8%	+46.4%	+14.4%	+8.7%	-19.1%

Note: Additional companies operating on the French biosimilars market as of February 2024: Arrow, Biocon, Biogaran, EG Labo, Fresenius Kabi, Gedeon Richter, Rovi, Samsung Bioepis, Sanofi, Teva, Theramex, Zentiva

Sources: GERS – Assurance Maladie (Dec. 31, 2023) – Smart Pharma Consulting analyses

[1] Both retail and hospital sales – [2] Ex-factory price, before taxes and rebates – [3] Company founded in November 2020 by the merger of Mylan, Mylan Medical and Pfizer Upjohn activities. In December 2023, Viatris transferred its biosimilars portfolio to Biocon Biologics (excluding Inhixa, its biosimilar of enoxaparin sodium)

As of December 2023, 22 pharma companies were operating in the biosimilars market, of which six are R&D-based companies, with no or little business interactions with retail pharmacists

Biosimilars portfolio structure of pharma companies (2023) – (1/2)

Pharma Companies	Ada	Beva*	Eculi*	Enoxa	EPO	Etan	Fol α	Inflix*	Insul aspart	Insul glarg	Insul lispro	Ranib	Ritux*	Soma	Teri	Trastu*	Filgras	Peg Filgras	Total
Accord Healthcare															X	X	X	X	4
Amgen°	X	X	X													X			4
Arrow¤				X											X				2
Biocon Biologics	X[1]	X[1]				X[1]										X[1]		X[1]	5
Biogaran¤				X											[2]		X	X	3
Biogen°	X					X		X											3
Celltrion Healthcare	X	X						X					X			X			5
EG Labo¤	X	X										X			X[3]				4
Fresenius Kabi	X																		1
Gedeon Richter							X												1
Lilly°										X									1

** Hospital-only biological molecules – ° R&D-based companies with no or limited activity at retail pharmacies level – ¤ Generics companies with an important activity at retail pharmacies level*

Sources: GERS (December 2023) – Assurance Maladie (December 2023) – Smart Pharma Consulting analyses

[1] Business acquired from Viatris in December 2023 – [2] Biogaran markets a teriparatide version having the status of generics that can benefit from retail pharmacists' substitution – [3] In partnership with Nordic Pharma

Pfizer and Sandoz have the broader biosimilars portfolio, ahead of Biocon Biologics (which has recently acquired Viatris brands) and Celltrion Healthcare

Biosimilars portfolio structure of pharma companies (2023) – (2/2)

Pharma Companies	Ada	Beva*	Eculi*	Enoxa	EPO	Etan	Fol α	Inflix*	Insul aspart	Insul glarg	Insul lispro	Ranib	Ritux*	Soma	Teri	Trastu*	Filgras	Peg Filgras	Total
Mundi-pharma																		X	1
Organon°		X														X			2
Pfizer°	X	X			X			X					X			X	X	X	8
Rovi				X															1
Sanofi°									X		X[1]								2
Samsung Bioepis[2]			X[3]									X							2
Sandoz¤	X				X	X		X					X	X			X	X	8
Teva¤				X								X					X	X[4]	4
Theramex							X								X				2
Viatris¤	5	5		X		5										5		5	1
Zentiva¤		X																X	2
Total ▶	8	7	2	5	2	3	2	4	1	1	1	3	3	1	4	6	5	8	66

** Hospital-only biological molecules – ° R&D-based companies with no or limited activity at retail pharmacies level – ¤ Generics companies with an important activity at retail pharmacies level*

Sources: GERS (December 2023) – Assurance Maladie (December 2023) – Smart Pharma Consulting analyses

[1] No sales as of December 2023 – [2] Samsung Bioepis was initially a joint-venture between Samsung Biologics and Biogen. Since 2022, it is fully owned by Samsung Biologics – [3] In partnership with Alloga – [4] Stimufend belonging to Fresenius Kabi but marketed by Teva– [5] Business transferred to Biocon Biologics in December 2023

The biosimilars market will be mainly driven by high sales original biologics' LOE[1], by new health authorities' measures to boost HCPs prescriptions and by additional substitutable biological drugs

Drivers & limiters of the French biosimilars market (2022 –2027)

	Drivers	Limiters
Authorities & Payers	▪ Biosimilars can increase access to treatments by: – Decreasing the overall treatment costs … – … and thus, increasing affordability (treatment of larger populations) ▪ Increasing body of evidence showing the reliability, efficacy and quality of biosimilars	▪ "Precaution principle": high cautiousness due to major public health issues in the past (e.g., blood transfusions contaminated with HIV, growth hormone case, sudden increase of Pure Red Cell Aplasia (PRCA) with Eprex[2]) ▪ Substitution permitted for only for two biological molecules since April 2022 (filgrastim and pegfilgrastim)
HCPs	▪ Biosimilars contribute to improve hospitals financial balance ▪ Objective of penetration by ARS[3] at hospital level (CAQES[4]) ▪ Financial incentives proposed by heath authorities for prescribing biosimilars at both hospital- and office-based levels ▪ For physicians, biosimilars are an alternative to list products (in case of shortage for instance)	▪ No guarantee of perfect equivalence with the original biologic (however, in practice, no specific nor significant issues have been reported following the prescription of biosimilars) ▪ Physicians have often established close relationships for many years with original biologic companies, which may slowdown the use of biosimilars by some of them
Patients	▪ None, except in cases where patients might have to bear (totally or partially) the cost of biological drugs[5]	▪ Preference for original biologic, in principle, especially in the case of serious and/or chronic diseases
Biosimilar companies	▪ Increasing number of biosimilar products per molecule accelerates market penetration and reduces hospital prices ▪ ~14 original biologics representing together € 2.6 B sales in 2022 will lose their market exclusivity by the end of 2027	▪ The intensification of competition drives hospital biosimilar prices down and jeopardizes biosimilar companies' profits… ▪ … making the market much less attractive for new market players

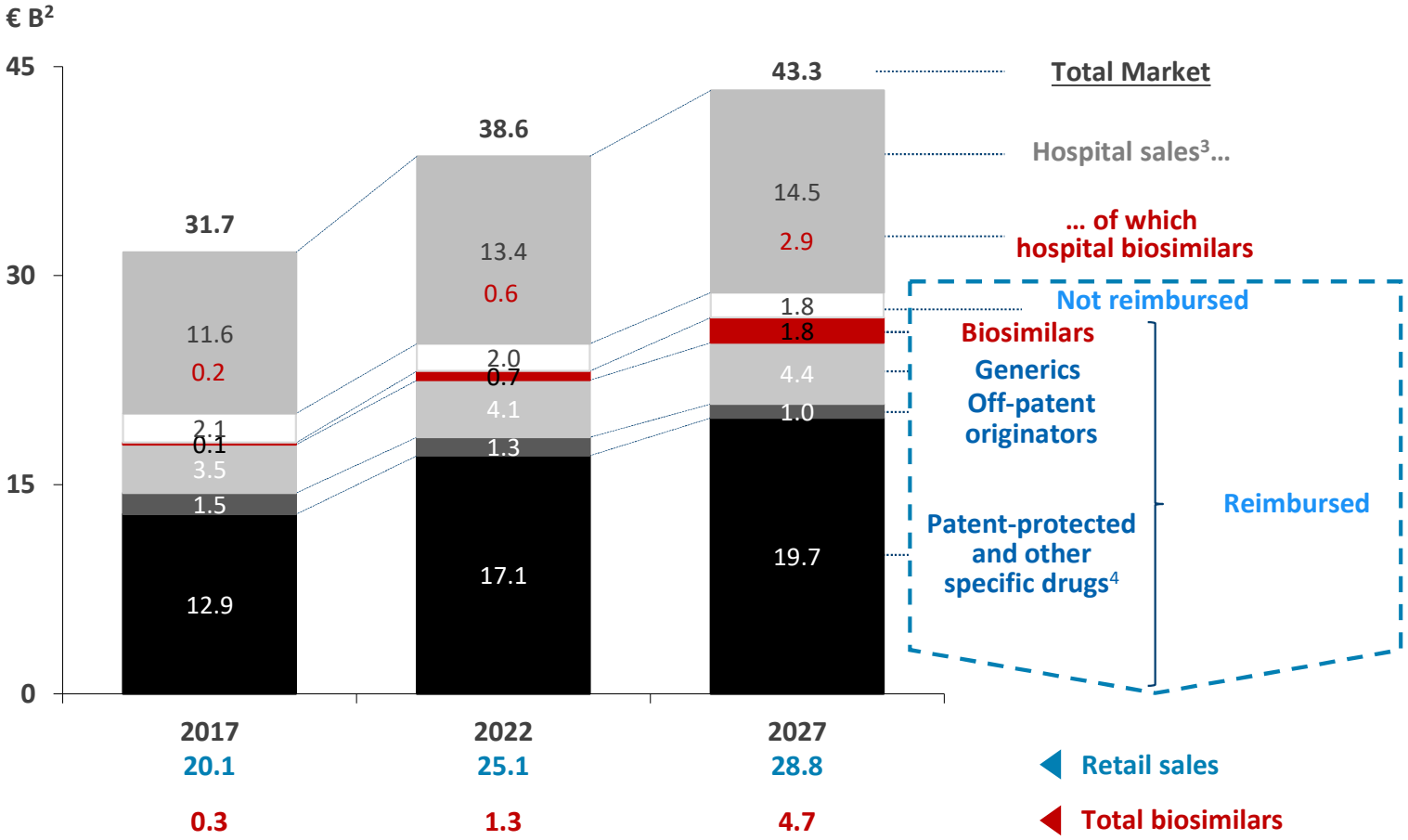
Sources: List of biologics patent expiring between 2022 and 2027, GreyB (2021) – Legifrance (2024) – Smart Pharma Consulting analyses based on external interviews

[1] Loss of exclusivity – [2] Increase in PRCA explained by an increase in the immunogenicity of Eprex following a formulation change in 1998, in which the human serum albumin stabilizer was replaced with polysorbate 80 and glycine – [3] Regional Health Agencies – [4] Contracts for healthcare quality and efficiency enhancement. In the new CAQES (2023 – 2024), there is no national objectives. However, at regional level, ARS can set prescription rate objectives for biosimilars – [5] Which does not apply to the French context, so far

The biosimilars market evolution over the 2022 – 2027 period – expressed in gross price – will strongly depend on patent expiries of original biologics and price cuts of the CEPS[1]

Drugs sales forecast by segment (2017 – 2022 – 2027)

Gross price



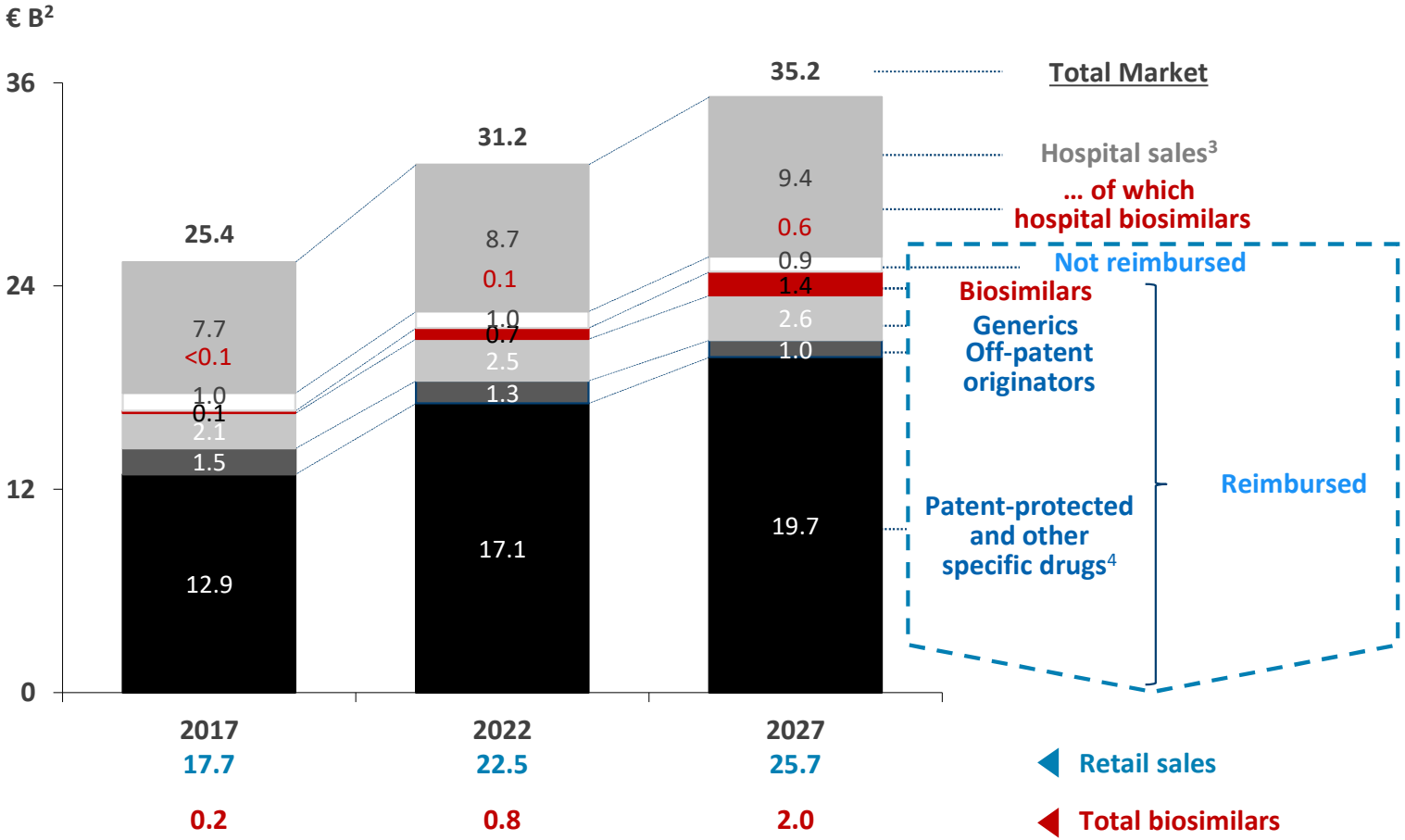
	CAGR[5] 2017-2022	CAGR 2022-2027
Total Market	+4.0%	+2.3%
Hospital sales[3]…	+3.0%	+1.5%
… of which hospital biosimilars	+30.3%	+36.3%
Not reimbursed	-1.4%	-1.7%
Biosimilars	+36.6%	+22.3%
Generics	+3.4%	+1.4%
Off-patent originators	-2.8%	-5.5%
Reimbursed	+5.2%	+2.6%
Patent-protected and other specific drugs[4]	+5.8%	+3.0%
Retail sales	+4.5%	+2.8%
Total biosimilars	+33.8%	+29.7%

Sources: GERS dashboards – Smart Pharma Consulting estimates

[1] Drug pricing committee – [2] Constant ex-factory prices, before rebates and taxes – [3] Including hospital sales of biosimilars, products invoiced on top of "T2A" and retroceded medicines – [4] Sales of drugs whose patents have not expired and of other specific products (calcium, sodium, potassium, paracetamol, etc.) – [5] Compound annual growth rate

It is estimated that the total average net prices of biosimilars in 2027 will be 57% below their list prices considering hospital and retail pharmacies[1] rebates granted by pharma companies

Drugs sales forecast by segment (2017 – 2022 – 2027)



Net price

	CAGR[5] 2017-2022	CAGR 2022-2027
Total Market	+4.2%	+2.4%
Hospital sales[3]	+2.3%	+1.7%
… of which hospital biosimilars	+30.3%	+38.7%
Not reimbursed	-1.4%	-1.7%
Biosimilars	+36.6%	+16.3%
Generics Off-patent originators	+3.4%	+1.4%
	-2.8%	-5.5%
Reimbursed	+5.3%	+2.7%
Patent-protected and other specific drugs[4]	+5.8%	+3.0%
Retail sales	+4.9%	+2.7%
Total biosimilars	+36.4%	+20.9%

Sources: GERS dashboards – Smart Pharma Consulting estimates

[1] Assuming that by 2027, pharma companies will authorized to offer rebates to retail pharmacists of up to 20% of their biosimilars ex-factory prices – [2] Constant ex-factory prices, before rebates and taxes – [3] Including hospital sales of biosimilars, products invoiced on top of "T2A" and retroceded medicines – [4] Sales of drugs whose patents have not expired and of other specific products (calcium, sodium, potassium, paracetamol, etc.) – [5] Compound annual growth rate

The most important success factor on the hospital market is to be the 1st entrant, and on the retail market to be a leading generics player with a broad portfolio of substitutable biosimilars

Key success factors on the hospital and retail biosimilars markets

#1 – Be the 1st entrant

- Historical analysis shows that first entrants have a bigger market share than the followers, especially on the hospital market segment
- When a biosimilar benefits from a temporary period of monopoly, its probability to win hospital tenders vs. the original biologic is very high
- Once a market has been won, it is locked for two to three years and the following biosimilars must wait

#2 – Offer the best price

- The lowest the price offer, the highest the probability to win tenders, especially for hospital-only products
- Superior product attributes and/or services may help a biosimilar product win a tender, in certain cases, only if the price offered is not superior to 10% to 15% than the lowest bidder
- On the retail market, to offer the maximum rebates to pharmacists is a must have to benefit from substitution, and in this respect, leading generics players have an important competitive advantage

KSFs

#3 – Propose a better product & larger portfolio

- There may be some possibilities to differentiate biosimilars amongst themselves and vs. the corresponding original biologic:
  - Amgevita (Amgen) proposes a citrate-free version of adalimumab, as Humira (AbbVie)[1] does since 2018, associated with less injection site-related pain[2]
  - Benepali (Biogen), has shown in a European study[3] that its autoinjector was more convenient than the Enbrel (Pfizer) one
- Pharma companies having a broader portfolio of substitutable biosimilars are likely to be preferred by retail pharmacists

#4 – Develop services

- Services proposed to hospital pharmacists, physicians, nurses and patients to facilitate the procurement, the prescription, the patient education and the drug usage may play a significant role to get preferred by hospital HCPs[4]
- Market insights (knowledge and understanding) of in-field collaborators are a prerequisite to deliver highly valued services
- The quality of services will reinforce the reputation of the biosimilars company and preference of HCPs for its products

Sources: Smart Pharma Consulting interviews with 5 General Managers of companies operating in the biosimilars market – Smart Pharma Consulting analyses

[1] Which is not the case for Imraldi (Biogen) and Hyrimoz (Sandoz), for instance – [2] Peter Nash, Rheumatol Ther (2016) 3:257-270 – [3] Kunal Thaku, Rheumatol Ther (2016) 3:77-89 – [4] Especially for products that are used in home care (e.g., subcutaneous anti-TNFs). It is essential at the launch phase to put in place observational studies in the key centers to boost the adoption of the biosimilar brand by the HCPs

The biosimilars market size will speed up, but its profitability will remain very low on the hospital segment and is likely to deteriorate on the retail segment, if higher rebates are allowed

Key Takeaways

1. Biosimilars market structure and dynamics

- The biosimilar penetration on the hospital and retail markets are in the range of 80% and 30%, respectively
- Certain hospital-only biosimilars, such as antineoplastics, can reach 95% or more market share
- From 2017 to 2022, biosimilars have grown by +36.4% p.a.[1]

2. French regulatory environment

- Health authorities have multiplied initiatives to boost the biosimilars market and…
- … set a doctrine re. biosimilars price cuts over time
- New measures are targeted at the retail market, including incentives for prescribers and pharmacists, along with the extension of the number of substitutable biosimilars

3. 2022 – 2027 market growth

- The market should increase by € 1.2 B and € 3.4 B, respectively expressed in gross and net prices, thanks to the LOE of blockbusters (e.g., RoActemra, Stelara, Eylea, Simponi, Nplate, Perjeta, Cosentyx) and the increasing market penetration of biosimilars recently launched (e.g., eculizumab, ranibizumab)

4. Customers behaviors

- Hospital listing and prescribing depend mainly on price and product attributes
- In the absence of financial incentives, retail pharmacists have, so far, no interest to substitute biosimilars and…
- … physicians remain the key market driver

5. Competitive landscape

- Pharma companies having a strong presence on the retail market exhibit attractive margins because rebates are capped at 2.5% of biosimilars ex-factory prices[2]…
- … which is not the case on the hospital market[3]

6. Key success factors

- Enter first the hospital market and be the lowest-priced bidder or offer a better product
- Be a leading generics player with a broad portfolio of substitutable biosimilars (e.g., Sandoz, Teva)

Sources: Smart Pharma Consulting

[1] In net value – [2] However, health authorities are likely to increase the capping in the short-term, at probably ~20% of ex-factory prices – [3] The rebates are not capped per se. The limit is the sale below cost which is forbidden

Smart Pharma
CONSULTING

Biosimilars Substitution Impact

Situation Analysis

&

Strategic Options

May 2024

The purpose of this study is to help pharma companies define an optimal strategy considering the expected extension of biosimilars authorized to be substituted by retail pharmacists

Introduction

Context

- The art. 54 of the LFSS[1] 2024 published in December 2023 authorizes the substitution by retail pharmacists of biosimilars, two years after their market entry, unless the ANSM[2] gives a negative opinion
- This change in the retail market environment should have different impacts on companies marketing biosimilars according to their product portfolio and their current presence at retail pharmacy level

Objective

- The objective of this study is to evaluate:
  - The likely changes re. the substitution of biosimilars over the 2024 – 2027 period, on the retail market
  - The possible impacts on the behavior of involved stakeholders
  - The specific strategic implications for pharma companies depending on their competitive position and ambition

Methodology

- Desk research (professional magazines, Smart Pharma Consulting and other experts' reports)
- Market database analysis (2019 – 2023)
- Interviews of 38 key stakeholders to gather insights re. their vision, opinion and likely behavior:
  - 6 professional associations
  - 9 Pharma companies operating on the retail biosimilars market
  - 20 retail pharmacists and 3 VTOs[3]
- Market scenario building and strategic options development and evaluation for pharma companies on the retail biosimilar market

Sources: Smart Pharma Consulting

[1] Loi de Financement de la Sécurité Sociale (Social Security Financing Act) – [2] Agence Nationale de Sécurité du Médicament (National Agency for the Safety of Medicines and Health Products) – [3] Voluntary Trade Organizations (pharmacy groups)

So far, the development of the biosimilars retail market has been mostly driven by the prescription of hospital and office-based physicians which is encouraged by health authorities

Stakeholders involved in the French biosimilars market

Health Authorities & Payers[1]

- Health authorities and payers have introduced a series of measures to convince hospital and office-based physicians to prescribe more biosimilars, either as an initial treatment or as a switch

- Prescriptions of biosimilars by physicians depend on patients and the products
- Patients and PAGs[2] still wary re. the Rx of biosimilars
- Retail pharmacists are divided re. the substitution of biological drugs…
- … which is only allowed for filgrastim and pegfilgrastim as of May 2024

Sources: Smart Pharma Consulting analyses

[1] National Health Insurance Fund – [2] Patients Advocacy Groups

The French retail biosimilars market requires from pharma companies' strategies, tactics and organizational models to succeed that are different from the hospital market segment ones

Specificities of the retail biosimilars market

Definition	▪ Prescribed by hospital and/or office-based specialists, purchased and delivered by retail pharmacies only (e.g., follitropin alfa, somatropin) or by hospital pharmacies too (e.g., epoetin, filgrastim)
Pricing	▪ Ex-factory price initially set by the CEPS at -40% below the price of the original biologic before its price is cut, following biosimilars entry
Purchasing	▪ The level of rebates to retail pharmacies is legally limited to a maximum of 2.5% of the ex-factory price which is in general granted by wholesalers[1] ▪ Limited price pressure on retail sales
Medico marketing activities	▪ Medical activity carried out by MSLs to reassure prescribers about the quality of the biosimilars ▪ Promotional activity carried out by marketers and med reps to be prescribed to in- and out-patients

Sources: Smart Pharma Consulting analyses

[1] Pharma companies are not used to giving discounts to retail pharmacists for their biosimilars

Substitution of biosimilars by retail pharmacists is yet allowed for filgrastim and pegfilgrastim, and should be extended to additional biologics, from 2024 onwards

Regulations related to biosimilars

Biosimilar drugs[1]

- A biosimilar drug is any biological drug that has the **same qualitative** and **quantitative** composition of **active substance** and the same pharmaceutical **form** as an original biologic…
- … but does not fulfill the conditions for being regarded as a generic due to differences related to **raw material variability** or **manufacturing processes** requiring the achievement of additional **preclinical** and **clinical data** under regulatory conditions…
- … demonstrating that the biosimilar:
  - Is **similar** to the original biologic
  - **Does not differ** significantly from the originator in terms of **quality**, **efficacy** and **safety**

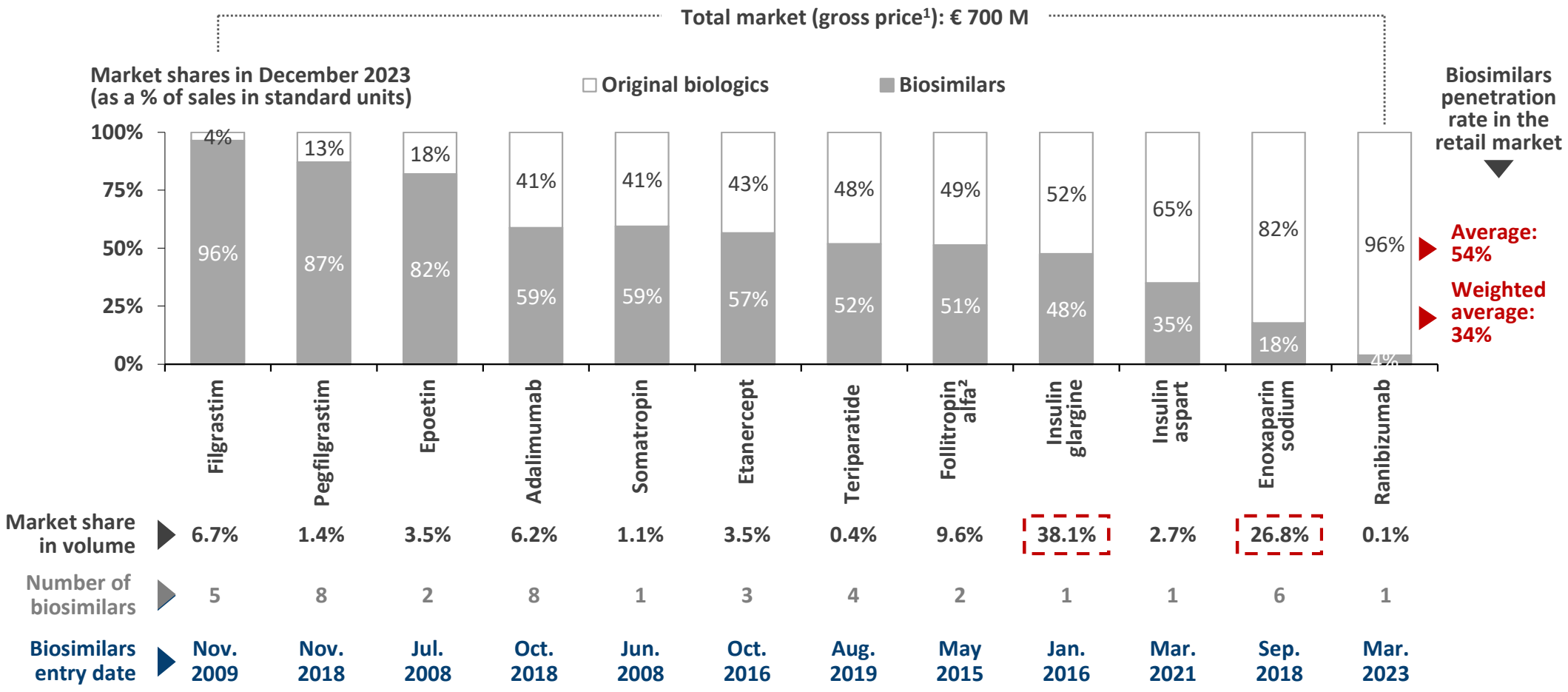
Inter-changeability	▪ The ANSM has specified in **May 2016** that **inter-changeability** was **possible** between biologic drugs belonging to the **same similar biologic group**
Biosimilar register	▪ The ANSM[2] has created in 2017 **similar biologic groups**, each of them defined by an **original biologic** and its corresponding **biosimilars**, listed by brand name
Biosimilar substitution right	▪ France **allowed** the **substitution** of biosimilars in **December 2013**, but in the absence of implementation decrees, this law has never been implemented ▪ After having been abrogated in 2020, the substitution right has been reintroduced in 2022, with a decree authorizing the substitution by retail pharmacists of 2 products: **filgrastim** and **pegfilgrastim** ▪ The Article 54 of the LFSS 2024 stipulates that **two years after** the publication of the **reimbursement** listing of the **first biosimilar**, in a given group, a **decree** will **authorize** the **substitution by retail pharmacists** within this group, **unless the ANSM issues** an **opinion to the contrary** before the end of these two years ▪ **Substitution** is possible, provided: – The biological products belong to the **same similar biologic group** – The **prescriber** has **not explicitly prohibited**, in writing, the substitution of the prescribed drug – The **retail pharmacist** has **informed the prescriber, the patient** and **recorded the details** of the biosimilar delivered – The biological product delivered **does not induce higher costs**[3]

Sources: Public Health Code – Official Gazette – ANSM – Smart Pharma Consulting analyses

[1] A specific legal framework for biosimilars was introduced in Europe on March 31st, 2004, and the first biosimilar was authorized by the European Commission in April 2006 – [2] "Agence nationale de sécurité du médicament": National Agency for the Safety of Medicines and Health Products – [3] For the National Health Insurance Fund

In December 2023, the weighted average retail biosimilars penetration rate was limited to ~34%, pulled down by insulin glargine and enoxaparin sodium which accounted for ~65% of the volumes

Retail biosimilars penetration rate (2023)

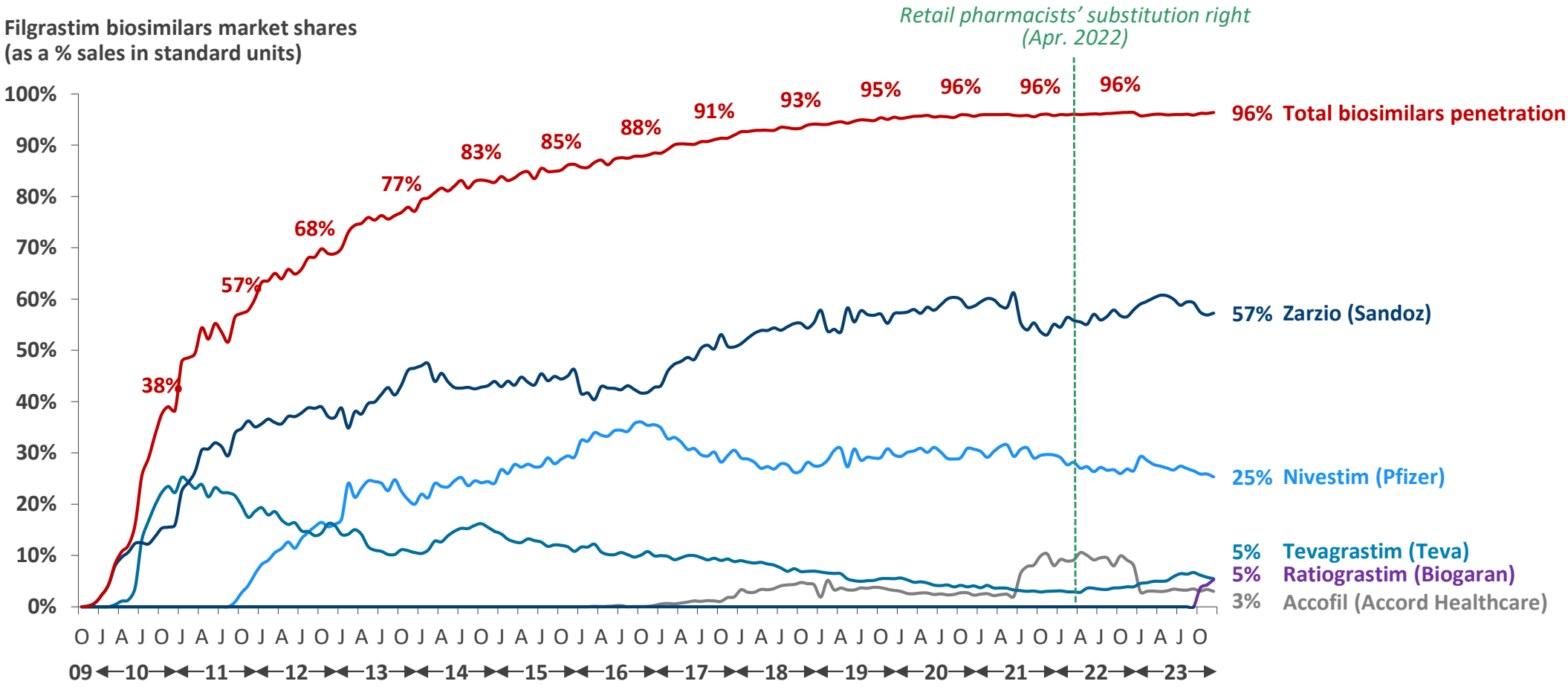


Sources: GERS (December 2023) – Smart Pharma Consulting analyses

[1] Ex-factory prices before taxes – [2] In equivalent 900 UI standard units

Retail pharmacists' substitution right had no significant impact on both biosimilar penetration (which already reached ~96% before the authorization) and market shares amongst biosimilars

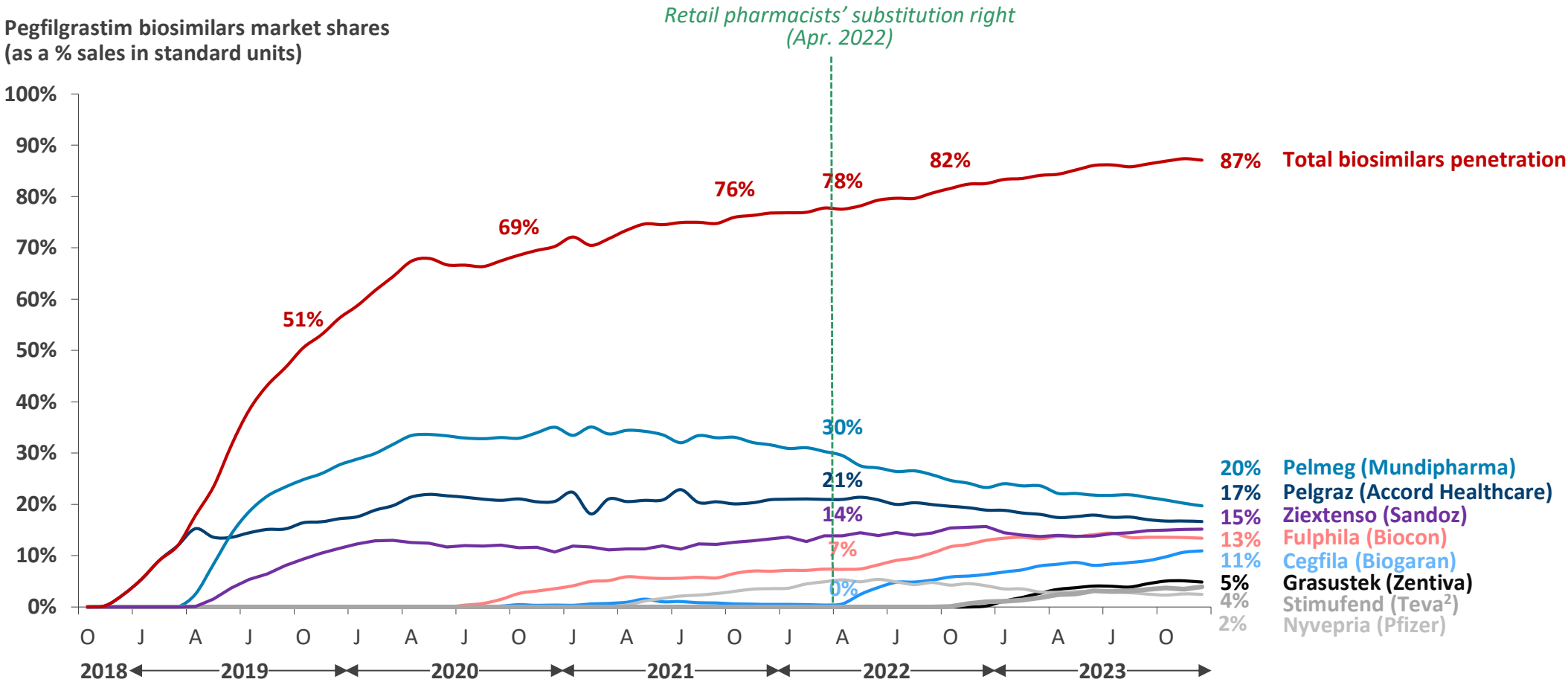
Filgrastim biosimilars penetration in volume (retail market)



Sources: ANSM – GERS (December 2023) – Smart Pharma Consulting analyses

Retail pharmacists' substitution right led to a strong uptake of Biogaran (+11 pts MS) and Biocon[1] (+6 pts MS) to the detriment of Mundipharma (-10 pts MS) and Accord Healthcare (-4 pts MS)

Pegfilgrastim biosimilars penetration in volume (retail market)

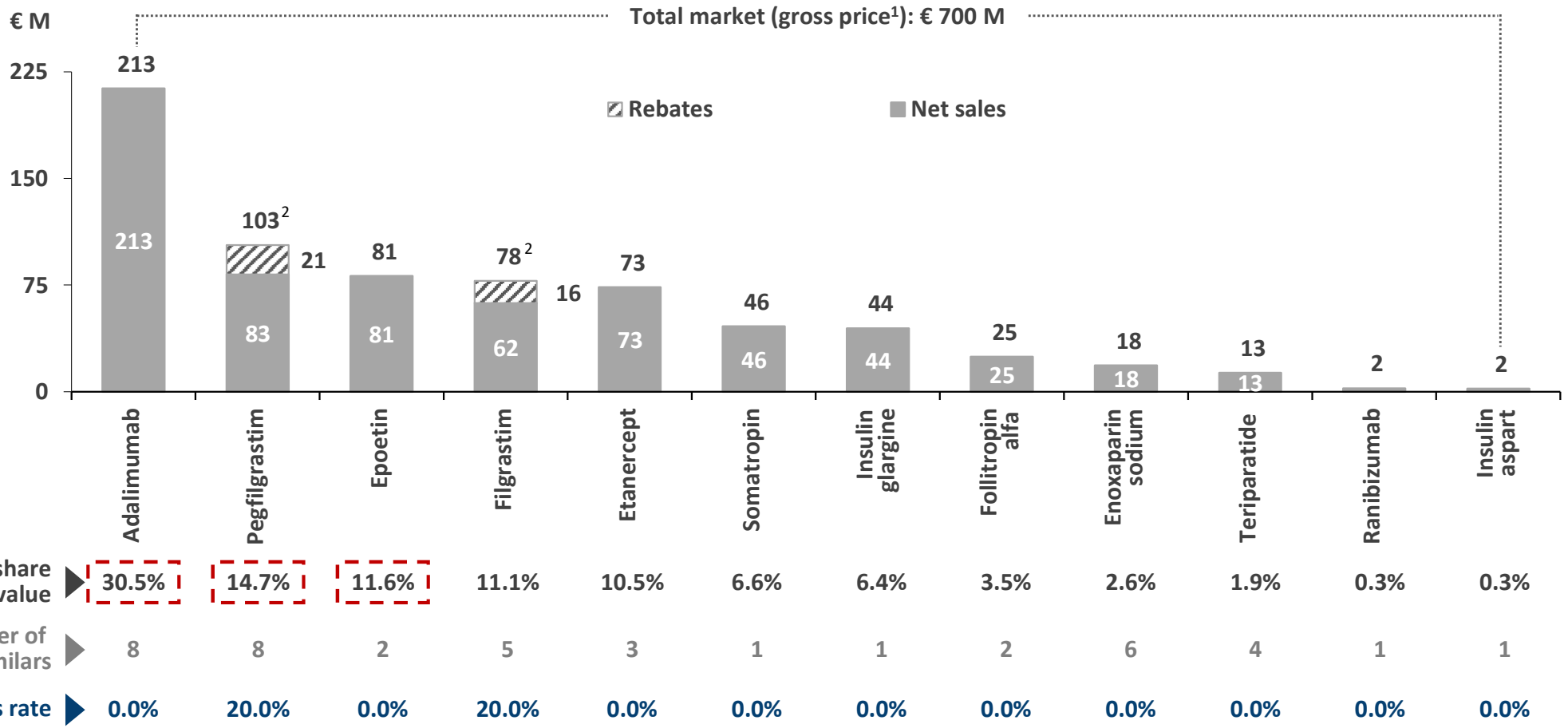


Sources: ANSM – GERS (December 2023) – Smart Pharma Consulting analyses

[1] Since December 2023. Previously marketed by Viatris – [2] Belonging to Fresenius Kabi but marketed by Teva

In 2023, adalimumab, pegfilgrastim and epoetin led the French biosimilars retail market, accounting together for ~57% of the market in value

Retail biosimilars market size (2023)



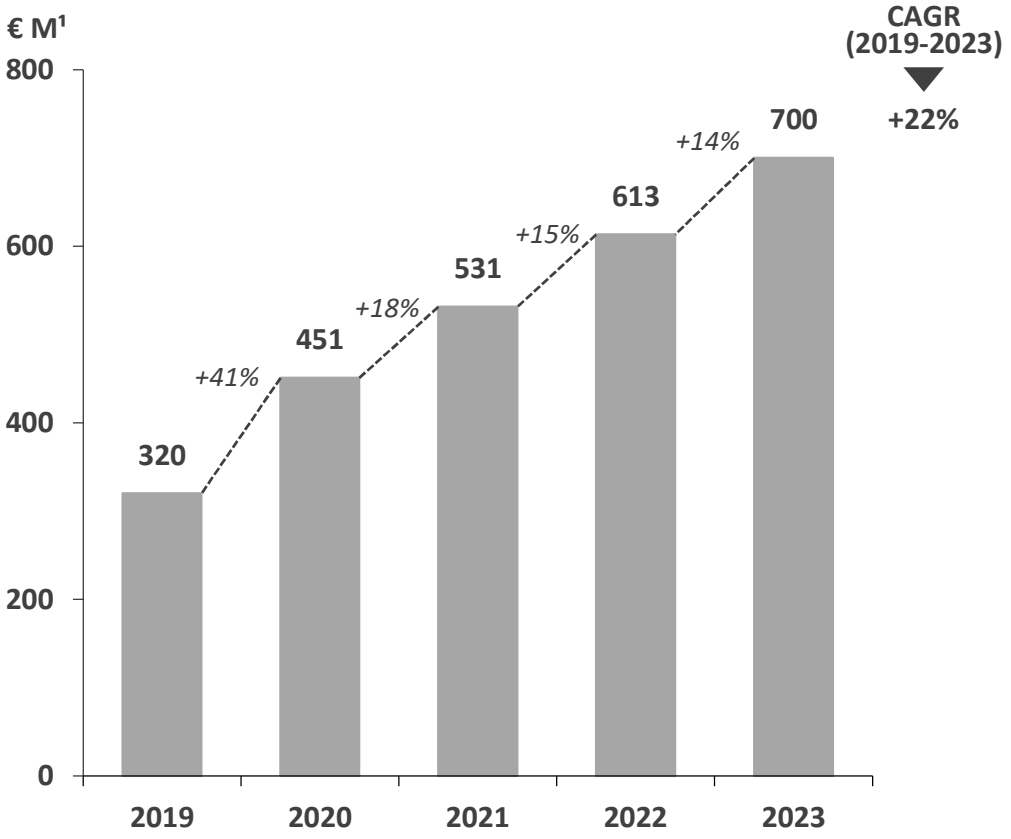
Sources: GERS (December 2023) – Smart Pharma Consulting analyses

[1] Ex-factory prices before taxes – [2] Average discounts estimated at 20% in 2023

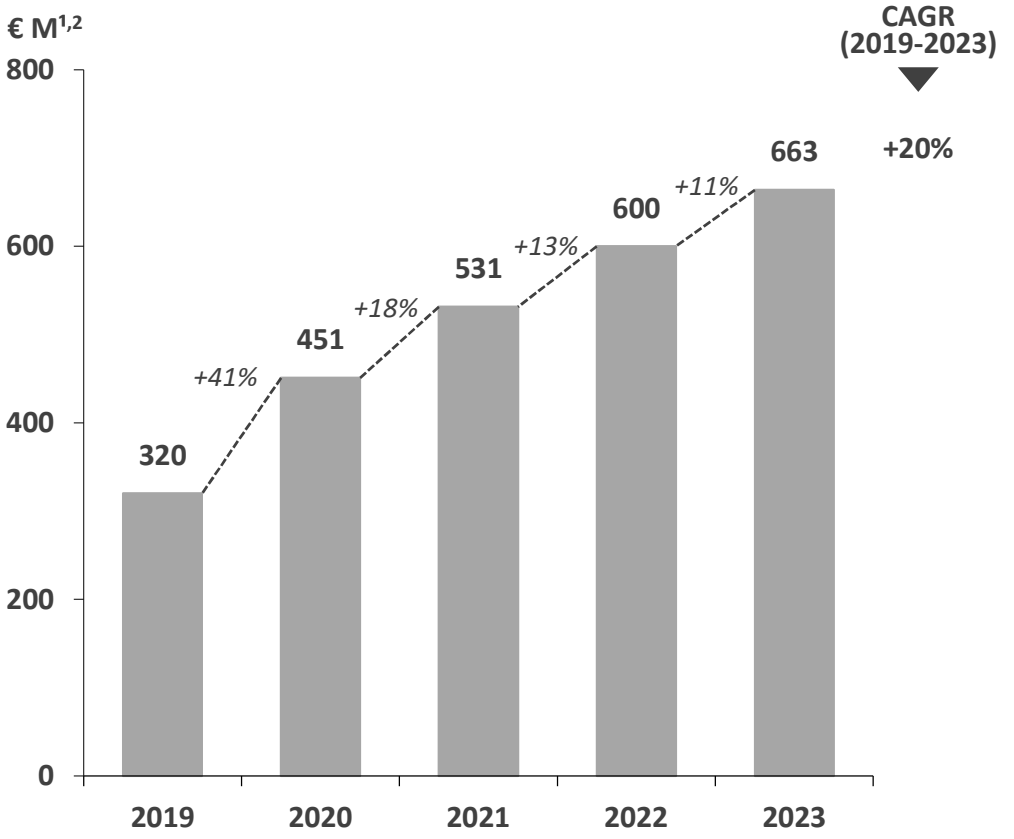
In 2023, biosimilars retail sales reached € 700 M in gross value and an estimated € 663 M in net value, representing a +22% and a +20% CAGR between 2019 and 2023, respectively

Retail biosimilars market evolution (2019 – 2023)

Gross price



Net price



Sources: GERS (December 2023) – Smart Pharma Consulting analyses

[1] Ex-factory prices before taxes – [2] Assuming the following discounts on biologics substitutable (i.e., filgrastim and pegfilgrastim): 10% from April 2022 to December 2022 and 20% in 2023

In May 2024, the price difference between original biologics and their biosimilars ranges from -32.9% (for pegfilgrastim) to +11.9% (for epoetin)

Price differences between retail original biologics and biosimilars (2024)

INN	Original biologics	Date of 1st biosimilar commercialization	Original biologic price[1] in € (May 24)	Biosimilar price[1] in € (May 24)	Price difference (May 24)
Pegfilgrastim	Neulasta (Amgen)	November 2018	594.78	399.13	**-32.9%**
Follitropin alfa	Gonal-F (Merck)	May 2015	194.88	139.49	**-28.4%**
Ranibizumab	Lucentis (Novartis)	March 2023	377.78	283.34	**-25.0%**
Tocilizumab	Roactmera (Roche)	Feb. 2024	589.72	442.29	**-25.0%**
Insulin aspart	Novorapid (NovoNordisk)	March 2021	12.27	9.60	**-21.8%**
Adalimumab	Humira (AbbVie)	October 2018	438.96	367.95	**-16.2%**
Somatropin	Genotonorm (Pfizer)	June 2008	1,290.57	1,134.04	**-12.1%**
Filgrastim	Neupogen (Amgen)	November 2009	54.58	50.49	**-7.5%**
Enoxaparin	Lovenox (Sanofi)	September 2018	22.98	22.06	**-4.0%**
Insulin glargine	Lantus (Sanofi)	January 2016	32.44	31.51	**-2.9%**
Teriparatide	Forsteo (Lilly)	August 2019	176.18	172.73	**-2.0%**
Etanercept	Enbrel (Pfizer)	October 2016	466.85	457.76	**-1.9%**
Epoetin	Eprex (Janssen)	July 2008	153.21	171.42	**+11.9%**[2]

Sources: National Health Insurance tariffs (May 2024) – Smart Pharma Consulting analyses

[1] For each INN, unit ex-factory price before discounts and taxes of the most sold SKU in 2023 – [2] The fact that the original biologic has a lower price than its biosimilars results from Janssen pricing strategy to encourage physicians to remain loyal to their brand and to the negotiation with the CEPS. However, this gap should be reduced in the short-term since the CEPS is currently negotiating a price decrease for the corresponding biosimilars of Sandoz and Pfizer

The ANSM has established a timetable to assess similar biologic groups so that to tell the MoH – which at end will decide – the biologics for which it does not recommend substitutability

Assessment of biosimilars' substitutability by the ANSM – 2024 Timetable[1]

Timetable	INN	Indications	Original Biologics	Biosimilars	Sales (2023)
April 24	Ranibizumab	AMD[2]	Lucentis (Novartis)	Ranivisio – Byooviz – Ximluci	€ 2 M*
	Aflibercept	AMD[2]	Eylea (Bayer)	Yesafili	NA**
May 24	Adalimumab	RA[3] – Psoriasis – IBD[4]	Humira (AbbVie)	Amgevita – Amsparity – Hukyndra – Hulio – Hyrimoz – Idacio – Imraldi – Yuflyma	€ 213 M
	Etanercept	RA – Psoriasis	Enbrel (Pfizer)	Benepali – Erelzi – Nepexto	€ 73 M
	Teriparatide	Osteoporosis	Forsteo (Lilly)	Livogiva – Movymia – Sondelbay – Terrosa	€ 13 M
June 24	Insulin aspart	Diabetes	Novorapid (NN[5])	Insulin aspart Sanofi	€ 2 M
	Insulin glargine		Lantus (Sanofi)	Abasaglar	€ 44 M
	Insulin lispro		Humalog (Lilly)	No Bx launched	NA*
	Epoetin	Cancer – CKD[6]	Eprex (Janssen)	Binocrit – Retacrit	€ 81 M
	Follitropin α	Functional anovulation	Gonal-F (Merck)	Bemfola – Ovaleap	€ 25 M
	Enoxaparin	Angina – infarction – DVT[7]	Lovenox (Sanofi)	Enoxaparin Arrow – Enoxaparin Becat – Enoxaparin Biogaran – Enoxaparin Crusia – Enoxaparin Teva – Inhixa	€ 18 M

** Recently launched – ** Not yet launched*

Sources: ANSM – SmPCs – Smart Pharma Consulting analyses

[1] A tocilizumab biosimilar (Tyenne) has been added to the biosimilars repertory on December 29, 2023, but is not to be assessed this year – [2] Wet age-related macular degeneration – [3] Rheumatoid arthritis – [4] Inflammatory bowel disease including Crohn's disease and ulcerative colitis – [5] Novo Nordisk – [6] Chronic kidney disease – [7] Deep vein thrombosis

All the biologics assessed by the ANSM should become substitutable but with restrictions for some of them, while certain prescribers will write "No substitution" on their prescription

Retail market: Estimates of substitutability barriers

INN	Treatment duration	Forms / dosages differences	Physicians' positions		ANSM position re. substitutability	Bx penetration dynamics
			Bx prescription[1]	Substitution		
Adalimumab	2-3 years	Different dosages / pack size / excipients	59%	At initiation	Restricted to initiations	**Limited acceleration**
Enoxaparin	5 to 35 days	Not all dosages	18%	No objection	Allowed	**High acceleration**
Epoetin	≥ 4 months	Similar injector Same dosage	82%	Not in nephrology	Allowed	**Limited acceleration**
Etanercept	2-3 years	Different dosages	57%	At initiation	Restricted to initiations	**Limited acceleration**
Follitropin α	4 months	Different injectors Different dosages	51%	Not favorable[3]	Restricted to initiations	**No acceleration**
Insulin aspart	Life-long	Different injectors (pen – cartridge)	35%	No objection	Allowed	**Medium acceleration**
Insulin glargine	Life-long	Similar injector Same dosage	48%	No objection	Allowed	**Medium acceleration**
Insulin lispro	Life-long	NA	Bx not marketed	No objection	Allowed	**Medium acceleration**
Ranibizumab	Several years	Different injectors (PFS – injectable solution)	4%[2]	If as convenient[4]	Allowed	**Limited acceleration**
Teriparatide	≤ 18 months	Pen with or without cartridge	52%	No objection	Allowed	**Medium acceleration**

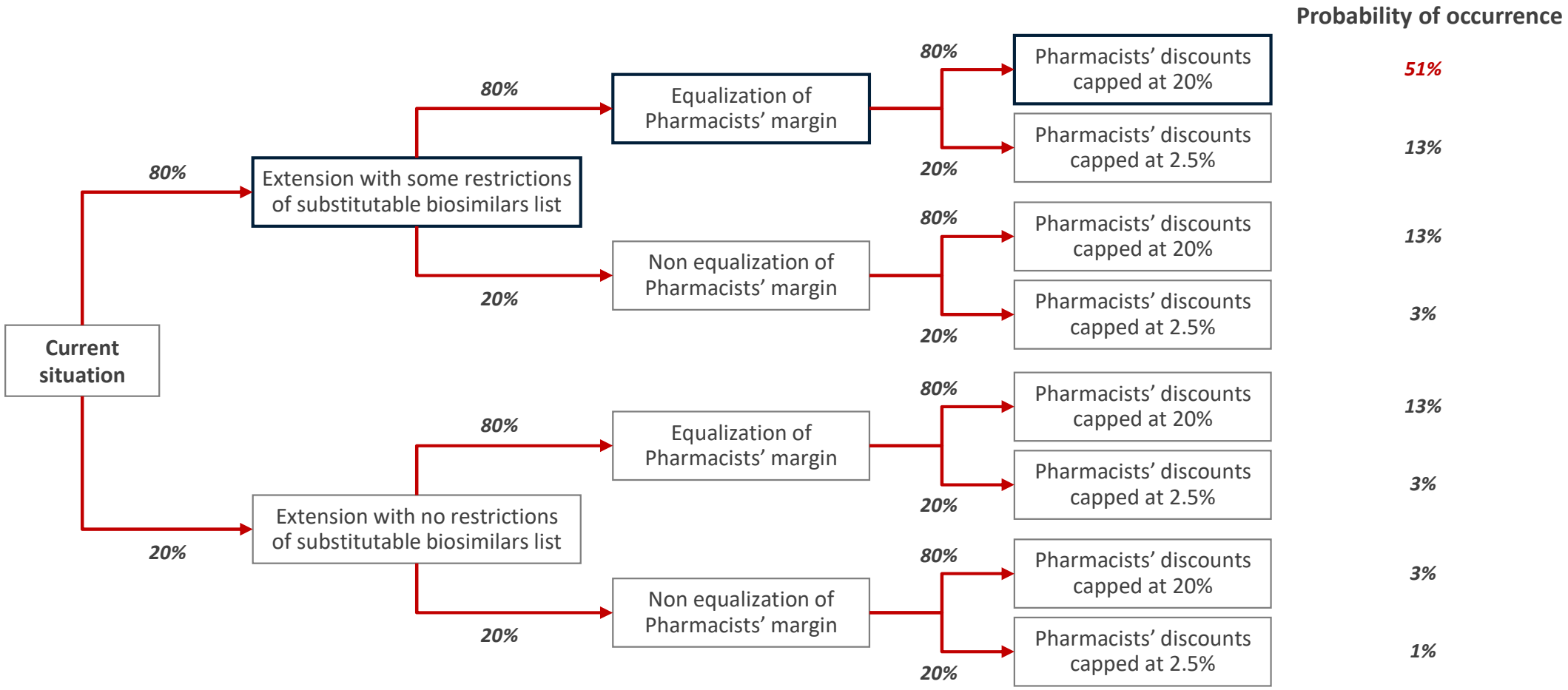
Note: The Human Growth Hormone (HGH) somatropin for which a biosimilar (Omnitrope), marketed in France since 2008, in a previous evaluation, the ANSM has expressed a negative opinion re. its substitutability, under the pression of PAGs and physicians

Sources: GERS data – EMA – ANSM – Vidal (May 2024) – Key stakeholders' interviews – Smart Pharma Consulting analyses

[1] As of December 2023 in standard units – [2] Recently launched – [3] Success rate of 30% only for IVF (In-Vitro Fertilization) – [4] Injected by prescribers who in general run after time

Based on market research and analysis, we assume that most of biosimilars, with restrictions for some of them will be substitutable, margins will be equalized, and discount capped at ~20%

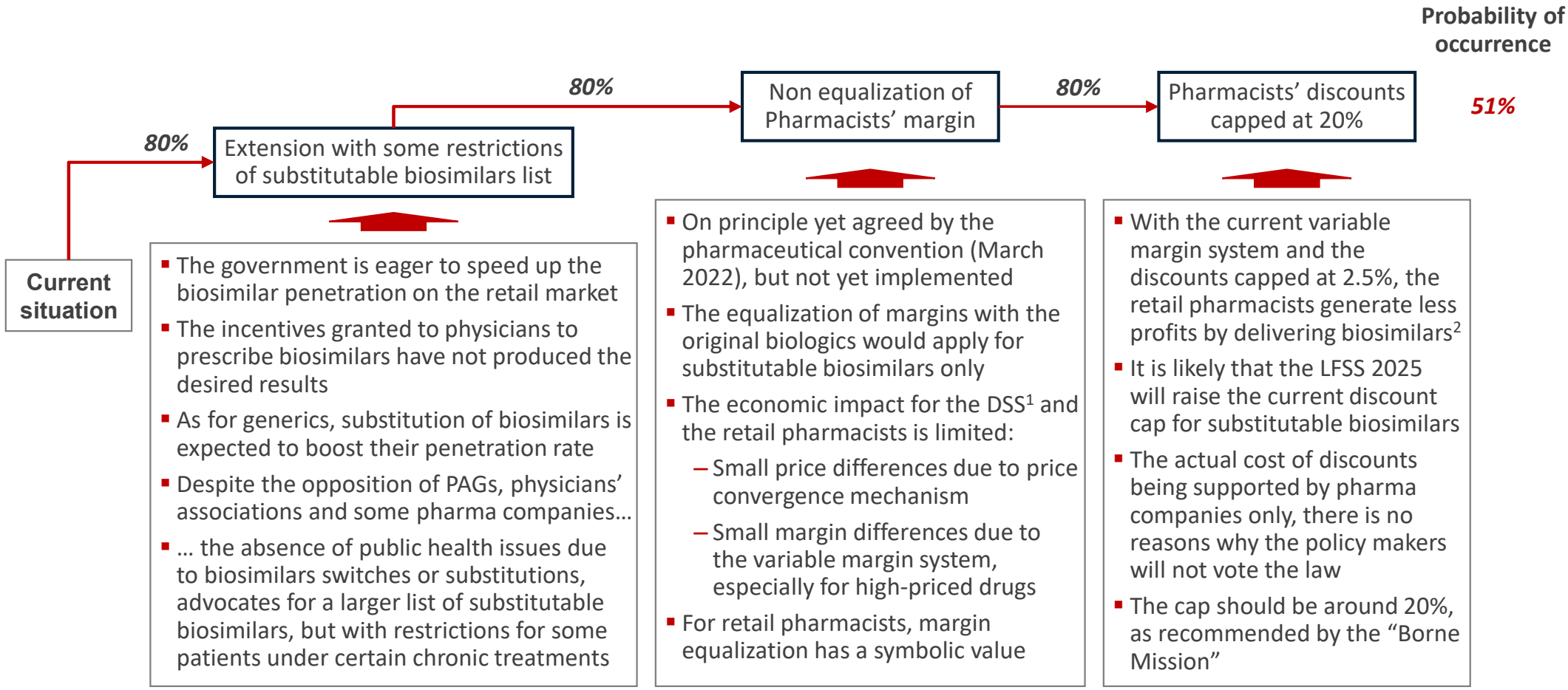
Market changes driven by health authorities – Scenario building (2024 – 2027)



Sources: Stakeholders interviews – Smart Pharma Consulting analyses

Based on market research and analysis, we assume that most of biosimilars, with restrictions for some of them, will be substitutable, margins will be equalized, and discounts capped at ~20%

Retail market: Rationale supporting the most likely market scenario

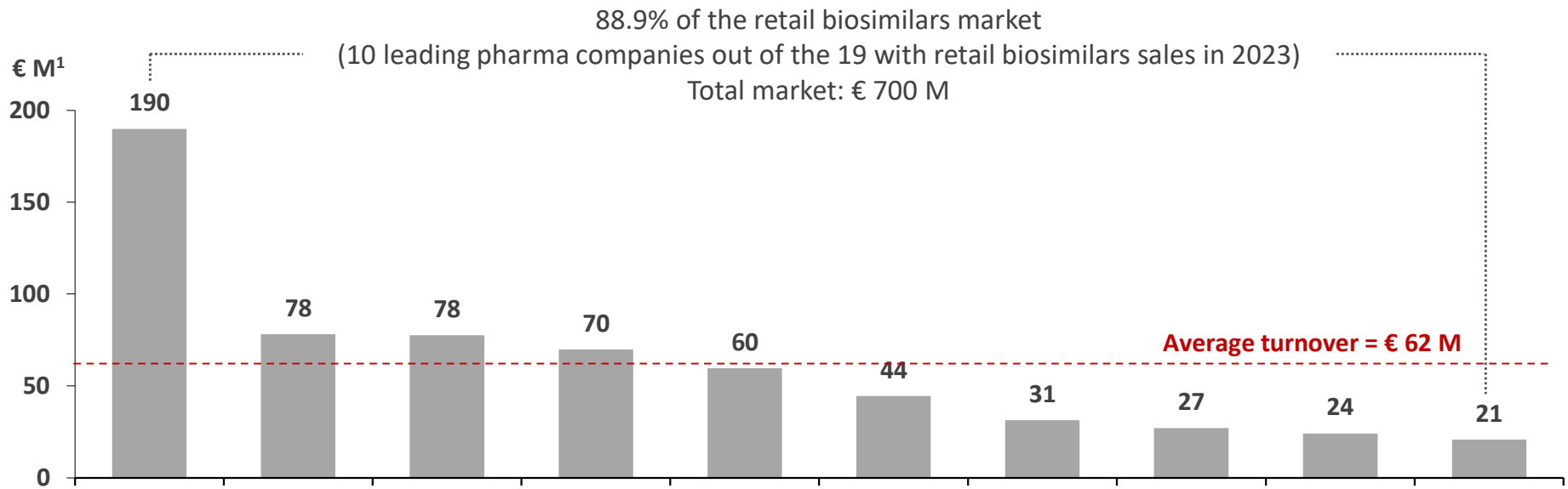


Sources: Stakeholders interviews – Smart Pharma Consulting analyses

[1] Directorate of the Social Security – [2] Officially. Currently, pharma companies offer rebates of 20-25% for pegfilgrastim and filgrastim

In 2023, Sandoz, Biogen, Amgen and Viatris generated individually € 70 M or more retail sales and represented together ~59% of the French retail biosimilars market in value

Top 10 companies on the retail biosimilars market – In value (2023)



	Sandoz	Biogen	Amgen	Viatris[2]	Pfizer	Lilly	Celltrion	Mundipharma	Accord Healthcare	Biogaran
Market share	27.1%	11.2%	11.1%	10.0%	8.5%	6.4%	4.5%	3.9%	3.4%	3.0%
Biosimilars weight in the retail portfolio	28.6%	42.3%	14.8%	4.0%	4.3%	7.0%	36.0%[3]	63.9%	41.1%	1.5%
2022-2023 evolution	+14.2%	+9.5%	+4.8%	+25.4%	-7.1%	+7.1%	+260.7%	-24.8%	-15.1%	+110.9%

Note: Other companies operating on the French biosimilars market as of May 2024: Arrow, EG Labo, Fresenius Kabi, Gedeon Richter, Rovi, Samsung Bioepis, Sanofi, Teva, Theramex and Zentiva

Sources: GERS (December 2023) – Smart Pharma Consulting analyses

[1] Ex-factory price, before taxes and discounts – [3] Company founded in November 2020 by the merger of Mylan, Mylan Medical and Pfizer Upjohn activities. In December 2023, Viatris transferred its biosimilars portfolio to Biocon Biologics (excluding Inhixa, its biosimilar of enoxaparin sodium) – [3] Remsima SC, which accounted for 64% of Celltrion retail sales in 2023, does not have the biosimilar status, unlike its IV form available at hospital

14 of the biosimilars players have a weak competitive position at retail pharmacies while Sandoz, EG Labo, Teva and Biogaran have a well-balanced position

Mapping of pharma companies marketing biosimilars in the retail market

Number of proposed Biosimilars[1]	Weak	Medium	Strong
8		Sandoz	
7			
6			
5		EG Labo	
4	Biogen, Accord, Pfizer	Teva	Biogaran
3	Fresenius Kabi, Biocon		
2	Amgen, Celltrion, Theramex	Arrow	Viatris
1	Sanofi, Lilly, Rovi, Gedeon Richter, Mundipharma, Samsung, Orion	Zentiva	

Competitive position at retail pharmacy level

R&D-based companies – Generics and/or biosimilars companies – Mature brand companies

Sources: Smart Pharma Consulting analyses

[1] As of January 2025

The development of the substitutable biosimilars market segment will lead to important challenges irrespective of the group the pharma companies belong to

Typology of pharma companies marketing biosimilars

	Group 1	Group 2	Group 3
Features	Weak competitive position at retail pharmacy level	Medium competitive position at retail pharmacy level	Strong competitive position at retail pharmacy level
Players	▪ Amgen – Biogen – Lilly – Pfizer – Sanofi ▪ Accord – Biocon – Celltrion – Gedeon Richter – Rovi – Samsung Bioepis – Theramex ▪ Fresenius Kabi – Mundipharma	▪ Arrow ▪ EG Labo ▪ Sandoz ▪ Teva ▪ Zentiva	▪ Biogaran ▪ Viatris
Key challenges	▪ If prescribed by physicians, they would probably be substituted in favor of biosimilars marketed by company having a medium / strong competitive position at retail pharmacies' level ▪ They will not benefit from the substitution of original biologics	▪ The companies with a broader portfolio (e.g., Sandoz, Teva) are well-positioned to reinforce their competitive positive at retail pharmacies' level ▪ Those with a narrow portfolio will be at risk on both their generics and biosimilars businesses	▪ They cannot take advantage of their strong position due to their limited biosimilars portfolio ▪ Could be "attacked" on the generics business by companies with a medium competitive position but a broader biosimilars portfolio

R&D-based companies – Generics and/or biosimilars companies – Mature brand companies

Sources: Smart Pharma Consulting analyses

To keep on playing on the retail substitutable biosimilars market, Group 1 pharma companies should partner with retail pharmacies, through third parties

Group 1: Strategic options

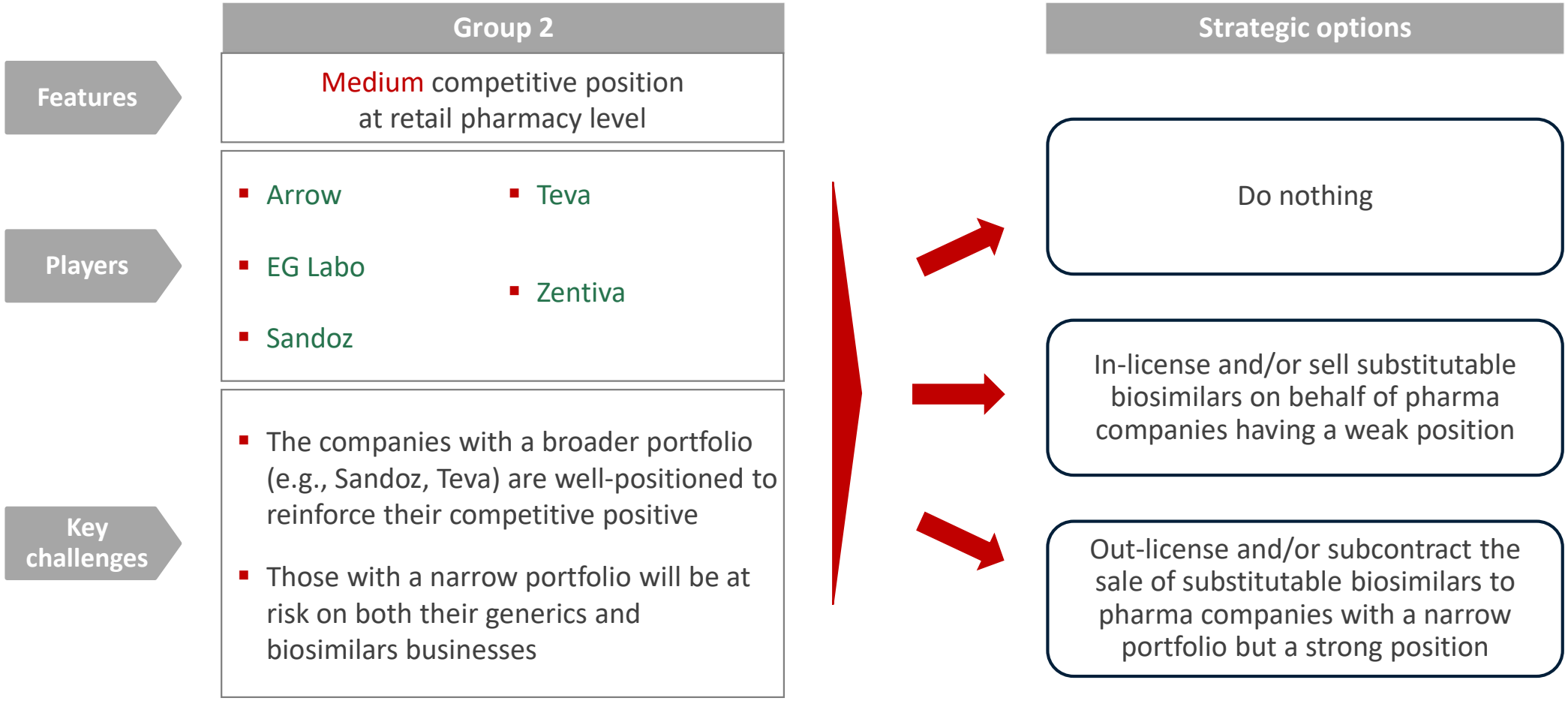
	Group 1	Strategic options
Features	Weak competitive position at retail pharmacy level	Stop marketing biosimilars that are substitutable or likely to be substituted
Players	▪ Amgen – Biogen – Lilly – Pfizer – Sanofi ▪ Accord – Biocon – Celltrion – Gedeon Richter – Rovi – Samsung Bioepis – Theramex ▪ Fresenius Kabi – Mundipharma	Milk biosimilars once they become substitutable
Key challenges	▪ If prescribed by physicians, they would probably be substituted in favor of biosimilars marketed by company having a medium / strong competitive position ▪ They will not benefit from the substitution of original biologics	Partner with a CSO, a generics or an OTC company well-established at retail pharmacy level Stand alone

R&D-based companies – Generics and/or biosimilars companies – Mature brand companies

Sources: Smart Pharma Consulting analyses

The strategy of Group 2 pharma companies will depend on the size of their portfolio, and their ability and willingness or not to be a leading player on the substitutable biosimilars market

Group 2: Strategic options

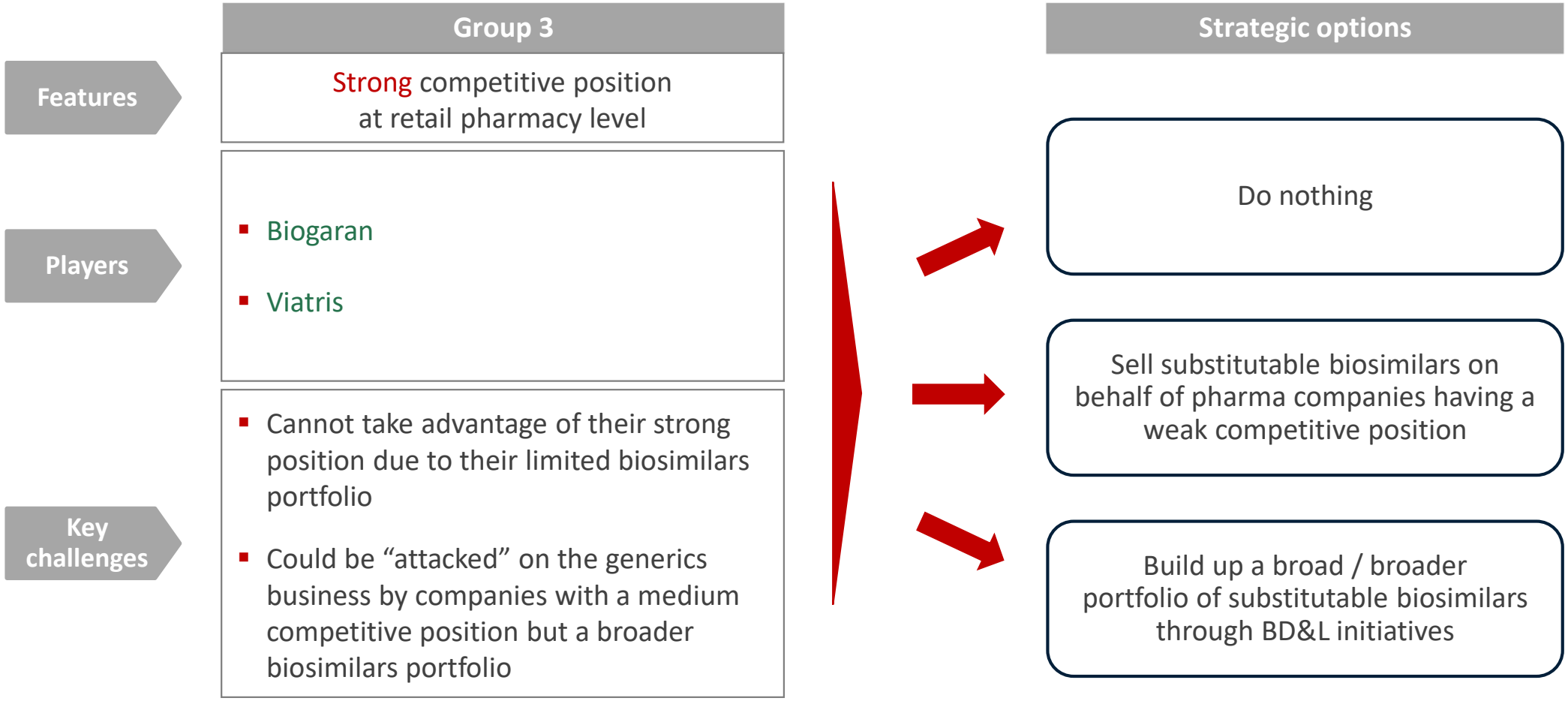


R&D-based companies – Generics and/or biosimilars companies – Mature brand companies

Sources: Smart Pharma Consulting analyses

To remain competitive on the retail substitutable biosimilars market, Group 3 pharma companies should either sell on behalf of, or in-license from, biosimilars manufacturers

Group 3: Strategic options



R&D-based companies – Generics and/or biosimilars companies – Mature brand companies

Sources: Smart Pharma Consulting analyses

Pharma companies will require medical reps only to promote non-substitutable biosimilars to physicians and pharmacy reps only to sell substitutable biosimilars to retail pharmacists

Biosimilars substitutability: Implications for pharma companies (1/2)

- 2 years from the publication of the **reimbursement** listing of the **first biosimilar**, in a similar biologic group

Non-substitutable biosimilars → **ANSM**

- Market share driven by the prescription of physicians

Medico-marketing & sales activities targeted at physicians only

Pharma companies' promotional activities

ANSM → Negative opinion → **Non-substitutable biosimilars**

- Market share driven by the prescription of physicians

Medico-marketing & sales activities targeted at physicians only

Pharma companies' promotional activities

ANSM → Absence of opinion → **Substitutable biosimilars**

Sales activities targeted at pharmacists & selected physicians[1]

- Market share driven by the substitution of retail pharmacists:
  - From original biologics to biosimilars
  - From biosimilars to biosimilars

Sources: Smart Pharma Consulting analyses

[1] Physicians who are reluctant to biosimilars' substitution and who will be inclined to indicate "Non substitutable" on their prescriptions of biosimilars

The sales activities of pharma companies at retail pharmacists should not start before it becomes substitutable

Biosimilars substitutability: Implications for pharma companies (2/2)

	Physicians	Pharmacists
Non substitutable phase	▪ Promotional activity at targeted physicians… ▪ … to strengthen physicians' preference for the marketed biosimilars	NO ACTION
Substitutable phase	▪ Promotional activity stopped… ▪ … or restricted to physicians who are opposed to biosimilars' substitution… ▪ … and willing to prevent substitution by indicating on their prescription, next to the name of the biologic[1] prescribed, "Non-substitutable"	▪ Sales activity to get the biosimilar listed… ▪ … and preferentially substituted at the expense of the original biologic or of another biosimilar

Sources: Smart Pharma Consulting analyses

[1] Either the original biologic or a biosimilar

The optimal strategies of pharma companies marketing biosimilars would depend on their competitive position at retail pharmacies, each product status and the diseases it addresses

Key Takeaways

1. Regulatory environment

- Filgrastim and pegfilgrastim are substitutable since April 2022
- From 2024 onwards, expansion of the list with existing drugs[1]
- For new biosimilars, a period of 2 years will precede the possibility to substitute biologics[1]

2. Physicians' behavioral trends

- Physicians, especially hospital-based, are used to initiate treatments with biosimilars…
- … but are more reserved regarding switching and substituting chronic treatments when patients' disease is well controlled[2]

3. Pharmacists' behavioral trends

- Pharmacists do not anticipate difficulties to substitute biologics for naïve patients
- For patients under a chronic therapy, they will substitute depending on each patient
- If opportunities to substitute are rare, pharmacists should not be very pro-active

4. Patients' behavioral trends

- Naïve patients should in large proportion accept biosimilar substitution, but…
- … if yet treated and well-controlled, they will have to be convinced by pharmacists
- Even if they accept, they may have trouble to adjust if the delivery device is different

5. Pharma companies' strategic options & recommendations

- During the two years before biosimilars become substitutable, they should be promoted to physicians[3]
- Certain substitutable biosimilars should still be promoted[3]
- Agreements with retail pharmacists and VTOs[4] they belong to, are essential to succeed on the biosimilar substitutable market
- To do so, company marketing biosimilars strategies would depend on their competition position at retail pharmacies:
  - If weak: partner with a company yet well-established, a CSO[5] or leave the market
  - If medium: in-license or sell biosimilars of companies having a weak position or out-license / subcontract to a 3rd party having a strong position
  - If strong: pharma companies should either sell on behalf of, or in-license from, biosimilars manufacturers

Sources: Smart Pharma Consulting analyses

[1] Unless the ANSM issues a negative opinion. The ANSM can also restrict the substitutability (e.g., to naïve patients only) – [2] In this case they can and should prevent substitution by indicating on their prescription "Non-Substitutable" – [3] Especially for chronic disease treatments – [4] Voluntary Trade Organizations (pharmacy groups) – [5] Contract Sales Organization

Smart Pharma
CONSULTING

The French Retail Generics Market

Situation Analysis

&

2027 Perspectives

February 2024

Smart Pharma Consulting has developed an expertise – second to none – regarding the generics market in general and the French generics market in particular, as shown in this position paper

Introduction

Smart Pharma Consulting Expertise regarding the French generics market

- Operational experience of one of the consultants as general Manager France for Novartis' generics business
- Strategic and management missions carried out for 16 generics companies in France and abroad:
  - Accord Healthcare – Arrow (Aurobindo) – Biogaran (Servier) – Dr Reddy's – EG Labo (Stada) – Gedeon Richter
  - Glenmark – Hospira (Pfizer) – Polymedic – Sandoz – Sothema – Teva – Viatris – Wockhardt – Zentiva – Zydus
- Several position papers and reports about the French generics market
- Several articles published regarding generics related issues:
  - Entering the French generics market (1997)
  - Can generics really help to curb French healthcare costs? (1999)
  - Lighting fire from wet timber in French generics market (2001)
  - How bright is the future for generics? (2003)
  - Barriers to substitution (2005)
  - What is the value of authorized generic agreements? (2006)
  - What future for the French retail generic market? (2015)

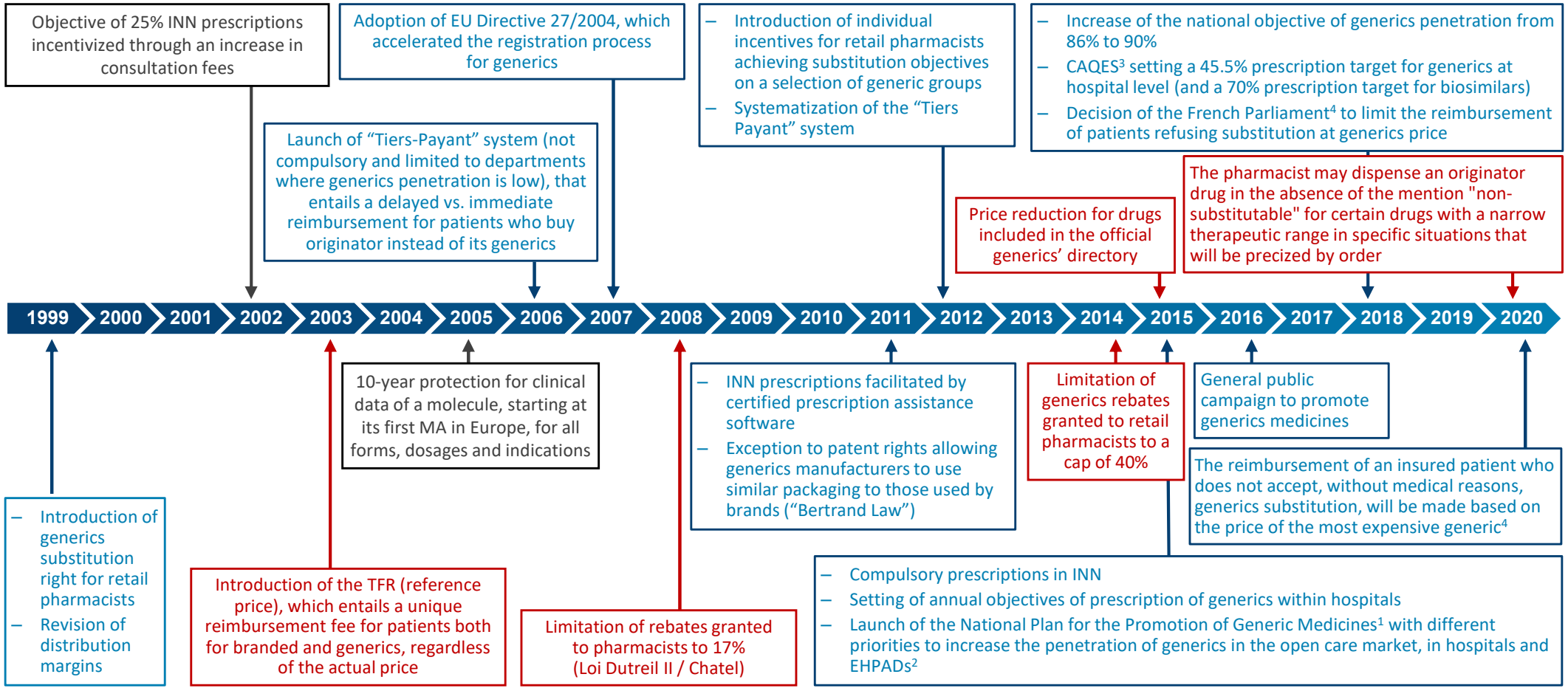
Context – Objective – Methodology

- The development of retail generics is a major lever to help the French government contain the growth of the drug costs reimbursed by the National health Insurance Fund
- This position paper analyzes the current business environment of the French retail generics market and…
- … estimates its 2027 gross and net sales perspectives
- To do so, the consultants have capitalized on their long experience and strong expertise re. this strategic segment

Sources: Smart Pharma Consulting

Since the substitution right has been granted to retail pharmacists in 1999, the different governments have introduced several measures to favor the development of generics

Main governmental measures related to retail generics (1999 – 2020)



Sources: Smart Pharma Consulting

[1] Launched in March 2015 and included in the 2015-2018 French stability program presented in April 2015 – [2] EHPAD: Institution taking care of dependent elderly people – [3] Contract between hospitals, regional health agencies and health insurance to improve the quality and the efficiency of healthcare – [4] Article 66 of LFSS 2019, as published in December 2018 ; Article 42 of the 2020 LFSS precises that this rule applies from two years after the publication of the 1st generic's price

The prices, margins and level of rebates are regulated by the CEPS (drug pricing committee) throughout the value chain of the reimbursable products, either originators or generics

Prices, margins and rebates for reimbursable drugs

	Originator without TFR[1]	Originator with TFR	Generic without TFR	Generic with TFR
Ex-factory price	▪ Price negotiated / set by the CEPS ▪ Generics are priced 60% below originator price at patent expiry ▪ Originator price is cut by 20% after generics entry or at patent expiry			
Wholesalers' margins	▪ Minimum of € 0.30 per pack if ex-factory price below € 4.33 ▪ 6.93% of ex-factory price if ex-factory price from € 4.33 to € 468.97 ▪ 0% beyond € 468.97, representing a maximum of € 32.50 margin per sold unit			
Pharmacists' margins	▪ Variable margin: – 10.0% of ex-factory price below € 1.92 – 7.0% from € 1.92 to € 22.90 – 5.5% from € 22.91 to € 150.00 – 5.0% from € 150.01 to € 1,930.00 – 0% above € 1,930.00 ▪ Dispensing fees (VAT excluded): – € 1.00 per pack (for monthly packs) – € 2.70 per pack (for quarterly packs) – € 0.50 per prescription including at least 1 reimbursable drug – € 3.50 for specific drugs (e.g., immunosuppressive drugs) – € 1.55 if the patient is under 3 years or over 70 years old – € 0.30 per prescription with at least 5 medicines		Margin in absolute terms identical to the corresponding originator	Calculation identical to the originator's one
Pharmacists' rebates[2]	▪ Maximum legal rebate: 2.5% of ex-factory price	▪ Maximum legal rebate: 40% of ex-factory price, since September 2014 (17% before)		
	▪ Possibility to add up to 100% of the wholesaler margin in case of direct sales			

Sources: CEPS annual report (December 2022) – National pharmaceutical agreement (March 2022) – Legifrance – Ameli – Leem – Smart Pharma Consulting analyses

[1] Tarif Forfaitaire de Responsabilité (Reference price) – [2] Including cooperation and other commercial rebates

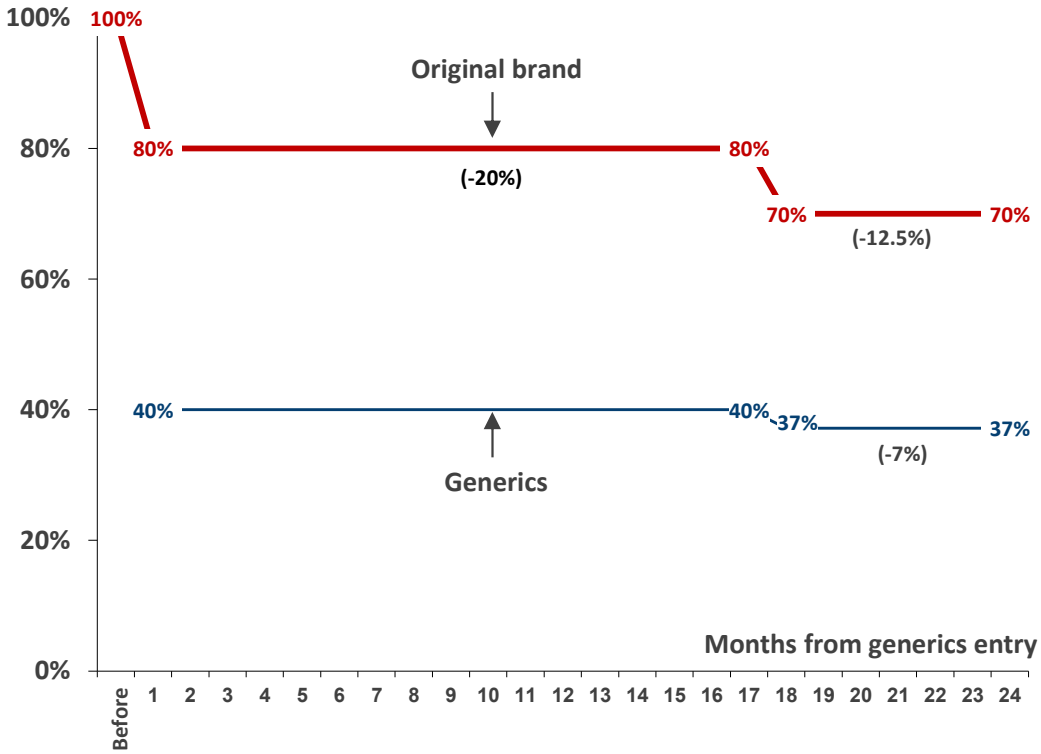
In the absence of reference price (TFR), the original brand can preserve 80% of its initial ex-factory price, which further decreases to 70% after 18 months

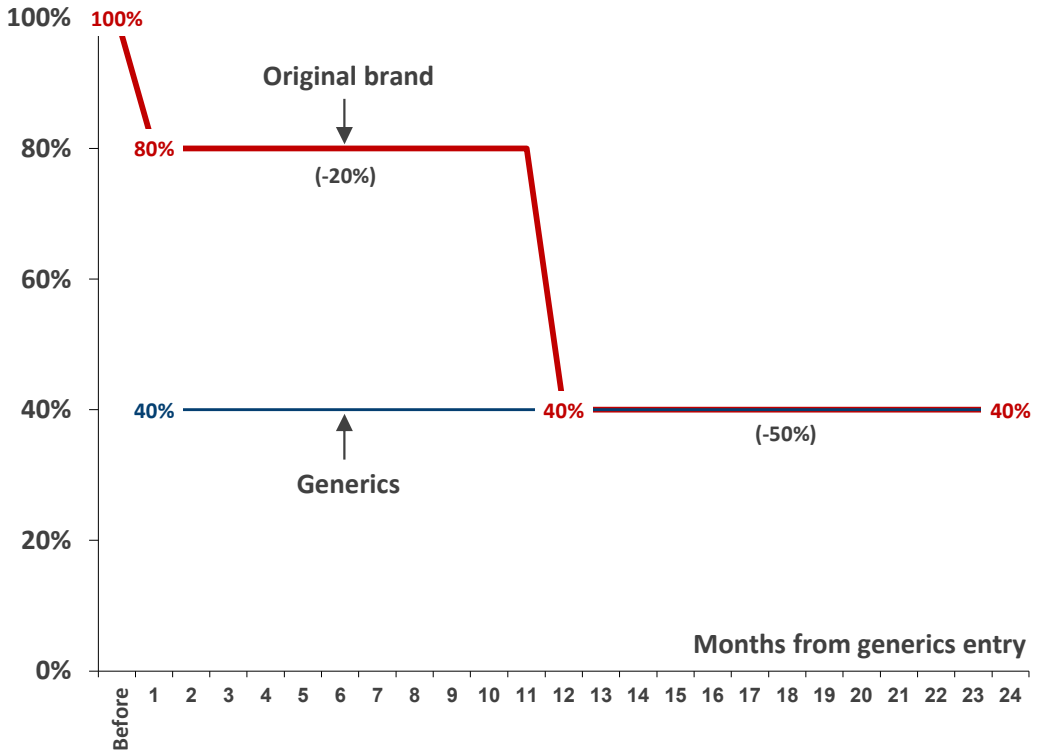
Price revision of genericized and generics products

Without reference price (TFR)

With reference price (TFR)[1]

As a % of the original brand ex-factory price before generics entry





Once the patent of an original product has expired, a price cut of 20% is applied by the CEPS (drug price committee), even if there is no generics

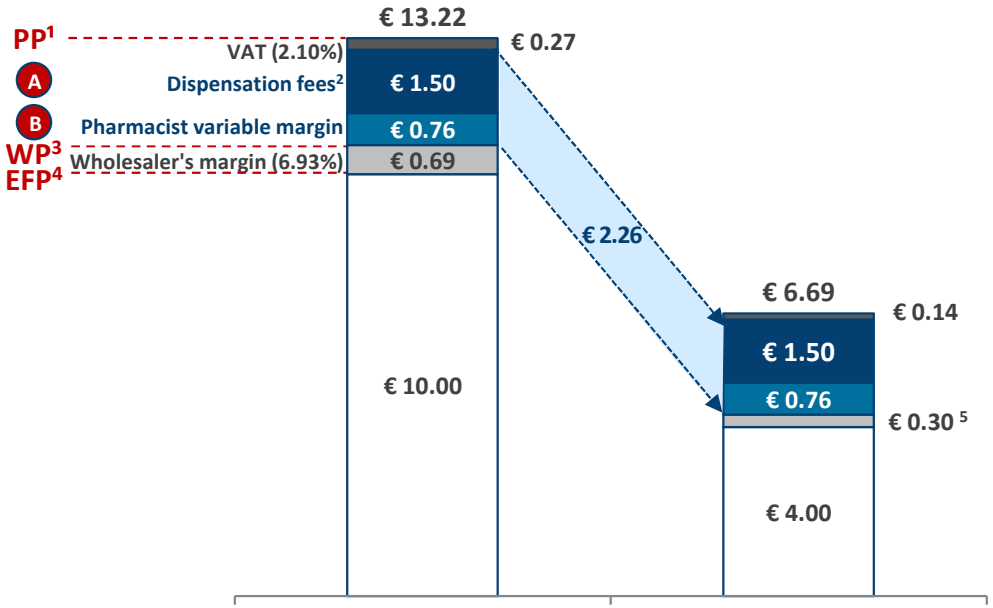
Sources: CEPS 2022 annual report, published in 2020 – Smart Pharma Consulting analyses

[1] The reference price is applied in the case the penetration of generics does not achieve 60%, 65%, 70% and 80% after 12, 18, 24 and 36 months of presence on the market

The levels of margins and rebates set by the CEPS (drug pricing committee) for drugs sold on the retail market contribute to regulate the evolution of cost of reimbursed drugs

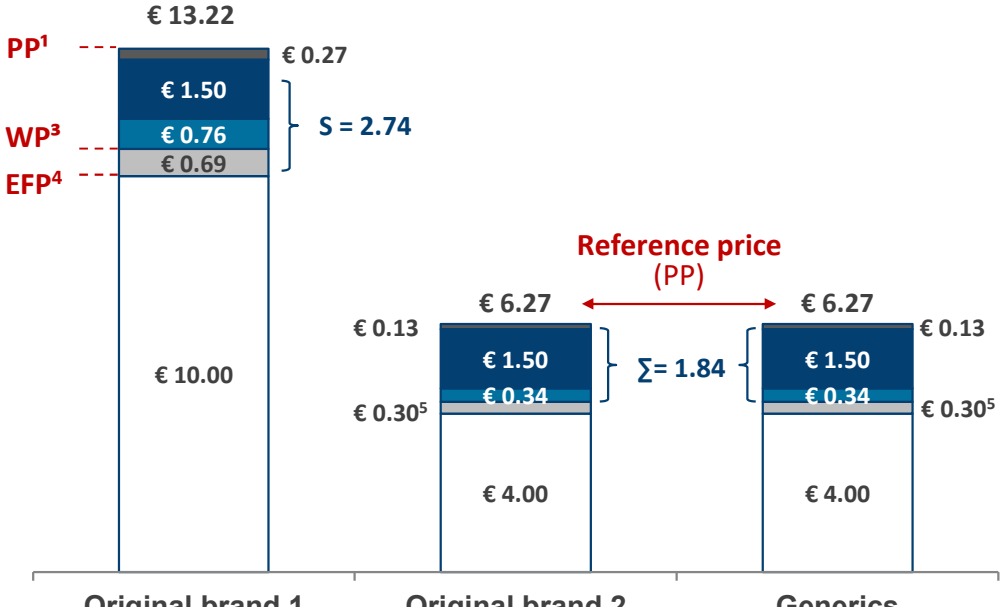
Legal margins and discounts for reimbursed drugs on the retail market

Without reference price (TFR)



	Original brand	Generics (ex-factory price: -60%)
Maximum legal discount (C)	2.5% (€ 0.25)	40% (€ 1.60)
Total profit for the pharmacist (legal) (A + B + C)	€ 2.51	€ 3.86

With reference price (TFR)



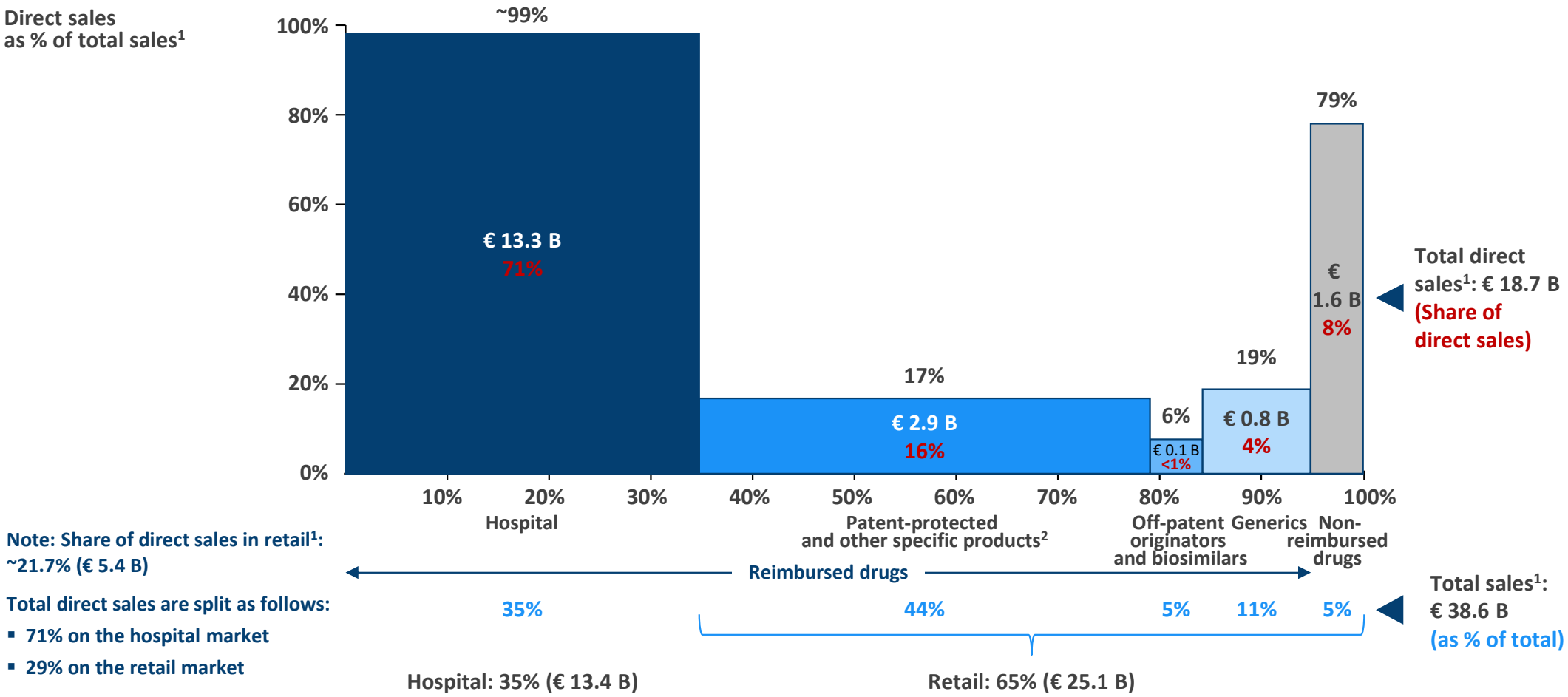
	Original brand 1	Original brand 2 (Alignment of reference brand prices)	Generics (Ex-factory price: -60%)
Maximum legal discount (C)	2.5% (€ 0.25)	40.0% (€ 1.60)	40.0% (€ 1.60)
Total profit for the pharmacist (legal) (A + B + C)	€ 2.51	€ 3.44	€ 3.44

Sources: Smart Pharma Consulting analyses

[1] Public price, including taxes and dispensing fees – [2] Dispensing fees, excluding taxes (i.e., € 1.00 per monthly pack and € 0.50 per prescription) – [3] Wholesaler price, excluding taxes – [4] Ex-factory price, excluding taxes – [5] Corresponding to the minimum wholesaler margin (for products with ex-factory price below € 4.33)

~19% of generics retail sales are directly distributed by pharma companies, through agents (pre-wholesalers)

Share of direct sales by segment (2022)



Note: Share of direct sales in retail[1]: ~21.7% (€ 5.4 B)

Total direct sales are split as follows:

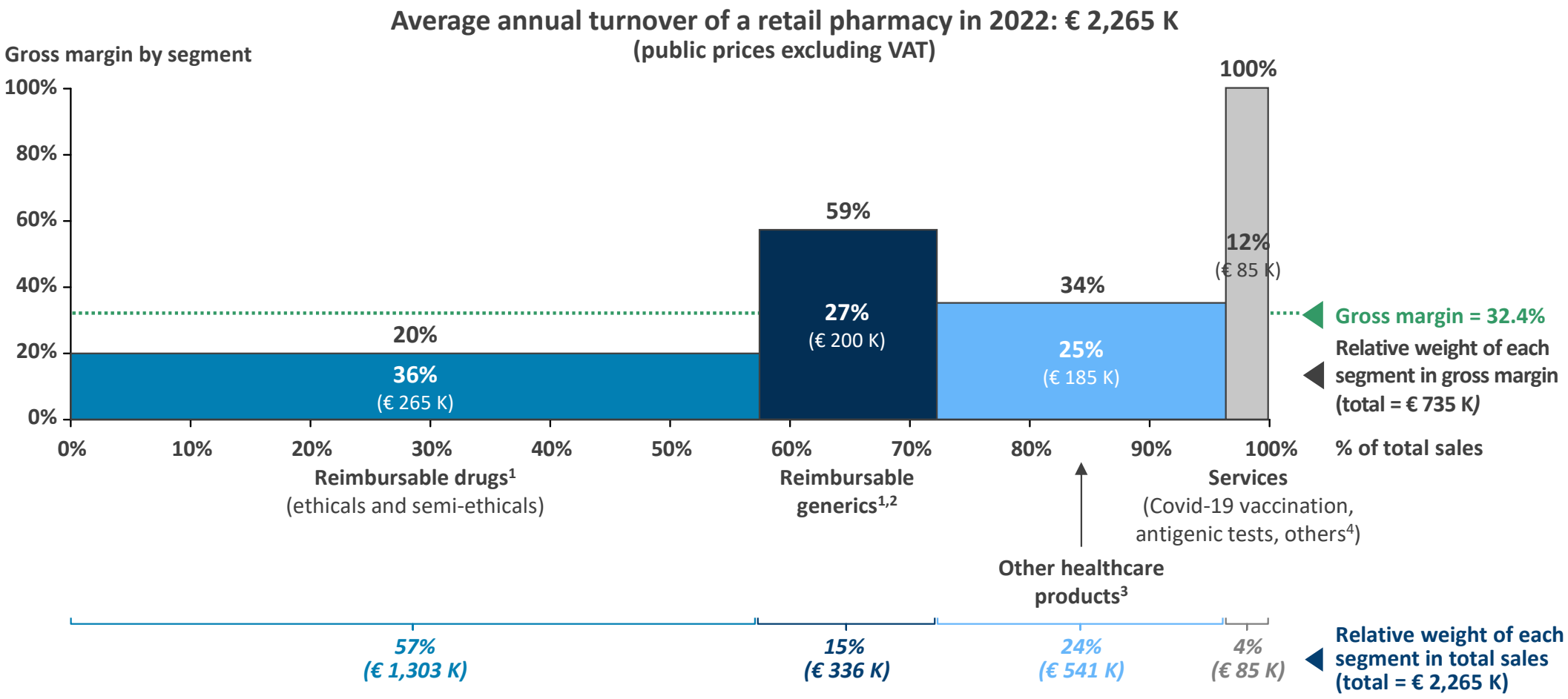
- **71% on the hospital market**
- **29% on the retail market**

Sources: GERS dashboard (December 2022) – Smart Pharma Consulting estimates

[1] Ex-factory prices, before rebates and taxes – [2] Sales of drugs that are not part of any generic group, whether patented or not, or other special products (calcium, sodium, potassium, paracetamol, etc.)

In 2022, generics accounted for ~15% of the retail pharmacies sales on average, and for ~27% of their gross margin, knowing that pharmacists work in general with two generics companies

Weight of generics in the economic structure of retail pharmacies (2022)*



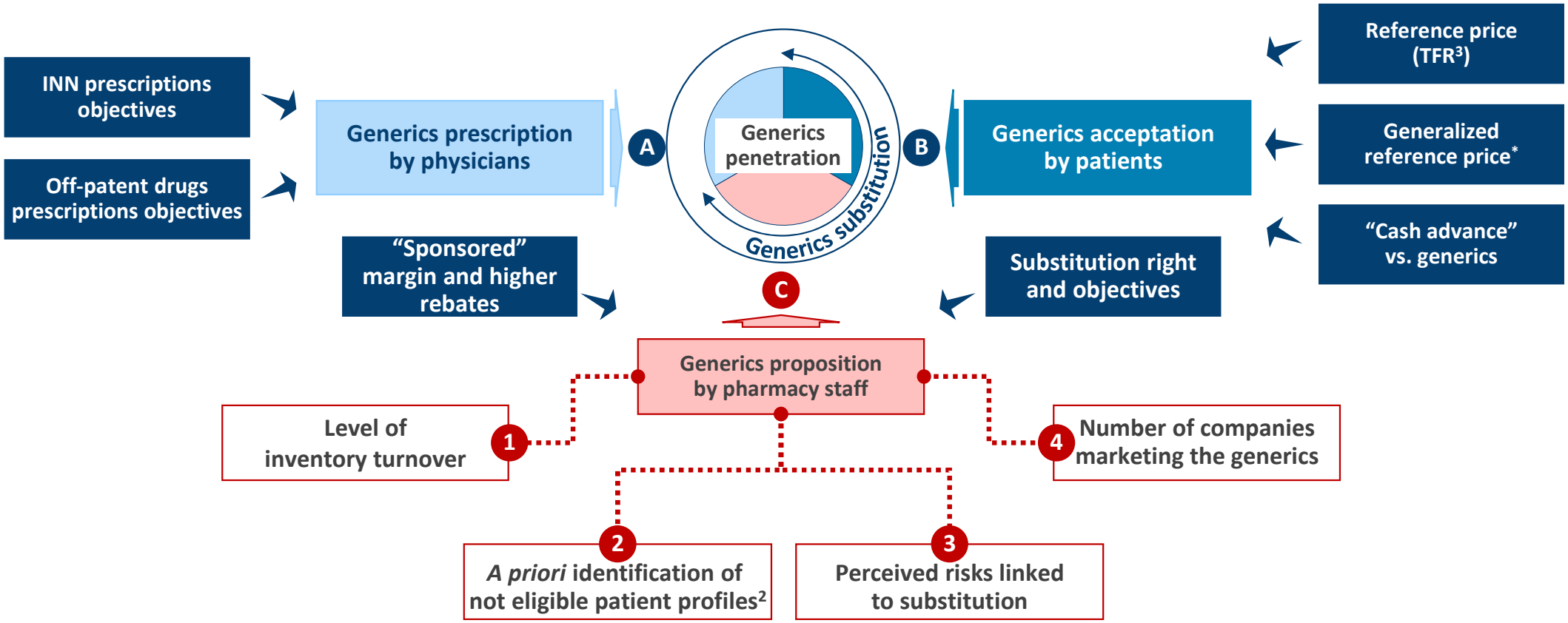
** Data estimated based on a sample of 1,807 retail pharmacies*

Sources : CGP Experts Comptables (2023) – External interviews with accounting experts (July 2023) – Smart Pharma Consulting estimates

[1] Including dispensing fee – [2] Including commercial cooperation with generic companies – [3] Including OTC and "lifestyle" Rx products, medical devices, food supplements, para-pharmacy products, etc. – [4] Remuneration for services corresponding to public health objectives (ROSP), new missions, etc.

Generics penetration is facilitated by INN[1] prescription and substitution, both of which are enhanced by a favorable support from health authorities

Key drivers of generics penetration on the retail market



Measures introduced by Health authorities

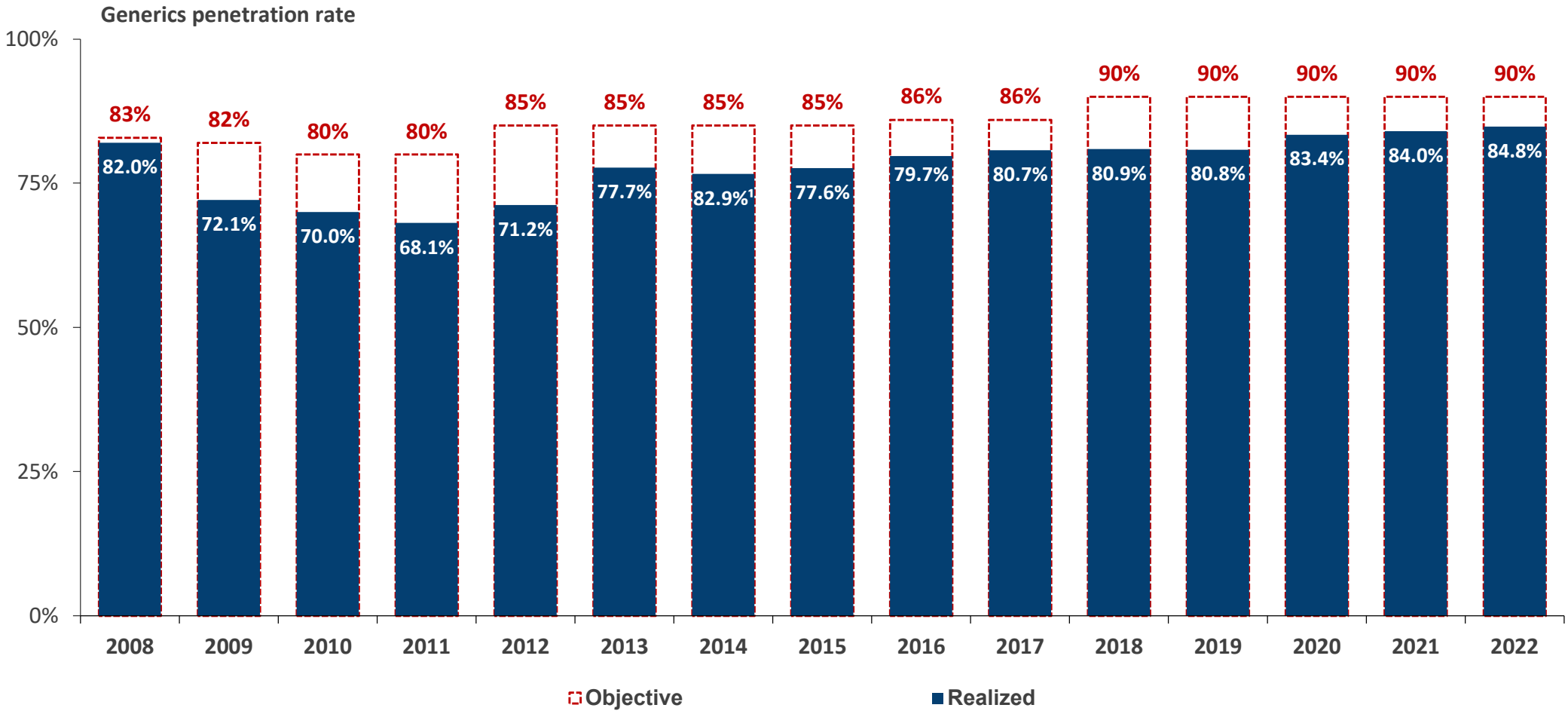
** Two years after the first generic get its price published, the originator will be reimbursed, based on the price of the most expensive generic. The price difference – if any – will be supported by the patient, unless he has a valid medical reason to refuse the substitution*

Sources: Smart Pharma Consulting analyses

[1] International non-proprietary name – [2] E.g., generics with excipients contra-indicated for specific patients – [3] "Tarif forfaitaire de responsabilité": single reimbursement price for a generic group, based on the cheapest generic price if a certain level of penetration is not achieved within a certain period

Retail pharmacists receive every year a national substitution target set by the National Health Insurance Fund which has never been achieved so far

Objectives and realized substitution rates (2008 – 2022)



Sources: 13th and 14th amendments to the Generics delivery Convention (November 17th, 2019 and August 20, 2020) – GERS dashboard (2008 – 2022) – Smart Pharma Consulting analyses

Substitution of original drugs by their generics results from an interaction between pharmacy teams and patients

Drivers and limiters of generics substitution by retail pharmacists

Drivers of generics substitution

- Information campaigns from the National Health Insurance Fund to inform patients about generics
- Out-of-pocket expenditure for patients refusing generics substitution without medical reasons[1]
- "Cash advance vs. generics" system
- Retail pharmacy substitution objectives for pharmacists
- INN prescriptions objectives within or outside the ANSM directory such as the ROSP[2]
- "DAM[3]" calls to medical offices
- Patients' information on their pathology: it is easier to convince patients who are already aware of their disease and of the associated treatments to try generics
- Inducement to prescribe generics for initiation prescriptions in hospitals or discharged patients to increase patients' confidence in generics
- Creation of a "hybrid" label to facilitate substitution

Limiters of generics substitution

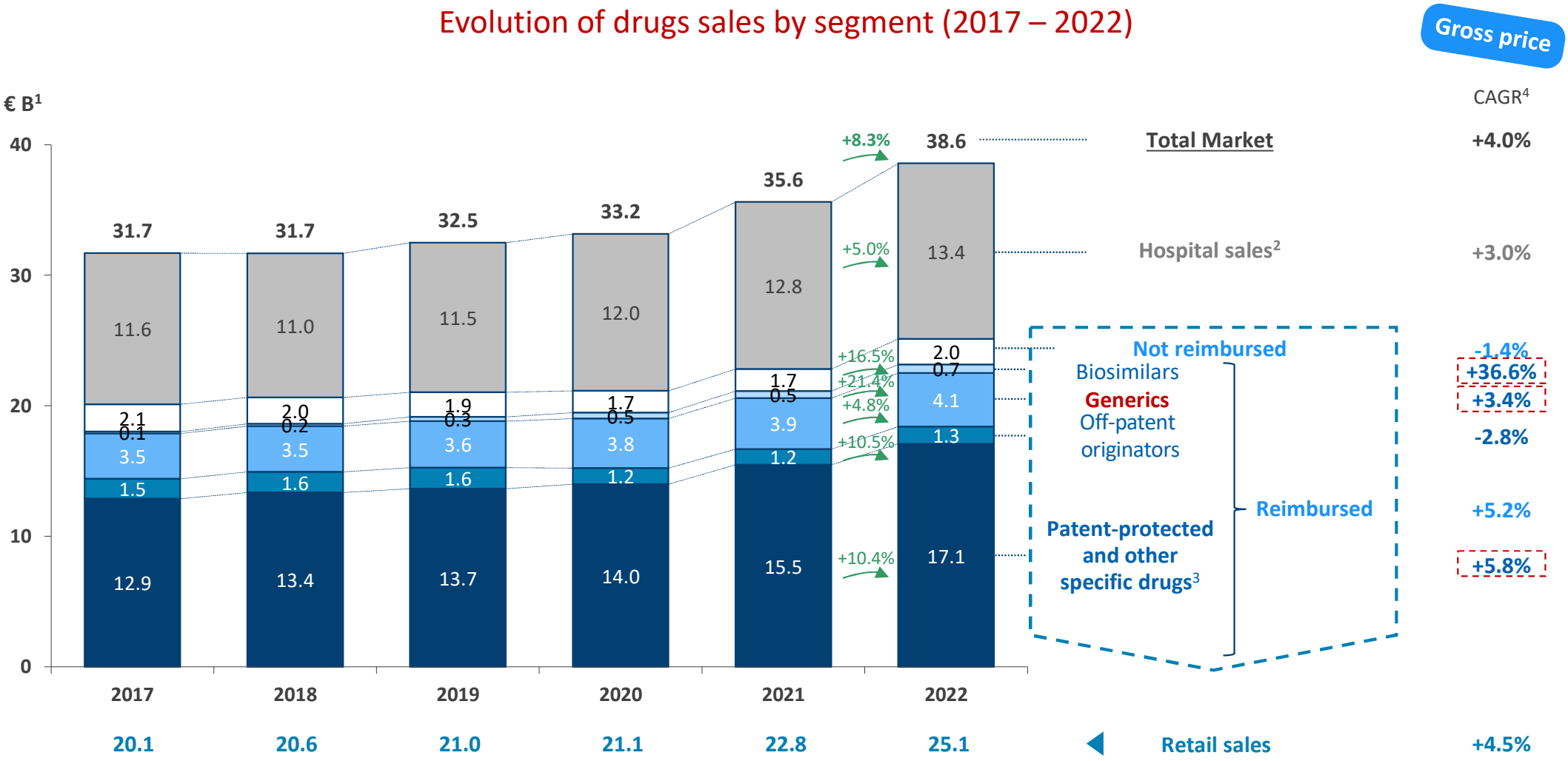
- ANSM warnings / recommendations
- Complexity of the pathology (e.g., opiates dependence, immunosuppression, epilepsy, etc.)
- Small share of INN prescriptions
- "Non substitutable" on scripts
- Limited number of generic companies
- Late arrival on the generics market (patients more worried and reluctant to generic substitution when treatment with an original brand was initiated a long time ago)
- Low inventory rotation in pharmacies
- Low proposal of generics by pharmacists
- Refusal of patients
- No correspondence of dosages / different chemical forms between generics and original brands
- Existence of different generic groups for a single molecule
- Protection of an indication

Sources: Business Intelligence – Smart Pharma Consulting analyses

[1] Reimbursement limited to the price of the most expensive generic – [2] "Rémunération sur objectifs de santé publique": Remuneration on public health objectives – [3] Délégués de l'Assurance Maladie": National Health Insurance reps

Since 2017, spending on drugs has been mainly driven by patent-protected drugs, generics and biosimilars delivered in retail pharmacies

Evolution of drugs sales by segment (2017 – 2022)

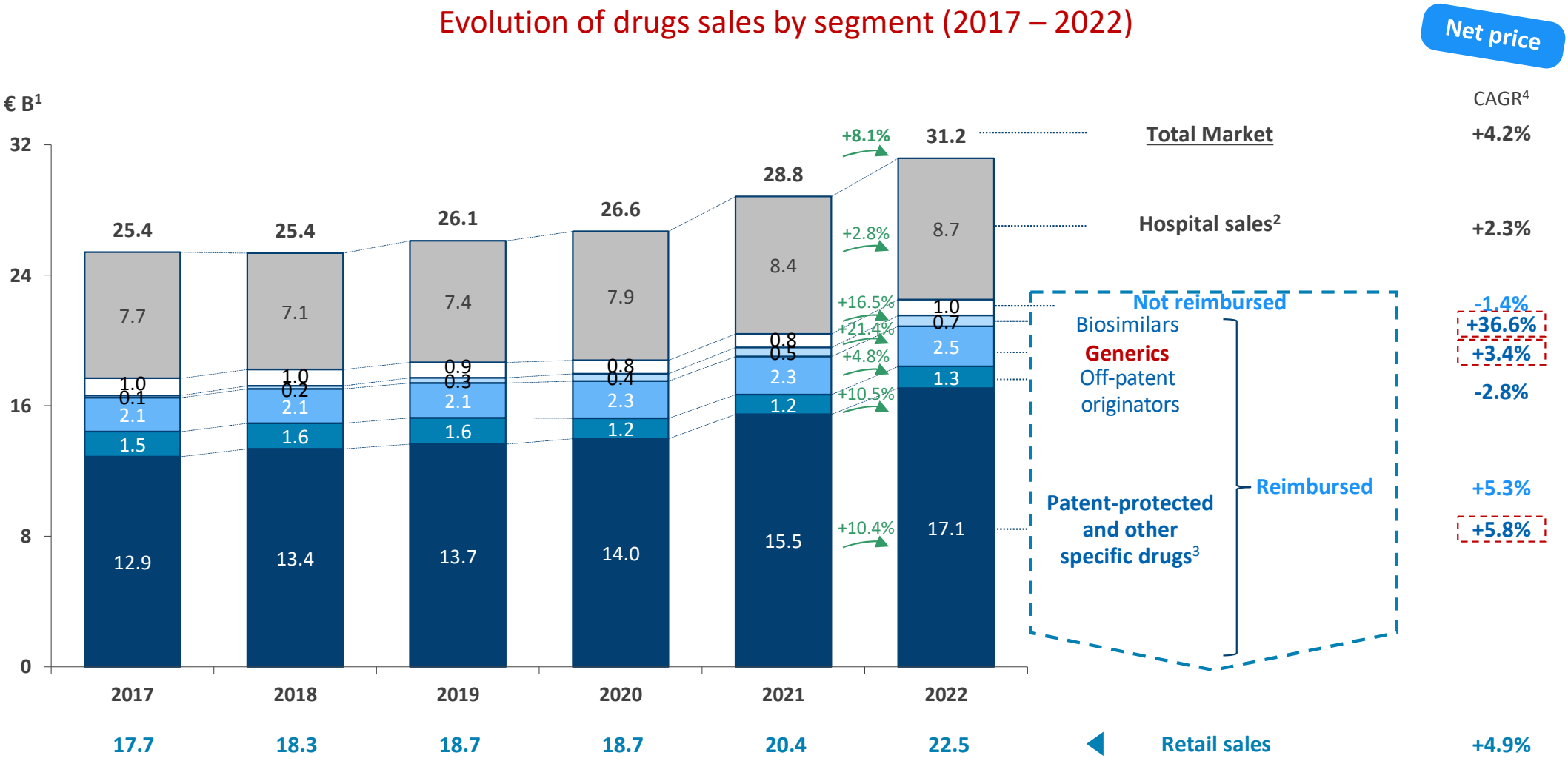


Sources: GERS dashboards – Smart Pharma Consulting estimates

[1] Constant ex-factory prices, before rebates and taxes – [2] Including hospital sales of biosimilars, products invoiced on top of "T2A" and retroceded medicines – [3] Sales of drugs whose patent has not expired and of other specific products (e.g., calcium, sodium, potassium, paracetamol) – [4] Compound annual growth rate 2017-2022

The retail generics market has been estimated at € 2.5 B in net price value, that is 39% lower than its list price value, considering the average discounts granted to retail pharmacies

Evolution of drugs sales by segment (2017 – 2022)

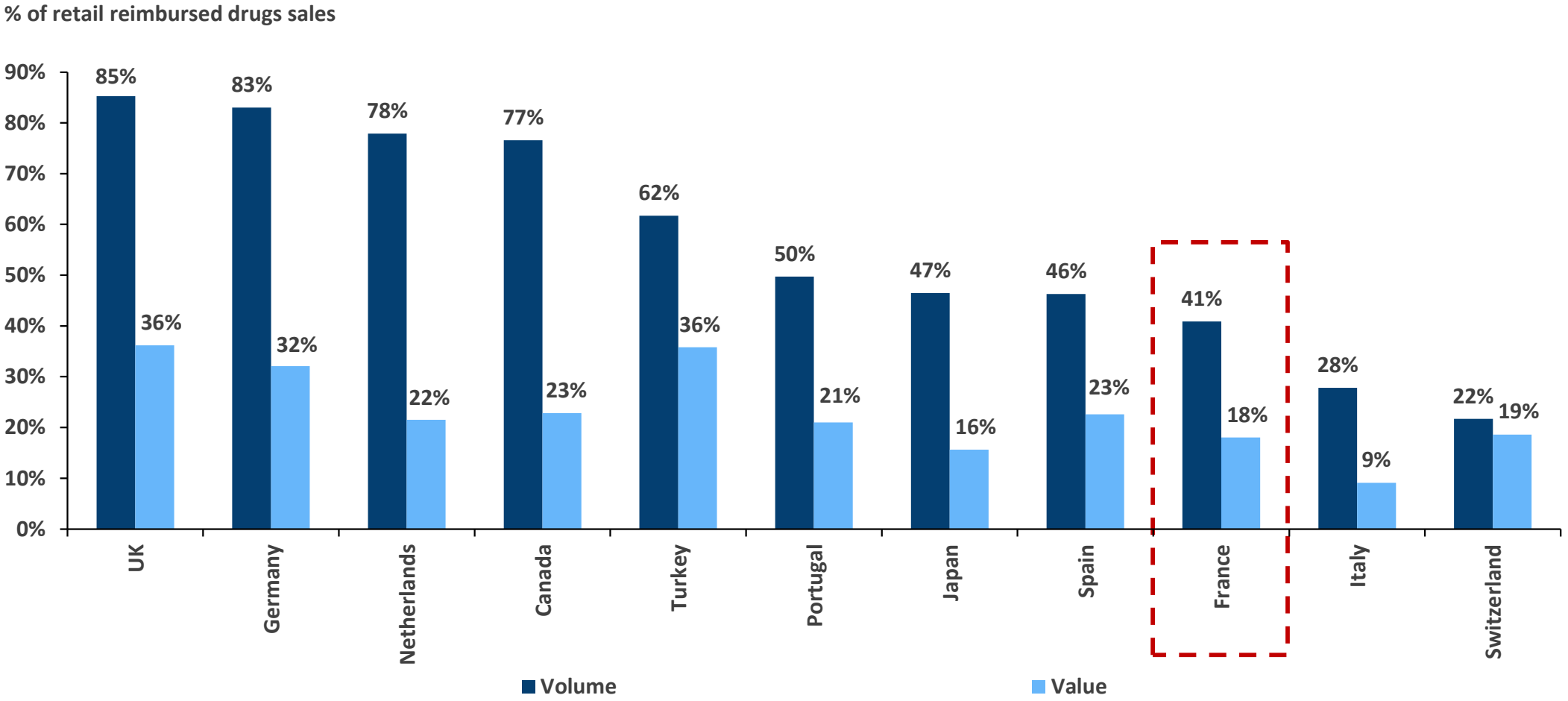


Sources: GERS dashboards – Smart Pharma Consulting estimates

[1] Constant ex-factory prices, after estimated rebates and before taxes – [2] Including hospital sales of biosimilars, products invoiced on top of "T2A" and retroceded medicines – [3] Sales of drugs whose patent has not expired and of other specific products (e.g., calcium, sodium, potassium, paracetamol) – [4] Compound annual growth rate 2017-2022

With a generics penetration rate of ~41% of the retail reimbursed market in volume (and ~18% in value), France is below most OECD countries

Generics penetration in the retail reimbursed market – International comparisons (2022[1])

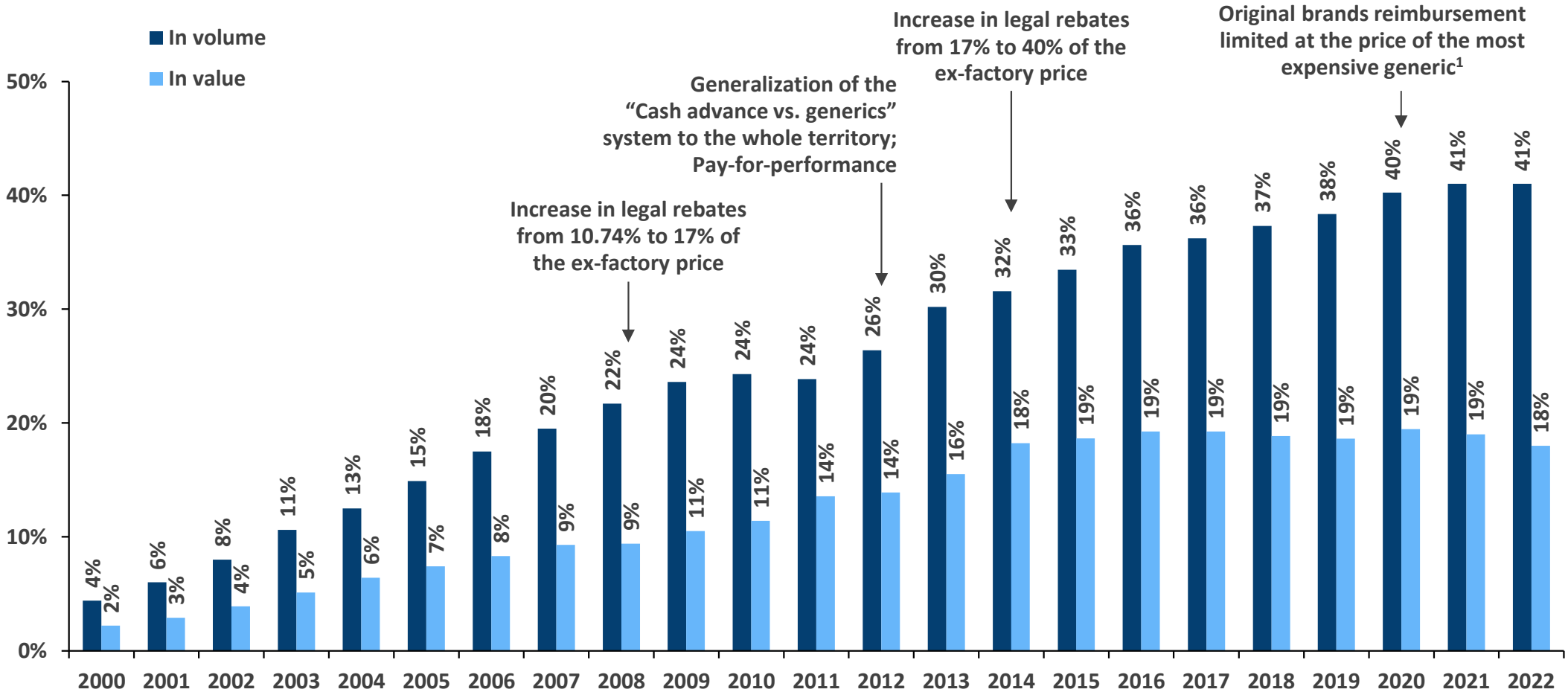


Sources: OECD Health Statistics (March 2021) – GERS Dashboard for France (2022) – Smart Pharma Consulting analyses

[1] Or latest data available

The penetration rate of generics in the retail reimbursable market in volume has been constantly growing since 2000

Evolution of generics penetration in the retail reimbursable market (2000 – 2022)

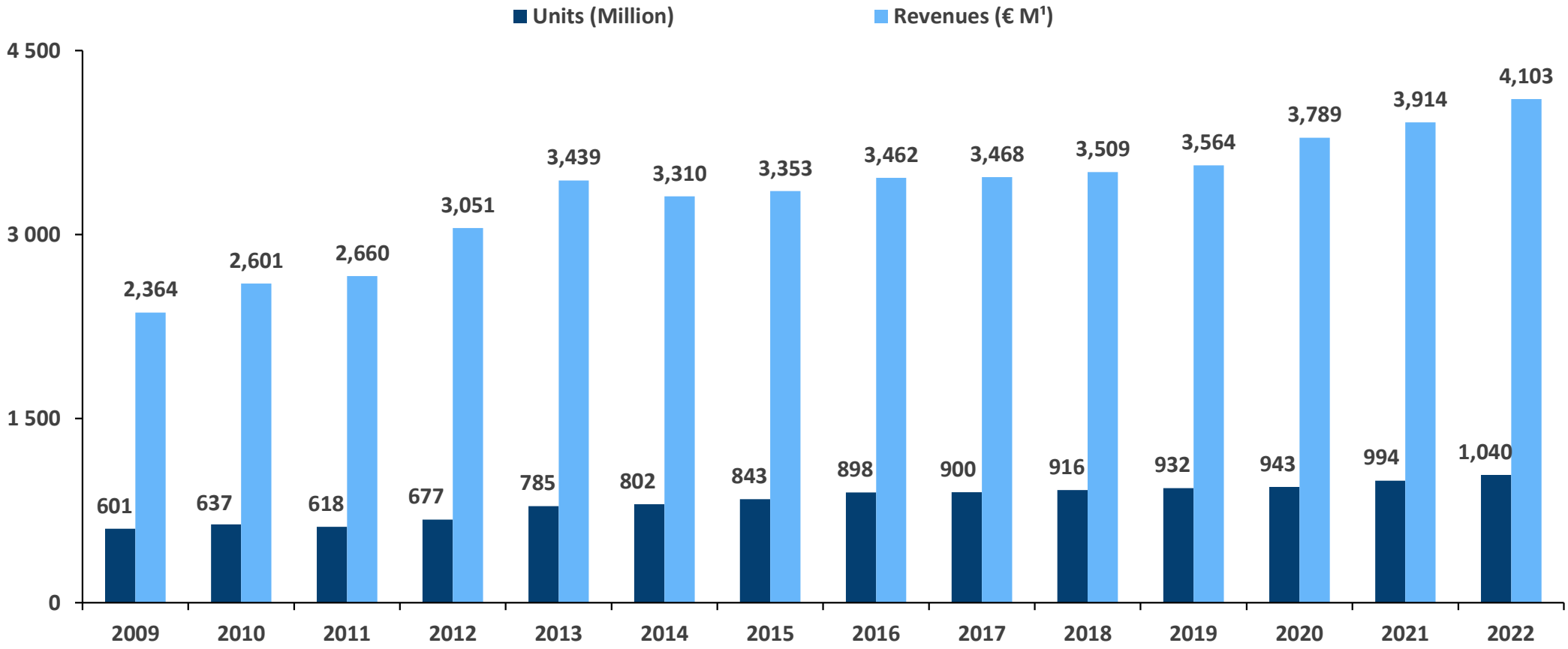


Sources: Smart Pharma Consulting

[1] Article 66 of LFSS 2019, as published in December 2018 ; Article 42 of the 2020 LFSS precises that this rule applies from two years after the publication of the 1st generic's price

In 2022, sales of reimbursable generics reached € 4.1 B and more than 1 B units in the retail market…

Evolution of reimbursable generics in the retail market (1/3)



The share of the exploited Generics Directory on the retail reimbursable market in volume represented 48.2% in 2022

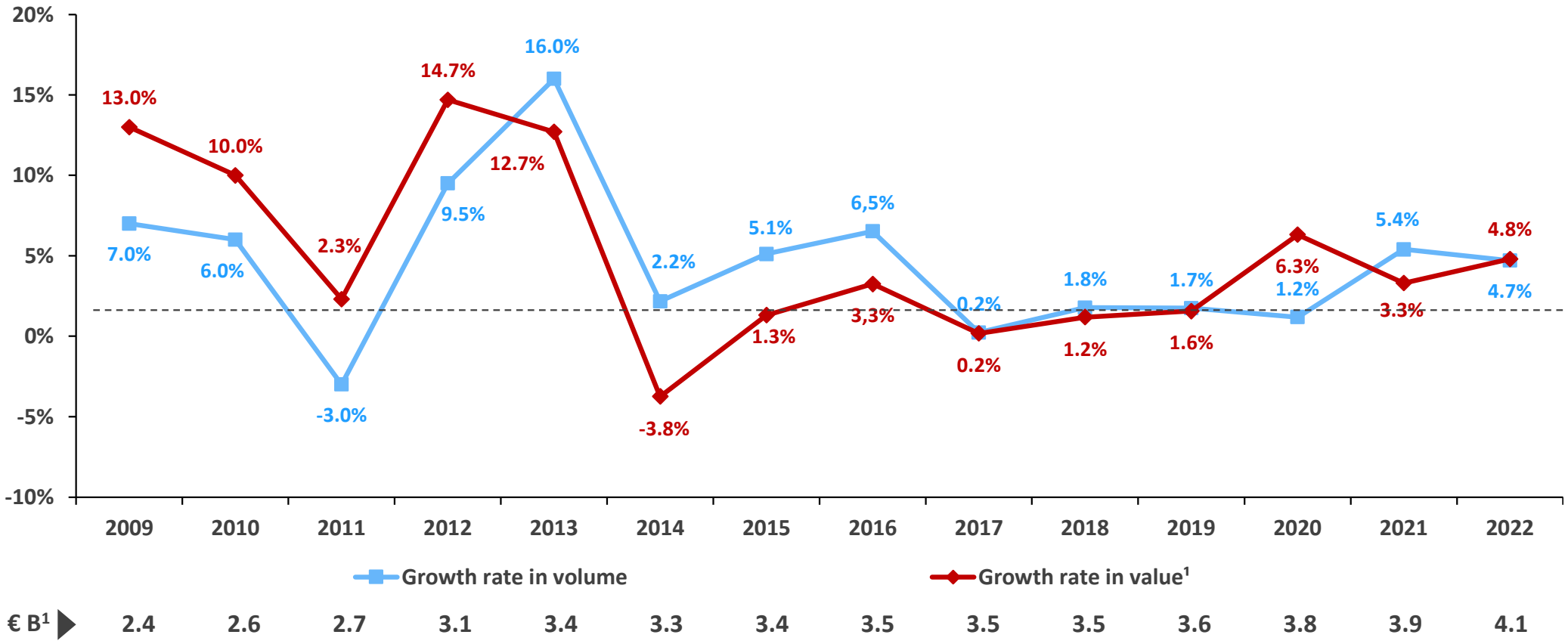
Sources: GERS dashboards – Smart Pharma Consulting analyses

[1] Ex-factory price, before rebates and taxes

… with an annual progression similar in value (+4.8%) and in volume (+4.7%), for the first time since 2019

Evolution of reimbursable generics in the retail market (2/3)

% of growth (vs. year-1)



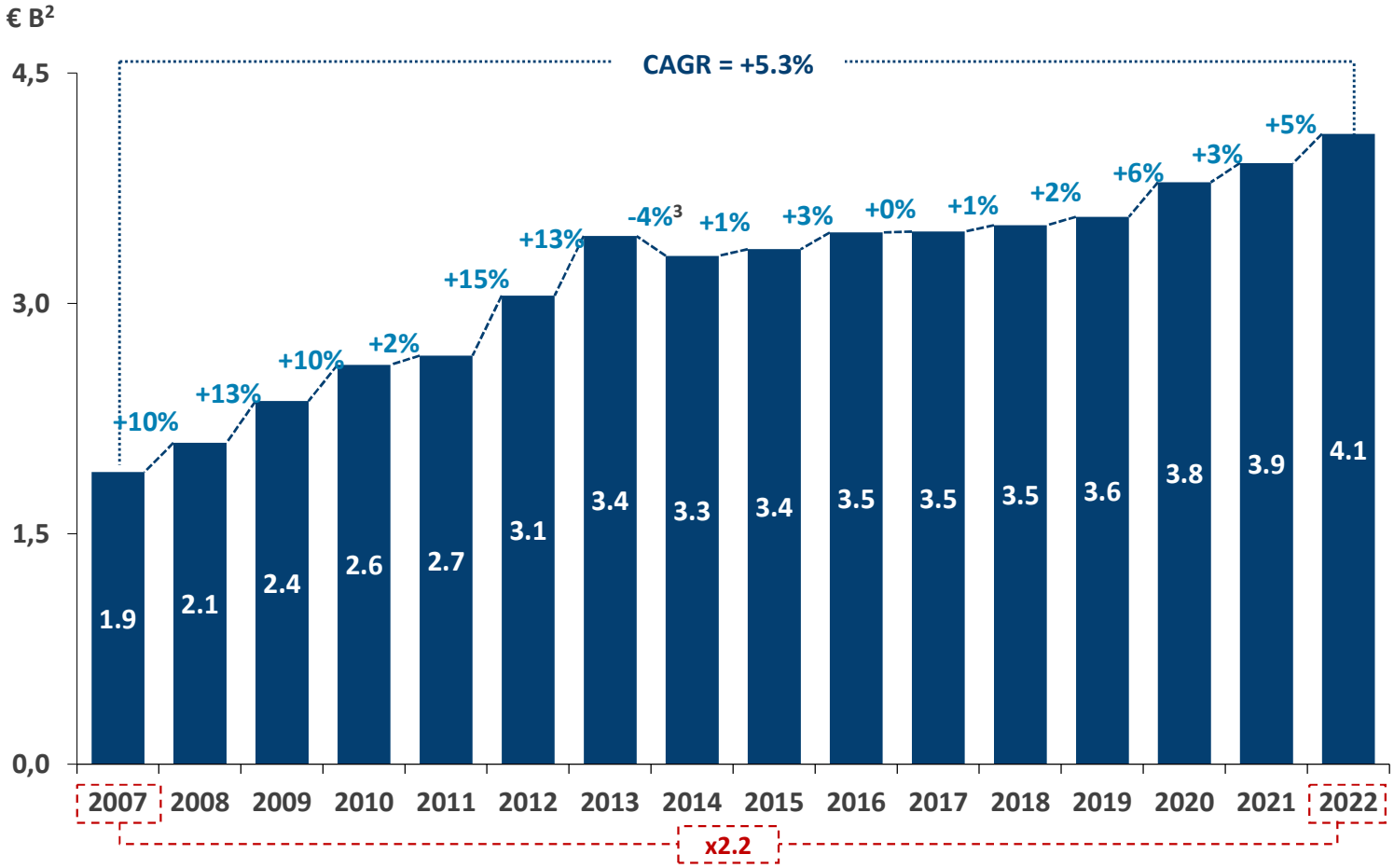
€ B[1]	2.4	2.6	2.7	3.1	3.4	3.3	3.4	3.5	3.5	3.5	3.6	3.8	3.9	4.1

Sources: GERS dashboards – Smart Pharma Consulting analyses

[1] Ex-factory price, before rebates and taxes

In value terms, the retail generics market growth has slowed down since 2013 due to regular price cuts decided by health authorities and applied by the CEPS[1]

Evolution of reimbursable generics in the retail market (3/3)



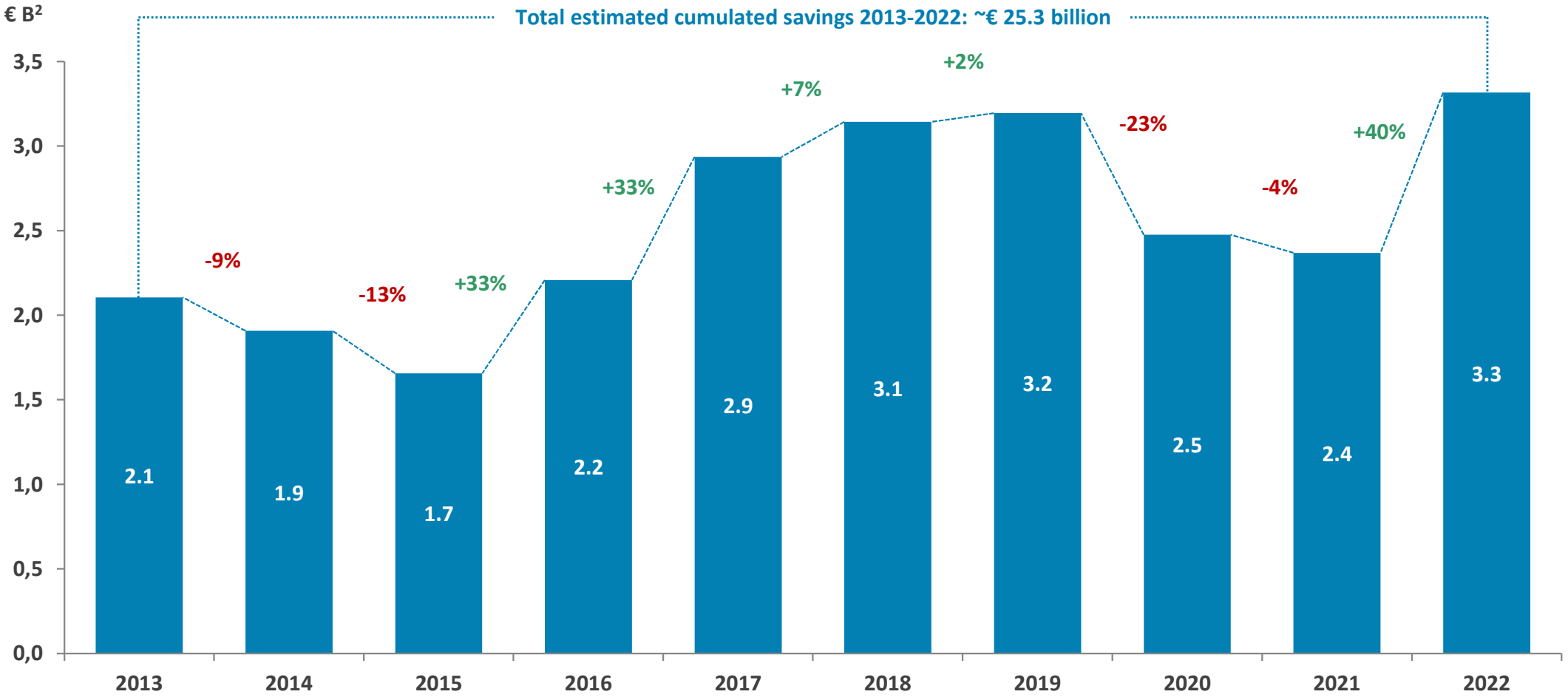
- After a slow-down in 2011, the sales of the generics market have been re-boosted by governmental measures introduced since 2012:
  - Increase of the national objective of average generics penetration
  - Introduction of individual incentives for pharmacists achieving substitution objectives on a selection of generic groups
  - Generalization of the "Tiers Payant" system, which exempts from upfront payment patients accepting generic substitution
  - From January 2020, limitation of the reimbursement of patients refusing substitution (without medical justification) at the generic highest price[4]

Sources: GERS dashboards – Smart Pharma Consulting analyses

[1] Drug pricing committee – [2] Constant ex-factory price, before rebates and taxes – [3] The 4% decrease of the market in value in 2014 was due to massive price cuts on generics – [4] As set by Article 66 of LFSS 2019. However, article 42 of the 2020 LFSS precises that this rule applies from two years after the publication of the 1st generic's price

Estimated savings generated by generics reached ~€ 3.3 billion in the year 2022 and accounted for a cumulated ~€ 25 billion over the 2013-2022 period for the National Health Insurance Fund

Estimated[1] savings generated by retail generics for the National Health Insurance Fund



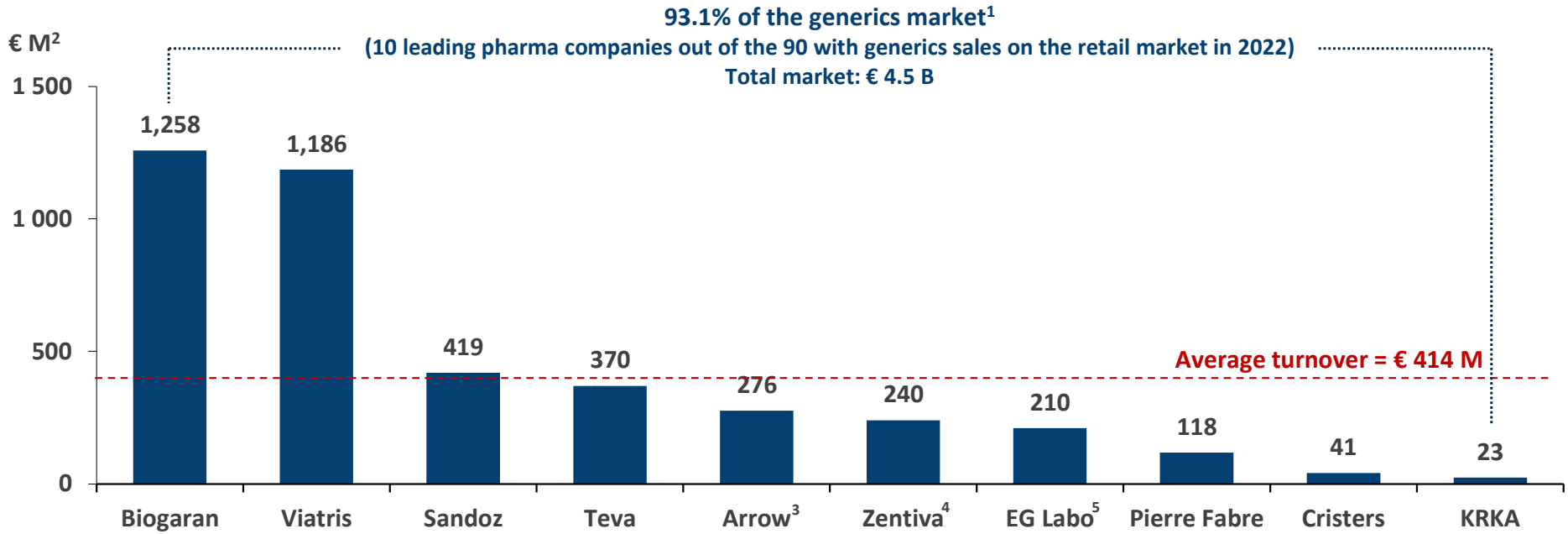
Sources: GEMME – GERS dashboards – Smart Pharma Consulting estimates

[1] Estimates based on the ex-factory prices which correspond approximately to what is reimbursed by the National Health Insurance Fund on reimbursed drugs (i.e., ~60% of the public price including 2.1% VAT)– [2] In constant ex-factory price before taxes

In 2022, Biogaran and Viatris generated more than € 2.4 B sales and represented together ~55% of the French retail generic market in value

Top 10 generics companies on the retail market – In value (2022)

Gross price



	Biogaran	Viatris	Sandoz	Teva	Arrow[3]	Zentiva[4]	EG Labo[5]	Pierre Fabre	Cristers	KRKA
Market share	28.3%	26.6%	9.4%	8.3%	6.2%	5.4%	4.7%	2.6%	0.9%	0.5%
Generics weight in the retail portfolio	97.0%	90.9%	69.1%	67.3%	89.6%	96.2%	91.7%	30.5%	97.2%	91.3%
2021-2022 evolution	+6.6%	+5.2%	+8.1%	+3.7%	+5.5%	-2.5%	+11.4%	-0.5%	-6.4%	+2.3%

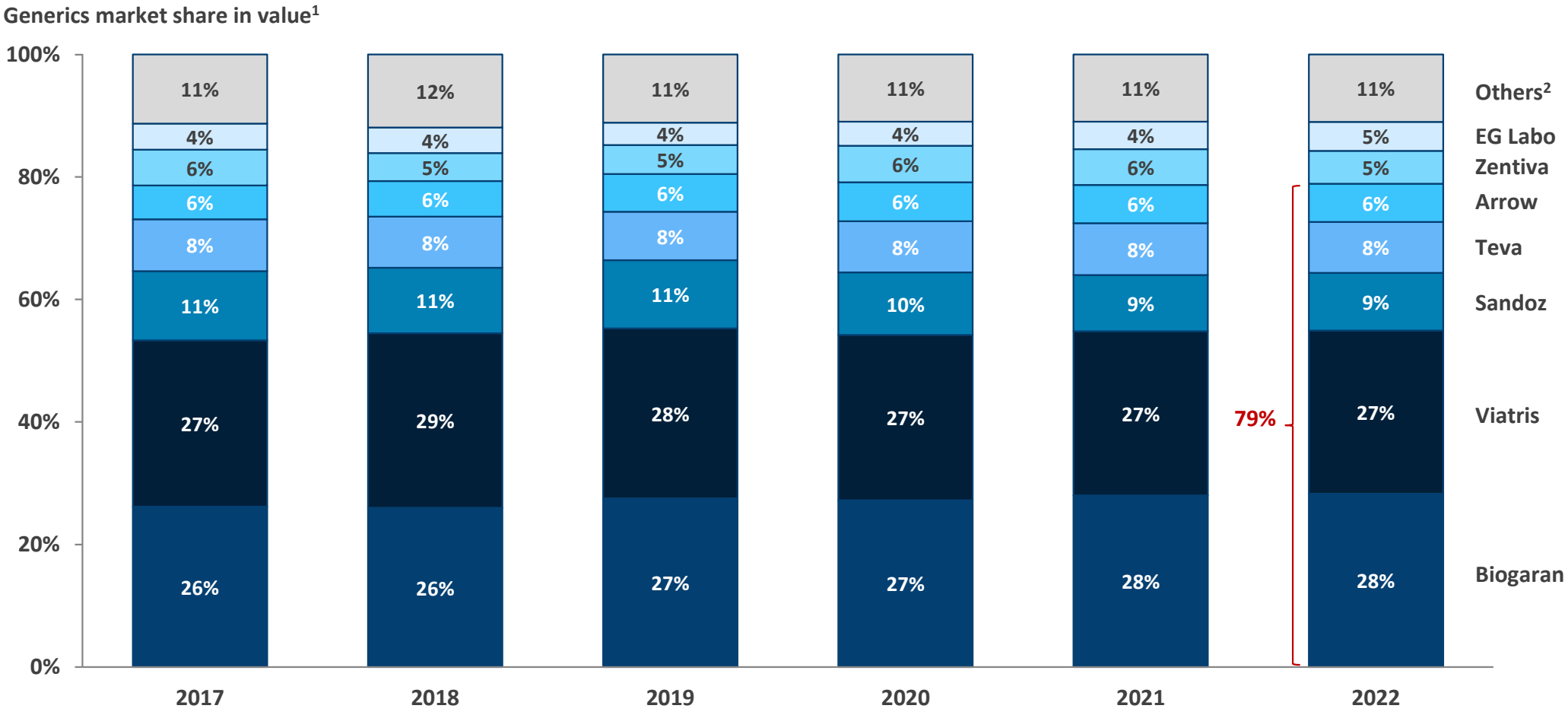
Sources: GERS – Smart Pharma Consulting analyses

[1] Reimbursable and non-reimbursable, listed in the ANSM generics Directory, including quasi generics – [2] Ex-factory price, before taxes and rebates – [3] Part of Aurobindo, since its acquisition of Actavis in 2014 – [4] Acquired by Advent International on September 30th, 2018 – [5] Subsidiary of Stada which was acquired by Bain Capital and Cinven in August 2017

The French generics market is concentrated with 79% of the sales captured by the top 5 players, whose market shares have been relatively stable since 2017

Market share of generics companies in the retail market (2017 – 2022)

Gross price

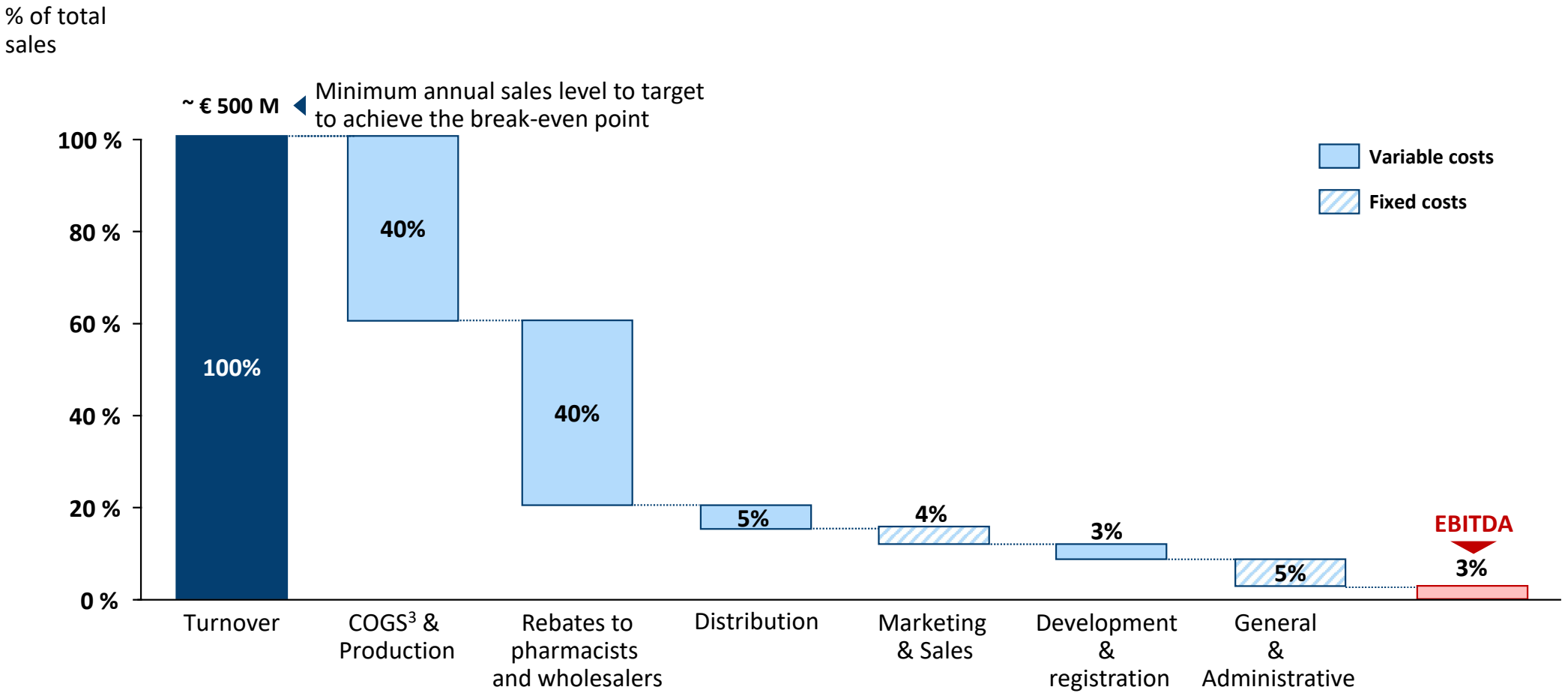


Sources: GERS – Smart Pharma Consulting analyses

[1] Ex-factory price, before taxes and rebates – [2] Mostly Pierre Fabre, Pfizer and Cristers

The average turnover to generate operating profitability (EBITDA[1,2]) is estimated at ~ € 500 M for generics companies operating in the retail market

Average estimated cost structure of generics companies in the retail market



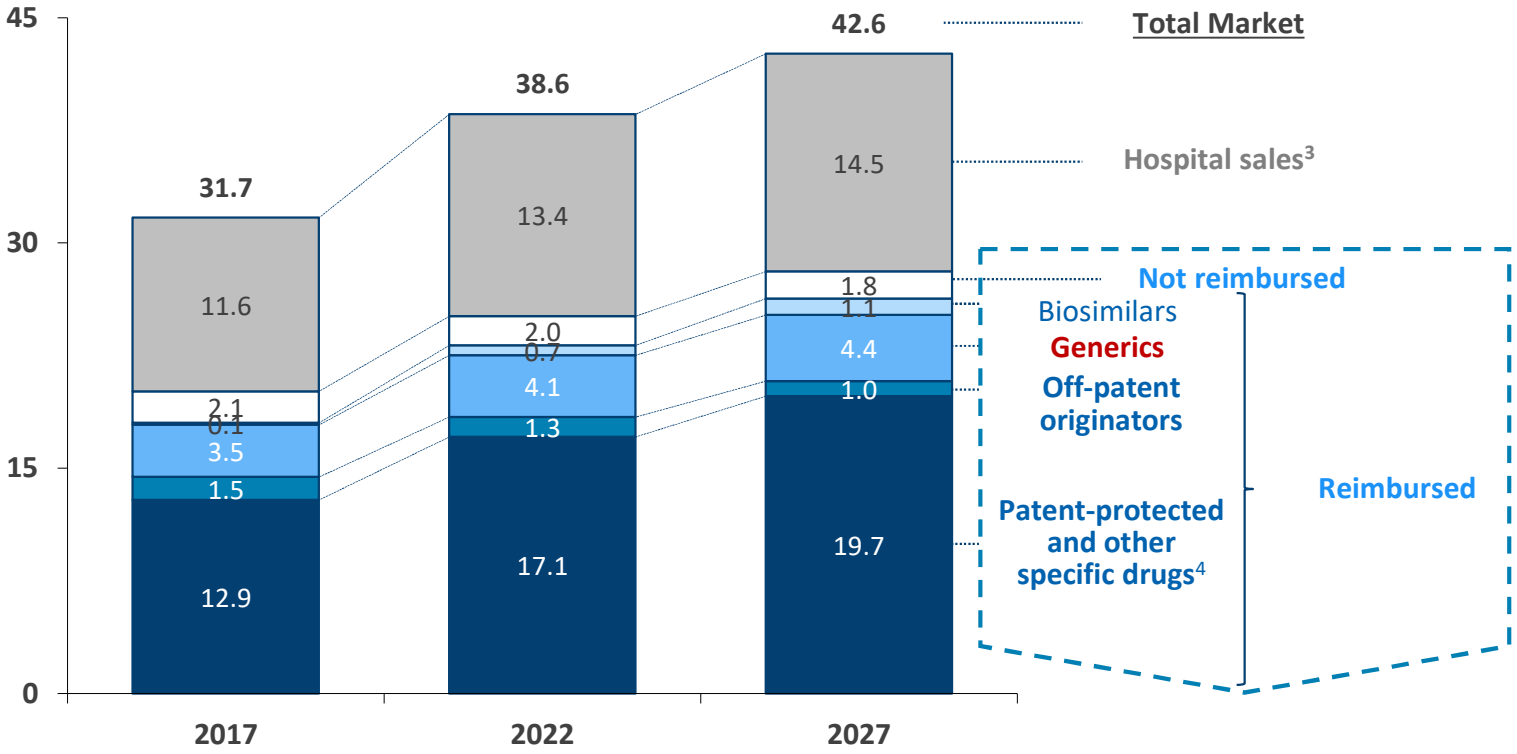
Sources: GERS – Smart Pharma Consulting analyses and estimates

[1] Earnings before interests, taxes, depreciation, amortization – [2] Before M contribution (safeguard clause) – [3] Cost of goods sold

The retail generics market evolution over the 2022 – 2027 period – expressed in gross price – will mainly result from the patent expiry of originators and the price cuts imposed by the CEPS[1]

Drugs sales forecast by segment (2017 – 2022 – 2027)

Gross price



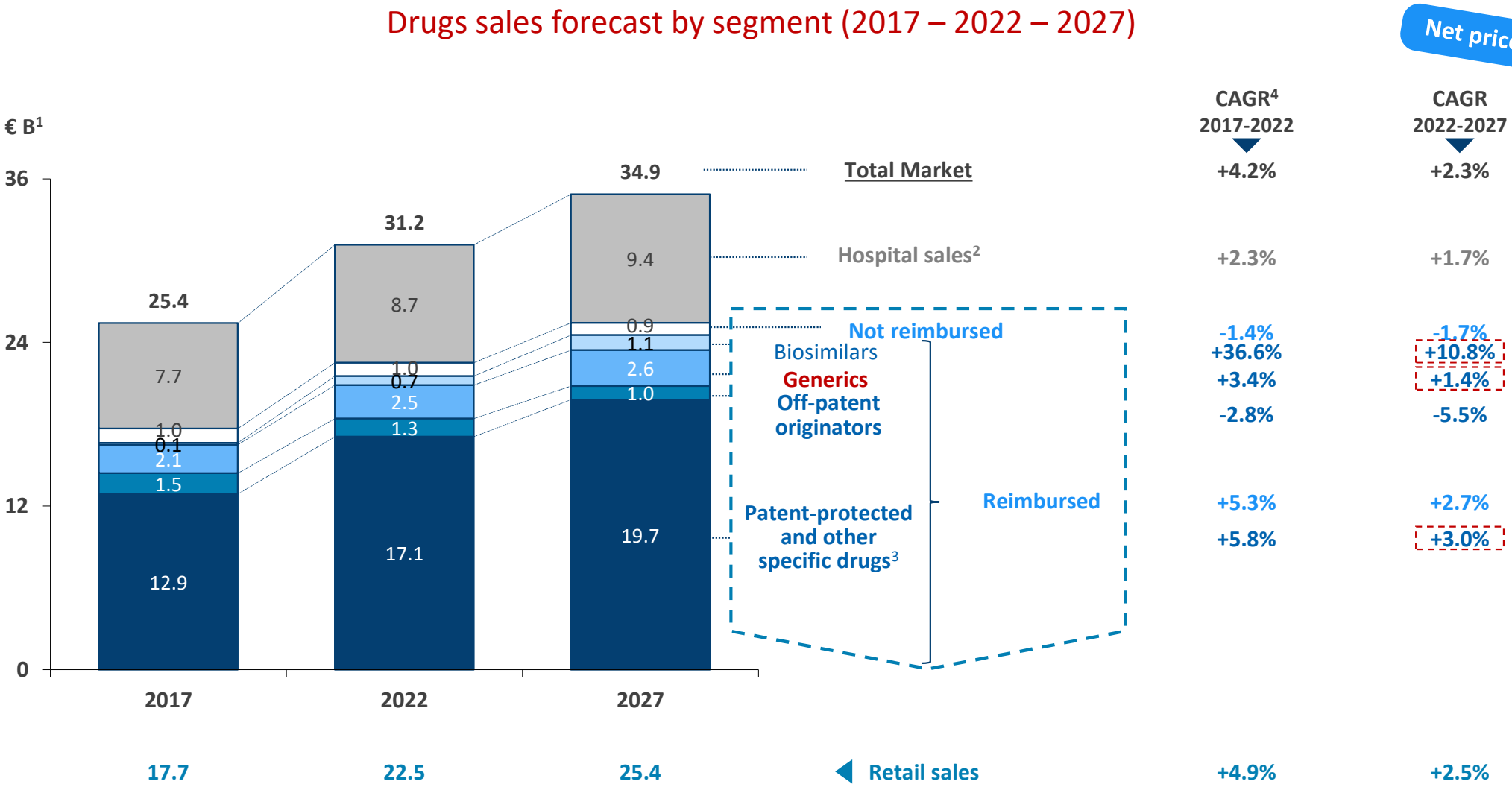
	CAGR[5] 2017-2022	CAGR 2022-2027
Total Market	+4.0%	+2.0%
Hospital sales[3]	+3.0%	+1.5%
Not reimbursed	-1.4%	-1.7%
Biosimilars	+36.6%	+10.8%
Generics	+3.4%	+1.4%
Off-patent originators	-2.8%	-5.5%
Reimbursed	+5.2%	+2.6%
Patent-protected and other specific drugs[4]	+5.8%	+3.0%
Retail sales	+4.5%	+2.3%
20.1		
25.1		
28.1		

Sources: GERS dashboards – Smart Pharma Consulting estimates

[1] Drug pricing committee – [2] Constant ex-factory prices, before rebates and taxes – [3] Including hospital sales of biosimilars, products invoiced on top of "T2A" and retroceded medicines – [4] Sales of drugs whose patents have not expired and of other specific products (calcium, sodium, potassium, paracetamol, etc.) – [5] Compound annual growth rate

It is estimated that in 2027, the retail generics market value expressed in net sales will account for 59% of the one in gross sales, considering the average discounts levels granted to pharmacists

Drugs sales forecast by segment (2017 – 2022 – 2027)



Sources: GERS dashboards – Smart Pharma Consulting estimates

[1] Constant ex-factory prices, before rebates and taxes – [2] Including hospital sales of biosimilars, products invoiced on top of "T2A" and retroceded medicines
[3] Sales of drugs whose patents have not expired and of other specific products (calcium, sodium, potassium, paracetamol, etc.) – [4] Compound annual growth rate

French health authorities will keep on supporting the development of the retail generics for economic reasons, and the market leaders will be in a better position to seize this opportunity

Key Takeaways

- The French retail generics market is expected to grow at +1.4% p.a. over the 2022 – 2027 period

- The government will keep on favoring the development of generics to contain the growth of reimbursed drug cost

- The market share of the two leaders (Biogaran & Viatris) should further increase from 55% to 60%[1]

- The average discount level granted by generics companies to pharmacists (~40%) should not increase by 2027

- Product portfolio breadth and commercial offer are key determinants to be listed by VTOs[2] retail pharmacists adhere to

- Generics companies having the highest market share exhibit the highest level of profitability

- The profitability generated by retail generics should be maintained, or even slightly improve for the leading players

- The market growth will be strongly driven by the number and the importance of original brands which will lose their market exclusivity by 2027, and the price cuts imposed by health authorities through the CEPS[3]

Sources: Smart Pharma Consulting

[1] Smaller players on the retail generics market may decide to abandon this market segment, like Sun Pharma did recently – [2] Voluntary Trade Organizations called "Groupements de Pharmacies" – [3] Drug pricing committee

Smart Pharma
CONSULTING

Economics of Generics Manufacturers

Performance on the French Retail Market

POSITION PAPER

October 2022

Gemme (The French Association of Generics Manufacturers) considered the support of Smart Pharma Consulting to assess their performance in France and put into perspective their footprint

Introduction

Context and objectives

- Generics industry supports local employment in France:
  - 15,000 direct and indirect jobs
  - 60 production sites
  - 55% of marketed generics made in France
- However, generics manufacturers have lower operating margins than other drug manufacturers
- Some externalities have a major deleterious impact:
  - The safeguard clause (known as contribution M), applicable to generic drugs since 2019
  - Regular price cuts decided in the context of the LFSS[1]
  - Inflation, which has an impact on the main cost items
- In this context, Gemme considered the support of Smart Pharma Consulting to carry out a study to alert government and politicians to the precarious situation of generics manufacturers

Methodology

1. Collection of market data
   - Overview of the structure and dynamics of the market for generics delivered in retail pharmacies
2. Analysis of the generics manufacturers' performance
   - Based on a sample of 7 companies accounting for 88% of the market for generics delivered in retail pharmacies in 2021

arrow génériques, BIOGARAN, EG Labo, SANDOZ Think Generics, teva, VIATRIS, ZENTIVA

3. Generics manufacturers' footprint in France

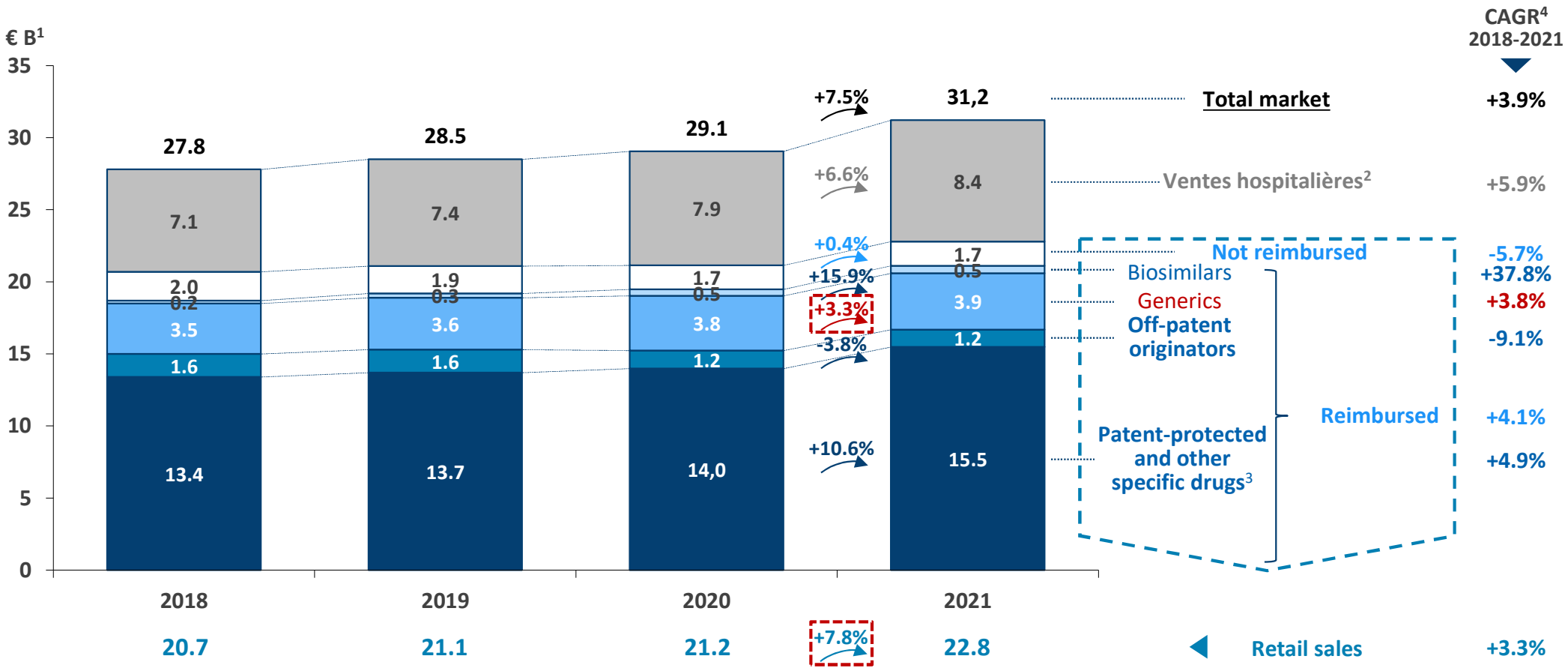
Employment, production and supply	Savings for Social Security	Economic balance of retail pharmacies

Sources: Brief Gemme / Smart Pharma Consulting

[1] *Social Security Financing Act*

In 2021, the retail drugs market increased by 7.8%, while retail generics grew 2.4 times slower, with a growth rate limited to 3.3%

Evolution of drugs sales by segment (2018 – 2021)



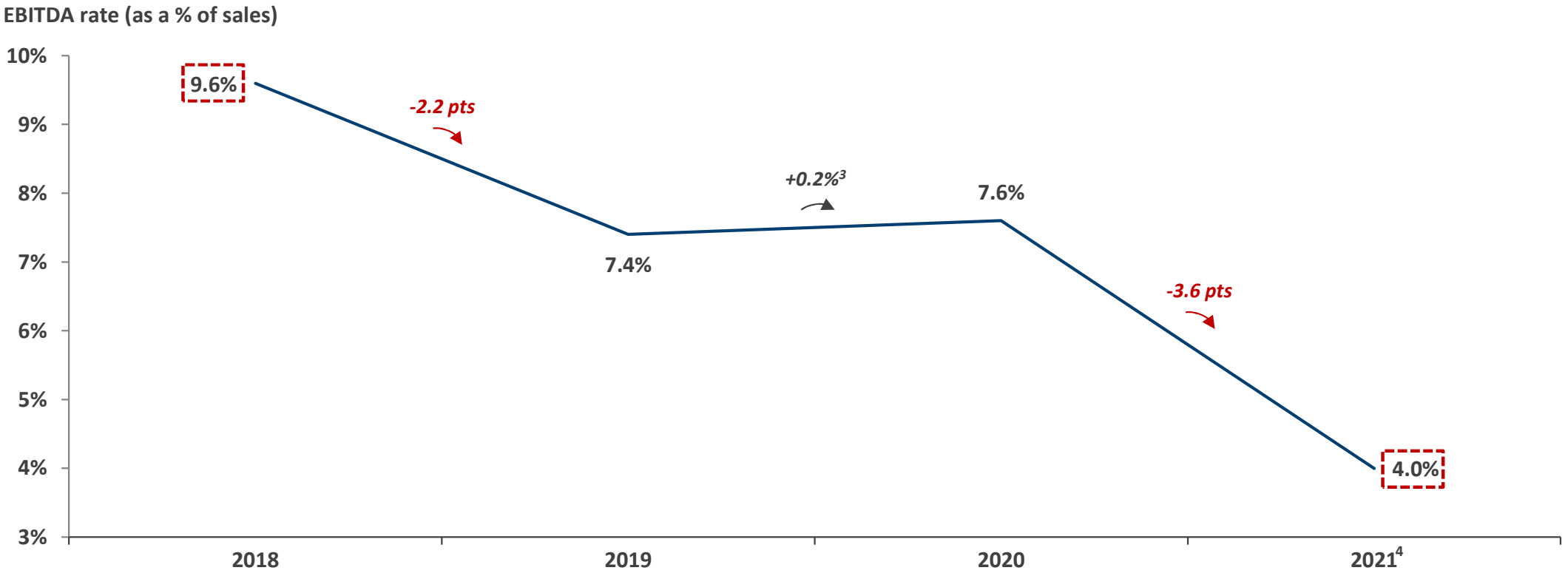
Sources : GERS Dashboard – Smart Pharma Consulting estimates

[1] Constant ex-factory prices – [2] Estimated net of a 33% average discount rate, including hospital sales of biosimilars, products invoiced on top of "T2A" and reassigned medicines – [3] Sales of drugs whose patent has not expired and of other specific products (e.g., calcium, sodium, potassium, paracetamol) – [4] Compound annual growth rate

Generics manufacturers EBITDA[1] rate decreased from 9.6% in 2018 to 4.0% in 2021, with a particularly marked drop in 2021 (-3.6 points)

Profitability of generics manufacturers operating in France (2018 – 2021)

Profitability for all activities[2]



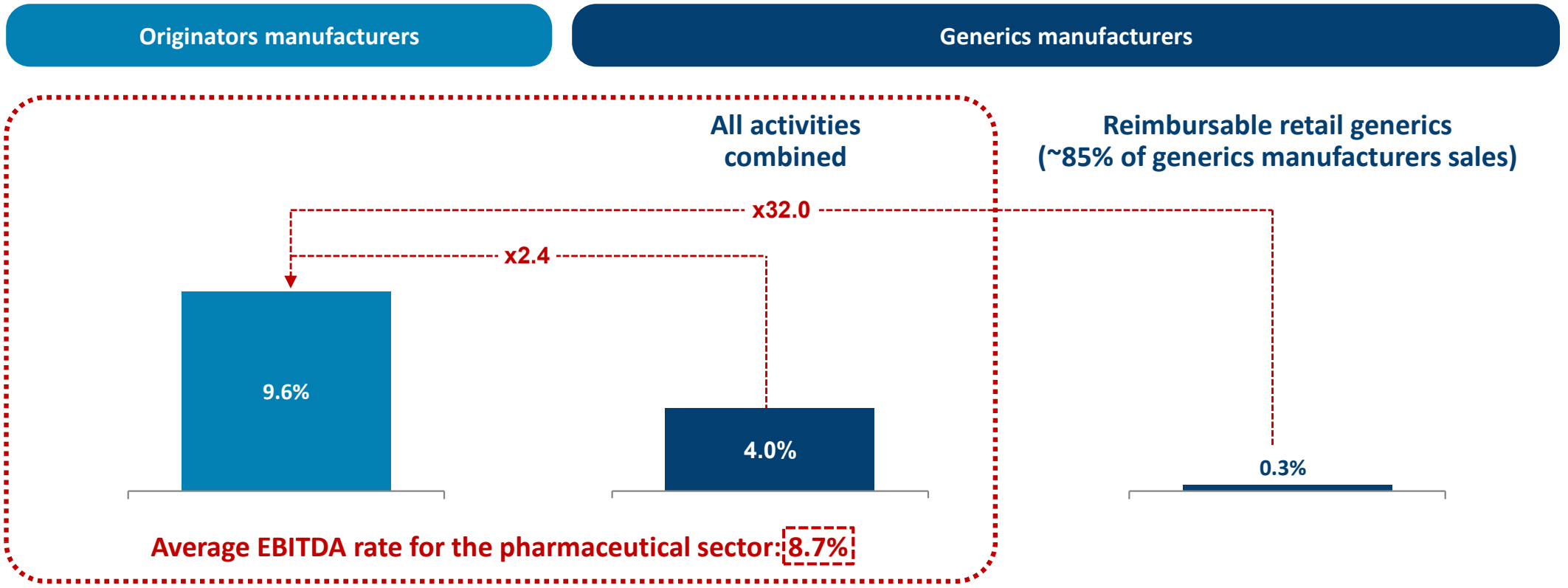
Sources: Statutory accounts of the 7 leaders of the generics market dispensed in retail pharmacies, representing a combined market share of 88% in 2021 – Smart Pharma Consulting analyses

[1] Earning before interest, tax, depreciation and amortization: financial indicator expressing the capacity of a company to generate cash resources solely from its operations – [2] Including the profitability of all segments retail and hospitals (i.e., generics, biosimilars, originators, OTC, etc.) – [3] Absence of price cuts and M contribution in 2020 – [4] Based on a total M contribution of € 760 M in 2021

In France, the average EBITDA[1,2] rate of the pharmaceutical industry is ~8.7%, but hides significant disparities between originators and generics manufacturers

Profitability of manufacturers operating in France (2021)

Average EBITDA rates in the pharmaceutical sector – National comparisons



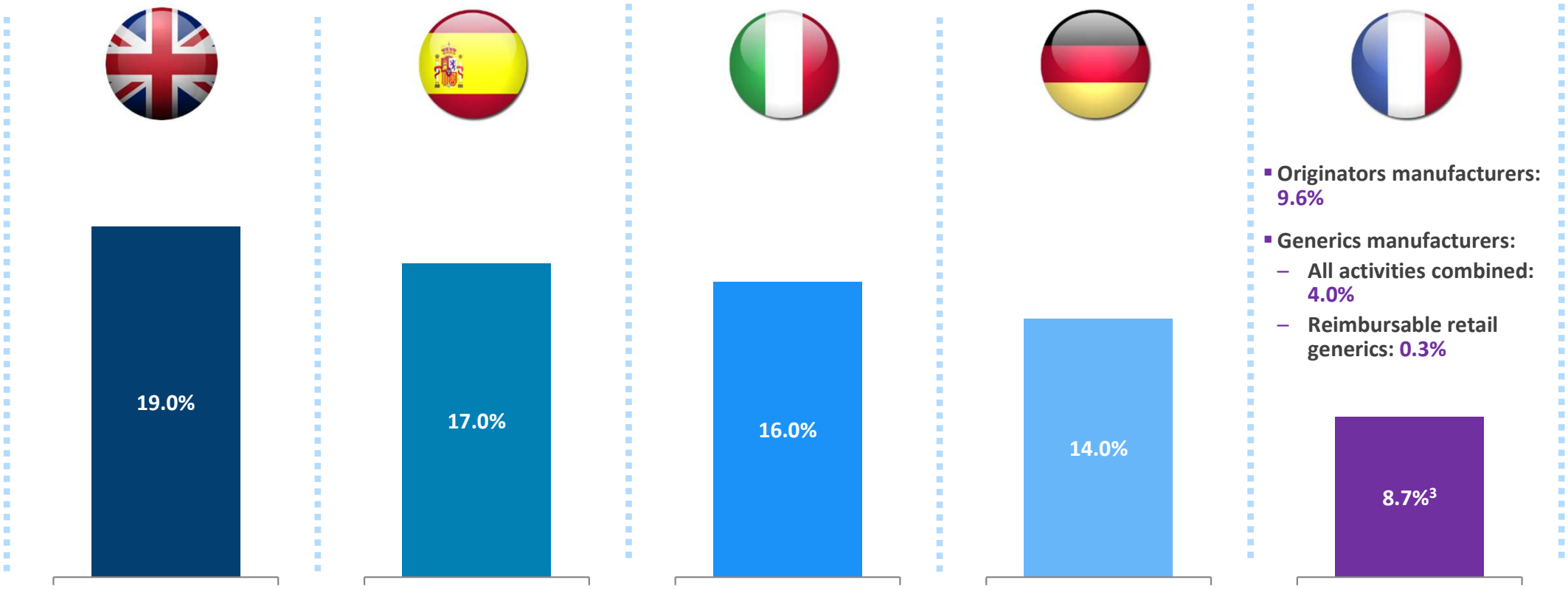
Sources: Statutory and analytical accounts of the 7 leaders of the generics market dispensed in retail pharmacies, representing a combined market share of 88% in 2021 – Insee sector studies – Smart Pharma Consulting analyses

[1] Earning before interest, tax, depreciation and amortization: financial indicator expressing the capacity of a company to generate cash resources solely from its operations – [2] Based on a total M contribution of € 760 M in 2021

Among the 5 main European markets, France is the least profitable country for the pharmaceutical sector (and particularly for the generics manufacturers operating there)

Profitability of manufacturers operating in France (2021[1])

Average EBITDA[2] rates in the pharmaceutical sector – International comparisons



Sources: Statutory and analytical accounts of the 7 leaders of the generics market dispensed in retail pharmacies, representing a combined market share of 88% in 2021 – Insee sector studies – LEEM – Smart Pharma Consulting analyses

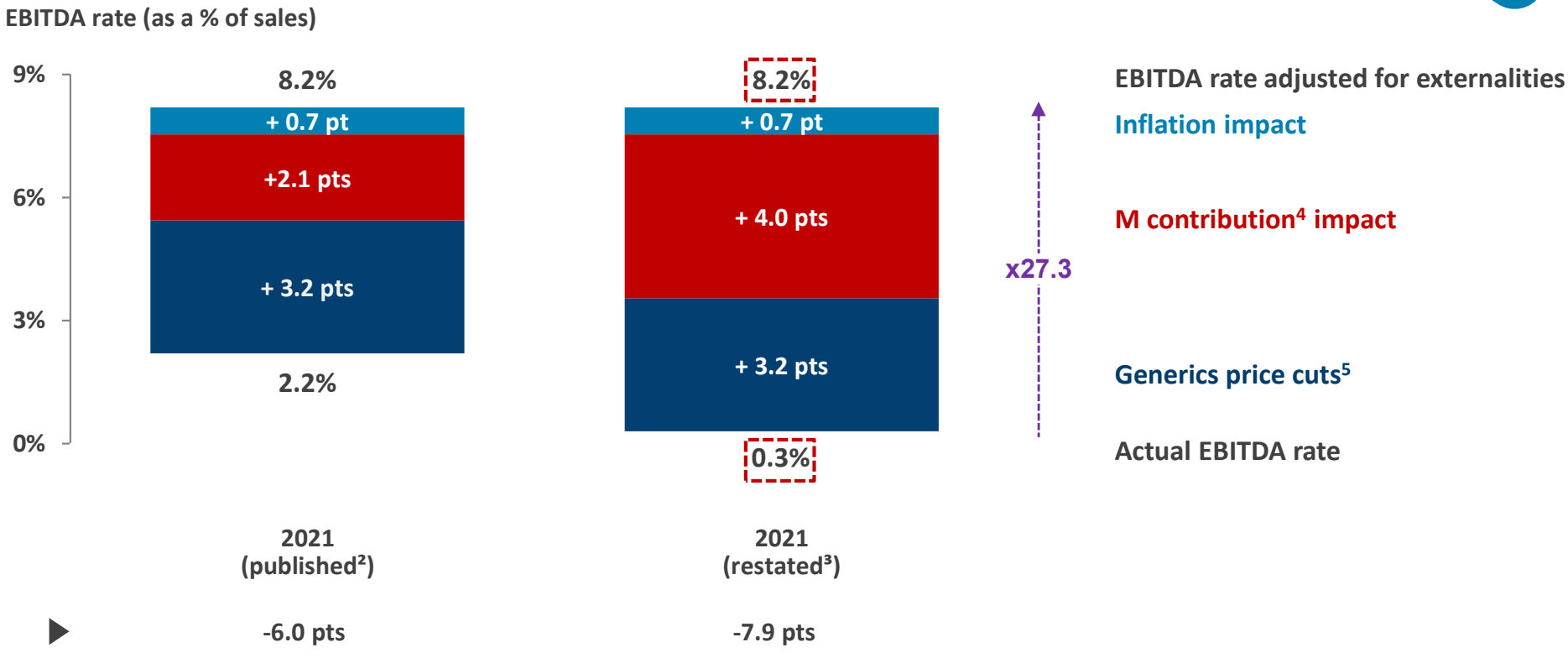
[1] Or the most recent year (2018 for the UK, Spain and Italy) – [2] Earning before interest, tax, depreciation and amortization: financial indicator expressing the capacity of a company to generate cash resources solely from its operations – [3] Based on a total M contribution of € 760 M in 2021

Inflation, M contribution and price cuts contributed to reducing the profitability of reimbursable retail generics from 8.2% to 0.3% of sales

Profitability of generics manufacturers operating in France

Reimbursable retail generics

Impact of externalities on generics manufacturers' profitability (2021)



Sources: Statutory and analytical accounts of the 7 leaders of the generics market dispensed in retail pharmacies, representing a combined market share of 88% in 2021 – Smart Pharma Consulting estimates and analyses

[1] Earning before interest, tax, depreciation and amortization: financial indicator expressing the capacity of a company to generate cash resources solely from its operations – [2] Based on a total M contribution of € 400 M– [3] Based on a total M contribution of € 760 M – [4] Before deduction – [5] Including carry-over effect

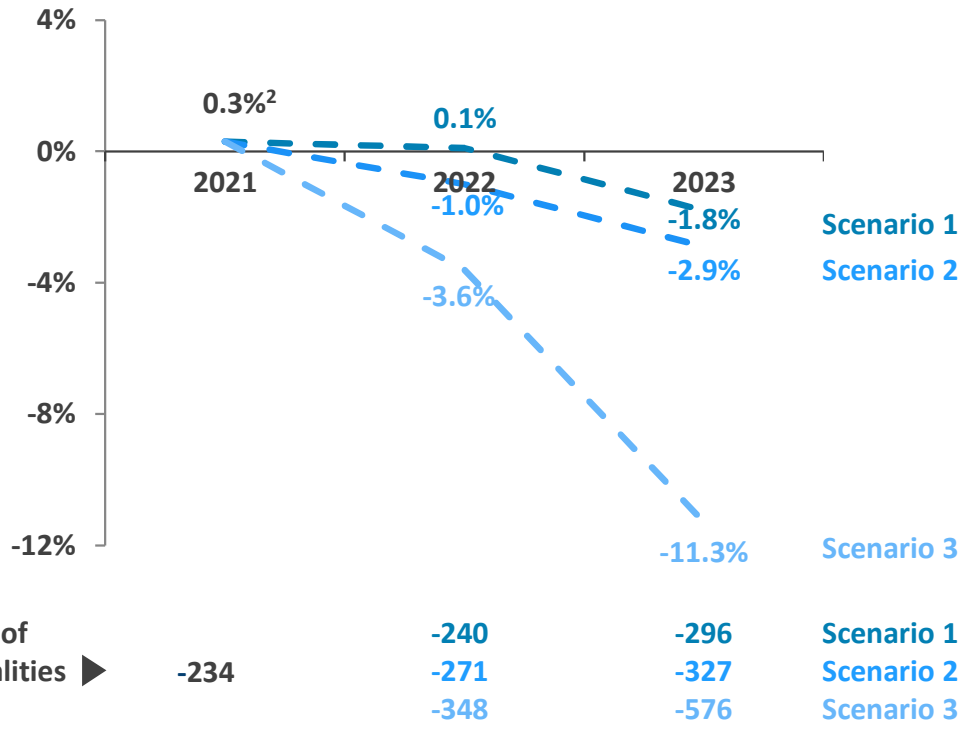
The economic balance of generics manufacturers will be weakened in 2022, and even more so in 2023, with a strong impact of externalities on their level of profitability

Profitability of generics manufacturers operating in France

Reimbursable retail generics

Outlook 2022 – 2023

EBITDA rate[2] (as a % of sales)



Impact of externalities (in €M)	2021	2022	2023	
	-234	-240	-296	Scenario 1
		-271	-327	Scenario 2
		-348	-576	Scenario 3

Assumptions 2022 – 2023

Externalities	Scenario	2022	2023	Assumptions
Inflation (including carry-over effect)	#1	€ 67 M	€ 124 M	▪ **2022:** inflation of +5.3% (Insee) ▪ **2023:** inflation of +4.2% (OECD, Ministry of the Economy)
	#2			
	#3			
Safeguard clause (before deduction)	#1	€ 93 M		▪ **~16% of market share x total M contribution:** #1: € 600 M (2022/2023) #2: € 800 M (2022:2023) #3: € 1,300 M (2022) / € 2,400 M (2023)
	#2	€ 124 M		
	#3	€ 202 M	€ 373 M	
Price cuts for generic drugs	#1	€ 79 M		▪ **2022:** CEPS source ▪ **2023:** same as 2022
	#2			
	#3			

--- Gemme Estimates / Smart Pharma Consulting

Sources: Statutory and analytical accounts of the 7 leaders of the generics market dispensed in retail pharmacies, representing a combined market share of 88% in 2021 – Insee (2022) – OECD (2022) – Government communications (2022) – Smart Pharma Consulting estimates and analyses

[1] Earning before interest, tax, depreciation and amortization: financial indicator expressing the capacity of a company to generate cash resources solely from its operations – [2] Based on a total M contribution of € 760 M

The more the share of generics grows, the more Social Security makes savings and the higher is the contribution M which significantly impacts the margin of market players

Generics: Current situation

> € 2 B
of savings generated per year

- With a penetration rate of 84% of the generics directory
- Generic drugs allow substantial savings to the Social Security every year....
- ... which can be used to reimburse more expensive innovative treatments

€ 237 M
Impact of externalities[1] incurred in 2021

- With a € 118 M contribution, € 96 M price cuts and € 23 M inflation, the economic balance of generic manufacturers has never been so fragile as in 2021
- ... to the point of generating losses, for many of them, likely to settle over time

~0.3%
Average EBITDA rate in 2021

- Reimbursable retail generics have almost nil and much lower operating margins than:
  - Originator manufacturers in France (9.6% of EBITDA)..
  - … and in Europe:
    - ✓ ~19% in the UK
    - ✓ ~17% in Spain
    - ✓ ~16% in Italy
    - ✓ ~14% in Germany

Sources: Smart Pharma Consulting analyses

[1] *M contribution, price cuts, inflation*

The increasingly precarious situation of generic manufacturers requires reconsidering price reductions and the safeguard clause

Generics: 2022 – 2023 perspectives

€ 191 M
Cumulated impact of inflation over 2022 - 2023

- With inflation rates estimated at +5.3% for 2022 and +4.2% for 2023...
- ... retail reimbursable generics manufacturers will be strongly impacted on their costs:
  - Of goods sold (+ € 149 M)
  - Of staff (+ € 27 M)
  - Of distribution (+ € 14 M)

€ 158 M
Impact of price cuts over 2022 – 2023

- If the price cuts decided in the LFSS[1] are maintained in 2023 ...
- ... they are likely to have a major deleterious impact on the profitability of generics manufacturers
- This impact has been estimated at € 79 M per year, i.e., € 158 M over 2022-2023

-1.8%[2] to -11.3%[3]
EBITDA rate for 2023

- The fragility of generics manufacturers observed in 2021 is likely to deteriorate in 2022, and even more so in 2023 given the:
  - Inflation
  - Price cuts
  - M contribution

Sources: Smart Pharma Consulting analyses

[1] Social Security Financing Act – [2] In case of a M contribution equal to 600 M€ – [3] In case of M contribution equal to € 2,400 M

As part of its "emergency plan for generic and biosimilar medicines", Gemme proposes to revise the fiscal and economic environment of mature medicines

Generics: Gemme proposals

Revision of the tax environment for mature drugs

- Revision of the scope and calculation of the safeguard clause[1]
- Revision of M amount for 2022
- Introduction of a mechanism for rebasing the value of M for the following year

Moratorium on price reductions for mature drugs for 2023

- Protection of the already degraded economy of generics:
  - Tensions in terms of supply
  - Weakening of the industrial tool
  - Loss of attractiveness for the French market

Integration of inflation in the price of least expensive drugs

- Revision of the price of drugs whose ex-factory price is ≤ € 5€ / pack or ≤ 0.12 € par tablet considering inflation (estimated at 5% for 2022)
- Expected impact of this measure for Social Security: € 185 M

Setting up of a floor price

- Setting up of a floor price (€ 0.14 € / tablet)
- This floor price would be:
  - Registered in the Public Health Code
  - Fixed under the framework agreement between CEPS and LEEM

Sources : Gemme

[1] *Proposal to distribute the M contribution, up to 20% based on market shares and up to 80% according to sales growth*

Smart Pharma
CONSULTING

The French OTC Market

Market Insights Series

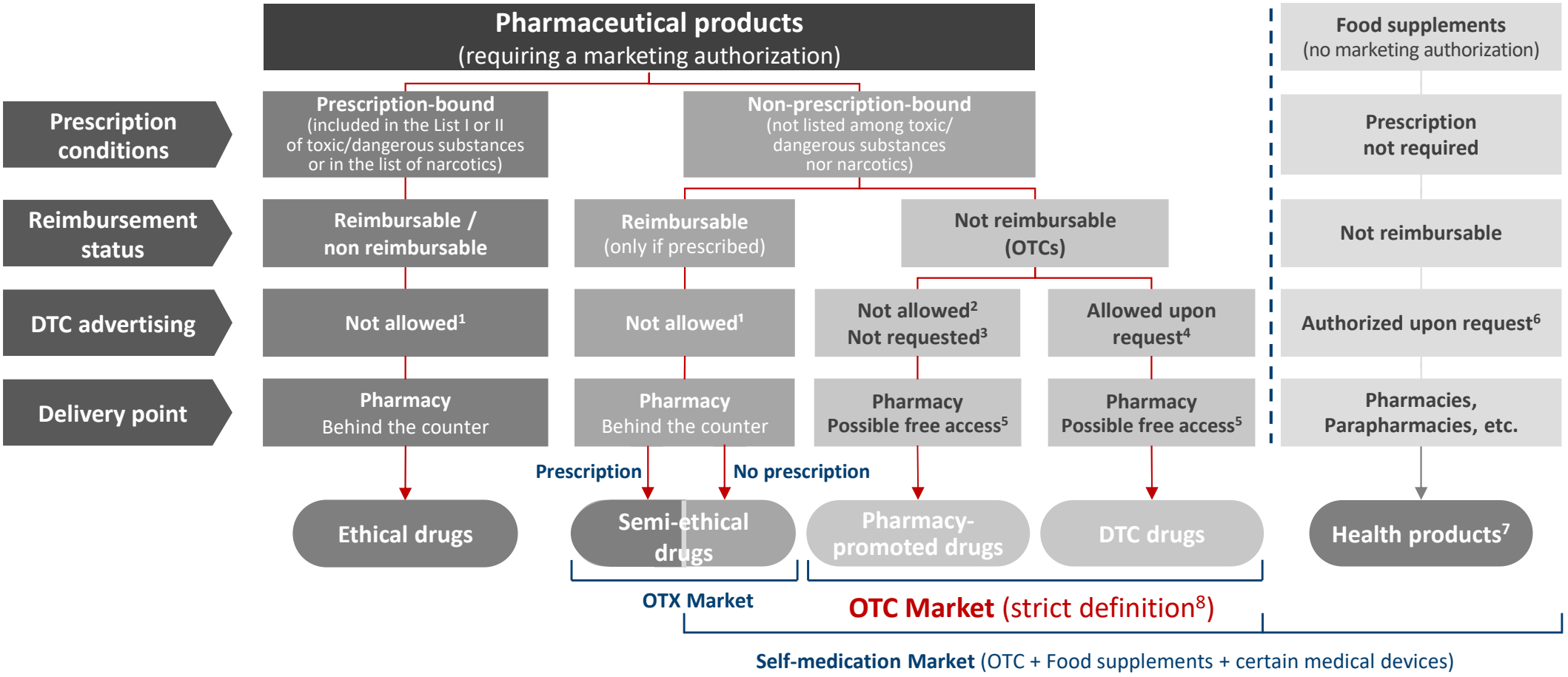
Situation Analysis & Trends

December 2024

1, rue Houdart de Lamotte – 75015 Paris – France
Tel. +33 6 11 96 33 78 – jmpeny@smart-pharma.com – www.smart-pharma.com

Pharmaceutical products can be split into prescription-bound and non-prescription-bound drugs, knowing that some of the prescribed drugs are not reimbursed

Classification of pharmaceutical products in France



Note: OTC = Over-the-counter, OTX = combination of prescription (RX) and over-the-counter (OTC), DTC = Direct to consumer

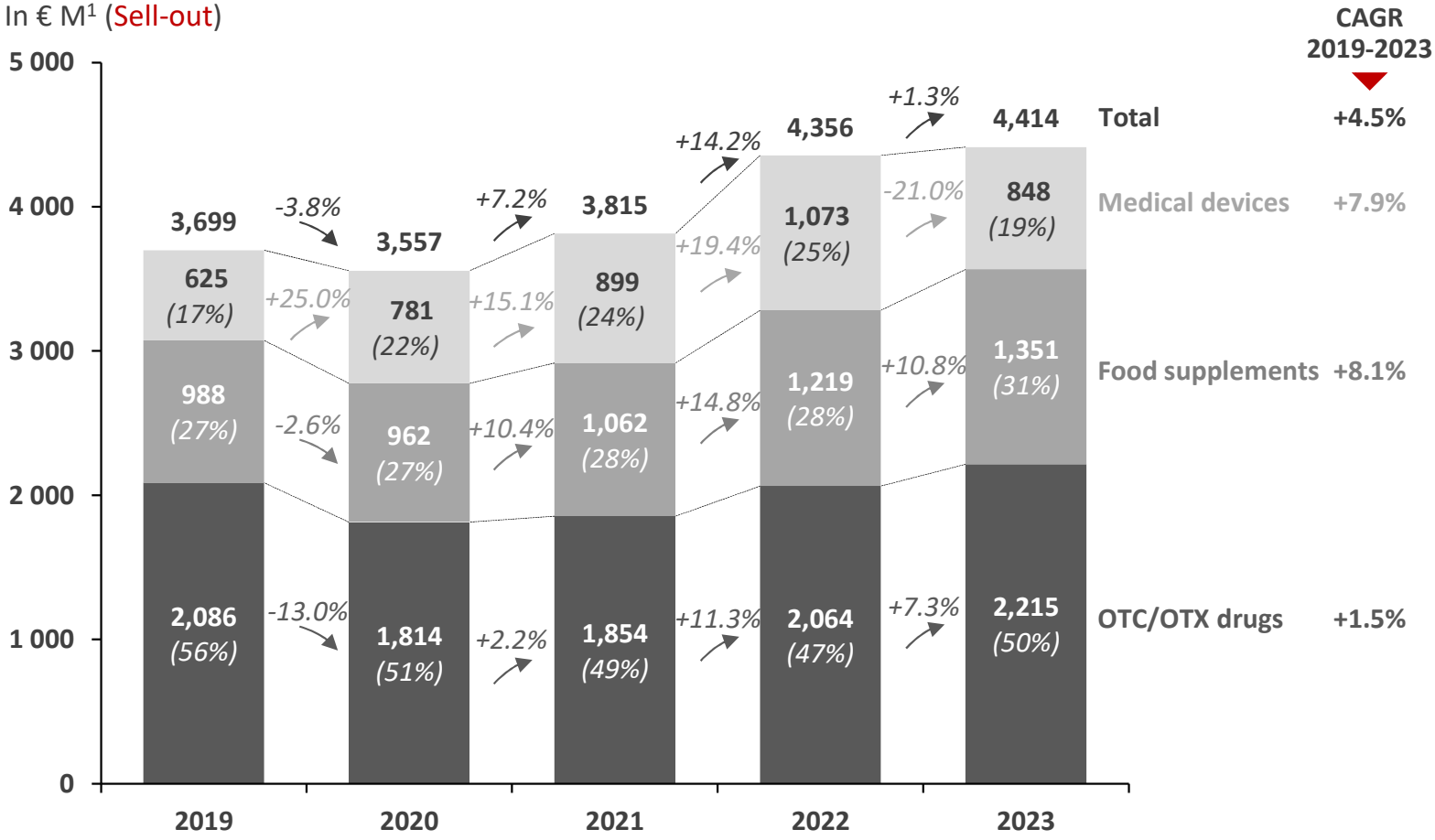
Sources: ANSM – DGCCRF – Smart Pharma Consulting analyses

[1] Rare exceptions (e.g., vaccines) – [2] Psychotropic or narcotic drugs – [3] When the pharma company does not wish to communicate to the general public – [4] Whatever the claims – [5] Possibility of "free access" within the retail pharmacy for certain OTC products – [6] Only for claims relating to healing, alleviating or preventing diseases – [7] Other than drugs and pharmaceutical products – [8] Defined as the non-listed, non-reimbursed and non-prescribed drugs bought by consumers at retail pharmacies

The total self-medication market – at sell-out value – increased by +4.5% p.a. over 2019 – 2023, with a strong growth of food supplements and medical devices, unlike OTC/OTX drugs

Self-medication: Market segmentation & dynamics (2019 – 2023)

Sell-out value



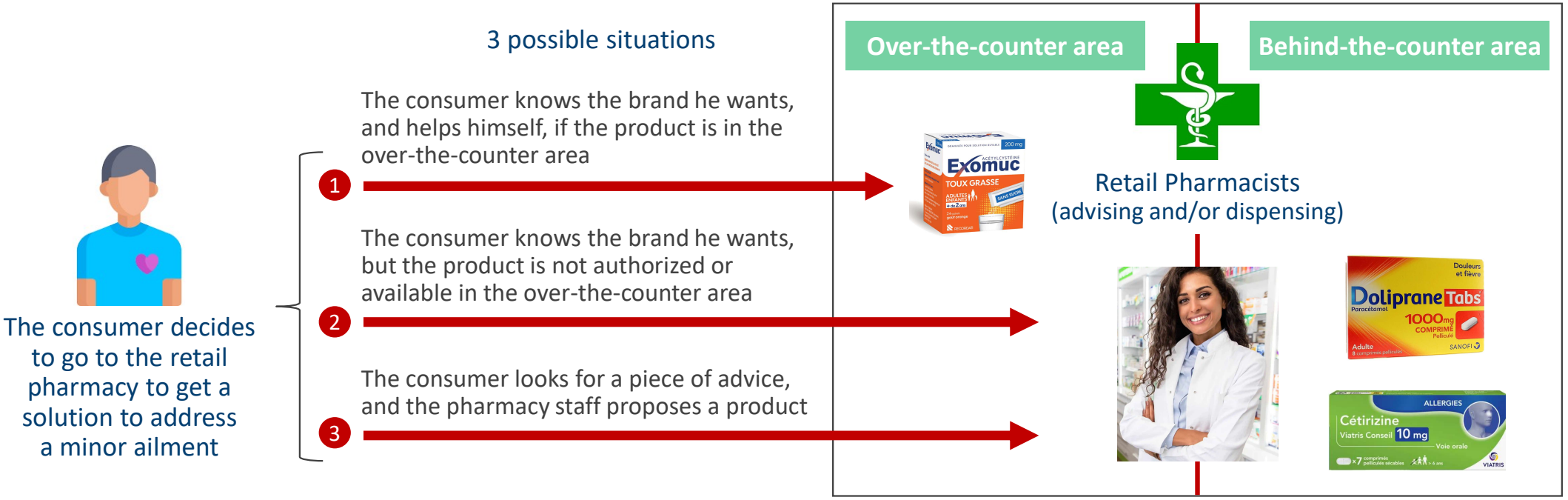
- The self-medication market includes all the products which are non-Rx bound, bought without a prescription and non-reimbursable
- The self-medication is split into three categories of products:
  - Drugs:
    - OTC (e.g., Toplexil)
    - Non-prescribed OTX (e.g., Helicidine)
  - Medical devices (e.g., Phytoxil)
  - Food supplements (e.g., Tux-actifs)
- A patient / consumer who needs a solution for a given ailment may be advised by the pharmacy staff or ask for a product belonging to one of these categories

Sources: Openhealth Company (Neres January 2024), based on a panel of 13,491 retail outlets – Smart Pharma Consulting analysis

[1] Sell-out, in public prices including VAT

The OTC market is mostly driven by pharmacy staff proposition and delivery, consumers having a low level of awareness and little, if any, OTC products being displayed in the over-the-counter area

Self-medication: Consumer journey from perceived need to delivery



- The ANSM has set a positive list of drugs authorized over-the-counter. They are not systematically displayed in this area in all outlets
- Consumers asking for a given brand will be delivered – in most cases – that brand. However, the staff may propose an alternative one
- When a brand is proposed, it can be an OTC drug, a food supplement or a medical device, which are all non-listed and non-reimbursed
- It is unlikely that an OTX drug[1] is proposed, because the price and the margin set by the CEPS[2] are much lower than for the other products types

Sources: Smart Pharma Consulting analyses

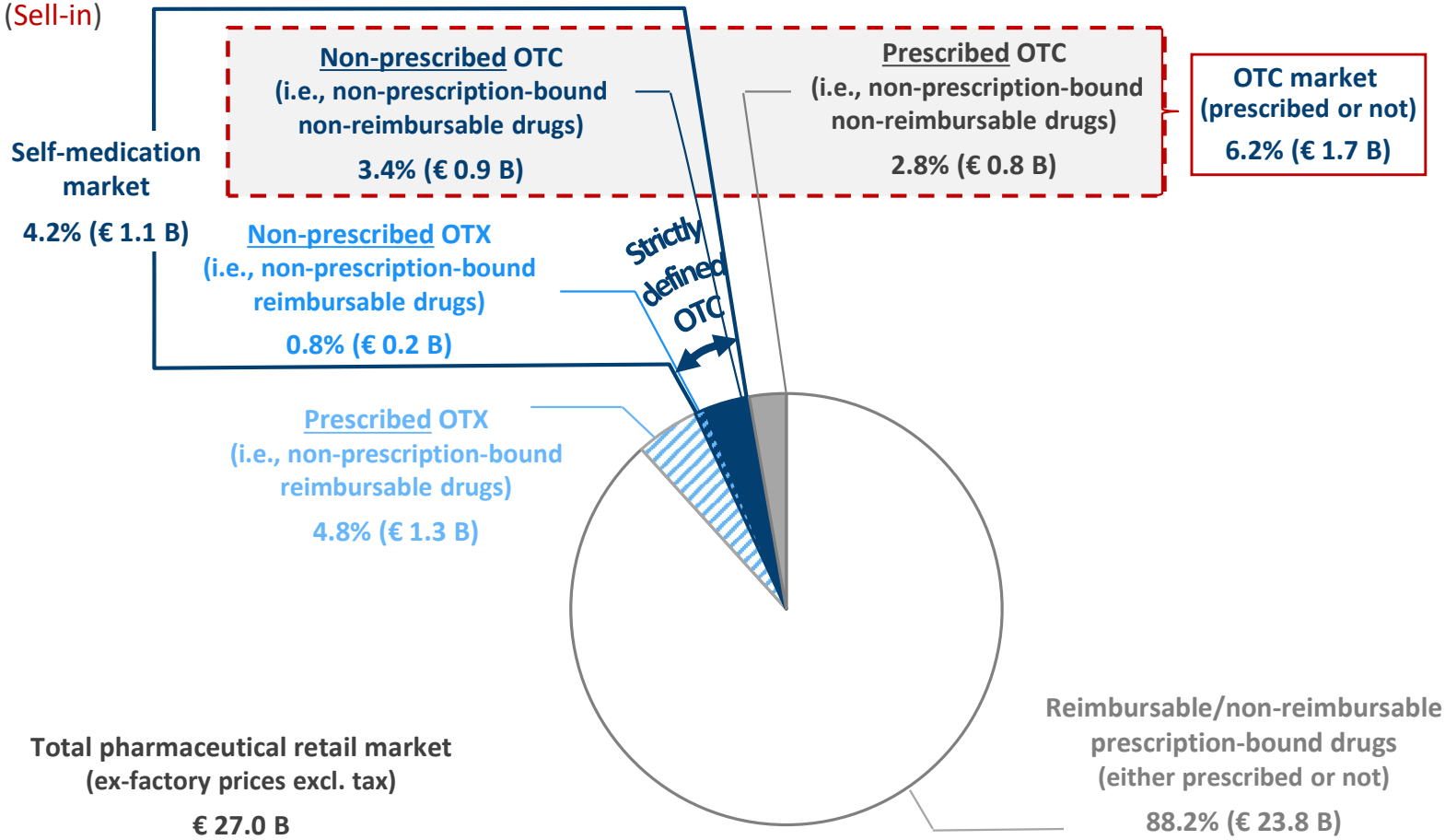
[1] Non-listed but reimbursable if prescribed – [2] French drug priced committee

In 2023, the OTC market (i.e., non-listed, non-reimbursed and non-prescribed drugs bought at retail pharmacies) amounted to € 1.7 B*, accounting for 6.2% of the retail pharmaceutical market

Size of the OTC market (2023)

Sell-in value

In € B[1] (Sell-in)



- OTX (i.e., non-prescription-bound, reimbursed only if prescribed) are massively prescribed by physicians (sometimes at patient request), which tends to limit the self-medication market growth potential

** Sales of products with the status of food supplements or medical devices which can compete with OTCs drugs (e.g., treatments for cough & cold) are not included*

Sources: Smart Pharma Consulting estimates based on GERS and IQVIA (Pharmastat) data

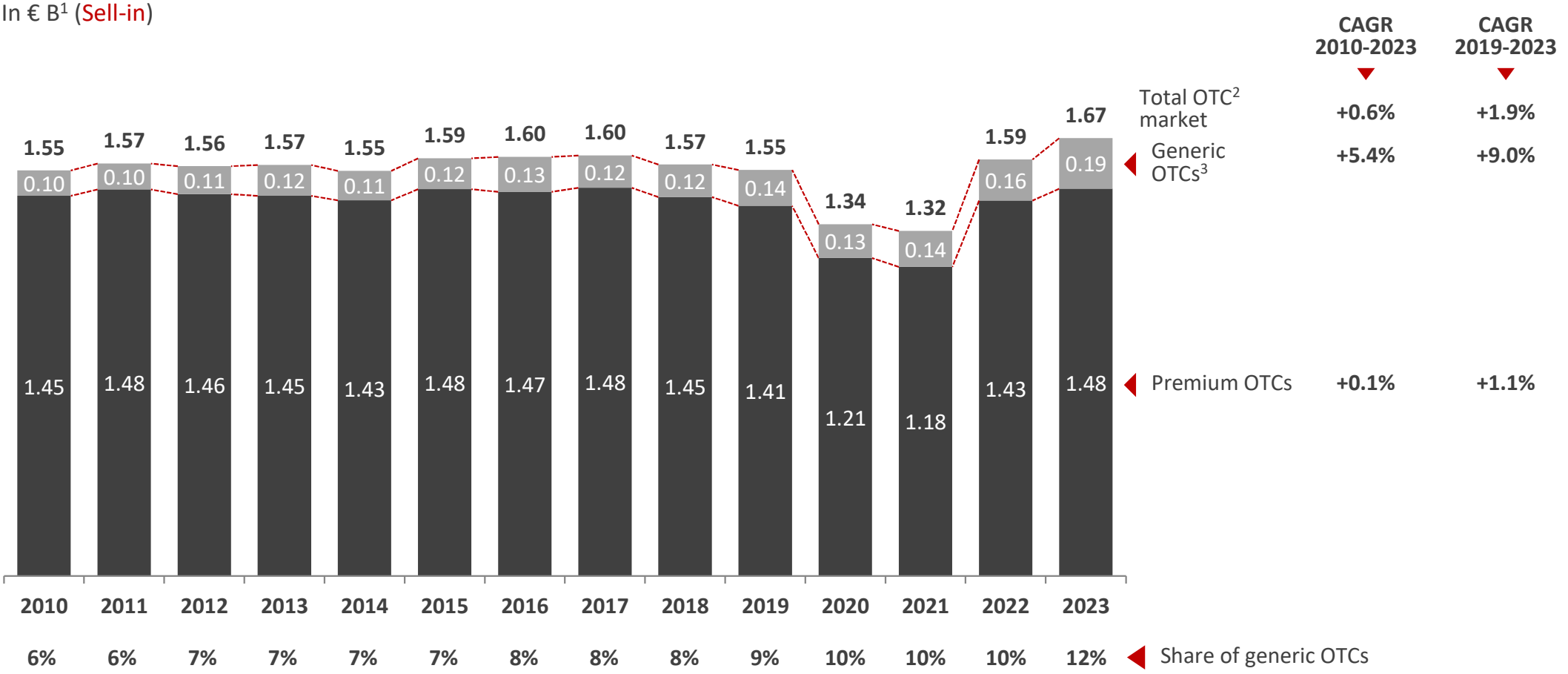
[1] Ex-factory price, before rebates and taxes

The OTC market has been quite stable since 2010, but the generics market share grew (+ 6 pts in 13 years)

OTC market evolution (2010-2023)

Sell-in value

In € B[1] (Sell-in)



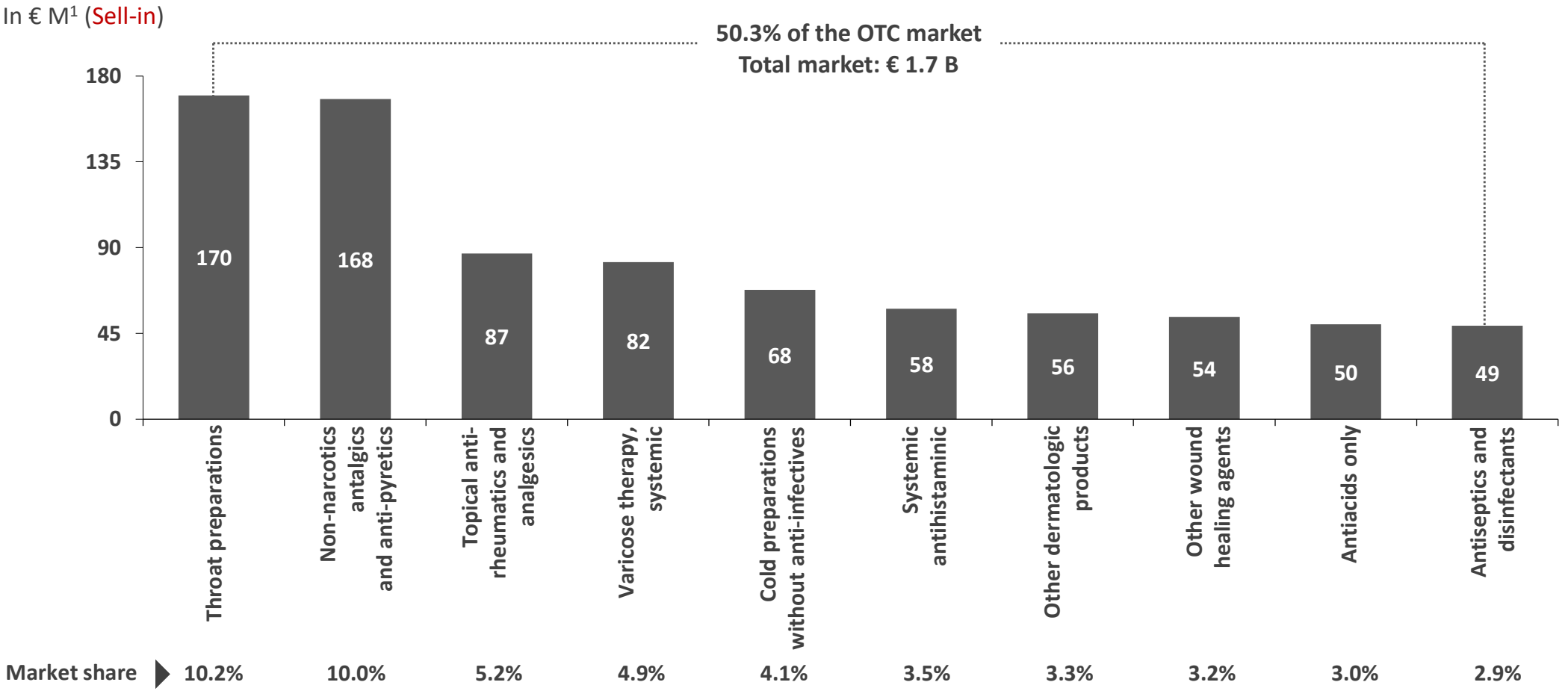
Sources: GERS dashboards – Smart Pharma Consulting analyses

[1] Ex-factory prices before rebates and taxes – [2] Not listed nor reimbursed – [3] OTCs commercialized by leading generics companies: Arrow, Biogaran, EG Labo, Sandoz, Teva, Viatris (before the acquisition of almost all its OTC portfolio by Cooper in July 2024) or Zentiva

In 2023, throat preparations led the French OTC market, followed by non-narcotics antalgics and antipyretics

Top 10 therapeutic areas – OTC market (2023)

Sell-in value



Sources: GERS – Smart Pharma Consulting analyses

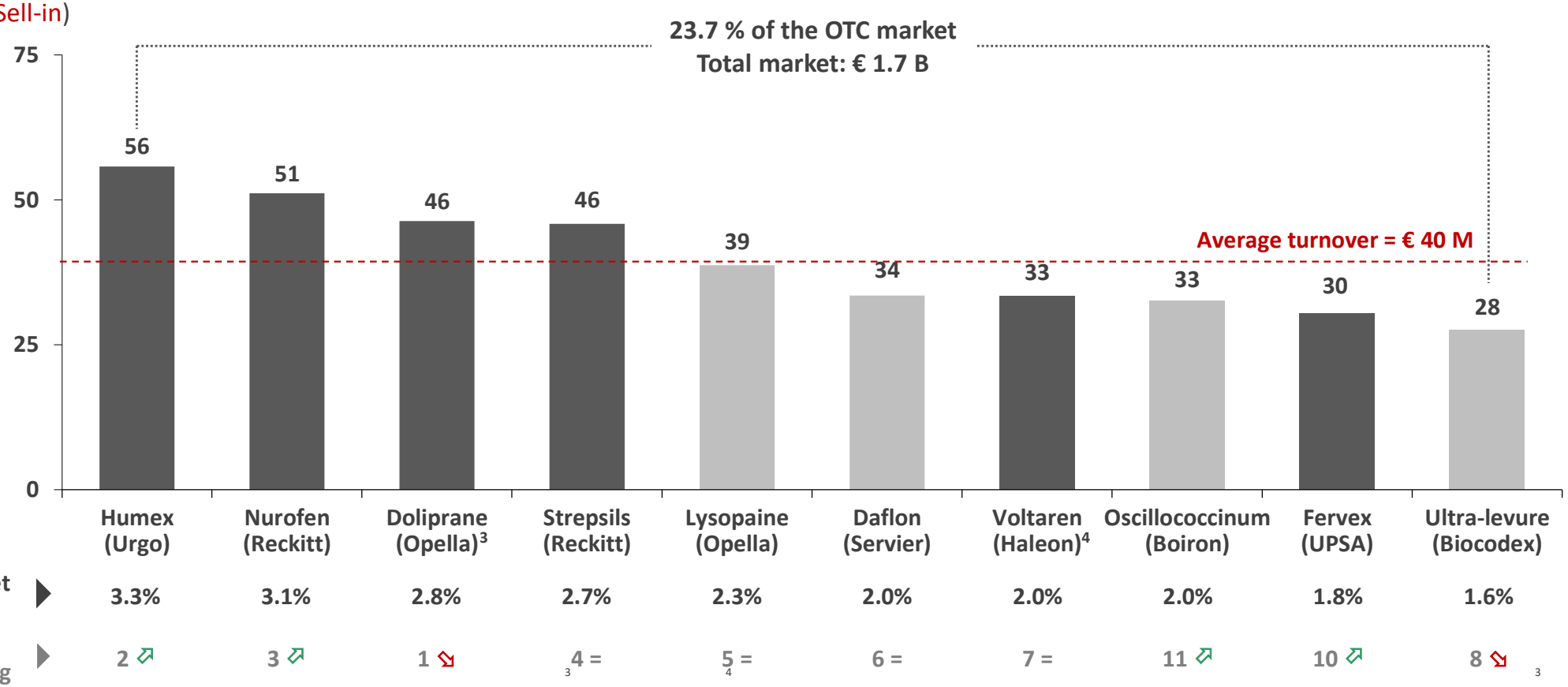
[1] Ex-factory prices, before rebates and taxes

The top 10 brands of the OTC market – including six umbrella brands – accounted for ~24% of the total sales in 2023

Top 10 brands and umbrella brands on the OTC[1] market (2023)

Sell-in value

In € M[2] (Sell-in)



Note: All these brands have been marketed for 30 years or more on the French market

Sources: GERS – Smart Pharma Consulting analyses

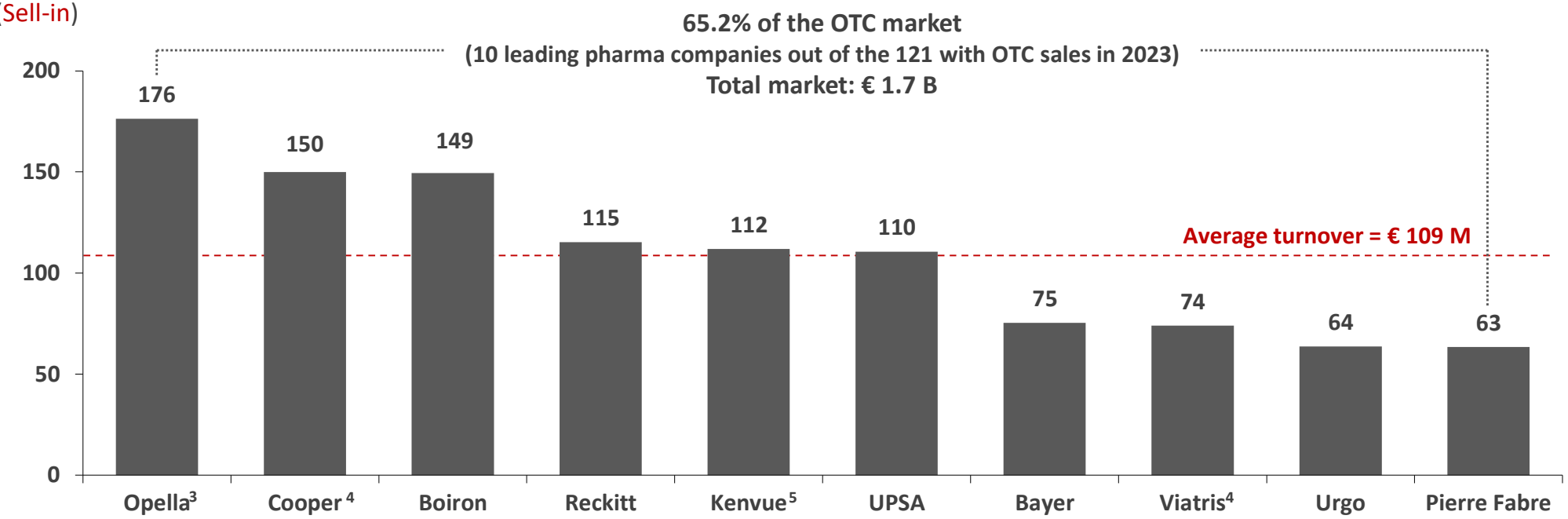
[1] Non-listed, non-reimbursable products – [2] Ex-factory prices, before rebates and taxes – [3] Sanofi entity, being partially sold to CD&R (exclusive negotiations for the repurchase of 50% of Sanofi's stake in Opella) and to BPI France (which should acquire a minority stake of almost 2% of Opella) – [4] Company created in February 2022, prior to its demerger from GSK in July 2022

The OTC business of companies operating in the French market is relatively small, with only six of them showing sales above € 100 M

Top 10 companies on the OTC[1] market (2023)

Sell-in value

In € M[2] (Sell-in)



	Opella[3]	Cooper[4]	Boiron	Reckitt	Kenvue[5]	UPSA	Bayer	Viatris[4]	Urgo	Pierre Fabre
Market share	10.5%	9.0%	8.9%	6.9%	6.7%	6.6%	4.5%	4.4%	3.8%	3.8%
2022-2023 evolution	-3.1%	+10.8%	+10.5%	+9.9%	+2.5%	-10.6%	-4.3%	+12.7%	+11.8%	+12.2%

Sources: GERS – Smart Pharma Consulting analyses

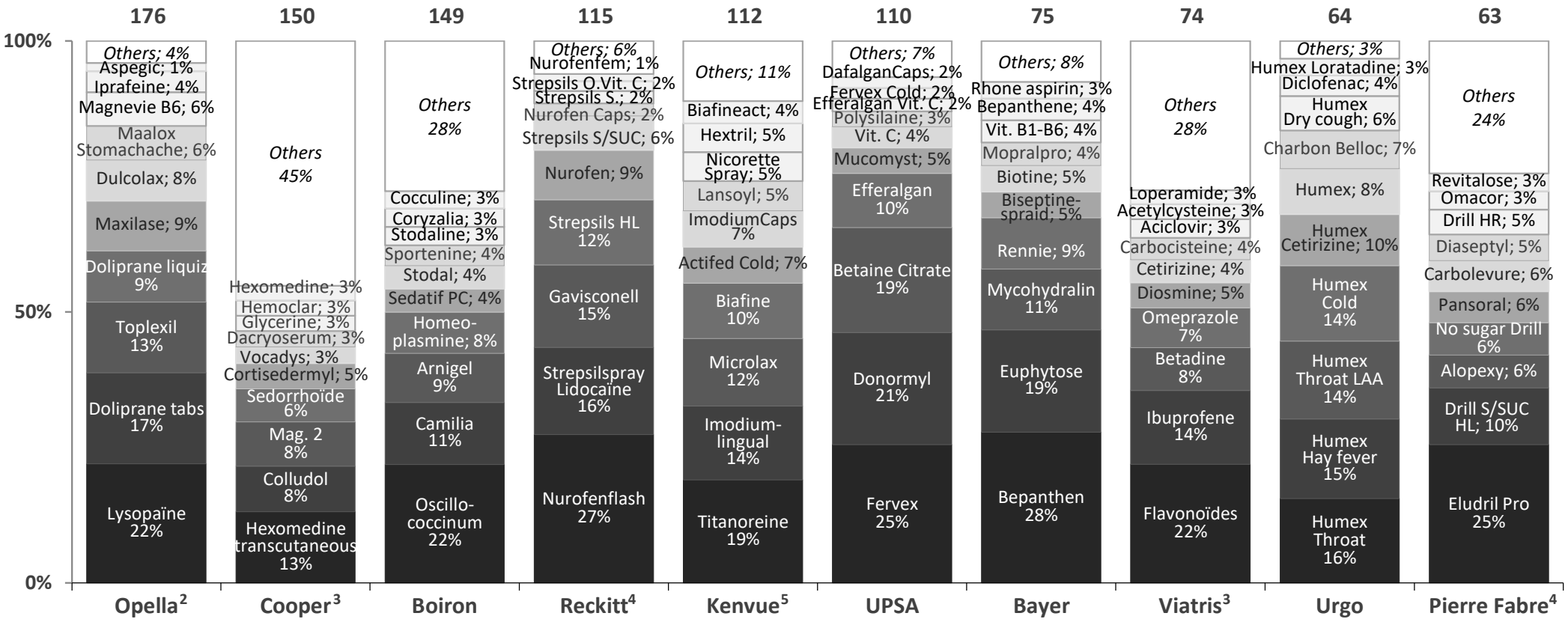
[1] Non-listed, non-reimbursable products – [2] Ex-factory prices, before rebates and taxes – [3] Sanofi entity, being partially sold to CD&R (exclusive negotiations for the repurchase of 50% of Sanofi's stake in Opella) and to BPI France (which should acquire a minority stake of almost 2% of Opella) – [4] In July 2024, Cooper acquired almost all the OTC portfolio of Viatris – [5] Company created in August 2023, after its demerger from J&J

Since the acquisition of Viatris OTC products by Cooper in July 2024, the latter has become the top selling OTC company on the French OTC market, with a fragmented portfolio

Top 10 OTC products of top 10 OTC companies (2023)

Sell-in value

In € M[1]



Note: Boiron is a company focusing on homeopathy products

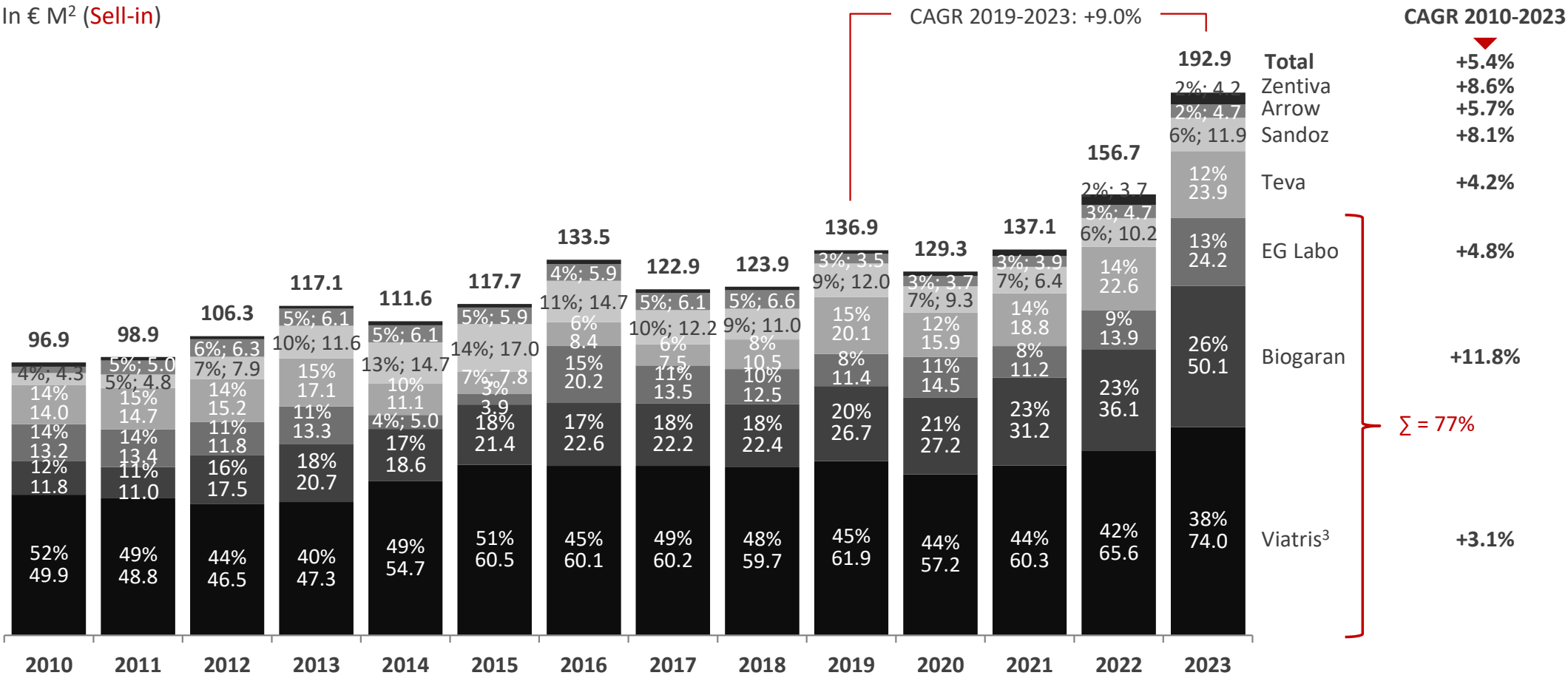
Sources: GERS – Smart Pharma Consulting analyses

[1] Ex-factory prices, before rebates and taxes – [2] Sanofi entity, being partially sold to CD&R (exclusive negotiations for the repurchase of 50% of Sanofi's stake in Opella) and to BPI France (which should acquire a minority stake of almost 2% of Opella) – [3] In July 2024, Cooper acquired almost all the OTC portfolio of Viatris – [4] S.: strawberry / O.: orange / HL: honey-lemon / HR: honey-rose – [5] Company created in August 2023, after its demerger from J&J

The generic OTC market growth which accelerated since 2020, driven by inflation, is quite concentrated with the three main players accounting for 77% of the total market

Generic OTCs[1] market shares evolution (2010-2023)

Sell-in value



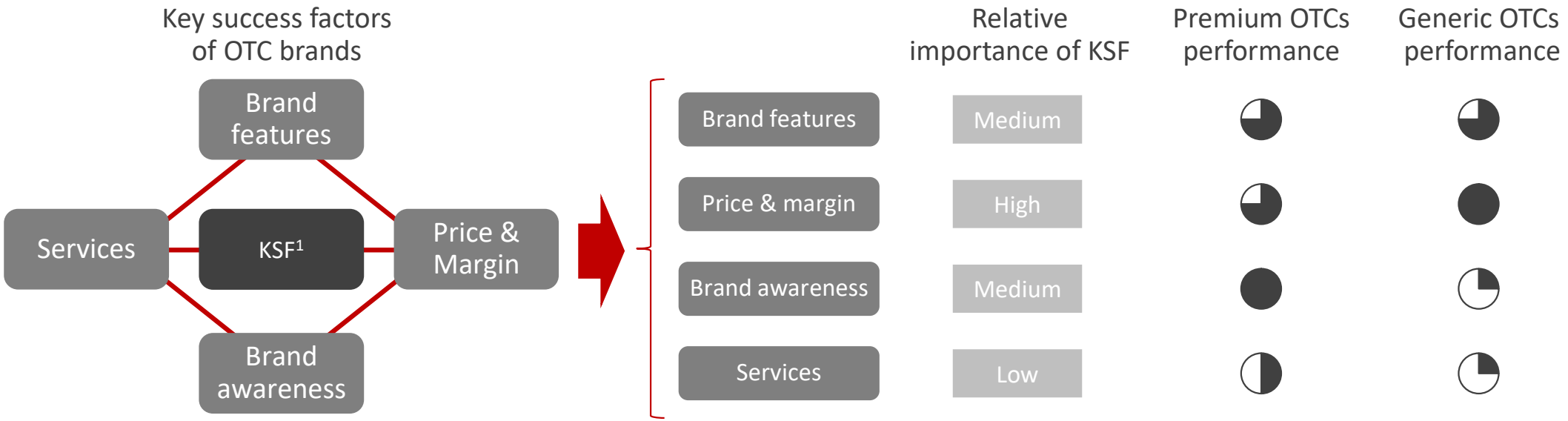
Sources: GERS dashboards – Smart Pharma Consulting analyses

[1] OTCs commercialized by generics companies – [2] Ex-factory prices before rebates and taxes – [3] In July 2024, Cooper acquired almost all its OTC portfolio

The only relative competitive advantages of generic vs. premium OTCs are a lower consumer price and a higher margin for retail pharmacists, assuming the difference is considered as big enough

Key success factors of generic vs. premium OTCs

- Premium OTC brands have been on the market for several decades, and supported by important and regular investment in:
  - Mass media (e.g., TV ads, radio, newspaper; and since early 2000s through social networks, products websites, YouTube)
  - Point of sales ads (e.g., posters, gondola ends, leaflets, totem)
- As an alternative to this pull marketing strategy, some originals, showing lower sales levels, have adopted a push marketing strategy based on pharmacy staff advice…
- … which is so far the strategy also adopted by generic OTCs
- Certain generics players, like Biogaran, communicate on mass media to create the demand for or enhance the acceptance of their OTC portfolio by the consumers, when proposed by the pharmacy staff



Sources: Smart Pharma Consulting analyses

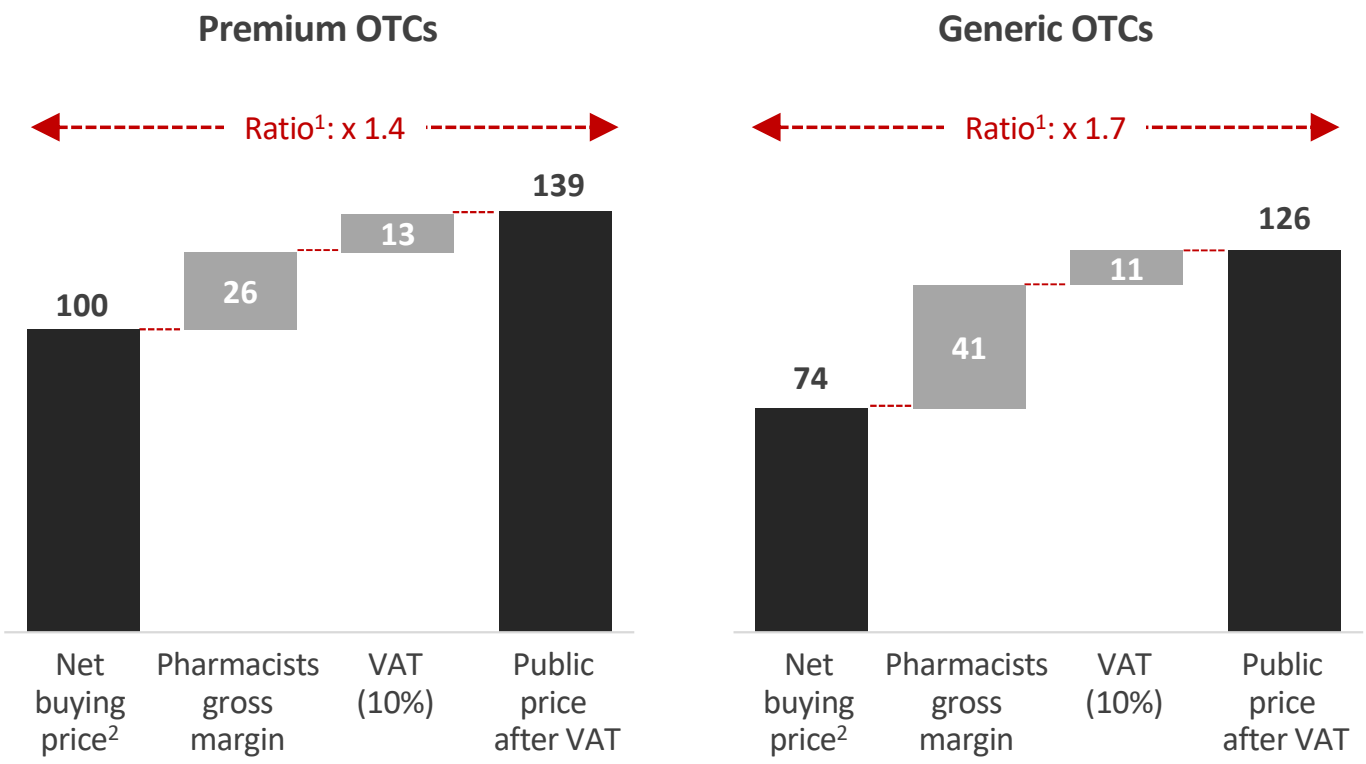
[1] Key success factors

Generic OTCs are considered by retail pharmacists as win-win products, because they apply a higher margin on these products and the customers still benefit from a lower public price

Financial impact of generic and premium OTCs for retail pharmacists

Interviews

What margins and prices differences do you apply on these two types of products?



Base 100: premium OTC net buying price

- **List prices** vary a lot amongst premium OTCs, the highest list price being up to seven times the lowest list price
- **Rebates on generic OTCs** are de facto hugely **variable**, going from -10% to -70%
- The interesting buying price for retail pharmacists is therefore the **net price**…
- …which must be **lower** for **generic OTCs** than for **premium OTCs**
- **Pharmacists' margins** are **higher** for **generic OTCs** (**x 1.7** ratio) than for **premium OTCs** (**x 1.4** ratio)
- **Generic OTCs** are therefore much **appreciated** because:
  - Pharmacists end up with a **higher margin** (in % and in absolute terms)…
  - … while customers benefit from a **lower public price**

(x) Number of quotes, 20 respondents

Sources: Interviews with retail pharmacists (April 2024) – Smart Pharma Consulting analyses and estimates

[1] Ratio applied by the retail pharmacists between the net buying price and the selling public price – [2] After potential rebates and before taxes

Pharmacists are becoming more open to generic OTCs in a context of inflation, but their delivery requires to convince their consumers who may be used to another brand for a given ailment

Value of generic OTCs for retail pharmacists

Interviews

	Value	Comments
1	**More affordable product offering for customers of retail pharmacists**	▪ For benign pathologies or conditions, for which patients must pay out of their pocket, pharmacists consider low-priced drugs as very attractive, especially in a context of inflation ▪ However, the generic OTC offering remains limited, as well as the number of suppliers and pharmacies having them listed
2	**High margin level**	▪ Pharmacists expect higher margins (in percentage & absolute terms) than those they get from original premium OTC brands… ▪ … knowing that they must, in some cases, convince their customers to accept a generic and/or to replace the brand they are used to
3	**Opportunity to increase the advisory role of the pharmacist**	▪ Most pharmacists propose generic OTCs when a customer asks for a piece of advice, and less frequently when they ask for a given brand ▪ Pharmacists admit that consumer advertising through mass media and/or on the point of sale facilitate the acceptance of generic OTCs

Sources: Pharmacists interviews – Smart Pharma Consulting analyses

Generics companies can position their OTC products as branded or non-branded (INN) generics or as a "copy" not listed in the Generics Directory, but in this case, they are not substitutable

Premium vs. generic OTC branding

	Branded	Non-branded (INN[1])
Premium drug	▪ Doliprane (paracetamol) Tabs 500 mg (Sanofi) ▪ Nurofen (ibuprofen) 200 mg (Reckitt Benckinser)	▪ NA
Generic drug	▪ Alopexy (Minoxidil, Pierre Fabre Médicament) ▪ Bronchokod (Carbocisteine, EG Labo)	▪ Carbocisteine Arrow Conseil 5% ▪ Minoxidil 5% Sandoz Conseil ▪ Oméprazole Viatris Conseil 20 mg
Non-generic copy drug	▪ Diarfix (Racecadotril, Cristers) ▪ Exomuc (acetylcystein, Recordati) ▪ Kendix 5% (Aciclovir, EG Labo)	▪ Aspirine UPSA Vitaminée C ▪ Gingko Zentiva 40 mg ▪ Purified Flavonoic Fraction Viatris Conseil 500 mg

- OTC products are either:
  - Premium drugs, and branded (e.g., Doliprane)
  - Generic drugs, most of the time non-branded (e.g., Dosmine Biogaran Conseil)
  - Non-generic copy drugs, since they do not belong to a generic group in the Generics Directory, they cannot be legally substituted by retail pharmacists, when prescribed by a physician (paracetamol Biogaran Conseil)
- The decision to market a non-premium drug under a brand name (e.g., Diarfix) or an INN (e.g., Carbocisteine Arrow Conseil) is just a marketing decision
- On the OTC market, the substitutable or non-substitutable status for a product has little impact, if self-medicated

Sources: Repertoire of generics, ANSM (February 2021) – Public database drugs (February 2021) – GERS – Smart Pharma Consulting analyses

[1] International Non-proprietary Name

Several strategies are possible for generic OTCs in terms of brand names and promotion

Generic OTC brand & commercial strategy

Branding

The generic OTCs can be marketed…

- … under a brand name (as chosen by EG Labo and pharma companies such as IPSEN[1], Bayer Healthcare, etc.)
- … under INN + company name (as chosen by Biogaran, Viatris[2], etc.)

Promotion

The generic OTCs can be promoted ...

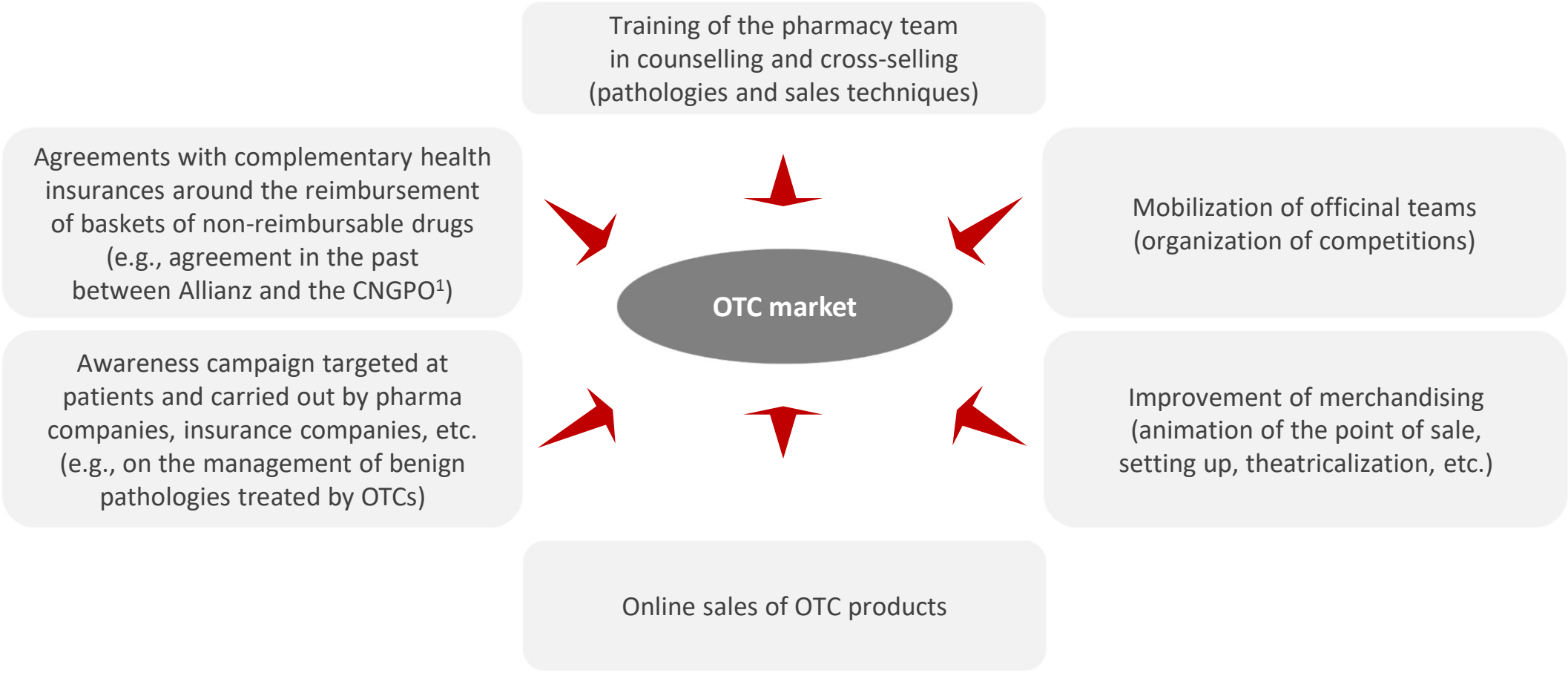
- … By the same sales reps as those used for ethical generics
  - Companies generally use the same sales reps to promote their generics OTCs and Rx-bound products
  - Pharmaceutical sales reps do not necessarily have the skills to sell OTC drugs (the price and rebates are not the only levers, the associated services like the merchandising actions also play a role)
- … By dedicated sales reps (no example in practice)
- … With mass-market advertising (e.g., Curanail from Galderma)
  - Some companies favor advertising for the whole portfolio (e.g., the Biogaran Conseil TV campaign at portfolio launch) when others only target certain products (e.g., Smectalia from IPSEN[1])
  - The high cost of mass-market advertising restricts some companies from using this promotion channel
- … Without mass-market advertising (e.g., Minoxidil Sandoz Conseil)

Sources: Business Intelligence – Smart Pharma Consulting analyses

[1] IPSEN has sold its OTC business to Mayoly in 2022 –
[2] In July 2024, almost all its OTC portfolio was acquired by Cooper

The OTC market has never been very dynamic, but it could be revitalized by applying several fundamental principles

Key factors in the development of the OTC market



Sources: Smart Pharma Consulting analyses

[1] *Collectif national des groupements de pharmaciens d'officine: National collective of voluntary trade organizations*

The main hurdle to the development of the OTC market in France is the reluctance of patients to pay "out of their pocket" for medications, even for minor disorders

Main barriers to the development of the OTC market

Physicians

- Prescription of reimbursable drugs on patient demand (client-based approach)
- Reluctance to recommend and/or prescribe OTC drugs (but less and less) considering they are not effective
- Lack of information on non-reimbursable drugs

Pharmacists

- Limited know-how of OTC drugs merchandising and retailing for many pharmacists
- Important time required to counsel self-medication products
- Pricing policy not always adapted to OTC market demand, in small to medium-sized pharmacies

Pharma companies

- Low interest of major pharmaceutical companies in their OTC activities
- Limitation and low reactivity of promotional investments
- Limitation of Rx-to-OTC switches

Complementary insurances[1]

- Some complementary health insurances offer packages for the reimbursement of medicines not reimbursed by the National Health Insurance Fund (limited to smallest insurance companies[4])

Patients

- Little inclination to purchase non reimbursed drugs (absence of OTC culture)
- Negative perception of OTC drugs, often considered as less effective and more expensive than reimbursable drugs
- High proportion of individuals who do not seek treatment for minor ailments

Health authorities

- Coexistence of reimbursed and de-reimbursed formulations for a same drug
- Negative speech on "de-reimbursement" motivations from the goverment[2]
- High control of non-reimbursed drugs promotion (e.g., DTC[3] communication)
- Conservative position regarding Rx-to-OTC switch permissions

Sources: Smart Pharma Consulting analyses

[1] Complementary health cover provided by mutuals, private insurers and provident institutions – [2] De-reimbursement being associated with a low/insufficient therapeutic benefit – [3] Direct to consumer – [4] To attract new clients and capped to a limited amount per year

Pharmacists expect new OTC products to fulfill a growing demand for cheaper and natural products, but the uncertainty on their future margins worries them

Evolutions in the OTC market

Interviews

New launches

- "Many companies do not launch real novelties; they just copy each other" (9)
- "There are always new products replacing an expensive product, or covering a new indication" (3)
- "New launches that broaden the OTC portfolio of suppliers are well appreciated to avoid pharmacists to deal with a too large number of companies to cover all indications" (3)
- "However, some brands are too strong, and clients do not want a generic version of it, because they are used to their favorite product (e.g. patients have a habit-based preference for paracetamol products)" (1)

Prices & Margins

- "Ex-factory prices of generics OTCs will increase, just as the premium OTC prices did these last two years…
- … and our margins will strongly decrease" (5)
- "Ex-factory prices should remain stable for generic OTCs: it is their strategic positioning" (3)
- "Margins should remain stable in percentage, but decrease in value" (2)
- "Premium OTCs have exponentially increased their prices, to a point which seems unfair for both the pharmacists and the clients: I want to bring my clients a product cheaper, but of equivalent quality" (1)

Customers' demand

- "More and more clients want cheaper care, such as generic OTCs" (13)
- "Advertising on TV and social media are impactful on OTC sales (5)…
- … and the price has become an essential criteria for some clients" (3)
- "There is a growing demand for natural products, (8)…
- …so that natural OTCs would be well received" (5)
- "Some indications lack on the OTC market, such as in:
  - Ophthalmology (3)
  - General and dental pain (3)
  - Dermatology (1)
  - Infectiology" (1)

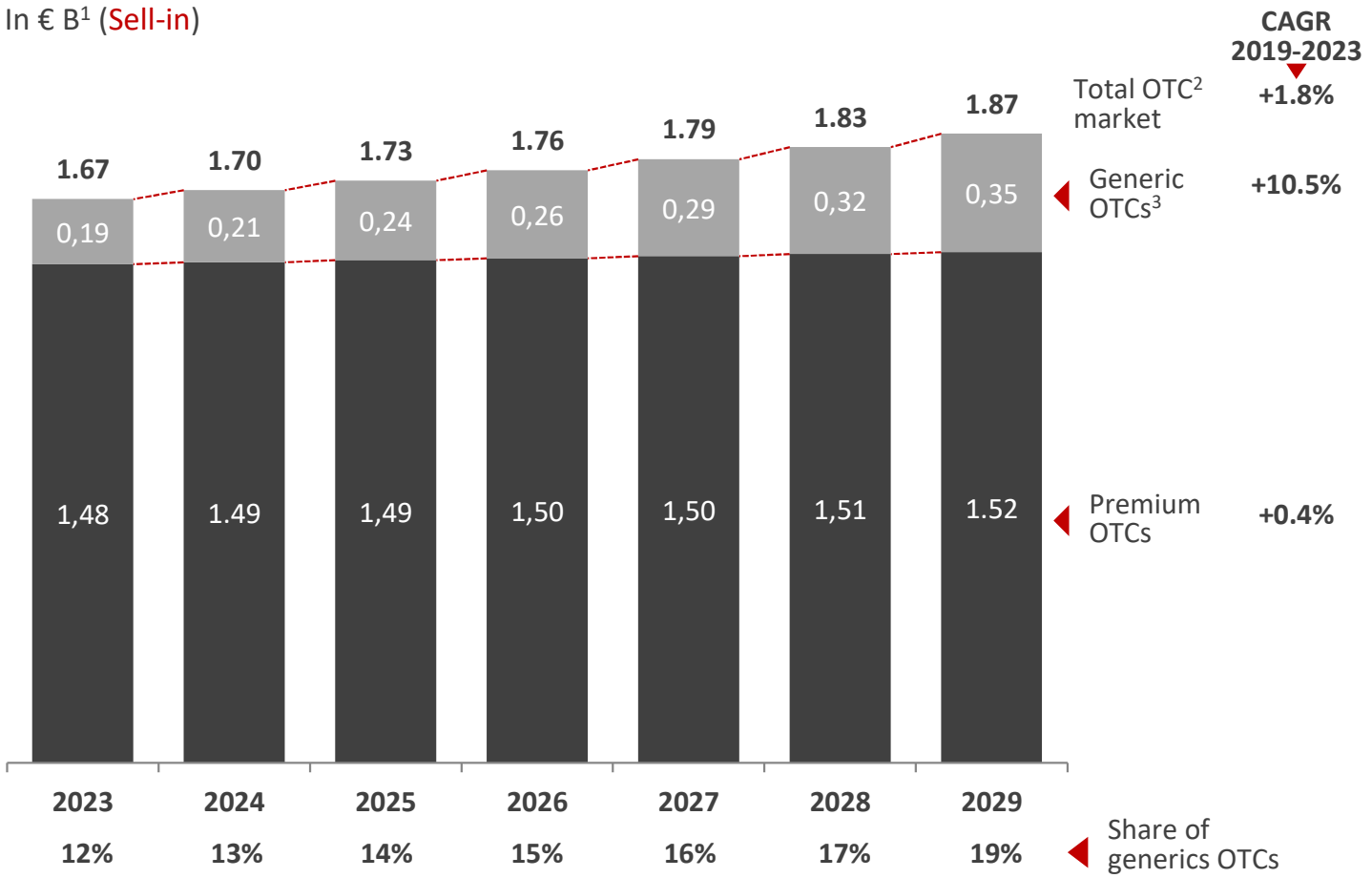
(x) Number of quotes, 20 respondents

Sources: 20 retail pharmacists' interviews (April 2024) – Smart Pharma Consulting analyses

The OTC market segment is estimated to grow by +1.8% p.a. over the 2023-2029 period, and the generic OTCs to reach 19% market share, driven by a broader offer and better prices

OTC market sales forecasts (2023-2029)

Sell-in value



- Forecasts have been built based on CAGR 2019-2023 trends:
  - Total OTCs market: +1.9%
  - Generic OTCs: +9.0%
  - Premium OTCs: +1.1%...
- … and adjusted as follows:
  - Slow down of premium OTC growth due to stronger generic OTCs competition
  - Increase of generic OTC growth by 1.5 pp due to:
    - Broader offer (new launches)
    - Better consumer awareness and acceptance
    - Higher consumer price sensitivity
  - Total OTC market growth limited by:
    - Food supplements competition (e.g., stress & sleep, vitality & immunity, digestive system)
    - Cheaper OTX products (e.g., pain, cough & cold, digestive system)
- Globally, no price changes for the segment

Sources: GERS dashboards – Smart Pharma Consulting analyses

[1] Ex-factory prices before rebates and taxes – [2] Not listed nor reimbursed – [3] OTCs commercialized by leading generics companies: Arrow, Biogaran, EG Labo, Sandoz, Teva, Cooper (since its acquisition of almost all the OTC portfolio of Viatris in July 2024) or Zentiva

The French OTC market will grow by less than 2% p.a. by end of 2029, facing food supplements and medical devices competition, and Premium OTCs will be strongly challenged by generic OTCs

Key Takeaways

1. In 2023, the OTC[1] market amounted to € 1.7 B, accounting for 6.2% of the retail pharma market, and grew by an average of only +0.6% p.a. since 2010

2. OTC sales are strongly driven by pharmacy staff who benefit from the trust of consumers, even if the latter's awareness has significantly increased over the past years

3. The top OTC products are all branded drugs launched for 30 years or more by established pharma companies

4. Generic OTCs may potentially offer a lower consumer price and a higher margin for retail pharmacists vs. premium OTCs

5. The OTC market is increasingly challenged by food supplements and medical devices which are more innovative and agile due to lower regulatory constraints

6. OTCs are estimated to grow by +1.8% p.a. over the 2023-2029 period, and the generic OTCs to reach 19% market share, driven by a broader offer and better prices

Sources: Smart Pharma Consulting

[1] Defined as the non-listed, non-reimbursed and non-prescribed drugs bought by consumers at retail pharmacies

Smart Pharma
CONSULTING

The French Food Supplements Market

Situation Analysis

&

2027 Perspectives

May 2024

Smart Pharma Consulting has evaluated the French food supplements market attractiveness and estimated its 2027 perspectives

Introduction

Context – Objective

- The French food supplements market has shown a steady growth over the past years
- Smart Pharma Consulting has carried out a new study on the French food supplements market with a focus on the retail pharmacists' distribution channel
- The objective of this position paper is to share our:
  - Assessment of the 2019 - 2023 market trends through the analysis of the:
    - Regulatory environment
    - Key competitors
    - Key customers
  - Estimates of the 2023 – 2027 market growth potential

Methodology

- Review of professional magazines (Le Quotidien du Pharmacien – Le Moniteur des Pharmacies – Le Pharmacien Manager – Pharmaceutiques) and trade organizations websites (e.g., NéreS, Synadiet)
- Review of Smart Pharma Consulting publications (reports, articles, position papers)
- Analysis of retail pharmacies sell-out data
- Interviews of 36 stakeholders including retail pharmacists, VTOs[1], professional organizations, distributors, key food supplements manufacturers
- Analysis of collected data
- Market assessment and 2027 perspectives

Sources: Smart Pharma Consulting

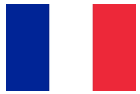
[1] Voluntary Trade Organizations (i.e., groups of pharmacies)

No major new regulations likely to disrupt the market in France are expected by the end of 2027, but authorities will keep on improving the quality, efficacy and safety of food supplements

Regulatory environment

- Even if there is a regulatory harmonization at European level re. food supplements quality, efficacy and safety for consumers, more restrictive constraints on ingredients, concentration, etc., can be applied at local level, leading to formulation adjustments, locally and to export countries
- The EU and French authorities regulate food supplements:
  - Ingredients
  - Maximum daily dose
  - Claims (nutritional and health) and labelling
  - Modalities of market entry (e.g., notification)
  - Post-marketing monitoring
- They have set a closed list of:
  - Vitamins & Minerals
  - 540 plants
  - Essential oils

  that can be used as food supplements
- Several measures have been introduced to set maximum levels of contaminants and pesticides residues



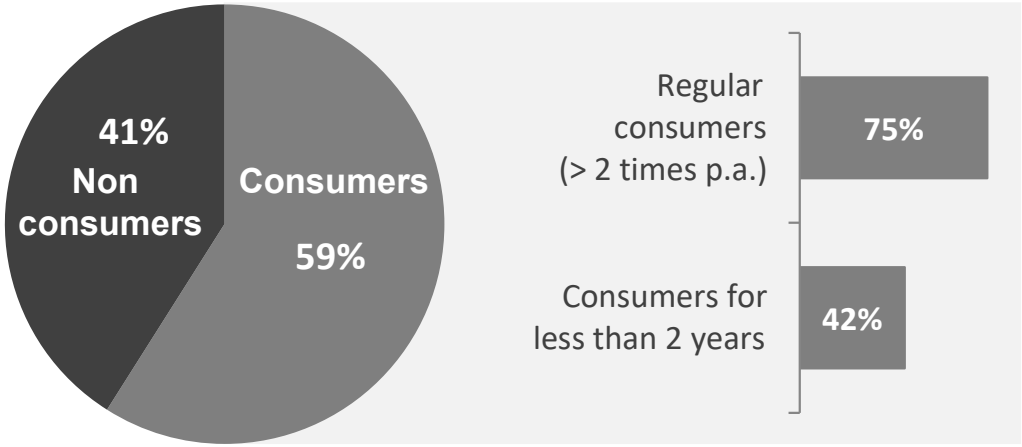
- The series of regulations introduced since 2002, have led to:
  - Improve the quality, efficacy and safety of products (e.g., setting maximum strengths for vitamins and minerals, plants reassessment)
  - Increase the confidence of consumers
  - Create higher entry barriers for newcomers
- Driven by the “precautionary principle”, EU and French authorities are likely to further strengthen quality and safety controls, and the standards of food supplements
- The VAT might increase on certain products from 5.5% like for food products to 10% for OTCs or 20% for certain medical devices, slimming products, etc.

Sources: Synadiet (March 2024) – EFSA (March 2024) – Smart Pharma Consulting analyses

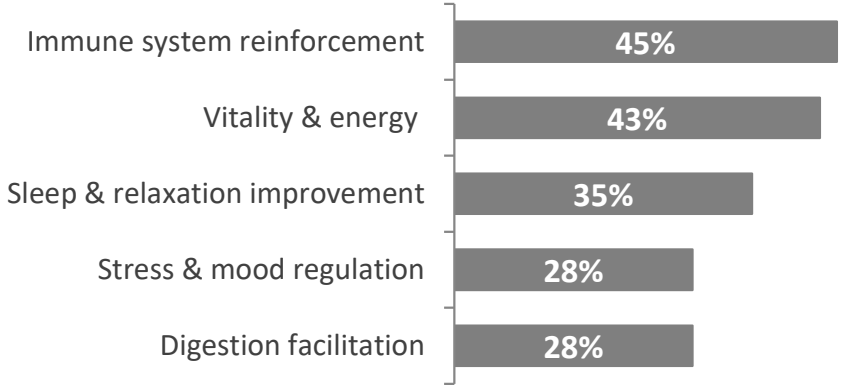
Almost 60% of French people have taken food supplements and 44% several times in the year, following HCPs recommendations, and especially those of retail pharmacy teams

Current consumers' behavior (1/4)

Share of consumers over the past two years



Expected benefits from food supplements consumption

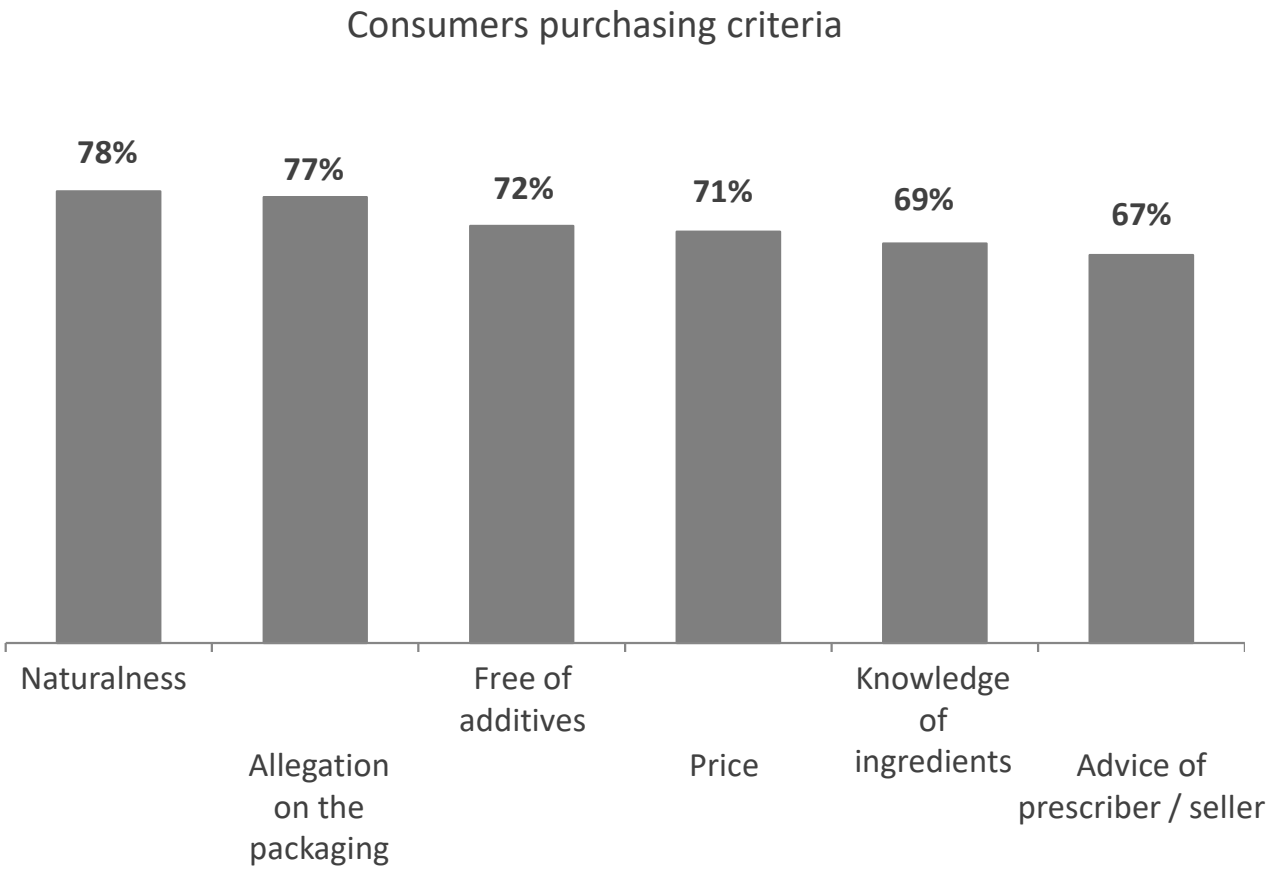


- After medicines, food supplements are seen by consumers as the most credible solution to manage their health
- This credibility is driven by:
  - HCPs recommendations and
  - Consumers own experience
- Recommendations of relatives, colleagues and friends, as well as comments on Internet, influence consumers' opinion
- They are aware that HCPs, especially pharmacists and their staff, can provide them with quality advice

Sources: Survey carried out on 1,017 people by Harris Interactive for Synadiet (March 2023) – Smart Pharma Consulting analyses

When buying food supplements, consumers attach a great importance to their naturalness, the clear indication of their allegation and the price, the latter being exacerbated by the inflation

Current consumers' behavior (2/4)



Consumers differentiate food supplements from medicines by:

- Their naturalness

> *"Unlike drugs, food supplements are natural"*

> *"There is no chemical ingredients. It is just vitamins, probiotics, plants or plants extracts"*

- Their usage

> *"They are useful even if we are not sick, which is not the case for drugs"*

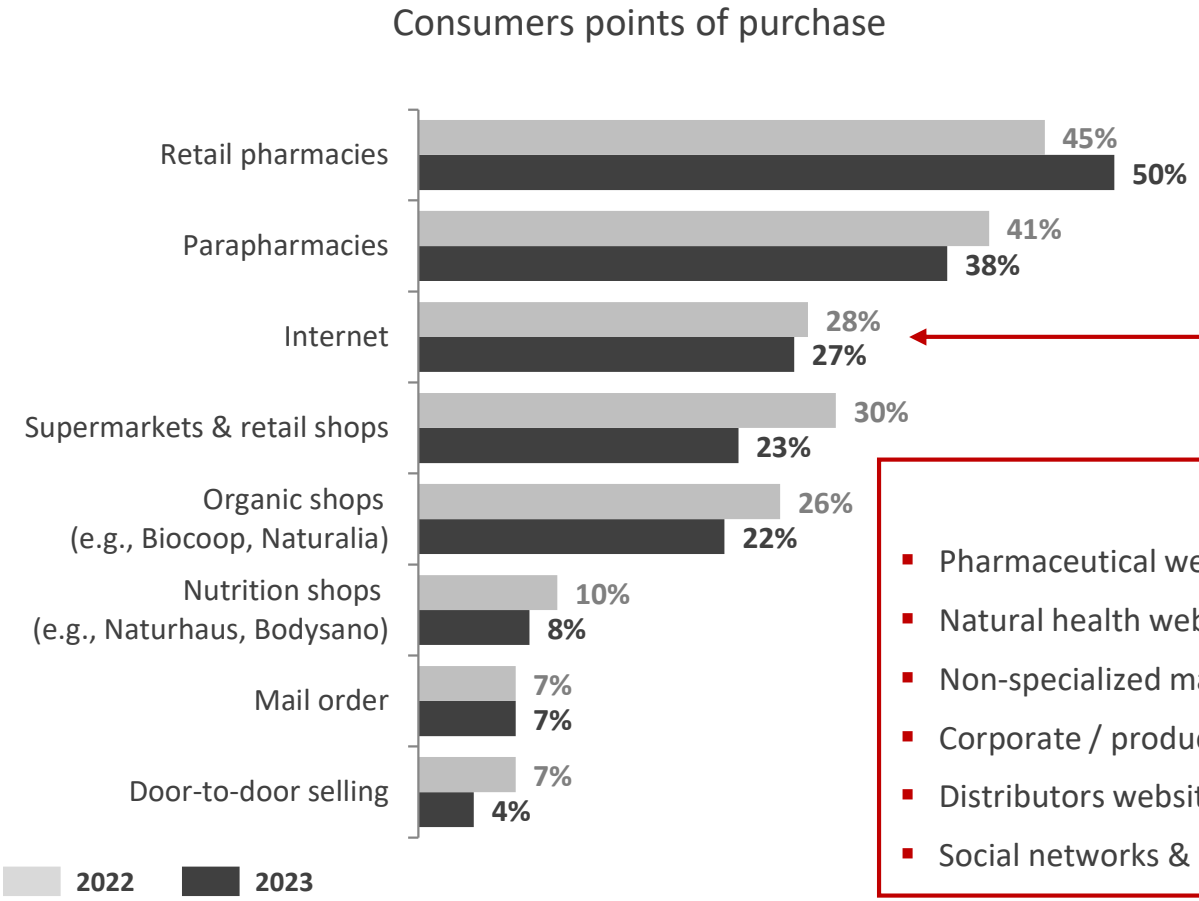
- Their mode of distribution

> *"Food supplements are available over-the-counter, and do not require a prescription"*

Sources: Survey carried out on 1,017 people by Harris Interactive for Synadiet (March 2023) – Smart Pharma Consulting analyses

Consumers use multiple channels to buy food supplements, but retail pharmacies remain the preferred one, and this preference has increased in 2023 compared to 2022

Current consumers' behavior (3/4)



- Pharmacists are not only the first point of purchase in 2023…
- … but their importance has also increased compared to 2022 (50% vs. 45%)
- The importance of other channels has decreased in 2023, excepting mail orders which are identical

	2023	2022
Pharmaceutical website (e.g., Atida, NewPharma, 1001 pharmacies)	38%	50%
Natural health websites (e.g., Onatera)	38%	41%
Non-specialized marketplaces (e.g., Amazon, Cdiscount, Veepee)	36%	40%
Corporate / product websites	23%	30%
Distributors websites (e.g., Carrefour.fr, chezmoi.leclerc, Biocoop)	13%	19%
Social networks & others	11%	15%

Sources: Survey carried out on 1,017 people by Harris Interactive for Synadiet (March 2023) – Smart Pharma Consulting analyses

Retail pharmacists that have been interviewed confirm the increasing demand for food supplements and the importance attached to the quality of advice given to consumers

Current consumers' behavior (4/4)

Retail pharmacists' perception

	Spontaneous quotes		Spontaneous quotes
▪ When consumers are satisfied, they become attached to the brand and continue to buy it	●	▪ An increasing number of consumers adopt a web-to-store purchasing behavior	◑
▪ Naturalness is increasingly important for consumers (but not so much for the label "bio"[1])	◕	▪ Many consumers are ready to pay a premium price for food supplements of high quality	◑
▪ Consumers look for effective solutions and advice when they buy through the pharmacy channel	◕	▪ Consumers take more responsibility for their own health by giving more importance to prevention	◑
▪ Food supplements consumers are younger and younger, starting from 25 years old	◕	▪ They trust the advice of the pharmacist or of the pharmacy staff	◑
▪ In general, consumers are loyal to food supplements brands	◕	▪ Consumers' feedback is most often positive	◔

Number of respondents (22)

% of respondents: ● *≥90%* ◕ *75% ≤ x <90%* ◑ *50% ≤ x < 75%* ◔ *<50%*

Sources: Retail pharmacists' interviews (March 2024) – Smart Pharma Consulting analyses

[1] *Consumers do not necessarily trust this label which is in addition associated with pricy products*

Retail pharmacists do not anticipate major changes by 2027 in consumers' behavior regarding the consumption of food supplements

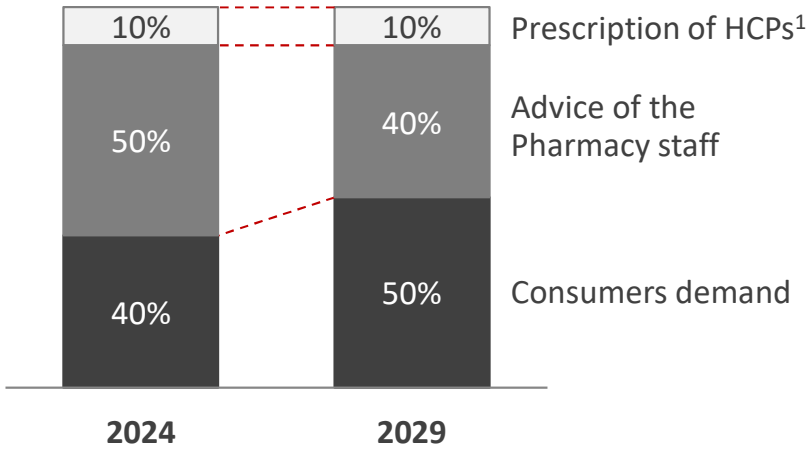
Consumers' behavioral trends by 2027

Retail pharmacists' perception

How do you think the consumers' behavior will evolve by 2027?

- The demand of consumers for the following categories of products should be very dynamic:
  - Probiotics – Vitality – Sleep – Respiratory tact
- There is a need to address Central Nervous System (CNS) troubles with food supplements (e.g., pain, depression, mood)
- They may pay more attention to eco-friendly packaging

What is today and what will be in 2027 the origin of the food supplements purchased in your outlet?



- Patients used to go to physicians to get reimbursed drugs
- Physicians have a limited knowledge about food supplements and are not very interested by them
- In 2027, the consumers will be better informed and more confident than today to self-medicate

Number of respondents (22)

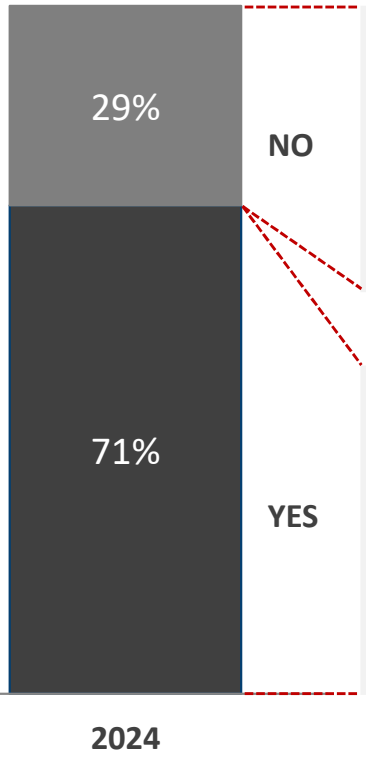
Sources: Retail pharmacists' interviews (March 2024) – Smart Pharma Consulting analyses

[1] GPs, specialists, midwives, naturopaths, osteopaths, dietitians, etc.

Most of interviewed pharmacists do list food supplements, even if available through alternative channels, provided the prices offered are not smashed compared to theirs

Pharmacists' behavior re. multichannel distribution

Do you list food supplements brands that are available through other channels than the retail pharmacies?



- *"The risk is to give advice to our clients who will then buy the food supplements on Internet"*
- *"When products are sold on marketplaces like Amazon, without advice, I am suspicious; it does not convey a good image"*
- *"I refuse to list products that are available online"*
- *"If the prices are discounted online, I stop to sell the brand"*
- *"I am afraid to lose my client"*

- *"Almost all manufacturers have their own website"*
- *"Internet is not necessarily cheaper, due to transportation costs"*
- *"We do not like it, but we do not have the choice"*
- *"I select products or product ranges which need advice so that I limit the competition against the low-price offers available on Internet"*
- *"For my elderly customers, Internet is not widely used for this type of products"*

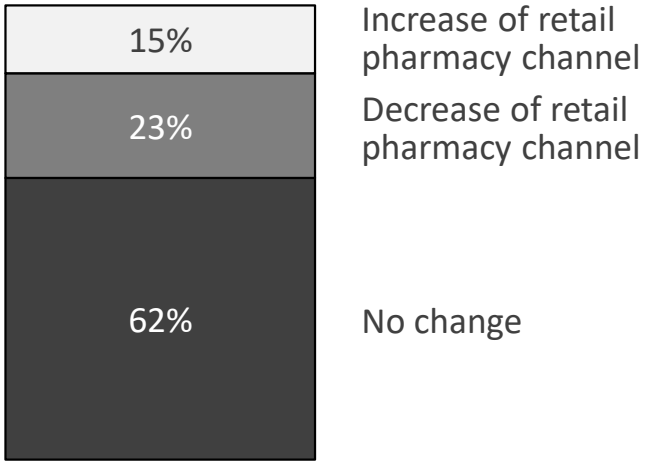
Number of respondents (22)

Sources: Retail pharmacists' interviews (March 2024) – Smart Pharma Consulting analyses

Most of pharmacists do not worry about alternative distribution channels, but remain vigilant and are aware of the necessity to deliver high quality advice to consumers to retain them

Evolution of the distribution channels by 2027

How do you think the distribution channels will evolve by 2027?



- Consumers will always need pharmacists' advice (12)
- Supermarkets, organic shops, e-shops, will take more importance, but the products sold, and their quality, will be different from those in pharmacies (6)
- Physicians have a limited knowledge about food supplements and are not very interested by them

What do think about the alternative distribution channels to retail pharmacies and their evolution by 2027?

Internet

- The risks of wrong self-diagnosis by consumers and misuse are high, if the food supplements are taken for the first time (8)
- Some consumers get advice from the pharmacy staff and then buy on Internet (5)
- A strong increase is anticipated (4), with a possible impact on food supplements sales and margins at retail pharmacies (3)
- For some other pharmacists, the importance of Internet should remain limited because consumers need advice (4)

Click & Collect

- It does not work in rural areas (8)
- Might be interesting for young consumers, living in the city and especially for the renewal of their initial purchase (3)

Others

- Organic shops are often more expensive than pharmacies (5)
- Supermarkets grow the market and its awareness, without directly competing with pharmacies (5)
- Home delivery is becoming more important (3)

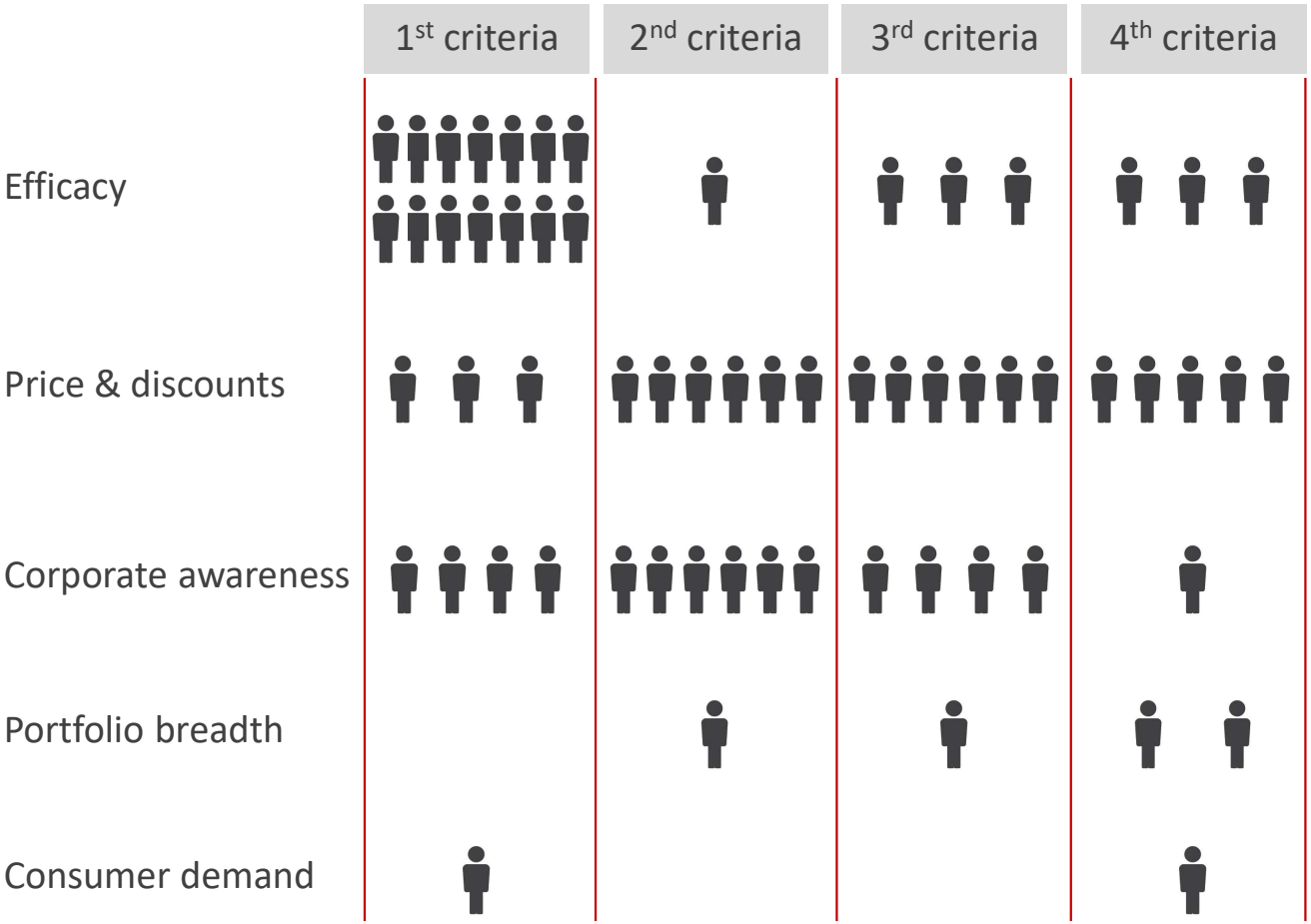
Number of respondents (22)

Sources: Retail pharmacists' interviews (March 2024) – Smart Pharma Consulting analyses

[1] GPs, specialists, midwives, naturopaths, osteopaths, dietitians, etc.

The three key criteria for interviewed pharmacists to select food supplements are the efficacy, the net price and the reputation of the marketing company

Listing criteria of pharmacists



- *"First of all, we need efficacious products, relieving our clients" (7)*
- *"One pays particular attention to the consumers' feedback" (6)*

- *"Prices must be acceptable if we want the staff to recommend the products" (4)*
- *"Trade conditions are very important" (3)*

- *"Pileje is a must have for digestive troubles" (4)*
- *"Arkopharma and Puressentiel are well-known by the consumers (1)*

- *"Santis has a narrow portfolio, but the products are well conceived" (2)*

Number of respondents (22)

(x) Number of quotes

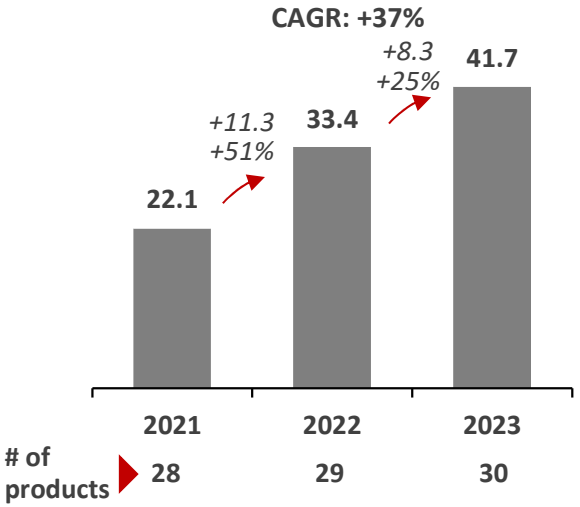
Sources: Retail pharmacists' interviews (March 2024) – Smart Pharma Consulting analyses

Aboca has doubled its sales in two years, driving its growth from a narrow portfolio, supported by scientific evidence with a good storytelling based on a vertical integrated organization

Selected competitors' ID cards (1/6)

Aboca

Sales (Sell-out incl. VAT in € million)



- Sales breakdown by category (2023):
  - Respiratory tract: 48%
  - Digestion: 38%
  - Circulation: 6%
  - Vitality & Immunity: 4%
- France is the 3rd largest market for Aboca, after Italy and Spain

Marketing & Sales strategy

- Positioning: 100% biodegradable & natural products
- Commercial strategy: B2B2C & B2C
- Points of sale: ~4,000 (pharmacies and parapharmacies)
- B2C communication channels:
  - Aboca website
  - Social media (Instagram, YouTube)
  - Free personalized counselling
  - Scientific evidence[1]

Strengths (Pharmacists & competitors views)

Company

- Good storytelling (from the field to consumers)[2]
- Investment in scientific proofs[2]

Portfolio

- Very efficacious products (8)
- Expensive and yet very requested (4)

Commercial relationships

- Very qualitative trainings (3)
- Good relationship with the representative (2)

Corporate Strategy & Values

- Integrated value chain, from organic farming to commercialization
- Commitments:
  - Natural-based solutions only
  - Constant R&D and HCPs education
  - Labelled B-Corp (since 2019)

Vigilance points (Pharmacists & competitors views)

Company

- Some formulations are complicared[2]

Portfolio

- Narrow portfolio (~29 products)[2]

Commercial relationships

- Pharma reps do not visit or visit enough pharmacies (3)

** Sales on the French market*

(x) Number of quotes

Sources: Aboca website and press releases – GERS Data – Retail pharmacists' interviews (March 2024) – Competitors' interviews (March 2024) – Smart Pharma Consulting analyses

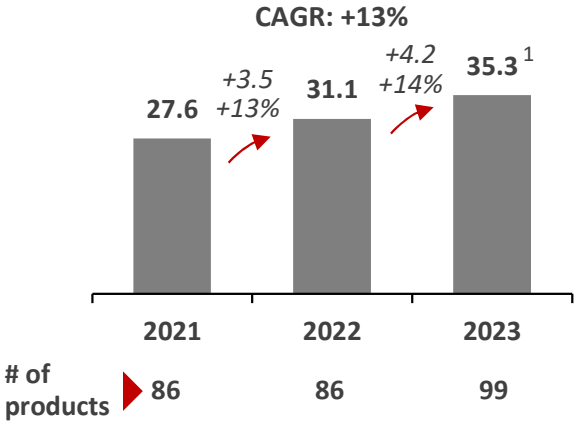
[1] For example, clinical study of NeoBianacid vs. omeprazole in the relief of heartburn (2023) – [2] Competitors' interviews

Aragan's good sales progression is driven by two well appreciated product ranges, a good quality of training *in situ* for pharmacy staffs, and performance-based rewards to motivate them

ARAGAN.

Selected competitors' ID cards (2/6)

Sales (Sell-out incl. VAT in € million)



- Sales breakdown by category (2023):
  - Digestion: 26%
  - Respiratory tract: 15%
  - Vitality & Immunity: 15%
  - Mood – Stress – Sleep: 15%
  - Joints: 10%
- Geographical footprint: Mainland France, FOTs, and Belgium
- EBITDA: 20%

Marketing & Sales strategy

- Two product ranges in France:
  - Pureprotect: protection of active ingredients kept cold in a fridge
  - Synactifs: synergistic combination of active ingredients[2]
- Commercial strategy: B2B2C
- Points of sale: >2,300 pharmacies
- B2C communication channels:
  - Free personalized counselling

Corporate Strategy & Values

- Commitments:
  - Innovation
  - Individualized solutions and advice
  - Sustainability: Havea CSR policy

Strengths (Pharmacists & competitors views)

Company

- Good quality products[3]
- Good trainers[3]
- Incentives to pharmacy staff are well appreciated[3]

Portfolio

- Good brands and good combinations of ingredients (5)
- Narrow product range (82) but clear indications (2)
- Affordable prices (1)

Commercial relationships

- Very qualitative trainings (3)
- Good relationship with the representative (2)

Vigilance points (Pharmacists & competitors views)

Company

- Commercial combativity[3]

Portfolio

- Pureprotect must be kept in Aragan fridges (1)

** Sales on the French market*

(x) Number of quotes

Sources: Arkopharma website and press releases – GERS Data – Retail pharmacists' interviews (March 2024) – Competitors' interviews (March 2024) – Smart Pharma Consulting analyses

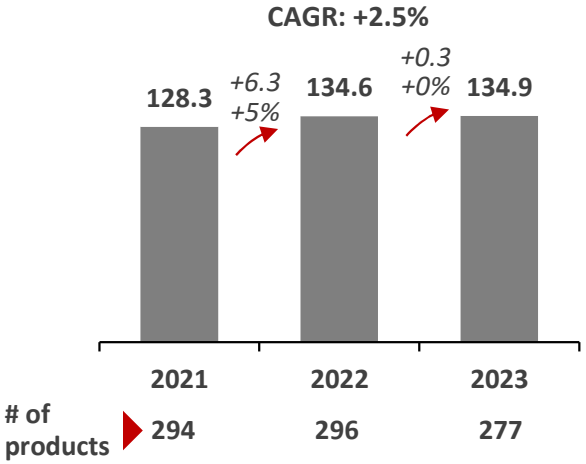
[1] If one includes Belgium, Aragan sales amounted to € 55 M in 2023 – [2] Based on amino acids, vitamins, essential oils, plants, trace elements – [3] Competitors' interviews

Arkopharma is a pioneer in France on the food supplements market, and for this reason benefits from a strong awareness, along with a good reputation from consumers due to its low prices

Selected competitors' ID cards (3/6)

Arko PHARMA

Sales (Sell-out incl. VAT in € million)



- Sales breakdown by category (2023):
  - Vitality & Immunity: 24%
  - Beauty: 18%
  - Mood – Stress – Sleep: 15%
  - Uro-genital tract: 11%
- Geographical footprint: 60 countries
- EBITDA: 25%

Marketing & Sales strategy

- Positioning: phytotherapy (50% of sales) and innovative forms
- Commercial strategy: B2B2C & B2C
- Points of sale: >13,000 pharmacies (80% of sales), parapharmacies and supermarkets (12%), e-business (~5.5%), of which e-shop <1%
- B2C communication channels:
  - Free educative booklets
  - Podcasts with a naturopath
  - Social media & influencers

Corporate Strategy & Values

- Respect of the environment, clients and commercial partners
- Expertise & Excellence in natural healthy products
- Passion & Engagement with a strong entrepreneurial audacity

Strengths (Pharmacists & competitors views)

Company

- An important presence in pharmacies[1]
- A strong awareness amongst the general public[1]
- Affordable products[1]

Portfolio

- Well-known and requested (2)
- Well-tolerated products (2)

Commercial relationships

- Regular calls from the representative (3)

Vigilance points (Pharmacists & competitors views)

Portfolio

- Difficulties to push such a large portfolio (264 products)[1]

Commercial relationships

- Too many different products to list to get rebates (1)

** Sales on the French market*

(x) Number of quotes

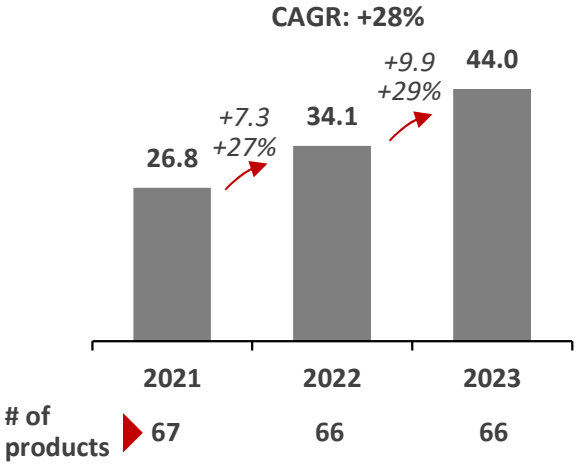
Sources: Arkopharma website and press releases – GERS Data – Retail pharmacists' interviews (March 2024) – Competitors' interviews (March 2024) – Smart Pharma Consulting analyses

[1] *Competitors' interviews*

NHCO high growth is based on a combination of good products, with a premium price combined with a selective distribution and a strong presence to encourage the staff to recommend them

Selected competitors' ID cards (4/6)

Sales (Sell-out incl. VAT in € million)



- Sales breakdown by category (2023):
  - Vitality & Immunity: 34%
  - Beauty: 18%
  - Slimness: 12%
  - Memory & Concentration: 6%
- Geographical footprint: Mainland France & Monaco
- EBITDA: 16%

Marketing & Sales strategy

- Positioning: specialization in aminoscience
- Commercial strategy: B2B2C & B2C
- Points of sale: >2,100 pharmacies
- E-shop: on NHCO website
- B2C communication channels:
  - Free booklets re. various topics
  - Free personalized counselling
  - Social media & influencers

Corporate Strategy & Values

- Commitments:
  - "Entreprise à Mission"[1] status since June 2023
  - Excellence & Innovation
  - Hand in hand partnership with HCPs & pharmacists

Strengths (Pharmacists & competitors views)

Company

- Strong image based on good formulations[2]
- High quality packaging[2]

Portfolio

- Very qualitative brand (4)
- Top range, luxury range (3)

Commercial relationships

- Qualitative regular trainings (3)
- Incentives & free samples for the team to try (2)

Vigilance points (Pharmacists & competitors views)

Company

- Marketing combativity[2]

Portfolio

- Expensive (3)

Commercial relationships

- High sales goals to achieve (2)

** Sales on the French market*

(x) Number of quotes

Sources: Arkopharma website and press releases – GERS Data – Retail pharmacists' interviews (March 2024) – Competitors' interviews (March 2024) – Smart Pharma Consulting analyses

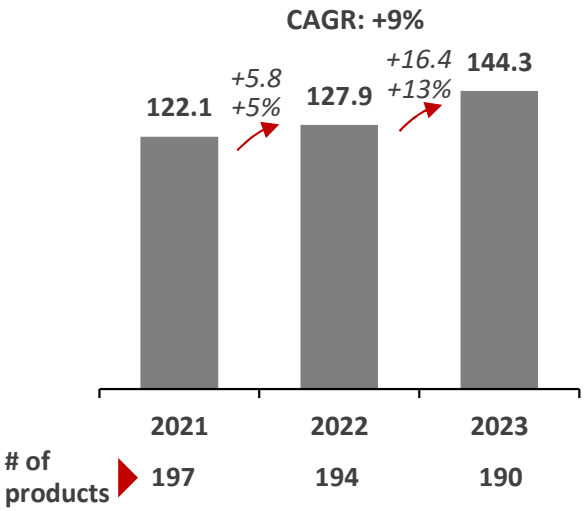
[1] French legal framework in which businesses pursue a set social and environmental purpose with specific sustainability goals. In practice, this means that NHCO is committed to sustain responsible micronutrition – [2] Competitors' interviews

Pileje success has been driven by close relationships with physicians, especially in the field of microbiotas, however, their portfolio being large, it is viewed as difficult to recommend

Selected competitors' ID cards (5/6)

PiLeJe LABORATOIRE

Sales (Sell-out incl. VAT in € million)



- Sales breakdown by category (2023):
  - Digestion: 43%
  - Mood – Stress – Sleep: 29%
  - Vitality & Immunity: 7%
  - Respiratory tract: 4%
- France accounts for ~70% of the global sales of Pileje

Marketing & Sales strategy

- Positioning: specialized in nutrition phytotherapy[1] and microbiotas
- Commercial strategy: B2B2C & B2C
- Points of sale: >10,000 pharmacies (98% of sales) and Pileje e-shop (2%)
- B2C communication channels:
  - Pileje website
  - Social media (Instagram, YouTube, Facebook, LinkedIn)
  - National campaigns for prevention

Corporate Strategy & Values

- Sustainability: ECOCERT certification (2008)
- Pileje foundation[2] (since 2005) aims at optimizing quality of life
- Partnerships & sponsorships[3]

Strengths (Pharmacists & competitors views)

Company

- A success story built on partnership with physicians[4]
- The reference for probiotics, supported by nice studies[4]

Portfolio

- Very famous and requested by consumer (6)
- Regular launches of novelties (2)

Commercial relationships

- Well trained people, delivering qualitative trainings (8)
- Regular calls and good relationship with reps (4)

Vigilance points (Pharmacists & competitors views)

Company

- Products launches outside of its field of expertise (2)

Portfolio

- Differences between products difficult to explain (5)

Commercial relationships

- Commercial conditions based on pharmacies' sales (2)

** Sales on the French market*

(x) Number of quotes

Sources: Pileje website and press releases – GERS Data – Retail pharmacists' interviews (March 2024) – Competitors' interviews (March 2024) – Smart Pharma Consulting analyses

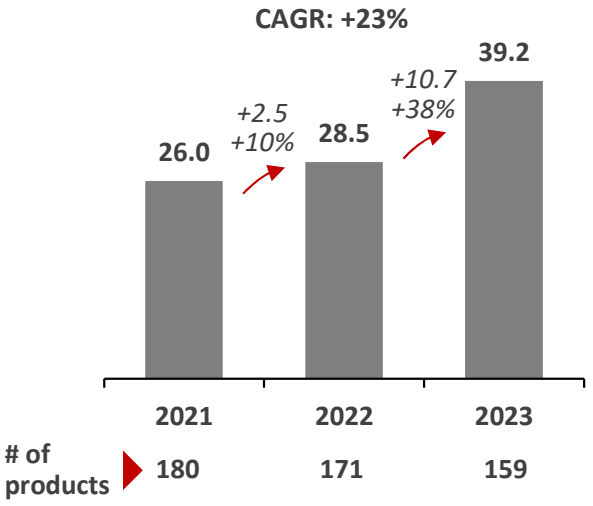
[1] Including raw material for magistral preparation done by retail pharmacists – [2] More than 51% of the fund held by Pileje – [3] More than 51% of the fund held by Pileje – [3] With healthcare foundations (e.g., AP-HP foundation, Rare Diseases Foundation) as well as with professional athletes

The reputation of EA Pharma[1] benefits from the pharma legacy of the brand "Granions" which is an historical expert in trace elements, and its large portfolio and pricing strategy drive its growth

EA PHARMA

Selected competitors' ID cards (6/6)

Sales (Sell-out incl. VAT in € million)*



- Sales breakdown by category (2023):
  - Joints: 32%
  - Beauty: 16%
  - Vitality & Immunity: 14%
  - Slimness: 10%
- Geographical footprint: 60 countries
- EBITDA: 25%

Marketing & Sales strategy

- Positioning: expert in trace elements
- Leading position: oligotherapy, collagen, muscular and joint comfort, sport nutrition
- Commercial strategy: B2B2C & B2C
- Points of sale: >6,500 pharmacies and parapharmacies (70% of sales)
- Organic stores & sport stores (20%) and others (10%)
- B2C communication channels: social media (Facebook, Instagram, LinkedIn), mass media (TV and press)

Strengths (Pharmacists & competitors views)

Company

- Well-positioned on sport nutrition[2]
- Pharma legacy with the brand "Granions"[2]

Portfolio

- Product offer adapting to consumer demand (e.g., launch of a collagen) (3)
- Very good price / quality ratio (2)

Commercial relationships

- Low turn-over of in-field people and regular visits (2)
- Good commercial terms through VTOs (4)

Corporate Strategy & Values

- Natural healthcare solutions
- Innovation
- Quality & Security
- Sustainability

Vigilance points (Pharmacists & competitors views)

Company

- Lack of consistency in the product offering[2]
- Aggressive pricing[2]

Portfolio

- Lack of consistency in the product offering[2]

** Sales on the French market*

(x) Number of quotes

Sources: Arkopharma website and press releases – GERS Data – Retail pharmacists' interviews (March 2024) – Competitors' interviews (April 2024) – Smart Pharma Consulting analyses

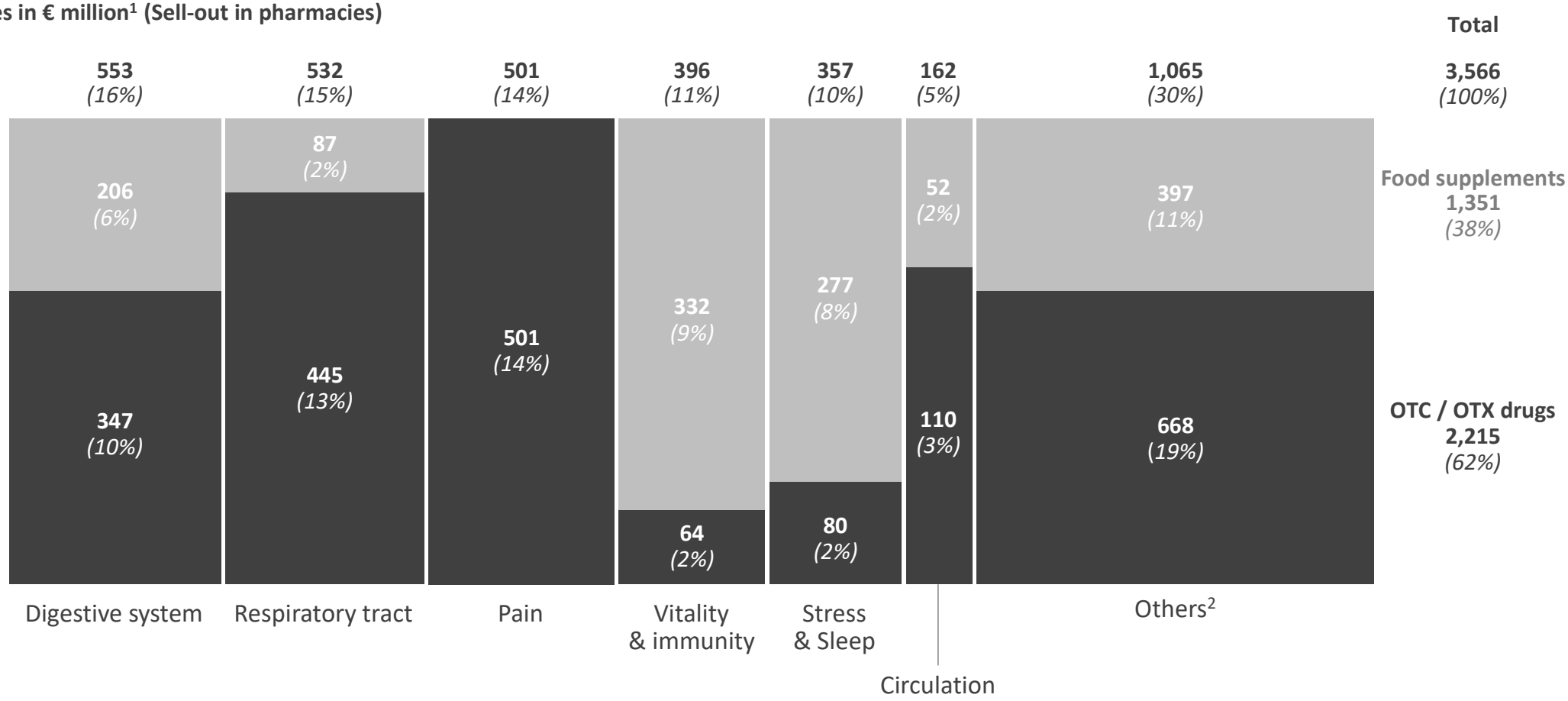
[1] Part of Olyos group – [2] Competitors' interviews

The top 3 therapeutic areas of the selfcare market* are led by OTC / OTX drugs while food supplements are more focused on vitality, immunity, stress and sleep indications

Selfcare market breakdown by product type and indication (2023)

Total market

Sales in € million[1] (Sell-out in pharmacies)



* Excluding medical devices

Sources: NèreS / OpenHealth (2024) – Smart Pharma Consulting analyses

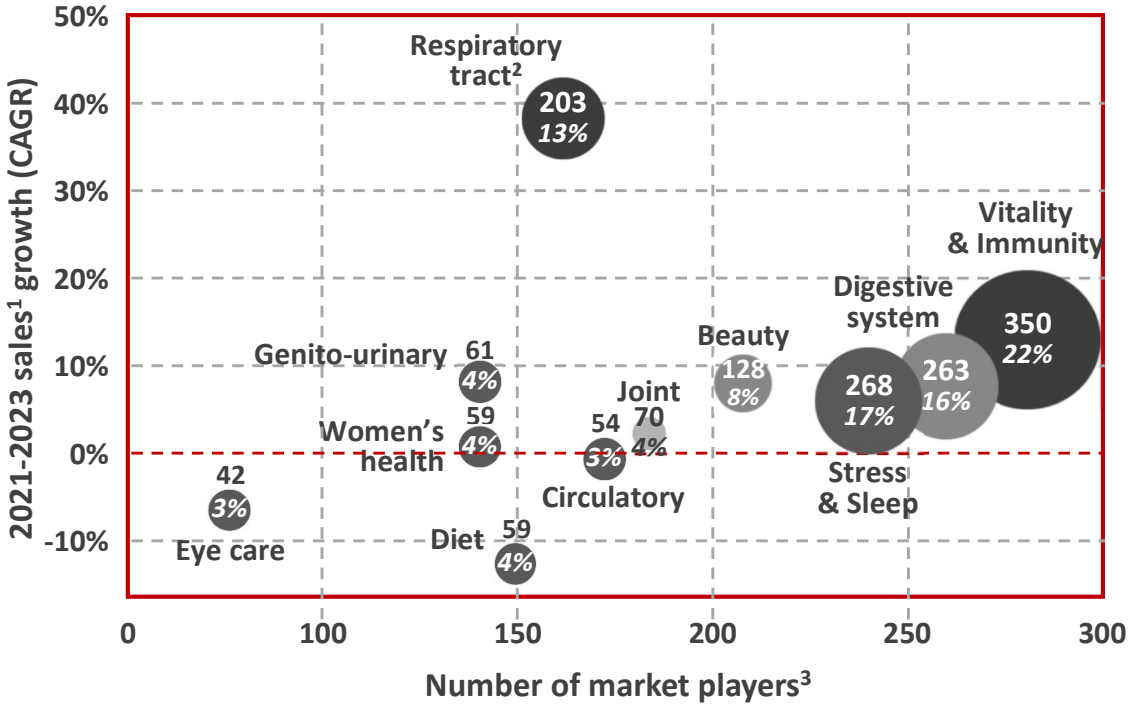
[1] Sell-out, in public prices including VAT – [2] Anti-smoking drugs, articular system, breastfeeding, homeopathy, growth, phycological aging, pregnancy, skin care, urinary & genital system, vision, weight management, women's health, etc.

Food supplements segments are particularly competitive, with a total number of market players ranging from 242 to 286 for the top 3 strategic segments in 2023

Attractiveness by strategic market segment (2021 – 2023)

Supplements market

Main food supplements' strategic market segments



◯ MAT 11/2023 sales in € M
(share of the MAT 11/2023 supplements market which reached € 1.6 B)

- The top 3 segments, which accounted together for ~55% of the food supplements market in MAT 11/2023, are particularly competitive:
  - Vitality & Immunity (22% market share with a +10.8% CAGR from 2021 to 2023): 286 players
  - Stress & Sleep (17% market share with a +7.3% CAGR from 2021 to 2023): 242 players
  - Digestive system (16% market share with a +8.2% CAGR from 2021 to 2023): 258 market players
- The respiratory tract segment (13% market share with a +37.5% CAGR[4] from 2021 to 2023) is a seasonal market whose annual performance depends on the incidence of winter pathologies
- Other segments accounted individually for 8% or less of the market in MAT 11/2023, with 2021-2023 CAGR ranging from -13.4% (diet) to +8.6% (beauty[5])

Sources: GERS Sell-Out (November 2023) – Smart Pharma Consulting analyses and estimates

[1] MAT 11/2021 and MAT 11/2023 sales, in public price including VAT – [2] Not only food supplements but also medical devices (e.g., Phytoxil) – [3] Market players with sales in 2023 – [4] +37.5% CAGR explained by a significant decrease of the segment in MAT 11/2020 due to Covid-19 lockdown, which significantly reduced seasonal pathologies – [5] Incl. hair and nails, skin, sunscreen and antioxidants

Food supplements innovations should fulfill consumers expectations such as proven efficacy, personalized solutions, more convenient forms, a sustainable sourcing and a clean label approach

Food supplements innovations by 2027

Consumers drivers propelling innovations

1

- **Science-backed innovations** to evidence the efficacy and the safety of the functional ingredients proposed

2

- **Personalization** to suit to individual needs (e.g., the company Nourished proposes consumers to select functional ingredients included in their 3D printed gummies)

3

- **Better convenience** by offering multiple ingredients in one product and/or new forms (e.g., drinks, chewing gums, effervescent tabs, sprays, powder, sticks packs)

4

- **More appealing organoleptic qualities** (i.e., visual aspects, taste, texture, flavor) of food supplements would contribute to consumer satisfaction

5

- **Clean and clear labels**, with recognizable and closer-to-nature ingredients (e.g., vegan) and sustainability credentials are increasingly valued by consumers

Sources: Food Business Review, Oct. 31, 2023 – Nutraceuticals World February 2022 – Nutraskills website, March 2024 – Start US Insights April 2023 – Smart Pharma Consulting analyses

Market Opportunities & Threats analysis

Market opportunities	1 to 5*
Authorities	
▪ EU / French regulatory constraints representing a barrier for new entrants while making export business easier	4
▪ Authorities' willingness to foster preventive health policies	4
Clients	
▪ Food supplements' outperformance (+8.1% CAGR over 2019-2023) due to growing demand for naturalness	5
▪ Traffic in retail pharmacies keeps on increasing with a 2019-2023 CAGR of +2.6% for selfcare products[1]	4
▪ Increasing pressure on pharmacists' margins leading them to focus on profitable segments (e.g., food supplements)	4
▪ Consumers' confidence in retail pharmacists' advice, who can easily switch them from a supplement to another[2]	3
Suppliers	
▪ Higher quality of food supplements available in pharmacies vs. those distributed in large and medium-sized stores	3
▪ Innovations (e.g., liposome, anti-aging products, etc.)	3

Market threats	1 to 5*
Authorities	
▪ *No threat identified by 2027*	
Clients	
▪ Food supplements market growth slowdown in 2023 (+10.8% vs. +14.8% in 2022) due to: – The start of a new post-Covid-19 cycle – Inflation impact on consumers' purchasing power	4
▪ Food supplements very rarely prescribed by physicians[3]	3
▪ Decreasing number of retail pharmacies in France (-0.9% CAGR over 2019-2023)	2
Suppliers	
▪ Fragmented markets, with 143 to 286 market players depending on indications in 2023 (incl. large companies such as Procter & Gamble, Bayer, Sanofi or Perrigo)	5
▪ Competition from OTC/OTX blockbusters well anchored in patients' mind (e.g., Oscillococcinum, Daflon, Nurofen)	4
▪ Development of new distribution options (e.g., direct sales from manufacturers, e-commerce, para-pharmacies)	3

* 1 = Low importance – 5 = High importance

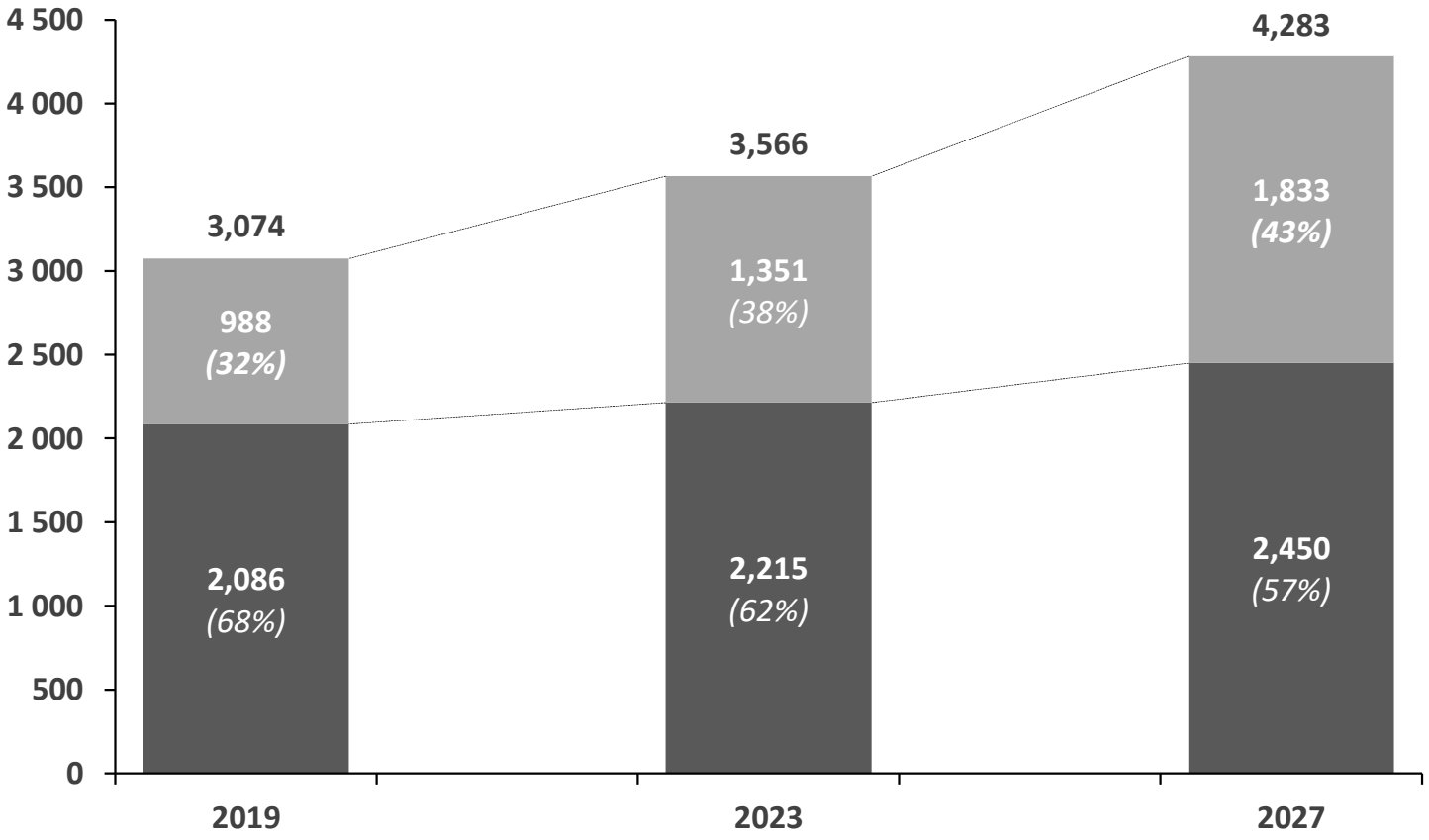
Sources: External interviews (March 2024) – NèreS / OpenHealth (2024) – Smart Pharma Consulting analyses

[1] Including food supplements and OTC/OTX products – [2] Provided its price is not significantly higher – [3] Mainly prescribed by specialists such as gynecologists or nutritionists, but quite never by GPs

Within the selfcare market*, the food supplements segment is likely to grow more than twice faster than the OTC/OTX drugs segment

Selfcare market trends by segment (2019 – 2027)

Sales in € million[1] (Sell-out in pharmacies)



	Total market CAGR 2019-2023	Total market CAGR 2023-2027
Total	+3.8%	+4.7%
Food supplements	+8.1%	+7.9%
OTC/OTX drugs	+1.5%	+2.6%

* *Excluding medical devices*

Sources: NèreS / OpenHealth (2020 – 2024) – Smart Pharma Consulting analyses and estimates

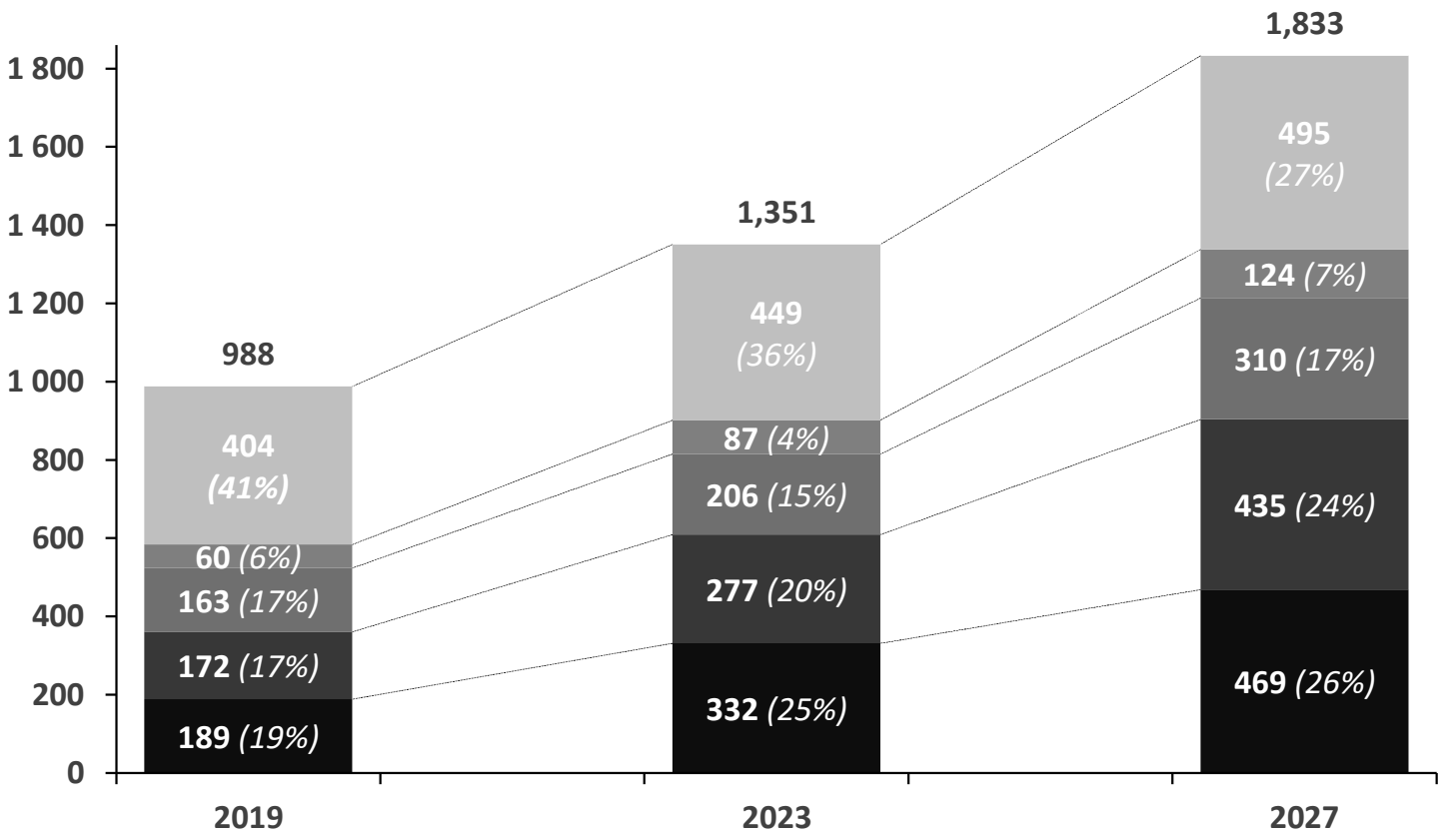
[1] *Sell-out, in public prices including VAT*

The food supplements market should increase by +7.9% p.a. from 2023 to 2027, mainly driven by Vitality & Immunity, Stress & Sleep indications

Food supplements market segment breakdown by indication (2019 – 2023)

Supplements market

Sales in € million[1] (Sell-out in pharmacies)



	CAGR 2019-2023	CAGR 2023-2027
Total	+8.1%	+7.9%
Others[2]	+2.7%	2.5%
Respiratory tract	+9.7%	9.3%
Digestive system	+6.0%	10.8%
Stress & sleep	+12.7%	11.9%
Vitality & immunity	+15.1%	9.0%

Sources: NèreS / OpenHealth (2020 – 2024) – Smart Pharma Consulting analyses and estimates

[1] Sell-out, in public prices including VAT – [2] Articular system, circulation, breastfeeding, growth, phycological aging, pregnancy, skin care, urinary & genital system, vision, weight management, women's health, etc.

French food supplements growth will be driven by improved quality of products, a larger number of consumers eager to better manage their health and HCPs more prone to recommend them

Key Takeaways

1. Regulatory environment

- No major regulatory decisions are expected at European level, nor at national level, that are likely to impact the food supplements market trend

2. Physicians' behavioral trends

- Physicians prescribe more and more food supplements, and especially gynecologists, dermatologists and nutritionists
- Probiotics are increasingly prescribed with antibiotics

3. Pharmacists' behavioral trends

- Food supplements are a significant source of business, accounting for 50% of the non-reimbursed retail pharmacies growth
- They focus their listing on few brands that are well-appreciated by their consumers
- Trainings and information from suppliers are expected to deliver quality advice to consumers

4. Consumers' behavioral trends

- They attach a great importance to clarity of allegations, naturalness and price
- They use multiple channels, but retail pharmacies remain their preferred one
- No major changes are anticipated in consumers' consumption of food supplements by end of 2027

5. Competitive landscape

- Historical OTC players (e.g., Cooper, Sanofi (Opella), UPSA) are entering or strengthening their position
- Manufacturers favor agreements with large pharmacies[1]
- KAMs[2] and Reps are instrumental to boost food supplements growth through the retail pharmacies channel

6. 2023 – 2027 market growth

- Food supplements should grow twice faster than OTC/OTX, at a pace of +7.9% p.a. from 2023 to 2027
- The segment will be mainly driven by Vitality & Immunity, Stress & Sleep indications

Sources: Smart Pharma Consulting

[1] Knowing that 94% of retail pharmacies are members of VTOs which sign master agreements with manufacturers, including price discounts and various services to help them attract customers and foster the sell out – [2] Key Account Managers in charge of negotiating, signing and following up agreements with VTOs

Smart Pharma
CONSULTING

Dietary Supplement & Baby Care Markets

Key Learnings based on a French Qualitative Study

POSITION PAPER March 2022

Smart Pharma Consulting has carried out a qualitative study to review the dietary supplement and baby care markets in France and to draw key learnings

Context – Objective – Methodology

Context

- The dietary supplement market is estimated at around €13 bn in Europe, with an average annual growth of 4%
- With €2 bn, France accounts for ~16% of the European market, behind Italy and Germany
- Pharmacies and drugstores account for ~60% of dietary supplement sales in France and…
- … phytotherapy products account for 41% of the market

Objectives

- The objective of this study was to collect and analyze stakeholders' thoughts to:
  - Better understand the specificities of the dietary supplement and baby care markets in France
  - Anticipate their evolution
  - Determine the key success drivers for manufacturers

Methodology

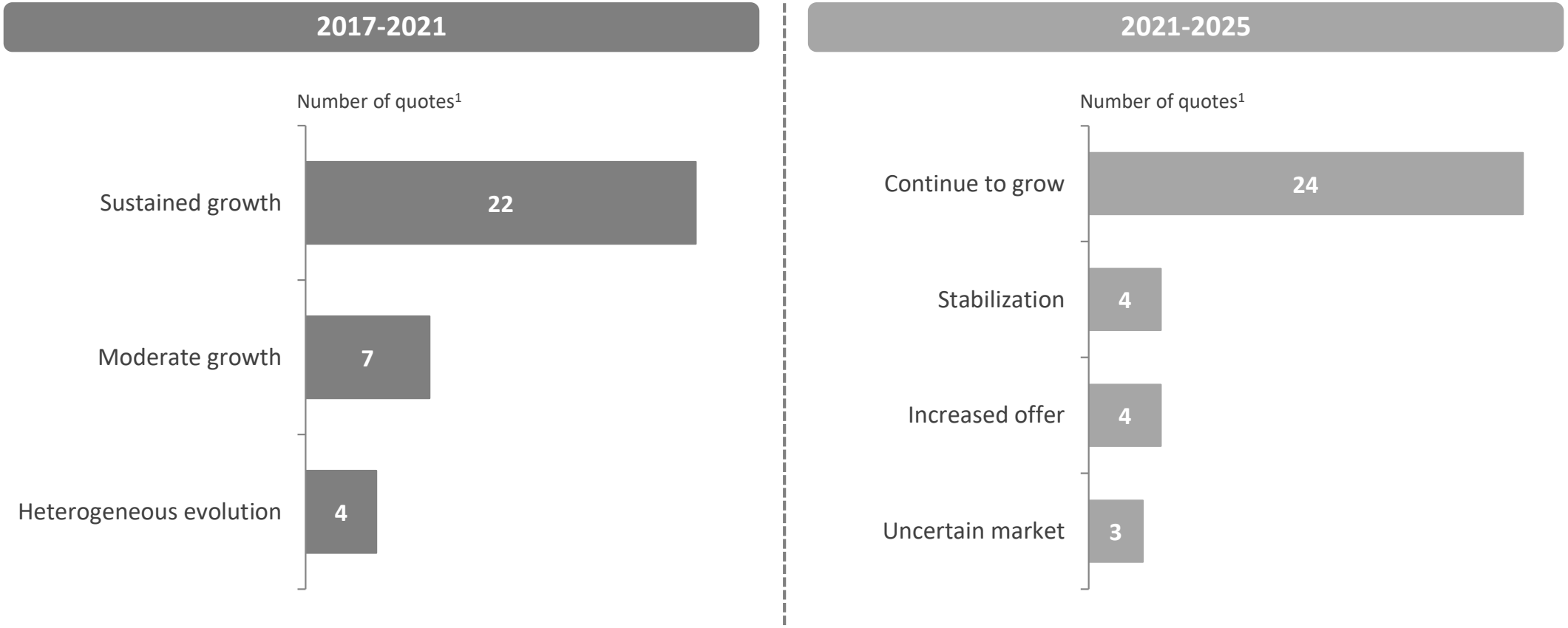
- Individual interviews have been conducted with:
  - 30 retail pharmacists
  - 20 physicians
  - 5 midwives
  - 5 manufacturers
- Self-administered questionnaires have been fulfilled by 85 consumers at retail pharmacies…
- … while purchasing a dietary supplement or a baby care product

Sources: Synadiet and IQVIA – Smart Pharma Consulting

According to retail pharmacists, dietary supplements and baby care markets have shown a sustained growth since 2017 and are expected to continue to grow by 2025

Market trends and perspectives

"How has your dietary supplement and baby care business evolved since 2017 and how do you anticipate its evolution by 2025?"



Number of respondents: 30

Sources: Interviews conducted with 30 retail pharmacists (September – October 2021) – Smart Pharma Consulting analysis

[1] Several answers possible

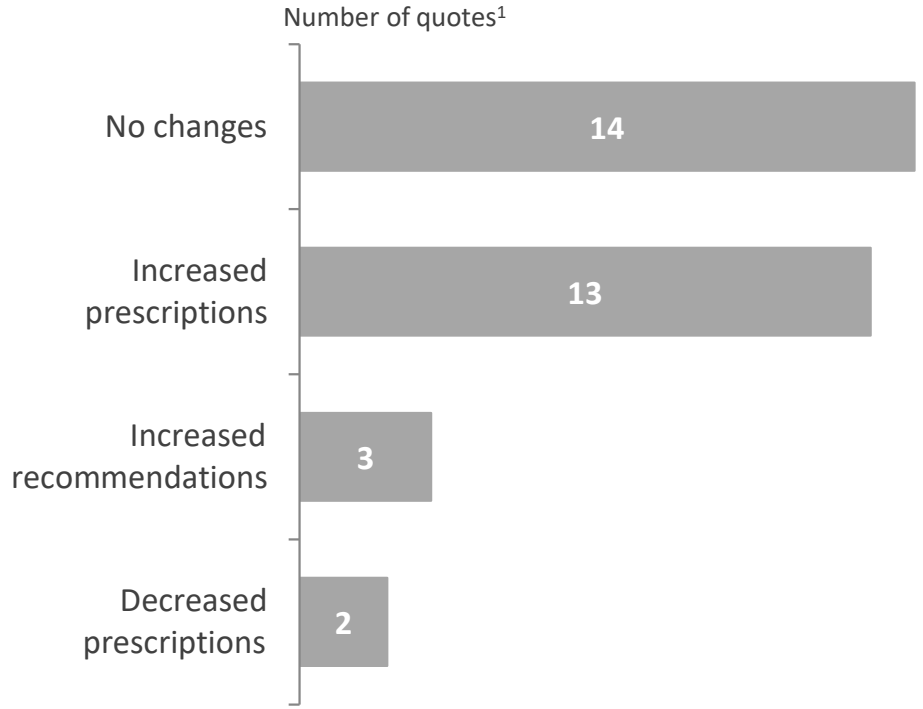
Major prescribers of dietary supplements and baby care products are GPs and specialist physicians who mostly increased their prescription or did not change their practice

Prescribers

"What is the profile of "major prescribers" and their likely behavioral trends re. dietary supplements and baby care products?"

Prescribers' main profiles

Prescribers' behavioral trends



Number of respondents: 30

Sources: Interviews conducted with 30 retail pharmacists (September – October 2021) – Smart Pharma Consulting analysis

[1] Several answers possible

The interviewed pharmacists mostly consider that dietary supplements and baby care products represent a small part of their activity and for these products, they dedicate ~6 shelves

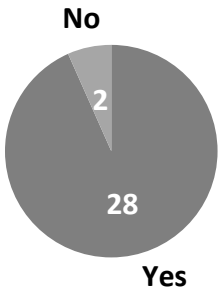
Pharmacists – Profile of pharmacies

Pharmacies overview

~€2.2 million annual income (2020)

~6 employees

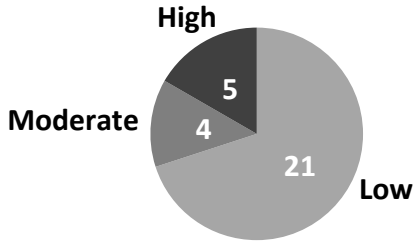
Member of a retail pharmacies group



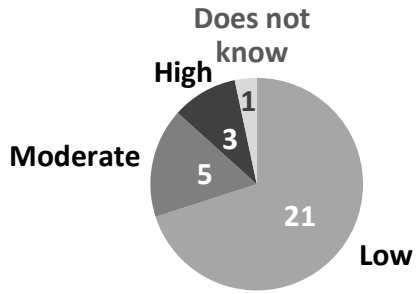
Number of respondents: 30

Food supplements and baby care products activity

Share of dietary supplements in the activity

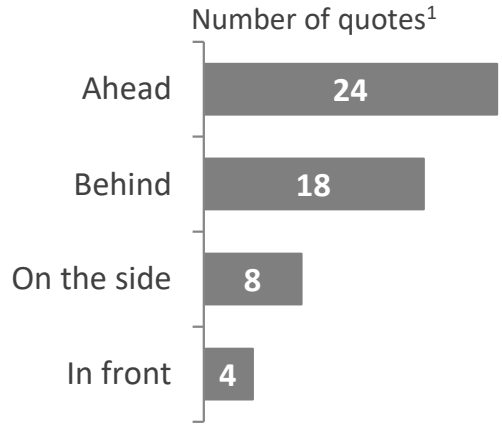


Share of baby care products in the activity



~6 shelves dedicated to dietary supplements and baby care products

Location of products in relation to the dispensing counter



Number of respondents: 30

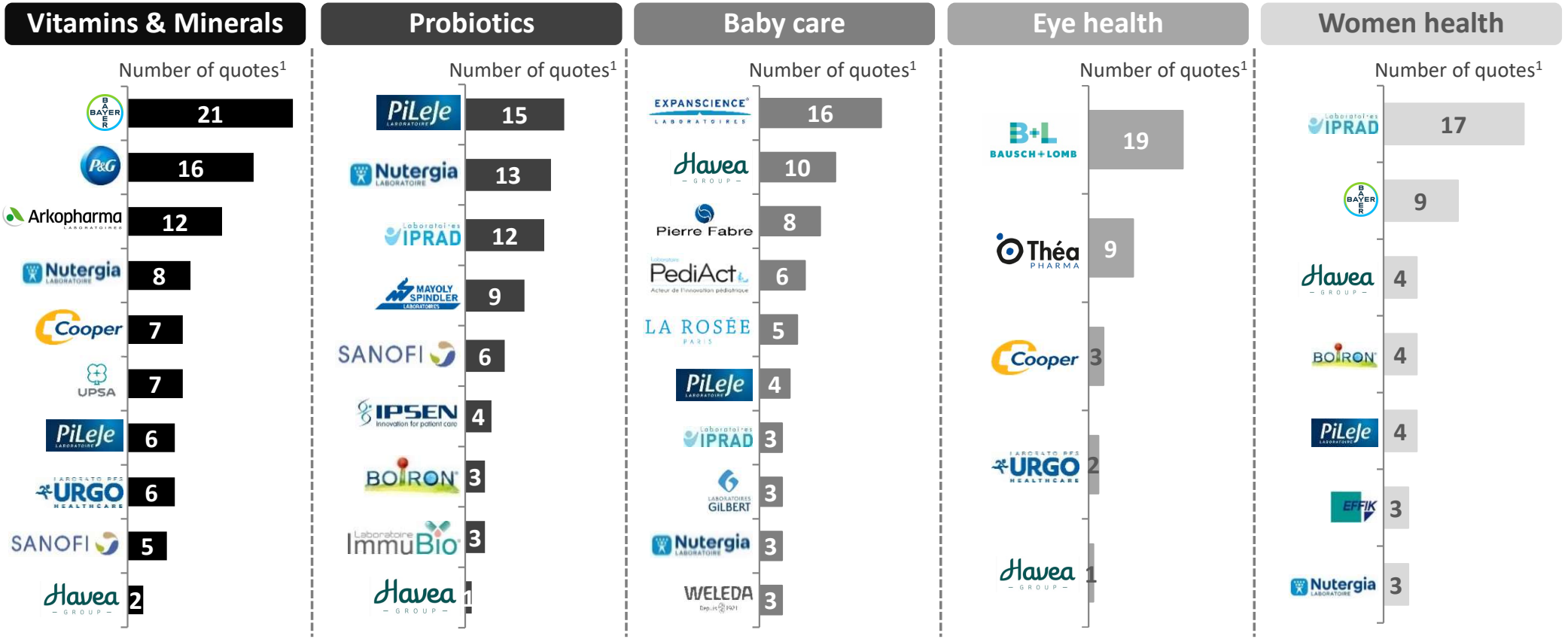
Sources: Interviews conducted with 30 retail pharmacists (September – October 2021) – Smart Pharma Consulting analysis

[1] Several answers possible

In terms of proposed brands, retail pharmacists' preference varies significantly by selected category, leading to heterogeneous competitive positions

Pharmacists – Top proposed brands

"What are the top brands you propose in the following segments?"



Number of respondents: 30

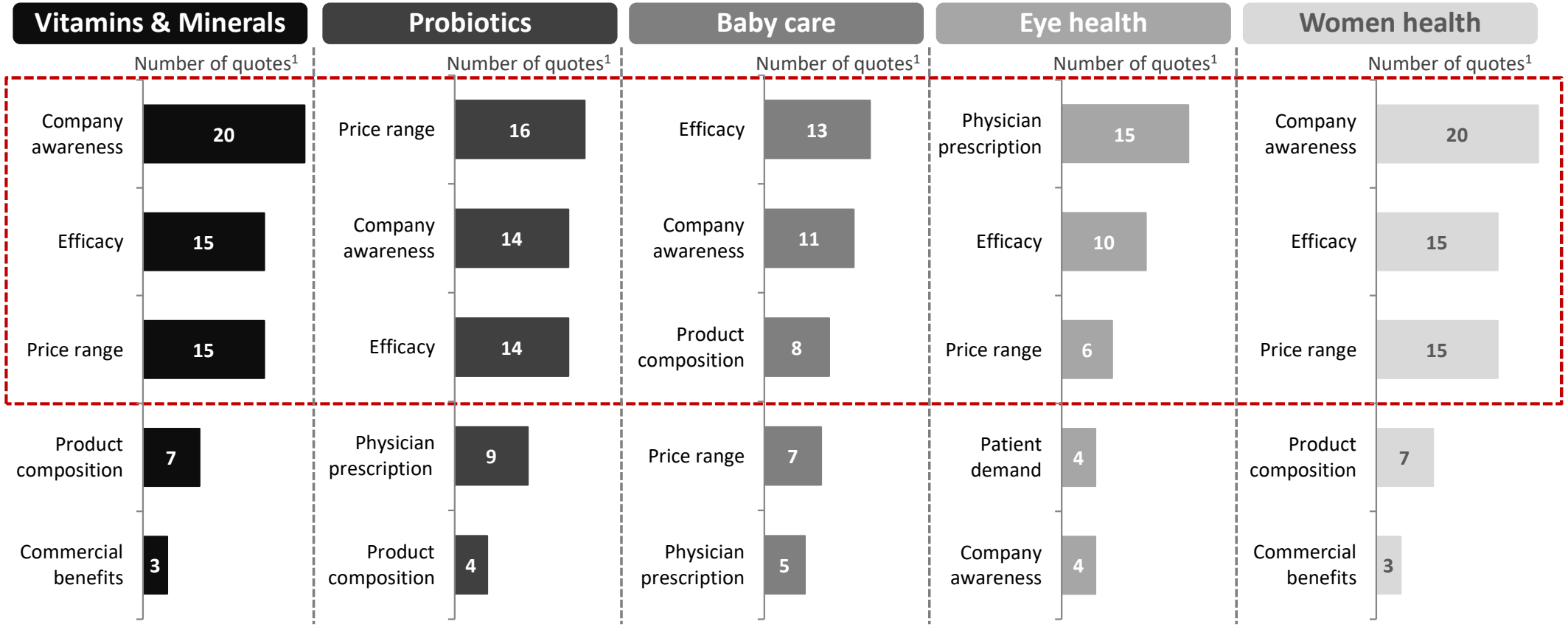
Sources: Interviews conducted with 30 retail pharmacists (September – October 2021) – Smart Pharma Consulting analysis

[1] Several answers possible

Awareness of the company, efficacy of its products and price range are the main criteria that encourage pharmacists to recommend dietary supplements and baby care products

Pharmacists – Criteria determining proposition

"What are the criteria that encourage you to propose a dietary supplement or a baby care product rather than another one?"



Number of respondents: 30

Sources: Interviews conducted with 30 retail pharmacists (September – October 2021) – Smart Pharma Consulting analysis

[1] Several answers possible

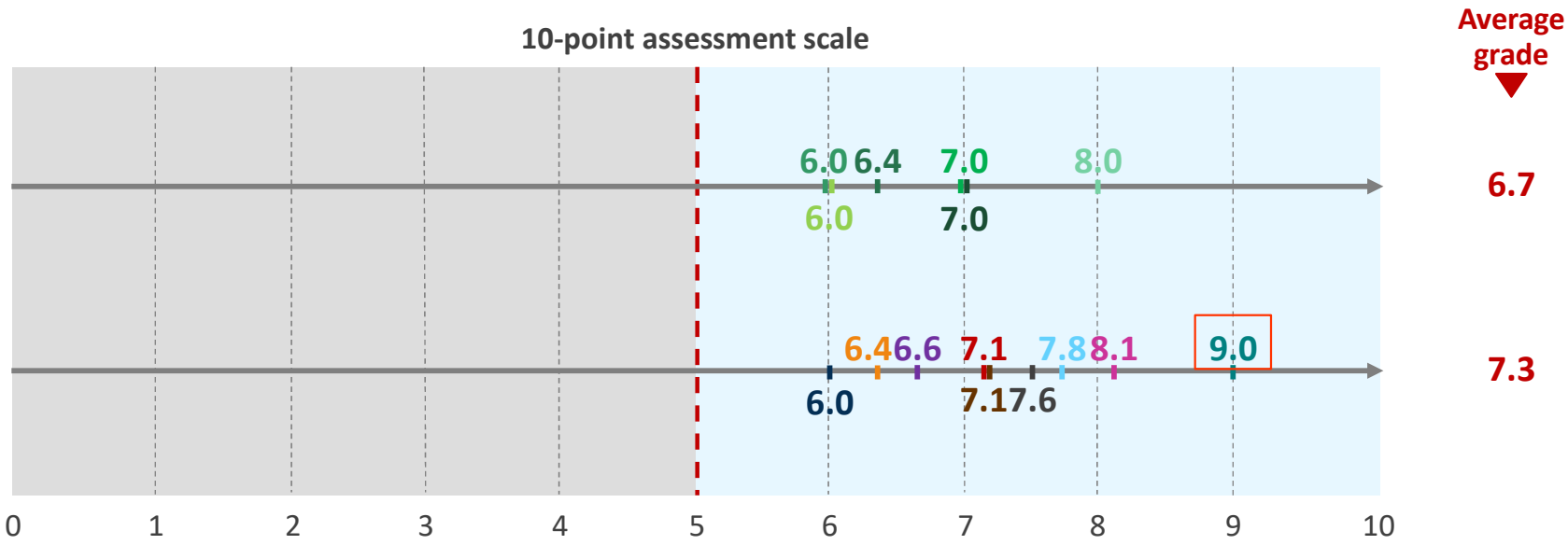
The opinion of pharmacists re. the following selection of companies operating on the dietary supplements and baby care markets is globally positive, with a special mention for NHCO

Pharmacists – Brands perception

"How would you evaluate the following companies on a scale from 0 (very negative opinion) to 10 (very positive opinion)?"

Densmore (women health) Densmore (eye health) Vitavea-Vitarmonyl-Manhaé Aragan Calmosine Synactifs

Solgar Expanscience Arkopharma Iprad-Biocodex Pierre Fabre Nutergia Cooper Pileje NHCO

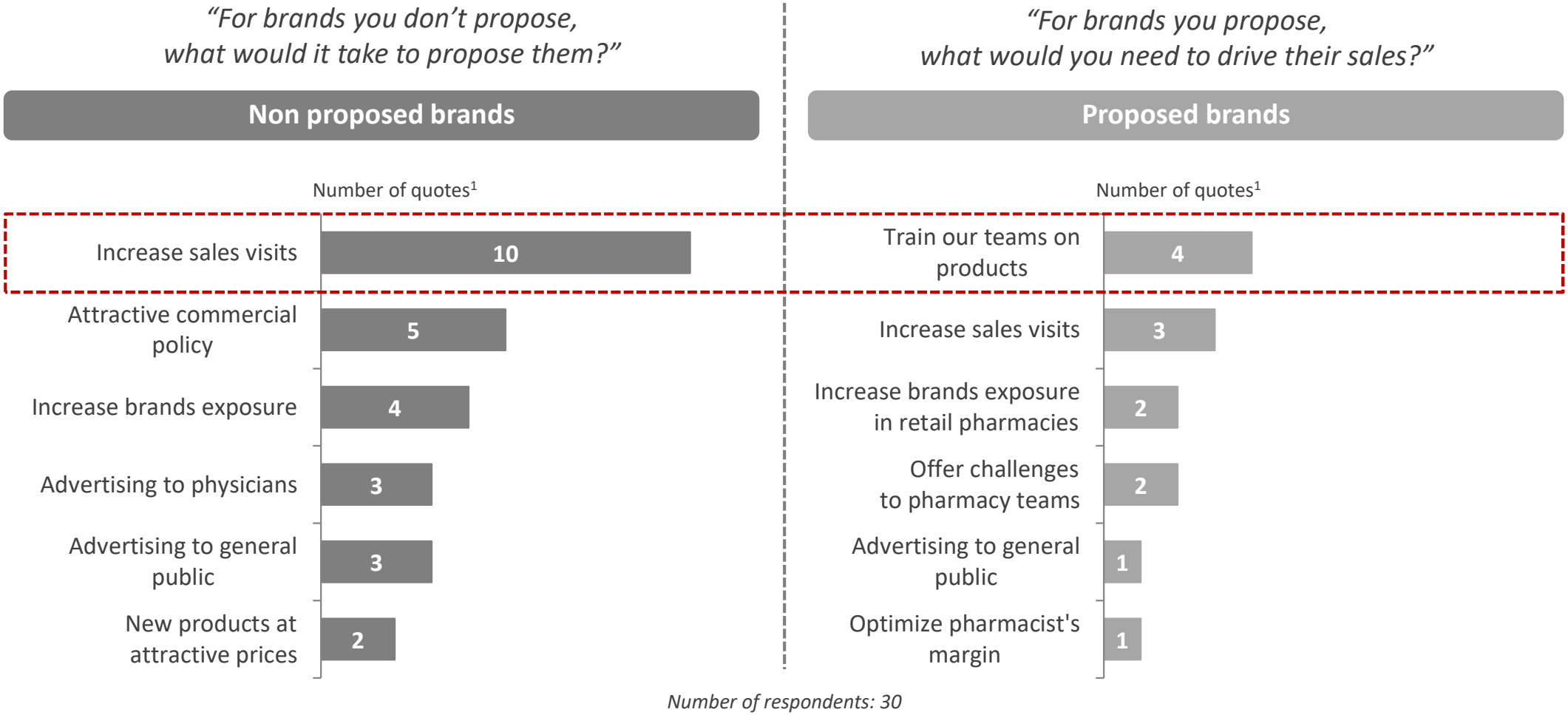


Number of respondents: 30

Sources: Interviews conducted with 30 retail pharmacists (September – October 2021) – Smart Pharma Consulting analysis

Pharmacists recommend companies to increase sales calls to encourage them to propose their brands and trainings to help them drive sales

Pharmacists – Recommendations to make them propose / sell more brands



Number of respondents: 30

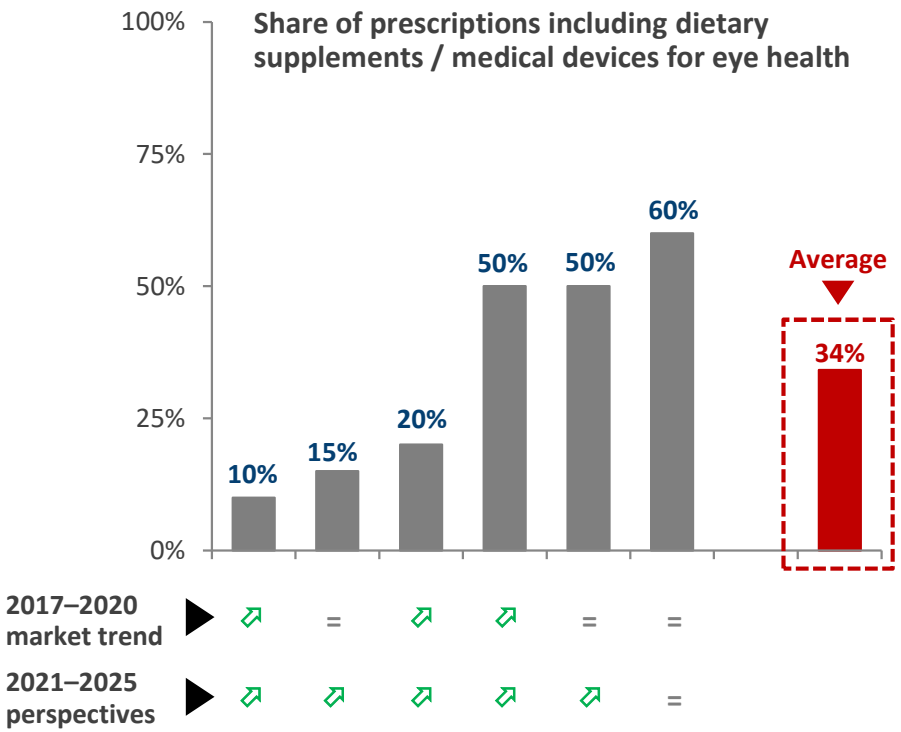
Sources: Interviews conducted with 30 retail pharmacists (September – October 2021) – Smart Pharma Consulting analysis

[1] Several answers possible

Ophthalmologists add dietary supplements / medical devices to 34% of their prescriptions and they always prescribe them by brand name

Ophthalmologists – Prescription behavior

"What percentage of your prescriptions includes medical dietary supplements / medical devices for eye health?"



"Do you prescribe dietary supplements / medical devices as single treatments or combined with other treatments?"

"When prescribing dietary supplements / medical devices, do you indicate a specific brand name, or let the pharmacist and/or the patient choose it?"

Number of respondents: 6

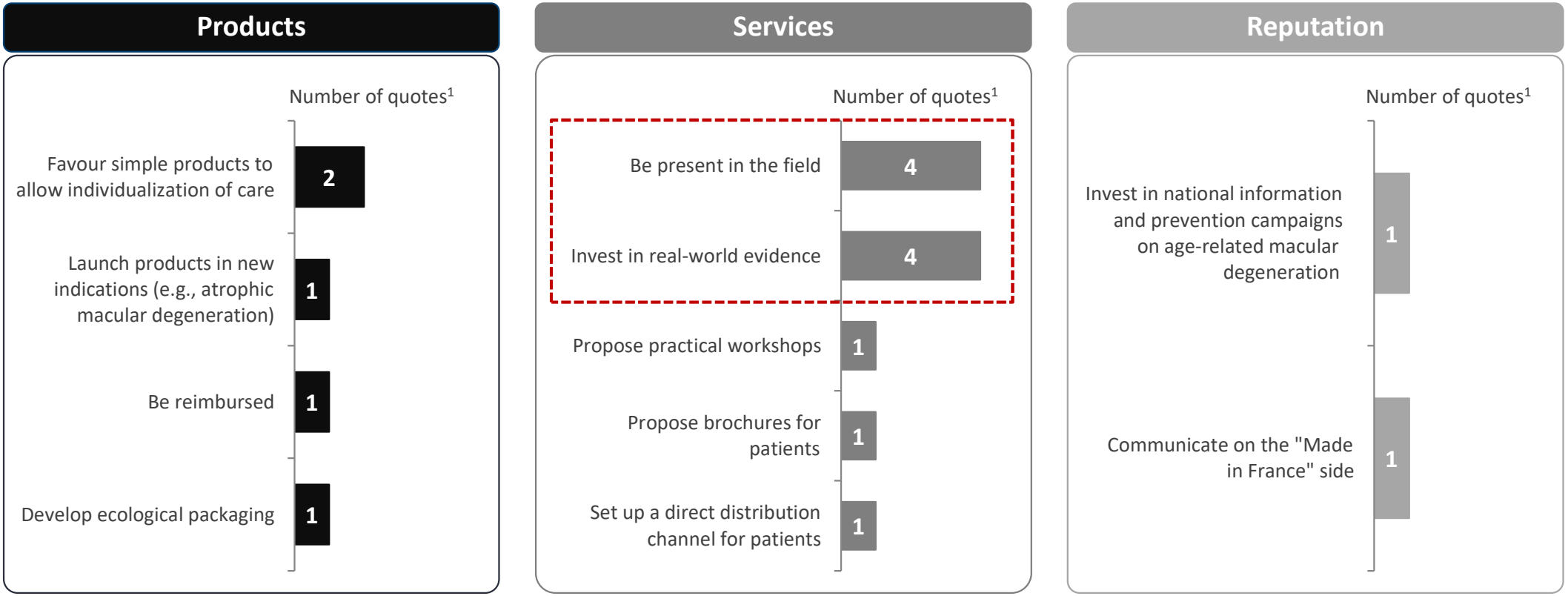
(X): Number of quotes

Sources: Interviews conducted with 6 ophthalmologists (September – October 2021) – Smart Pharma Consulting analysis

Ophthalmologists recommend companies operating in the eye health market to be present in the field and to invest in real-world evidence

Ophthalmologists – Recommendations

"What would you recommend to companies marketing dietary supplements / medical devices for eye health to strengthen your preference for their brands (in terms of products – services – reputation)?"



Number of respondents: 6

Sources: Interviews conducted with 6 ophthalmologists (September – October 2021) – Smart Pharma Consulting analysis

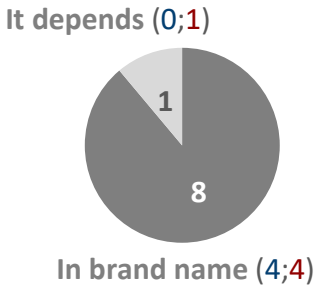
[1] Several answers possible

Most of pediatricians and midwives prescribe baby dietary supplements by brand name, but to a lesser extent hygiene and care products for which only two-thirds are prescribed in brand name

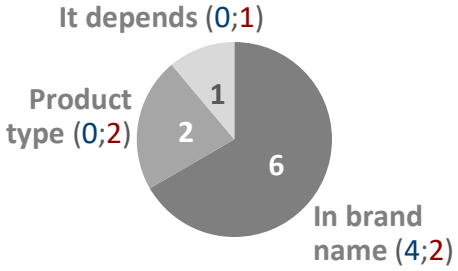
Pediatricians / Midwives – Prescription behavior

"When prescribing dietary supplements and/or hygiene and care products for babies, do you indicate a brand name, or let the pharmacist and/or the patient choose it?"

Dietary supplements



Hygiene and care

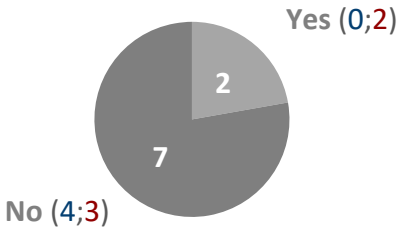


(Pediatricians ; Midwives)

Number of respondents: 9

"Did your practice in terms of prescribing/recommending dietary supplements or hygiene and care products change?"

Dietary supplements



Hygiene and care

(Pediatricians ; Midwives)

Number of respondents: 9

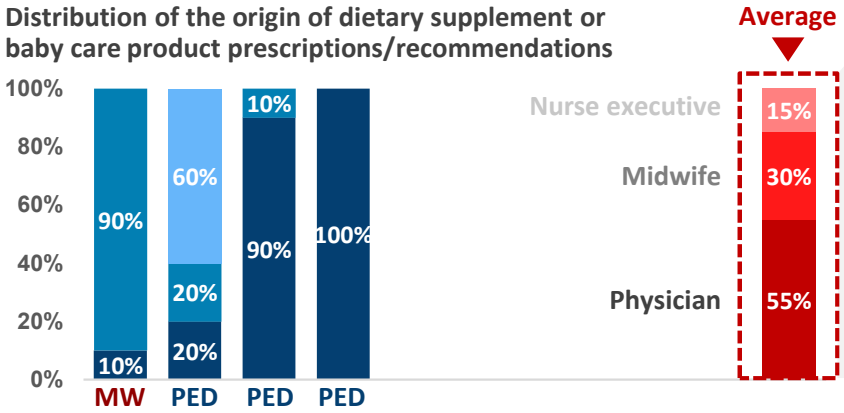
Sources: Interviews conducted with 4 pediatricians and 5 midwives (September – October 2021) – Smart Pharma Consulting analysis

On average, it is mainly physicians who prescribe or recommend dietary supplements and baby care products in maternity wards, followed by midwives

Pediatricians / Midwives – Prescription behavior

"In maternity wards who decide to prescribe/recommend baby dietary supplements (probiotics) or baby care products?"

Distribution of the origin of dietary supplement or baby care product prescriptions/recommendations



Number of respondents: 4[1]

Comments

- *"For products prescribed at the **end of the stay in the maternity ward**, it is **systematically** the **physician** who **makes the decision** to prescribe" (1;0)*
- *"For products used **during the stay in the maternity ward**, it is a **joint decision** between the **pediatrician** in charge, the **hospital pharmacist** and the **nurse executive**" (1;0)*
- *"**Nurse executives** have a strong hold on babies' **first weeks of life**" (1;0)*

(Pediatricians ; Midwives)

Market trends and perspectives

	Pediatricians				Midwives				
2017-2020 dietary supplements market trend	=	=	=	=	=	⇗	⇗	=	⇘
2017-2020 hygiene and care products market trend	=	⇗	=	=	=	=	⇗	⇗	⇘
2021-2025 perspectives	=	=	Does not know	Does not know	Does not know	⇗	Does not know	⇗	⇗

Number of respondents: 9

(X): Number of quotes

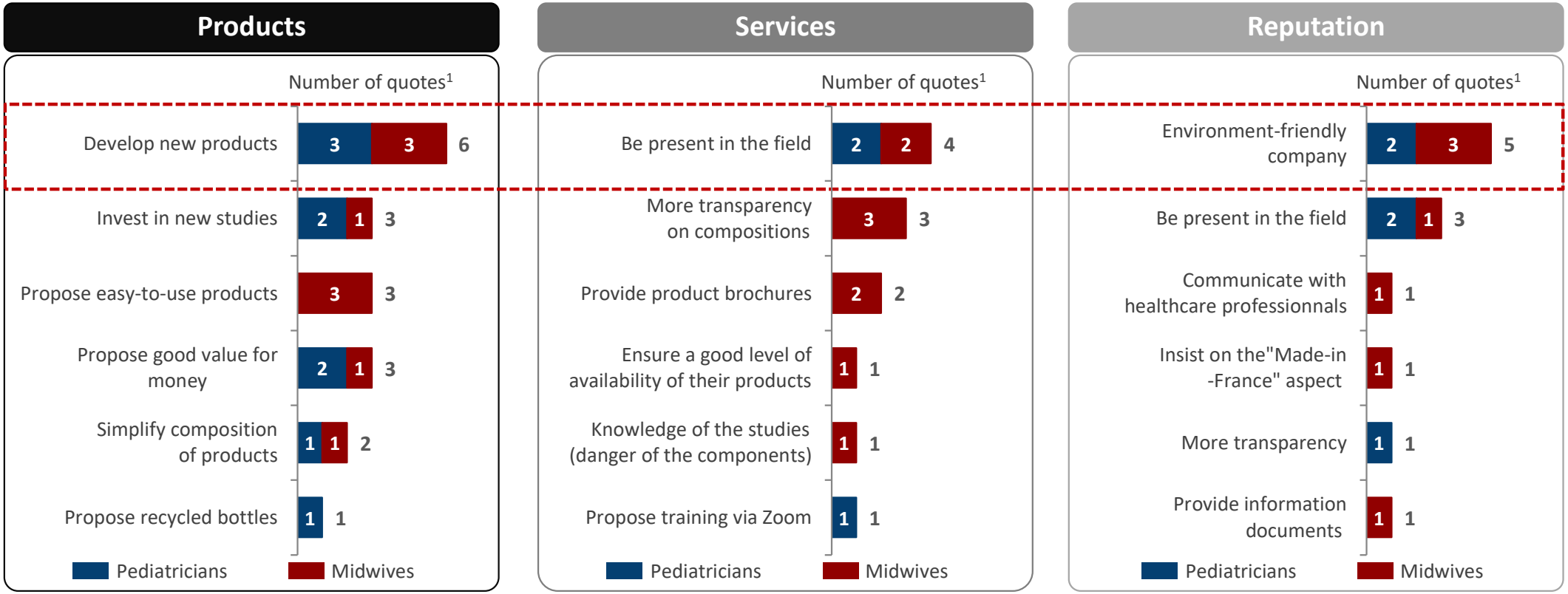
Sources: Interviews conducted with 4 pediatricians and 5 midwives (September – October 2021) – Smart Pharma Consulting analysis

[1] Only 4 respondents practice in maternity wards

To strengthen pediatricians and midwives' preference for their brands, companies should develop new products, be present in the field, and be more environment-friendly

Pediatricians / Midwives – Recommendations

"What would you recommend to companies operating in the dietary supplement and/or hygiene and care product markets for babies' health to strengthen your preference for their brands (in terms of products – services – reputation)?"



Number of respondents: 9

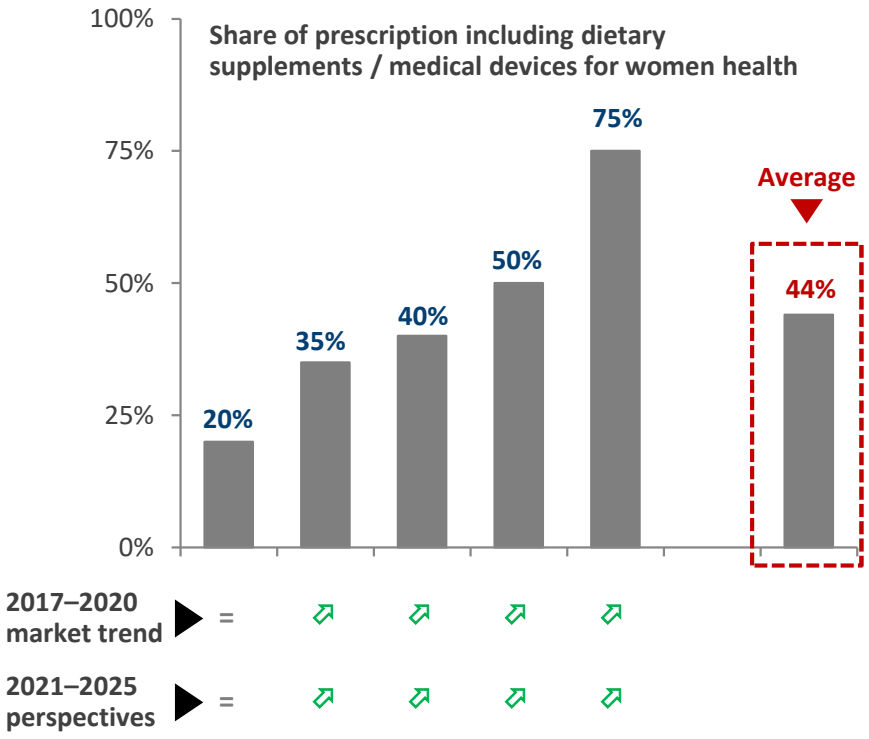
Sources: Interviews conducted with 4 pediatricians and 5 midwives (September – October 2021) – Smart Pharma Consulting analysis

[1] Several answers possible

Gynecologists add dietary supplements / medical devices to 44% of their prescriptions and they always prescribe them by brand name

Gynecologists – Prescription behavior

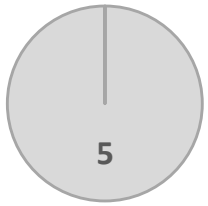
"What percentage of your prescriptions includes dietary supplements / medical devices for women health?"



Number of respondents: 5

"Do you prescribe dietary supplements / medical devices for women health as single or combined treatments?"

"When prescribing dietary supplements / medical devices, do you indicate a specific brand name, or let the pharmacist and/or the patient choose it?"



Prescription by brand name

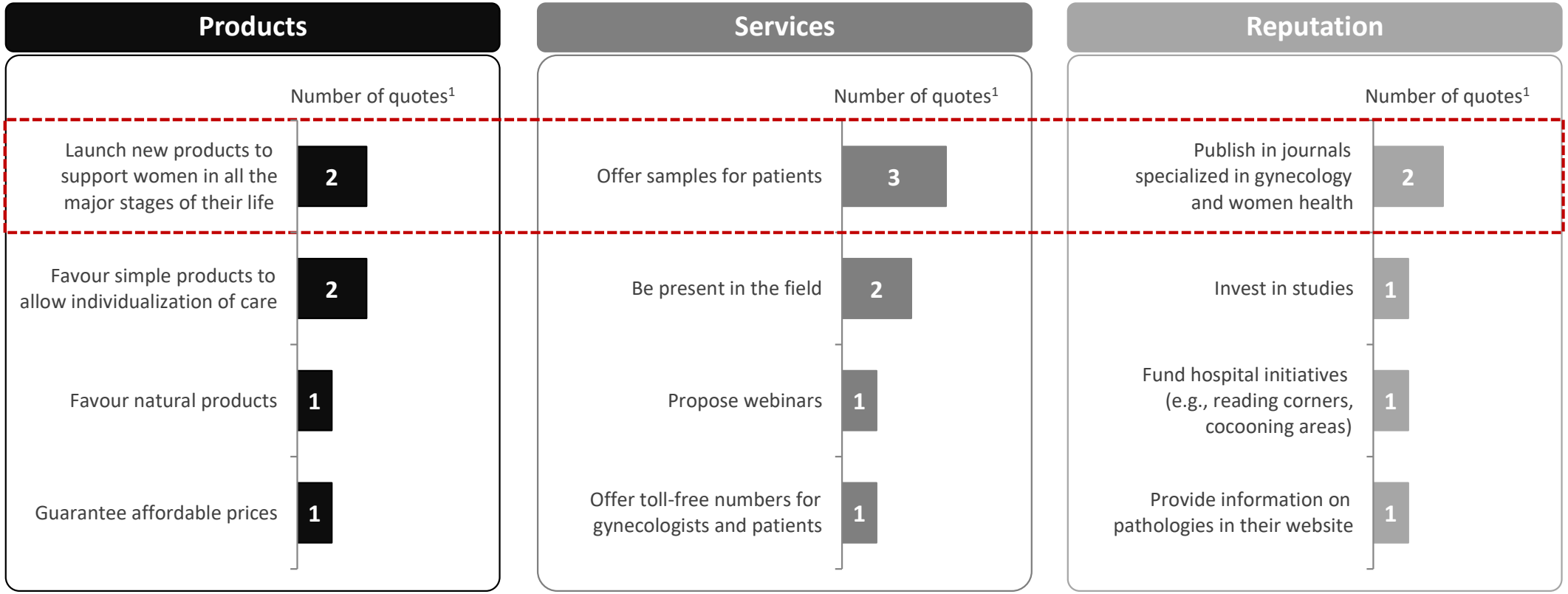
Sources: Interviews conducted with 5 gynecologists (September – October 2021) – Smart Pharma Consulting analysis

[1] *Several answers possible*

Gynecologists recommend to launch new products as simple as possible for new indications, offer samples for patients and publish in gynecology and women health medical journals

Gynecologists – Recommendations

"What would you recommend to companies operating in the dietary supplements / medical devices markets for women's health to strengthen your preference for their brands (in terms of products – services – reputation)?"



Number of respondents: 5

Sources: Interviews conducted with 5 gynecologists (September – October 2021) – Smart Pharma Consulting analysis

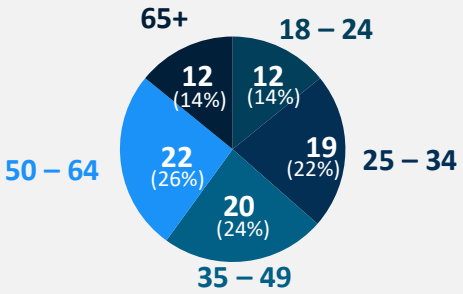
[1] Several answers possible

72% of patients surveyed use dietary supplements occasionally, with an average annual budget of €202, and most see this consumption increasing or not changing in the future

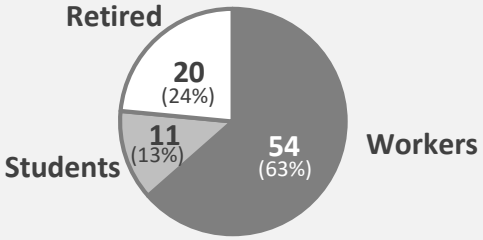
Consumers – Introduction (1/2)

Consumers profiles

Age groups

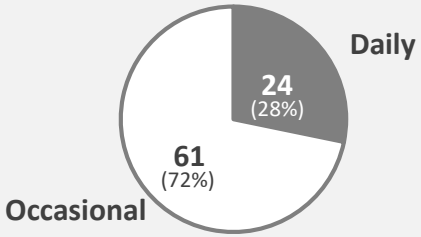


Status

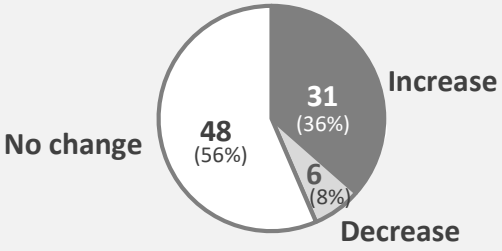


Consumers' behavior

Habits of consumption



Evolution of consumption



Yearly budget (€)

Minimum	€10
1st quartile	€70
Median	€180
Mean	€202
3rd quartile	€240
Maximum	€1,200

Number of respondents: 85

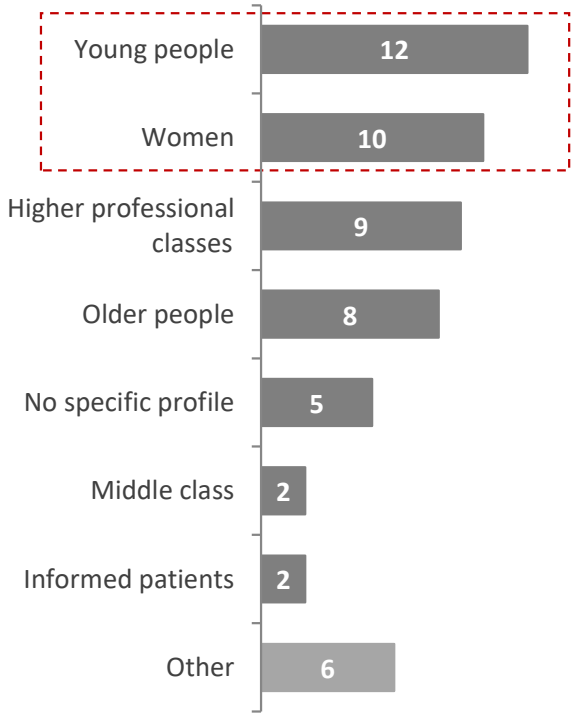
Sources: Interviews conducted with 85 patients (September – November 2021) – Smart Pharma Consulting analysis

Young people and women are the main consumers of dietary supplements, and they rely mainly on pharmacist's advice to choose products

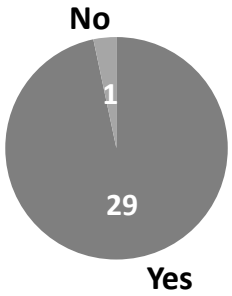
Consumers – Introduction (2/2)

"What is the profile of consumers of dietary supplements?"

Number of quotes[1]



"Do you observe a change in consumers' behavior towards these products?"

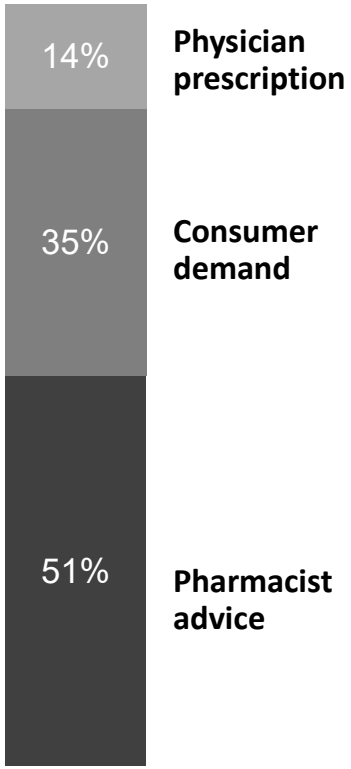


"If so, which one?"

- *"Back to **nature**, to **fewer chemical products**, which do not create addiction, **respect the body** and bring **comfort / well-being**" (15)*
- *"**Positive impact of Covid-19** pandemics on the dietary supplements market (**immune boosters**, **sleep** and/or **stress products**)" (10)*
- *"**Better informed patients** (Yuka-type applications, internet searches, advertising, etc.)" (6)*
- *"The **population** is more **aware**" (7)*

Number of respondents: 30

"What is the origin of consumers' demand for dietary supplements?"



(X): Number of quotes

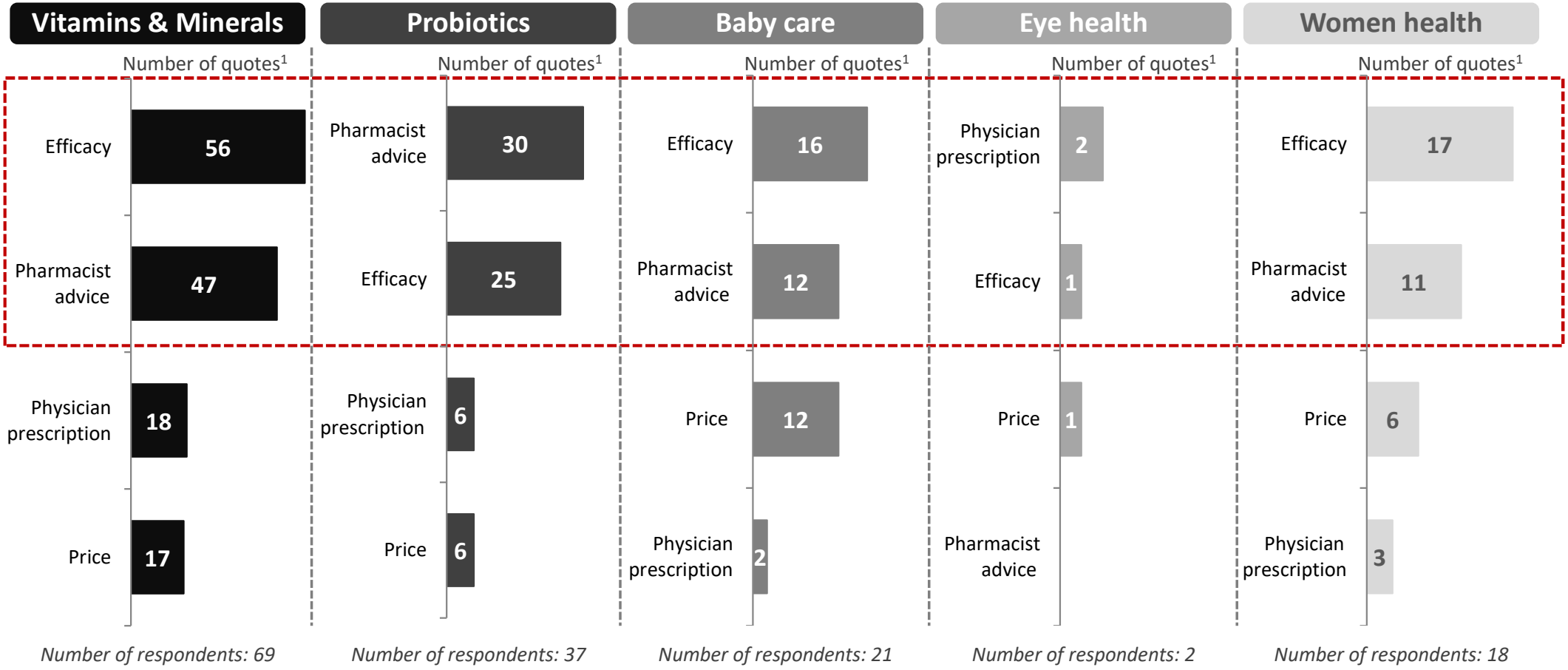
Sources: Interviews conducted with 30 retail pharmacists (September – October 2021) – Smart Pharma Consulting analysis

[1] Several answers possible

The efficacy of the product and the advice of the pharmacist are the main criteria that encourage patients to use dietary supplements and baby care products

Consumers – Criteria determining the use of dietary supplements

"What are the criteria that encourage you to use dietary supplements and baby care products?"

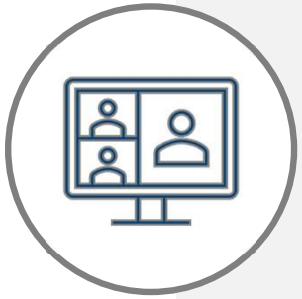


Sources: Interviews conducted with 85 patients (September – November 2021) – Smart Pharma Consulting analysis

[1] Several answers possible

The dietary supplement and baby care markets are expected to continue to grow by 2025, driven by a progressive change in consumers' demand for naturality and wellness

Key learnings – Overall landscape



- The dietary supplement and baby care **markets have grown since 2017** responding to **consumers' demand** and the **willingness of retail pharmacists to develop this activity**
- The **market is expected** to continue to **grow** by 2025 due to **increasing demands** and **prescriptions**
- N**o reimbursement** is expected for these products, even more, **tighter market access constraints** and **regulations** should **occur**
- **Stricter quality standards** and **norms** are getting **imposed** by **health authorities** in the European Union for medical devices, phytotherapy products and dietary supplements, without being always harmonized
- Their **efficacy** is the **main criterion** considered when deciding to use dietary supplements or baby care products, but all **HCPs regret** a **lack of scientific evidence**
- No major but **incremental innovations** in terms of **combined ingredients** are expected ; efficacy should be supported by **more robust evidence**, while **ecology** will play a **greater role**
- On average, **51%** of dietary supplements and baby care products **purchases come from pharmacist's advice**

Sources: Smart Pharma Consulting analysis

To strengthen their market share and to drive their brands' sales, manufacturers should boost stakeholders' awareness and focus on offering high standard quality products that are effective

Key learnings – Key stakeholders

- **Retail pharmacists** play a major role in **product selection** through their **advice to consumers**
- The number of **prescribers** and **prescriptions per prescriber** tend to **increase**, due to a more holistic approach of healthcare and a greater importance given to prevention
- **Physicians** mostly consider that dietary supplements and baby care products have a **moderate efficacy**, and they **always prescribe** them **by brand name**
- **Physicians' prescription** is the most important criterion for **eye health**
- For **probiotics**, patients mainly rely on **pharmacist's advice** to decide what product to use
- Patients are **better informed** about these products and **more sensitive** to their **well-being** and the **respect of their body**
- If **Arkopharma** is viewed as a **pioneer in phytotherapy** and **dietary supplements**, **Pileje** is considered as an **example of success story** based on **strong partnerships with KOLs and prescribers**

Sources: Smart Pharma Consulting analysis

Smart Pharma
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2. Strategy

Smart Pharma
CONSULTING

Top 20
Pharma Companies

MARKET INSIGHTS

Performance & Strategies

POSITION PAPER

September 2021

This document proposes a review of global pharma trends by 2025 and an analysis of top 20 pharma companies' performance and strategies

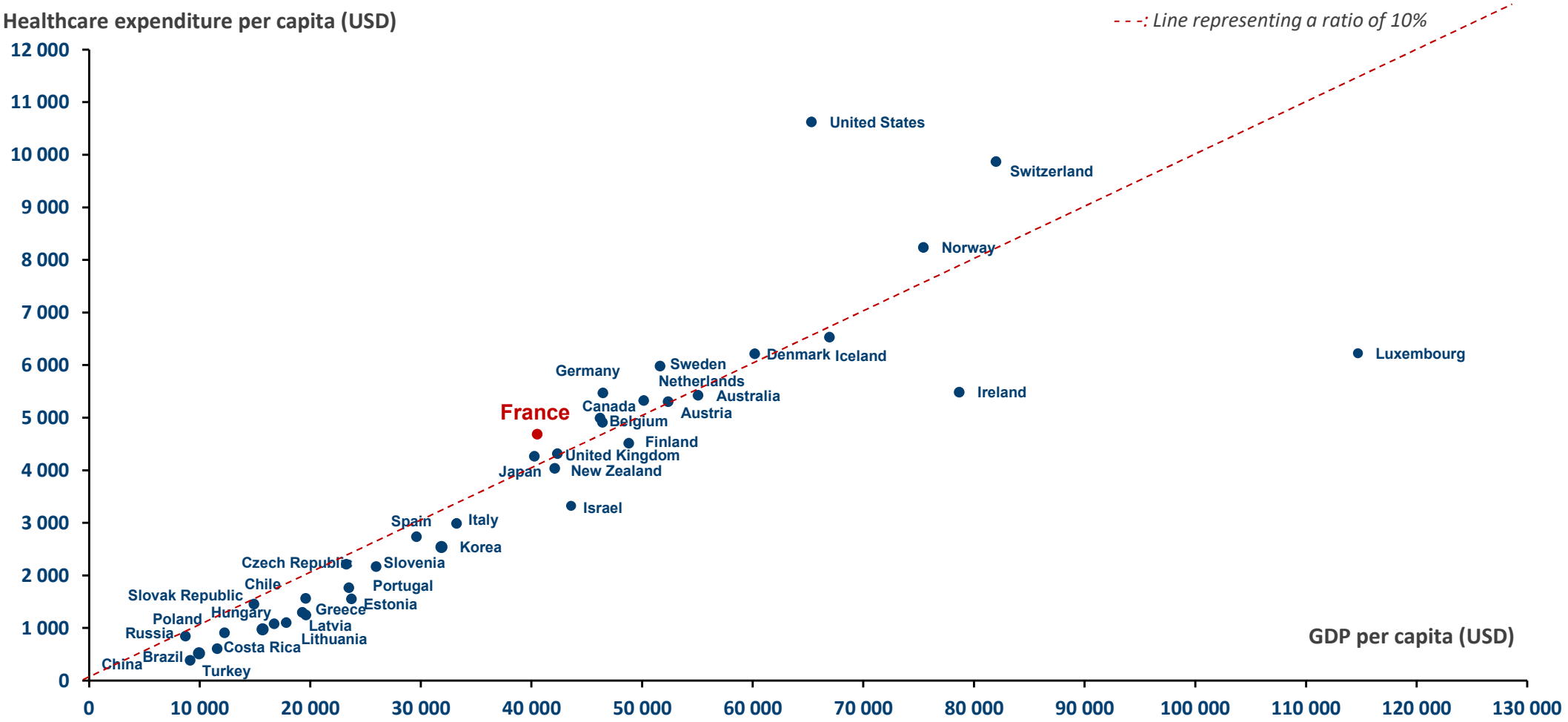
Introduction

Smart Pharma Consulting proposes to address the following issues:

- What is the structure of the global pharma market and how should it evolve by 2025?
- What has been the recent performance of the top 20 pharma companies worldwide?
- What are the current portfolio strategies of the top 20 pharma companies worldwide?
- What have been the objectives pursued by the top 20 pharma companies in their recent M&A deals?

Healthcare expenditure and GDP[1] per capita are highly related and the ranking[2] of France (#15 and #19 respectively) shows that healthcare is a key national priority

Relation between GDP and healthcare expenditure per capita (2018*)



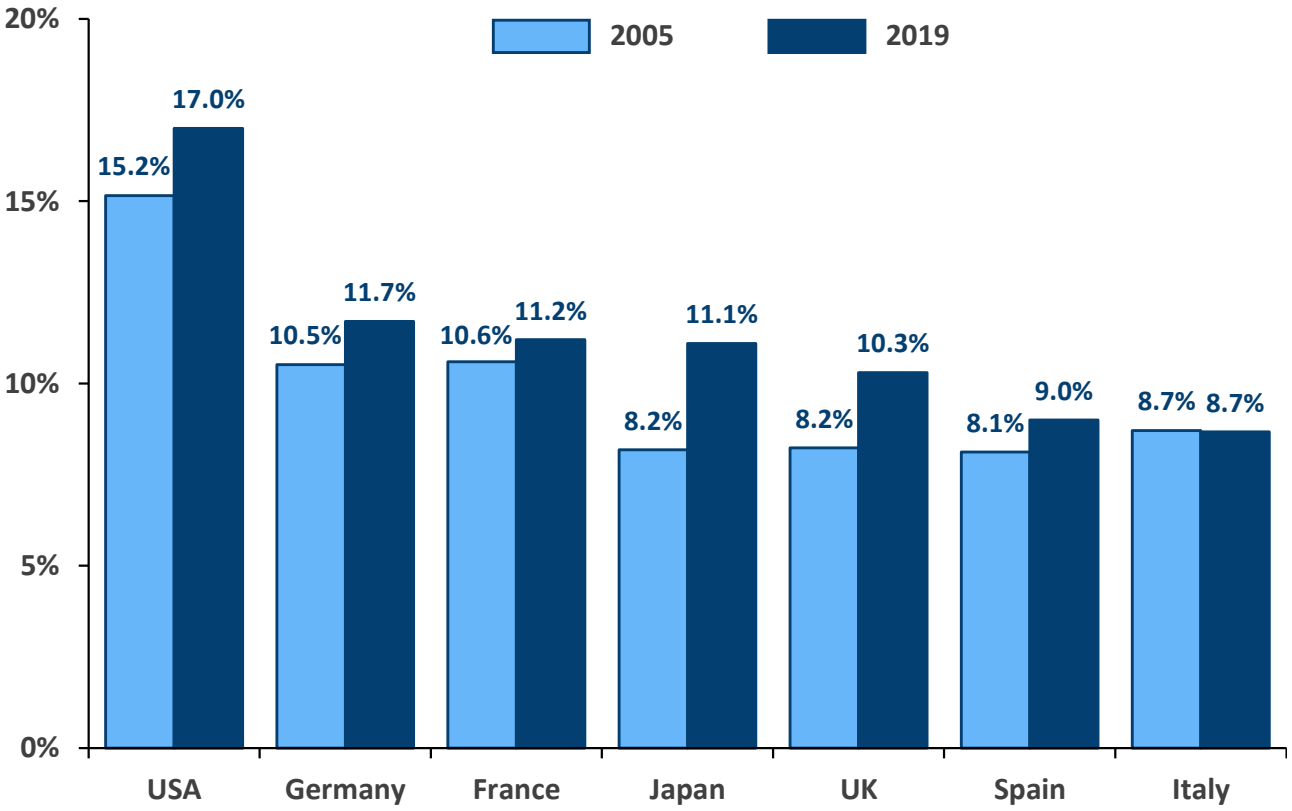
Sources: World Bank database (March 2021) – Smart Pharma Consulting analyses

*[1] Gross Domestic Product – [2] Amongst 44 countries in the world – * Or latest data available for all countries*

Healthcare expenditure should keep on growing faster than national economies due to demographic factors and willingness of citizens to have better access to healthcare

Healthcare expenditure as a percentage of GDP (2019*)

Total healthcare expenditure as a % of GDP (Local currency)



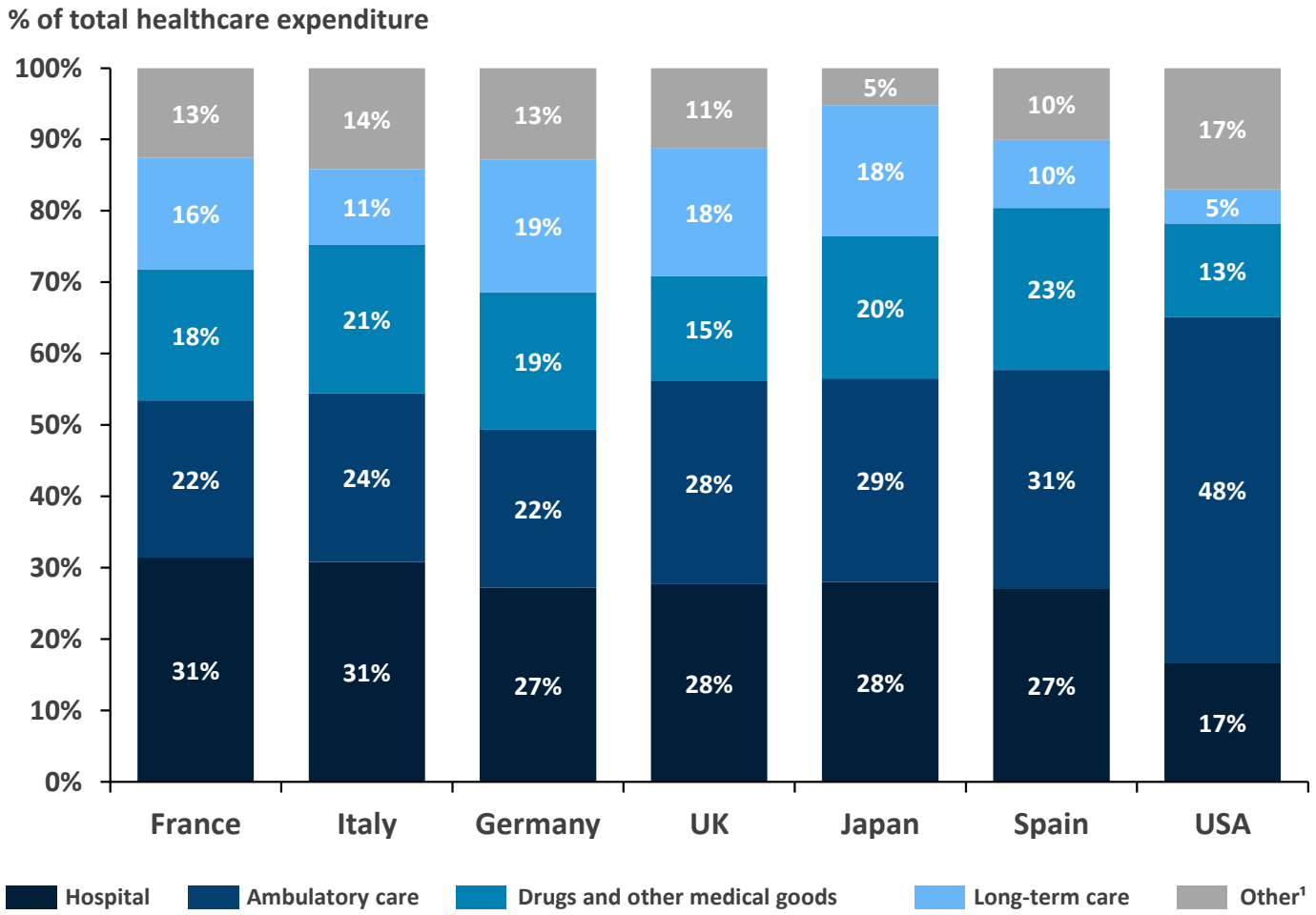
- Healthcare expenditure represents one of the largest public spending items in most developed economies: 1st (USA), 2nd (France, Germany, Japan and UK)[1] and 3rd (Italy and Spain)[2]
- At best, governments and payers will manage to slow down the rise of healthcare expenditure as a percentage of GDP but not to stop it
- There is no optimal ratio of healthcare expenditure over GDP
- This ratio primarily results from:
  - Public health conditions
  - Governments' investment prioritization
  - Citizens' willingness to seek for care
  - Healthcare cost

Sources: OECD database (March 2021) – Smart Pharma Consulting analyses

*[1] After social protection – [2] After social protection and general public service – * Or latest data available for all countries*

The cost of drugs is far behind that of hospital and ambulatory care, yet this segment is targeted by governments because it is technically and politically easier to control

Breakdown of healthcare expenditure per country (2019*)



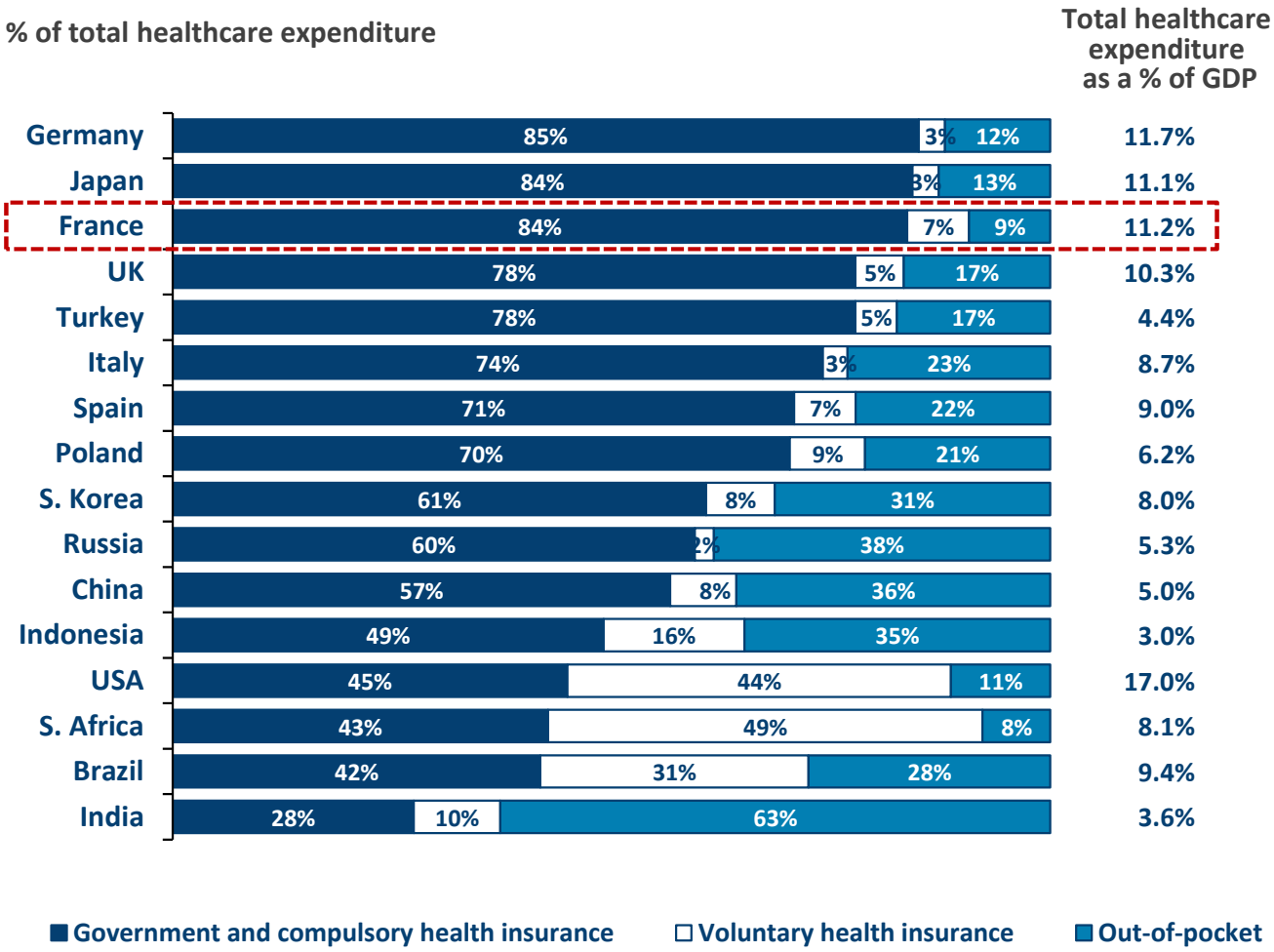
- Drugs represent the **3rd largest source** of healthcare expenditure in most major developed countries
- Drugs are typically the **easiest segment** to apply cost-containment measures on, as decisions are:
  - Made by payers (either public and/or private), with a limited bargaining power of suppliers
  - Much better accepted by citizens than restriction measures on the other segments
  - Practically easy to implement
- However, to significantly contain the raise of total healthcare costs, governments need to apply cost-optimization measures on all healthcare segments, irrespective of their relative importance

Sources: OECD database (March 2021) – Smart Pharma Consulting analyses

*[1] Other expenditures include ancillary services, preventive care and governance, healthcare system and financing administration – * Or latest data available for all countries*

France is one of the countries where the percentage of "out-of-pocket" spending to cover the healthcare expenditure is the lowest

Share of public spending in total healthcare expenditure (2019*)



- With 11.2% of its GDP spent in healthcare, France belongs to the countries allocating the largest share of their resources
- Its level of public spending on healthcare is amongst the highest, just behind Germany and Japan, showing a highly protective healthcare system
- All the French citizens benefit from a public health insurance and 95% of them have a complementary private healthcare insurance, which is compulsory, since the 1st of January 2016, for all employees, irrespective of the size of their company
- As a result, "out-of-pocket" spending represents only 9% of total healthcare expenditure

Sources: World Bank and OECD databases (March 2021) – Centers for Medicare & Medicaid Services (March 2021) – Smart Pharma Consulting analyses

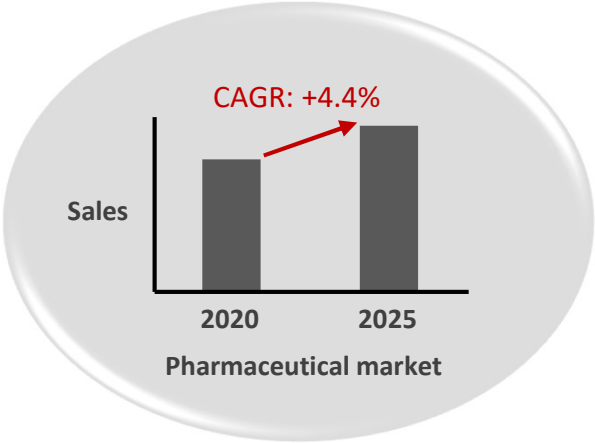
** Or latest data available for all countries*

The key drivers and limiters of the global pharmaceutical market by the end of 2025, as well as their probable impact on sales trends, are well identified and should remain stable

Global pharmaceutical market drivers and limiters (2020 – 2025)

DRIVERS

1. Population increase and ageing
2. Better access to medicines in emerging markets (e.g., BRICS[1], Mexico, Turkey, etc.) as a result of an increasing GDP per capita
3. Strong development of generics market (access to a larger number of people, especially in lower income countries), and to a lesser extent of biosimilars
4. Strong demand from patients / PAGs[2] for more effective and better tolerated new drugs



LIMITERS

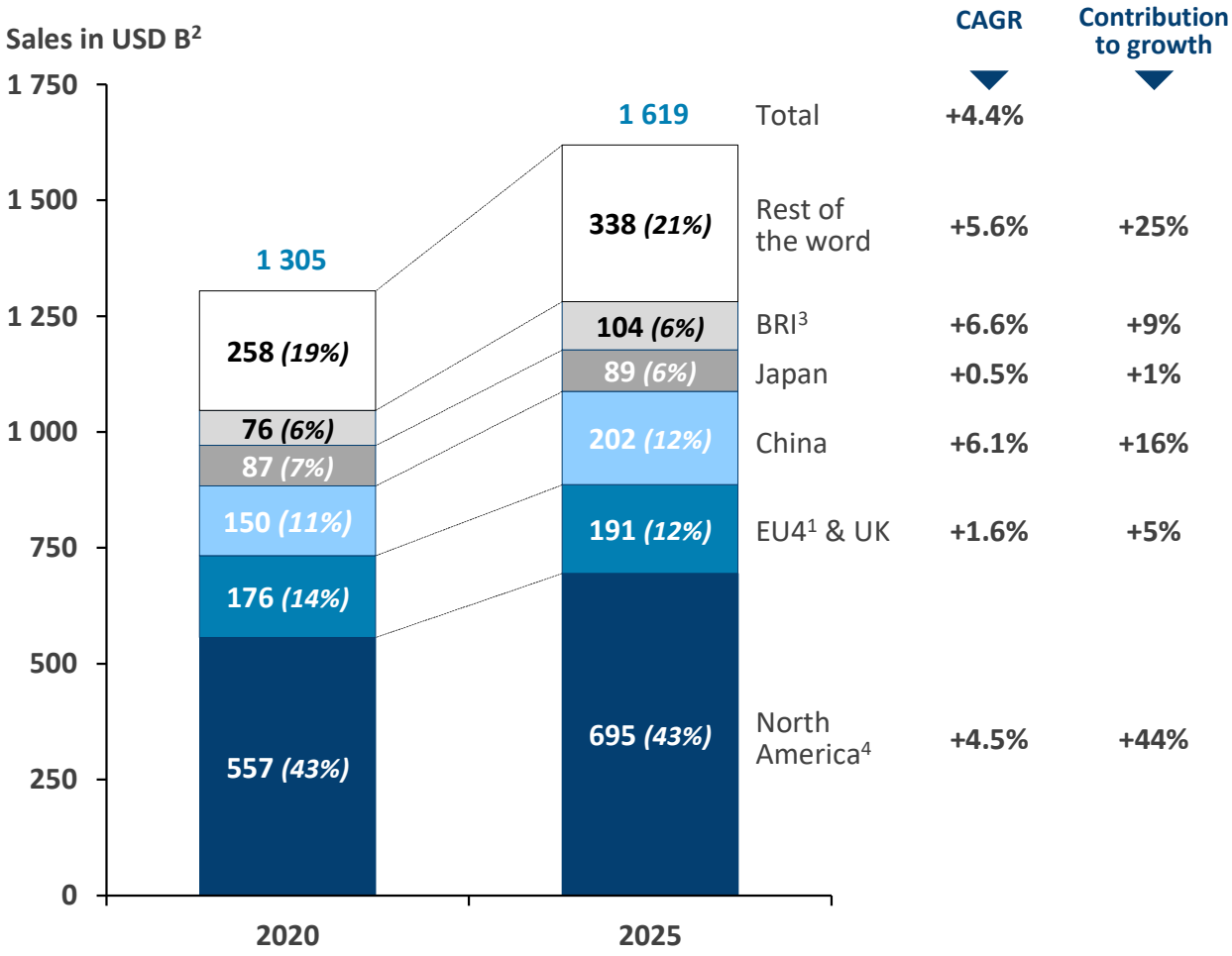
1. Decreasing R&D productivity of pharma companies re. breakthrough innovations
2. Increasing barriers to market access and stronger pressure on price from payers (governments, HMOs, patients, etc.), exacerbated by a tougher economic environment
3. Increasing competition of non-reimbursed drugs by medical devices and food supplements
4. Intensification of competition from generic and biosimilar drugs

Sources: Smart Pharma Consulting

[1] Brazil, Russia, China, South Africa – [2] Patient advocacy groups

Sales of EU4[1] & UK should grow slowly by 2025 due to stringent cost containment measures leading to a two-point decrease of their weight in the global pharmaceutical market

Global pharmaceutical market size and growth by geographic area (2020 – 2025)



- The global pharma market is expected to grow with a **CAGR of +4.4%** by 2025, including the impact of Covid-19, that should lead to **higher pressure** on **prices** worldwide, in the next 5 years
- **EU4 & UK** countries account together for only 14% of the global pharma market (Germany: 4%, France: 3%, Italy: 3%, UK: 2% and Spain: 2%) and should see their **weight drop by 2 points** by 2025, due to higher **price pressure** than in the average of the other countries in the world
- **North America** (of which the USA accounts from 41%) should continue to weigh for 43% of the global pharma market in value and contribute to **44% to worldwide market growth** over the 2020 – 2025 period
- **~75%** of the global pharmaceutical market **profits** which have been **generated by the USA** in 2020, should **reach ~80% in 2025**

Sources: IQVIA Institute (April 2021) – Smart Pharma Consulting estimates

[1] France, Germany, Italy and Spain – [2] Ex-factory price before rebates – [3] Brazil, Russia, India – [4] USA and Canada

By 2025, the French Pharma market is expected to step back from the 5th to the 6th place at the global level and remain at the 2nd place in Europe

Global pharmaceutical market ranking in value[1] (2015 – 2020 – 2025)

Rank	2015	2020	2025	CAGR 2020 – 2025
1	USA	USA	USA	++
2	China	China	China	+++
3	Japan	Japan	Japan	+
4	Germany	Germany	Germany	++
5	France	France	Brazil	++++
6	Italy	Italy	France	+
7	UK	UK	Italy	++
8	Spain	Brazil	UK	++
9	Canada	Spain	India	++++
10	Brazil	Canada	Russia	++++
11	India	India	Spain	++
12	South Korea	Russia	Canada	++
13	Russia	South Korea	South Korea	+++
14	Australia	Australia	Turkey	++
15	Saudi Arabia	Mexico	Mexico	++
16	Mexico	Saudi Arabia	Australia	++
17	Poland	Poland	Saudi Arabia	++
18	Switzerland	Turkey	Poland	++
19	Belgium	Belgium	Belgium	++
20	Netherlands	Taiwan	Egypt	+++

CAGR 2020 – 2025

++++ → ≥8%

+++ → 6 – 7.9%

++ → 3 – 5.9%

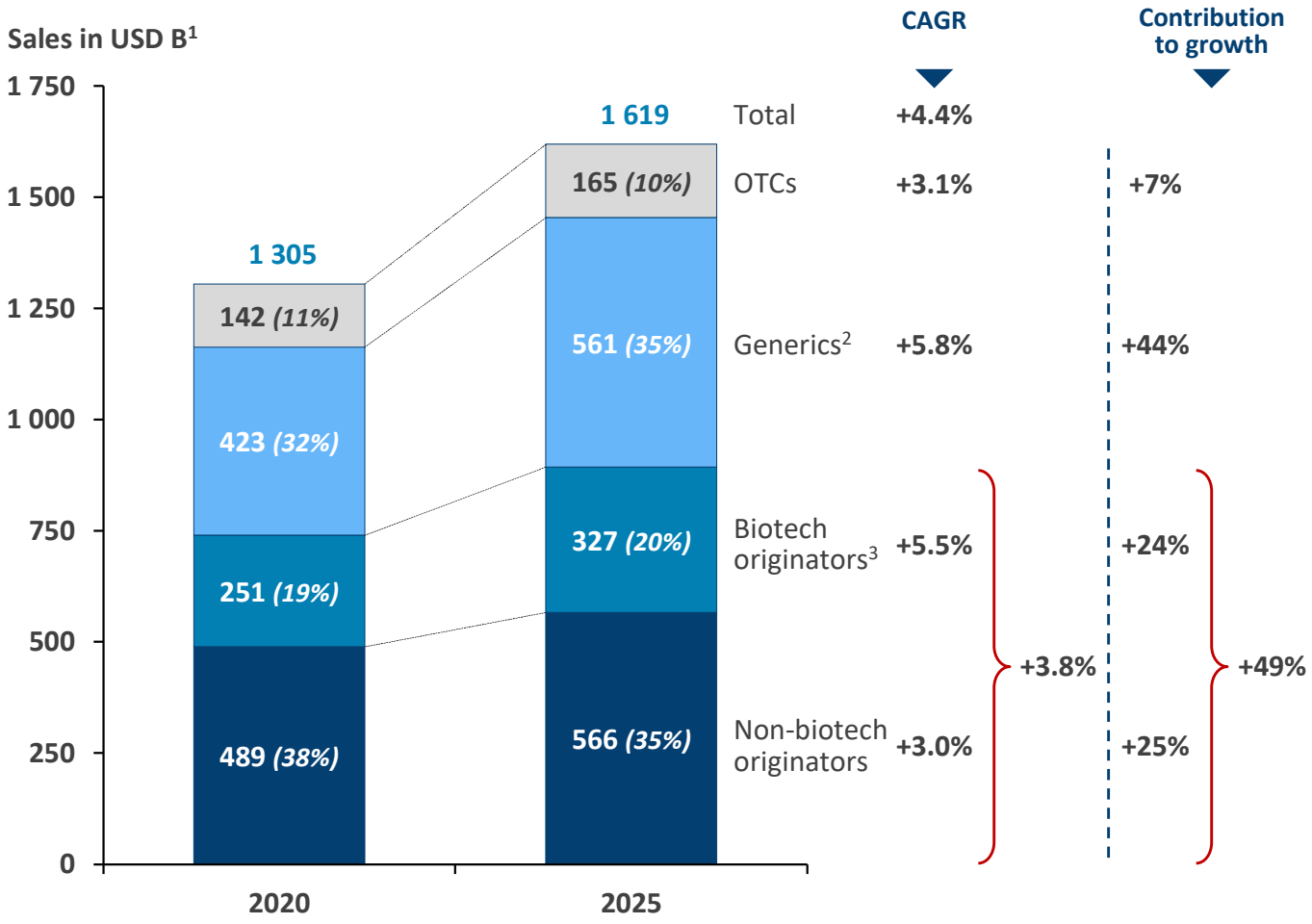
+ → <0 – 2.9%

Sources: IQVIA Institute (April 2021) – Smart Pharma Consulting estimates

[1] *In 2020 USD, at constant exchange rate*

All the business segments of the pharma market will be affected by the Covid-19 crisis through a strong price pressure over the 2020-2025 period

Global pharmaceutical market by strategic segment (2020 – 2025)



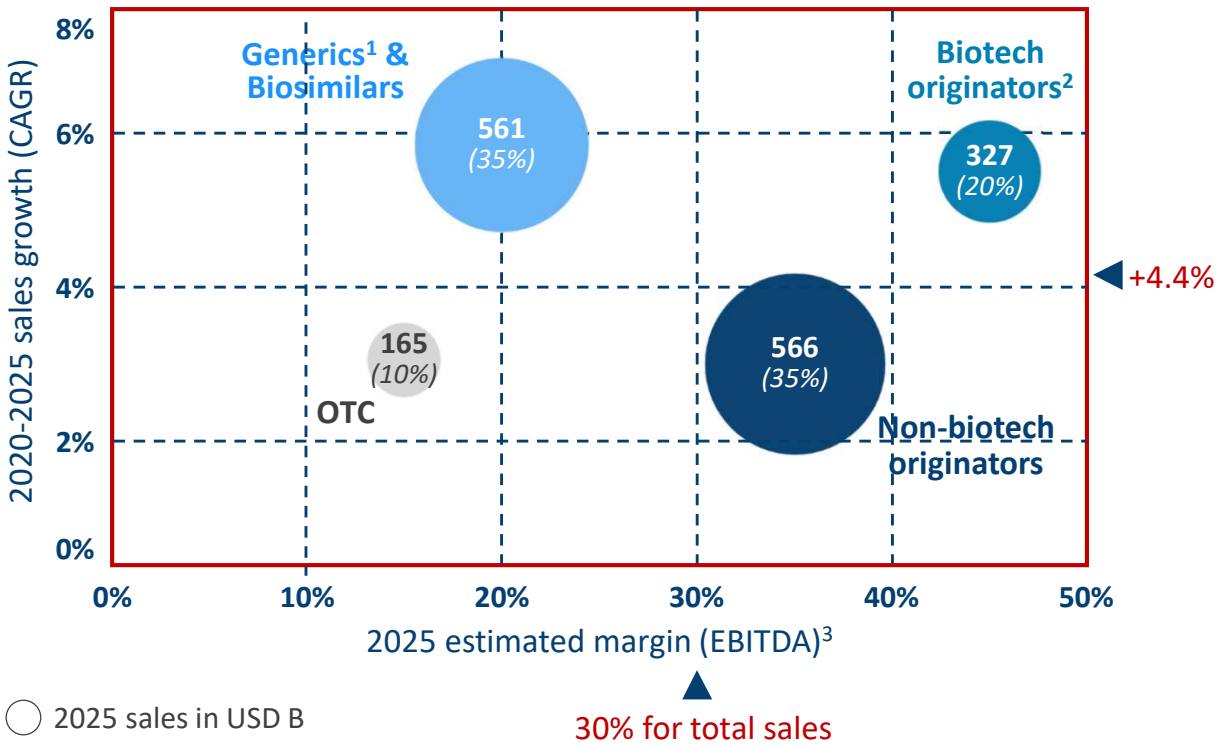
- **OTCs**, which should remain the smallest segment of the global pharma market, has been significantly **affected** by the **Covid-19** crisis in 2020, especially during **lockdown** periods. OTCs should grow at a lower pace than the other market segments, due to their stronger sensitivity to the economic environment
- **Generics** and **biosimilars** should continue to **grow** in **volume** due to patent expiries, but **pressure** on **prices** should **intensify** on this market segment
- **Biotech originators** should become the main **driver of innovation** in the next 5 years
- **Non-biotech originators** should be less dynamic, due to generics competition and the maturity of most of the brands. However, they should remain the **largest segment** of the global pharma market

Sources: IQVIA Institute (April 2021) – Smart Pharma Consulting estimates

[1] Ex-factory price before rebates – [2] Including branded and unbranded generics and biosimilars, excluding OTC – [3] Excluding biosimilars, already included in the "Generics" segment

By 2025, the sales growth of the pharma market should be essentially driven by generics and biotech originators, but pharma companies should lose two points of profitability

Global pharmaceutical market attractiveness by strategic segment (2020 – 2025)



- By 2025, the **global pharma market** should reach USD 1,619 B and grow at a pace of **+4.4% per year**, i.e., 1.5 point of percentage above the forecasted worldwide economic growth, but **0.6 point below the pre-Covid-19 estimates**
- The average **EBITDA** of the pharma industry should **decrease** from **~32%** in 2020 to **~30%** in 2025, mainly as a result of increasing price pressure
- In 2025, the **average net profits** of pharma companies are expected to be **more than twice higher** than the average of all **other** business **sectors**
- The **biotech** segment will **remain** very **attractive** but **biosimilar** competition will ramp up
- The OTC segment should be the least attractive

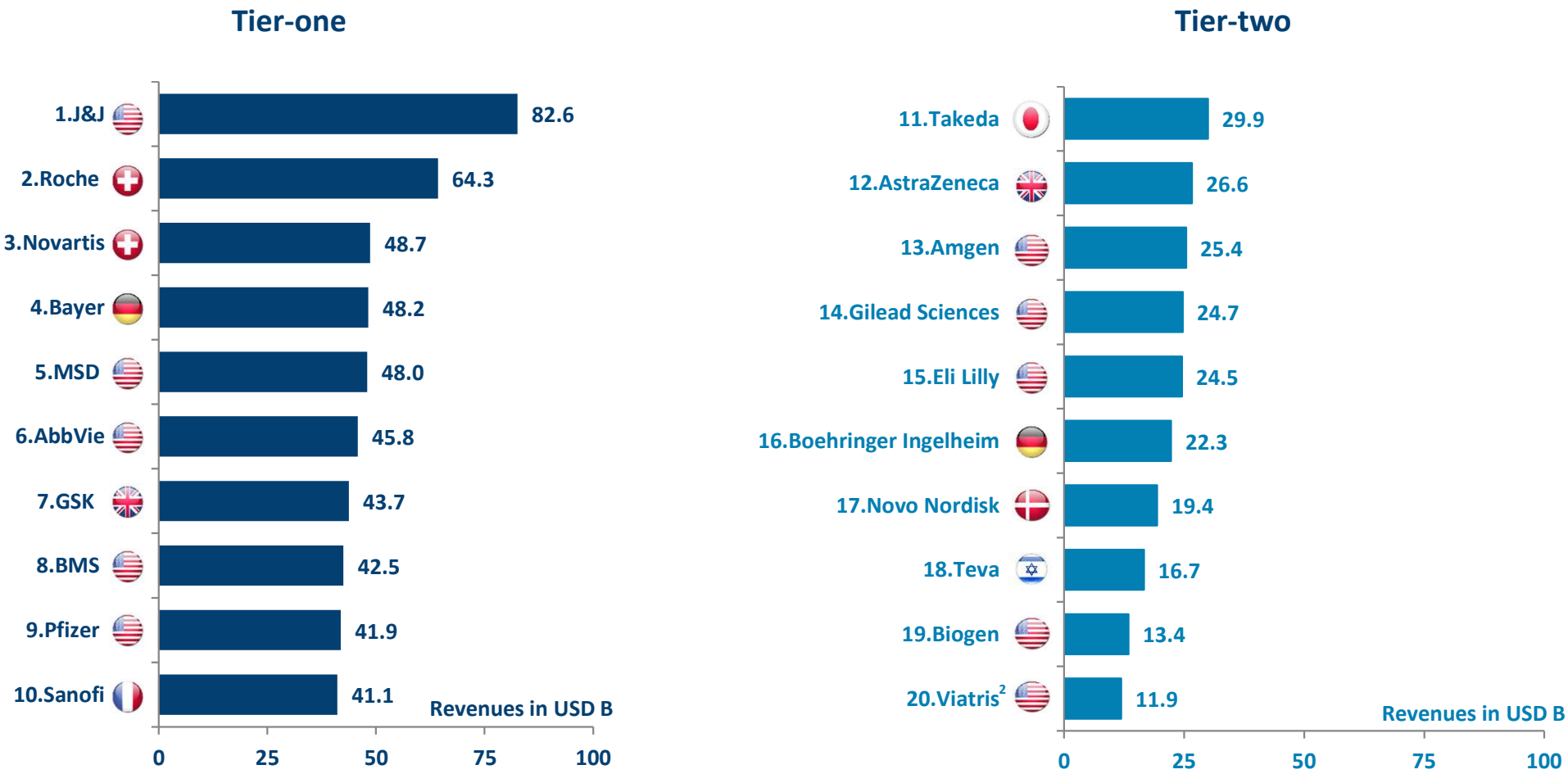
Worldwide economic growth – CAGR 2020-2025: +2.9%

Sources: IQVIA Institute (April 2021) – World economic outlook, IMF (October 2020) – Smart Pharma Consulting estimates

[1] Including branded and unbranded generics and excluding OTC – [2] Excluding biosimilars, already included in the "Generics" segment – [3] Earnings before interest, taxes, amortization and depreciation

The top 20 pharma companies based on all segments of activities[1] counts 10 companies from the USA, 8 from Europe, 1 from Japan and 1 from Israel

Top 20 pharma companies (2020) – All strategic segments

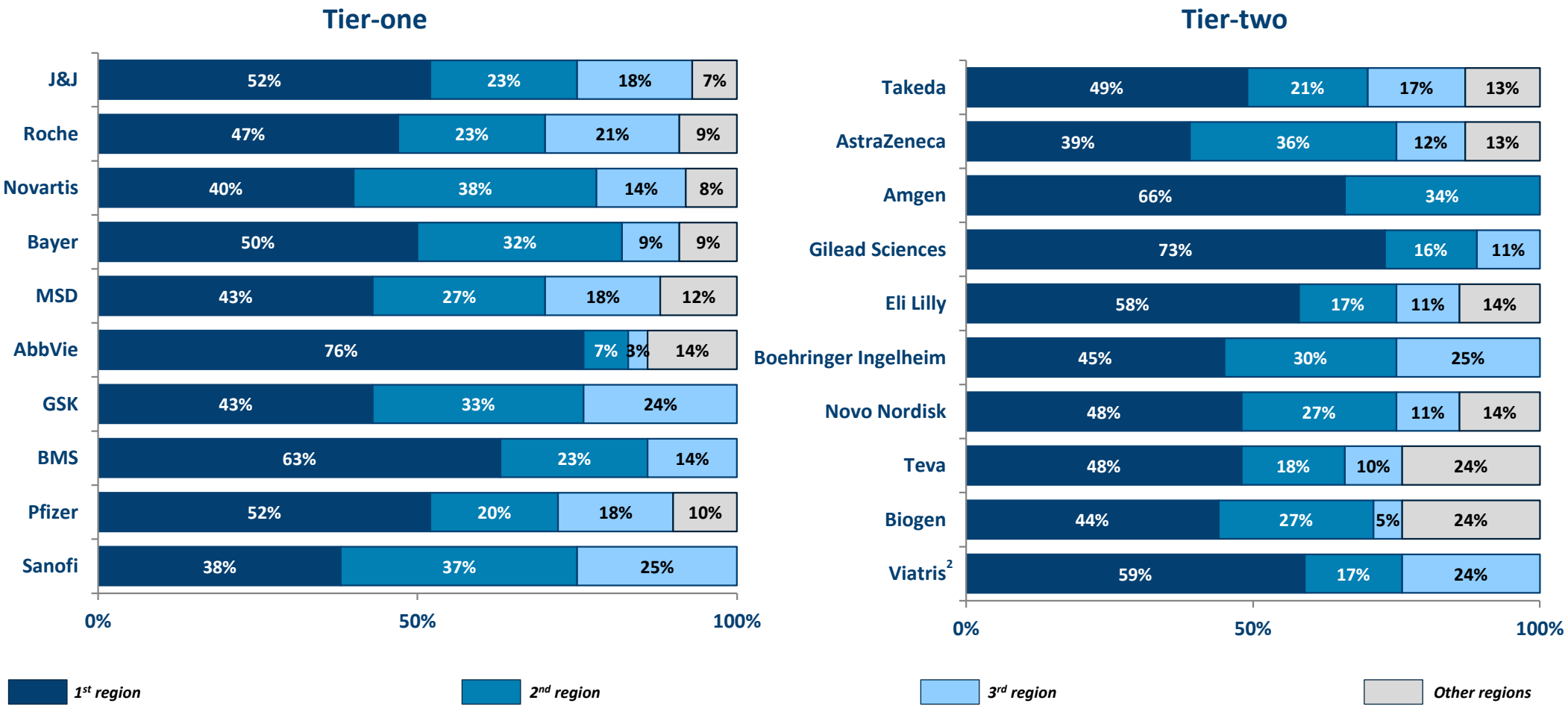


Sources: Companies annual reports (2020) – Pharmaceutiques (March 2021) – Smart Pharma Consulting analyses

[1] Including Rx-bound drugs but also all other businesses (e.g., consumer healthcare, medical devices, food supplements, animal health) –
[2] Including mature brands business of Pfizer Upjohn merged with Mylan since November 16, 2020

Tier-two pharma companies tend to be less geographically diversified, with most of them generating half of their revenues in a single region

Top 20 pharma companies – All strategic segments – Geographical areas (2020)

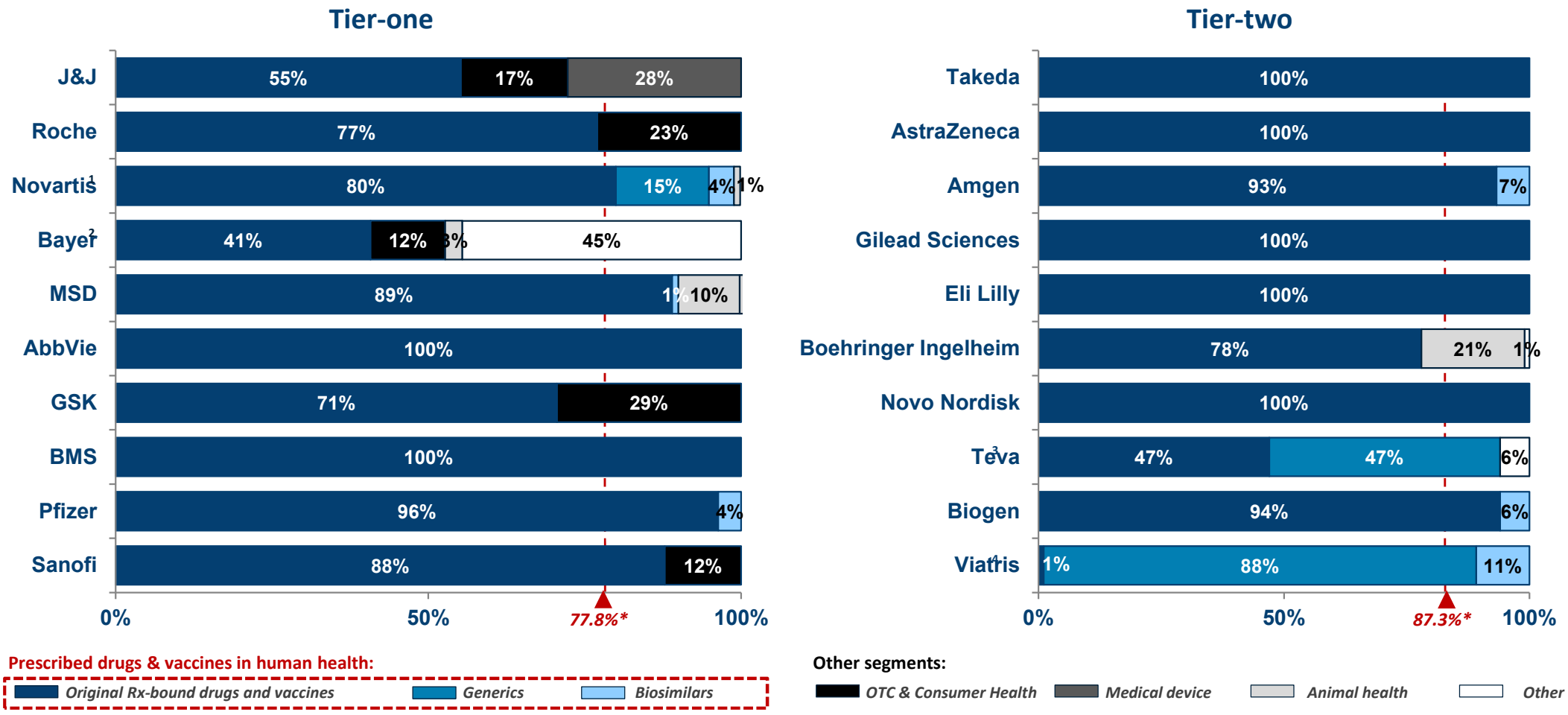


Sources: Companies annual reports (2020) – Smart Pharma Consulting analyses

[1] 1st & 2nd regions include two of the following geographical areas: North America (USA and Canada), Europe or Japan, depending on each company – [2] Including mature brands business of Pfizer Upjohn merged with Mylan since November 16, 2020

In 2020, original Rx-bound drugs and vaccines segments were the main source of revenue for most big pharma companies

Top 20 pharma companies – Strategic segments coverage (2020)



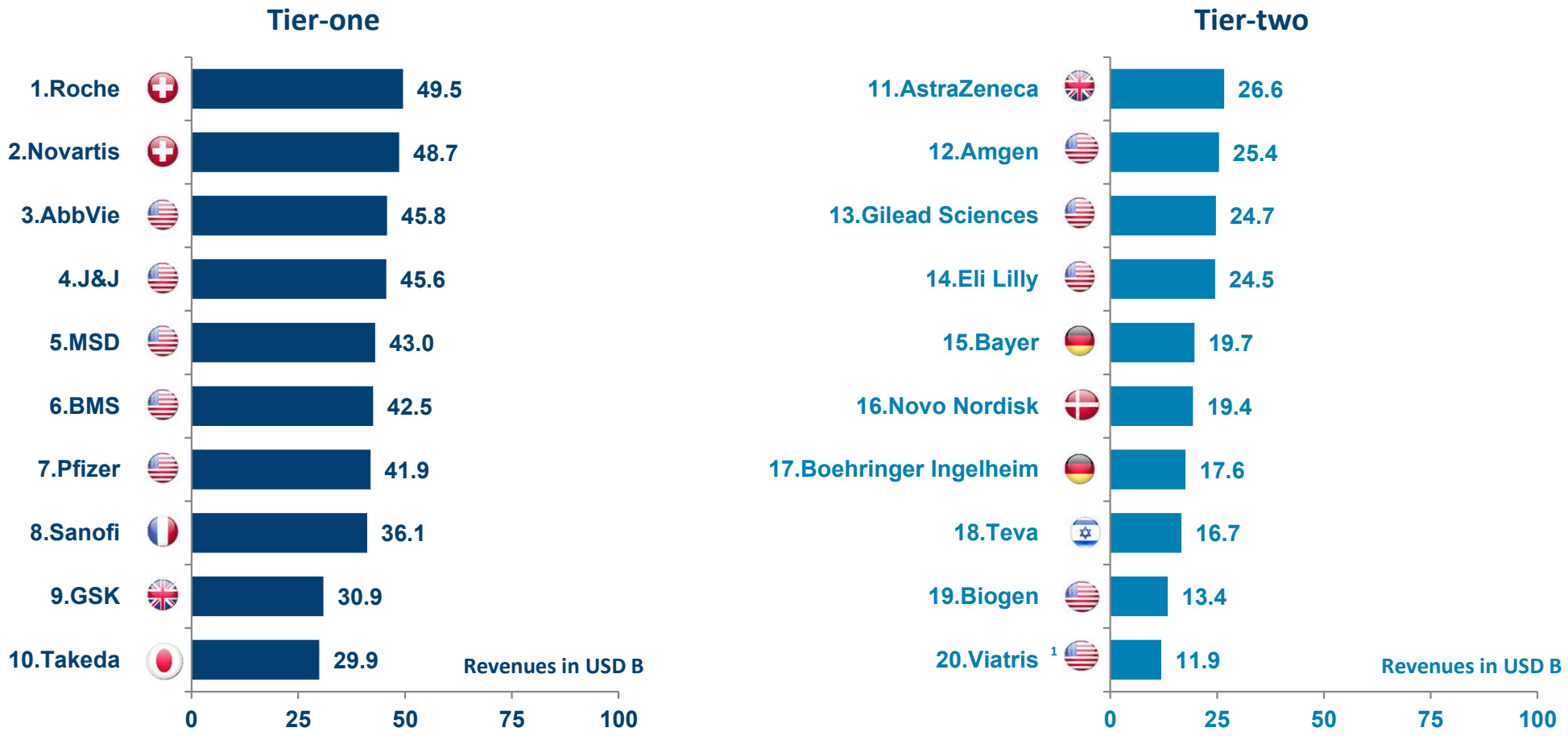
** Weighted average of the prescribed drugs and vaccines in human health*

Sources: Companies annual reports (2020) – Smart Pharma Consulting analyses

[1] Including Sandoz: Novartis division of generics and biosimilars – [2] Other includes Crop Science specialized in chemicals (fungicide, herbicide etc.) – [3] Generics segment including OTC products – [4] Including mature brands business of Pfizer Upjohn merged with Mylan since November 16, 2020

The top 20 pharma companies based on strategic drug & vaccines segments sales counts 10 companies from the USA, 8 from Europe, 1 from Japan and 1 from Israel

Top 20 pharma companies – Drugs & vaccines strategic segments (2020)



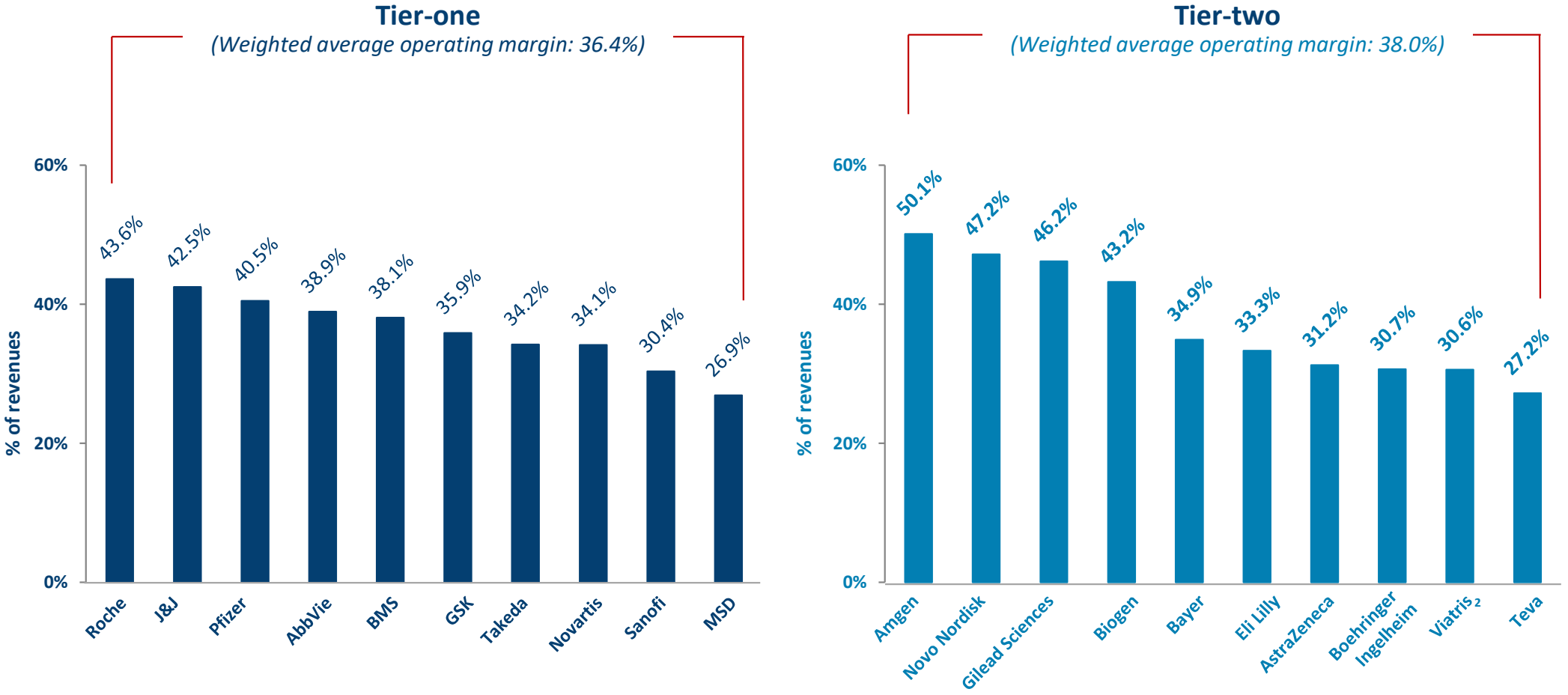
Note: panel of the 20 biggest pharma companies in terms of prescribed sales (drugs & vaccines) in human health in 2020 (excluding diagnostics, medical device, nutrition products and animal heath)

Sources: Companies annual reports (2020) – Smart Pharma Consulting analyses

[1] Including mature brands business of Pfizer Upjohn merged with Mylan since November 16, 2020

The 2020 average operating margin was higher for tier-two companies in comparison to tier-one companies, with a similar dispersion profile

Top 20 pharma companies – EBITDA[1] (2020)



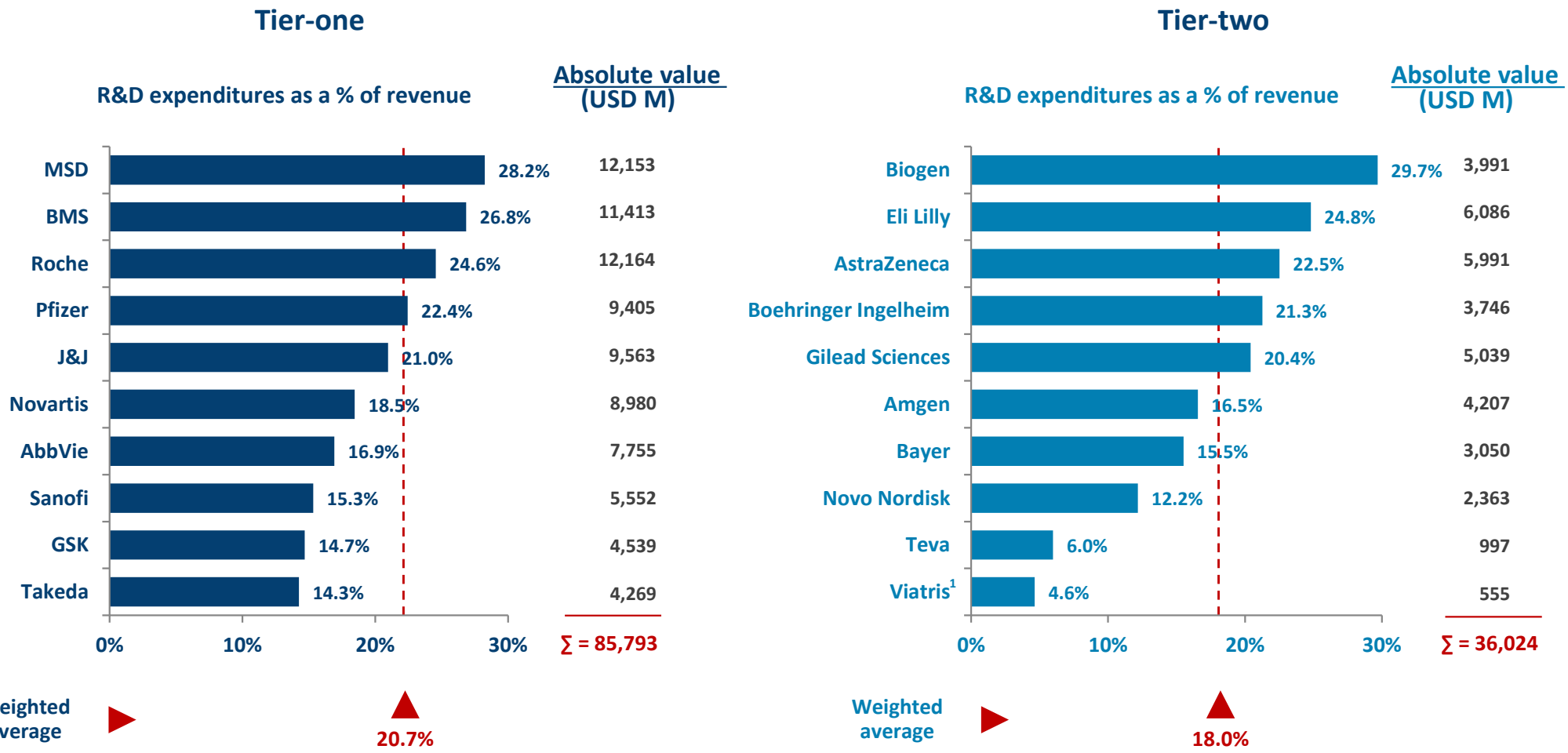
Note: panel of the 20 biggest pharma companies in terms of prescribed sales (drugs & vaccines) in human health in 2020 (excluding diagnostics, medical device, nutrition products and animal heath)

Sources: Companies annual reports (2020) – Smart Pharma Consulting analyses

[1] Earnings before interest, taxes, amortization and depreciation – [2] Including mature brands business of Pfizer Upjohn merged with Mylan since November 16, 2020

Tier-one pharma companies have spent two times more for R&D in absolute value than tier-two pharma companies and ~2.7 points more as a percentage of their revenues

Top 20 pharma companies – R&D expenditures (2020)



Sources: Companies annual reports (2020) – Smart Pharma Consulting analyses

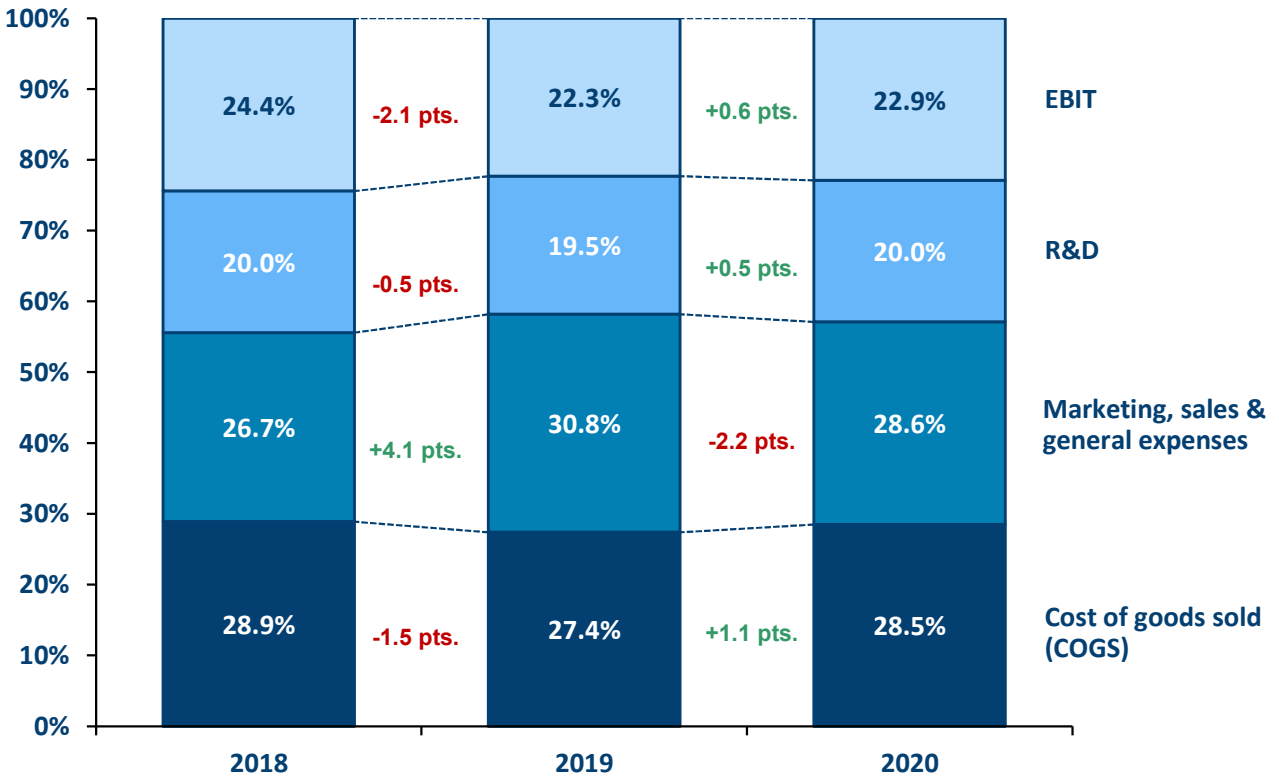
[1] Including mature brands business of Pfizer Upjohn merged with Mylan since November 16, 2020

In 2020, the weighted average operating result (EBIT) of the top 20 pharma companies reached ~23% of revenues, decreasing by 1.5 point of percentage vs. 2018

Top 20 pharma companies – Cost structure (2018 – 2020)

Cost structure as a percentage of total revenues

Weighted average of total revenues



- The analysis of the top 20 pharmaceutical companies in the world shows that their average profitability has slightly decreased by 1.5 point of percentage between 2018 and 2020
- This negative trend can be explained by:
  - The price pressure imposed by healthcare authorities
  - The loss of exclusivity of many blockbusters that has led to the intensification of generics and biosimilars competition
- With an average operating result of ~23% in 2020, the level of performance remains high, which is the Achilles heel of pharmaceutical companies when negotiating price and reimbursement of their drugs with governments and payers
- In 2020, Marketing, sales & general expenses were 43% higher than investment in R&D

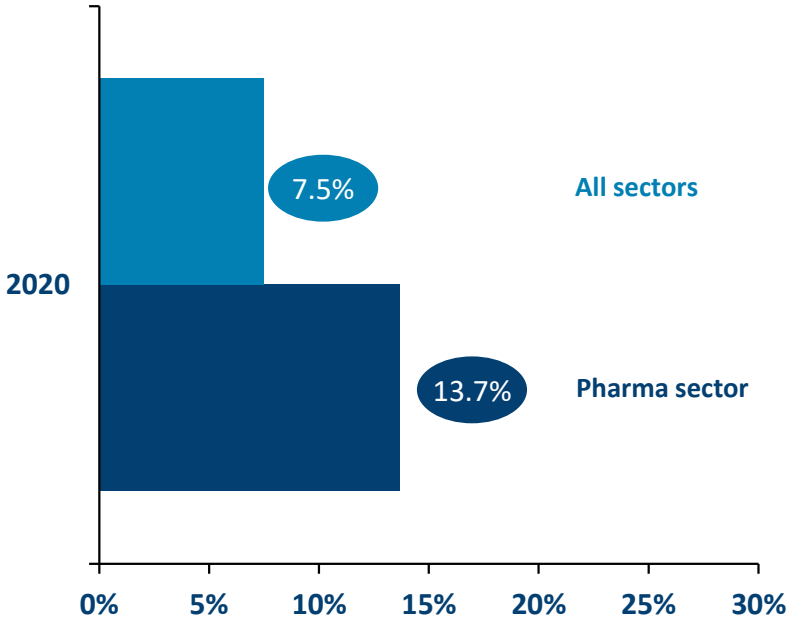
Note: panel of the 20 biggest pharma companies in terms of prescribed sales (drugs & vaccines) in human health in 2020 (excluding diagnostics, medical device, nutrition products and animal heath)

Sources: Companies annual reports (2020) – Smart Pharma Consulting analyses

In 2020, the net profitability of the pharma sector outpaces by ~6.2 points of percentage the average profitability of all sectors

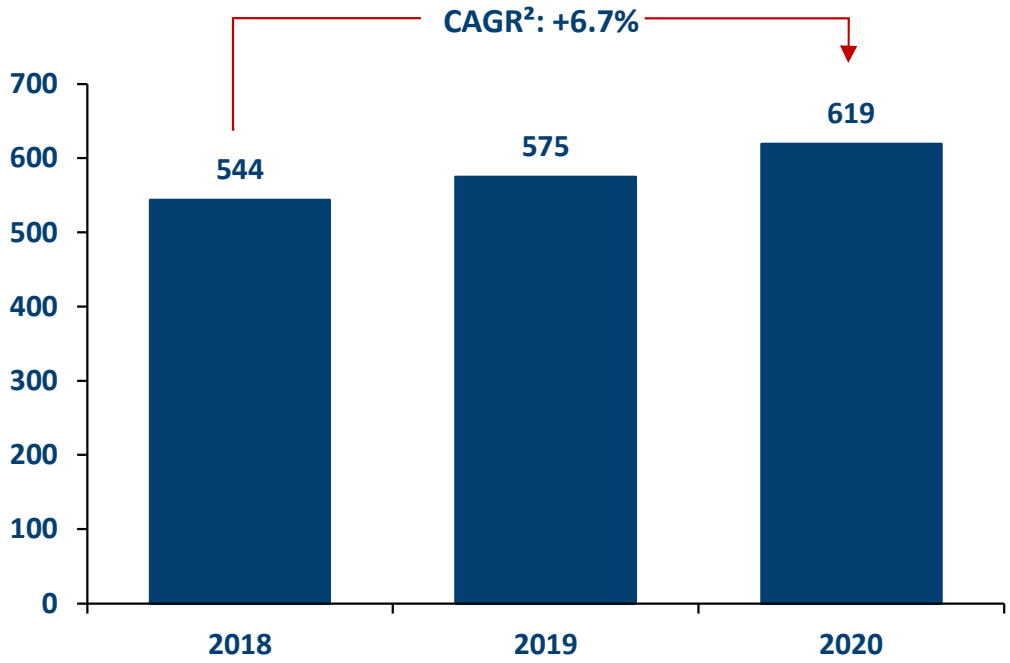
Profitability and sales dynamics of the pharma sector (2018 – 2020)

Net profitability in 2020
(Of top 20 Rx pharma companies and of the global economy)



Return on revenues[1] (weighted average)

Market sales trend
(Of top 20 Rx pharma companies)



Global economic growth[3] - CAGR 2018-2020[4]: -0.9%

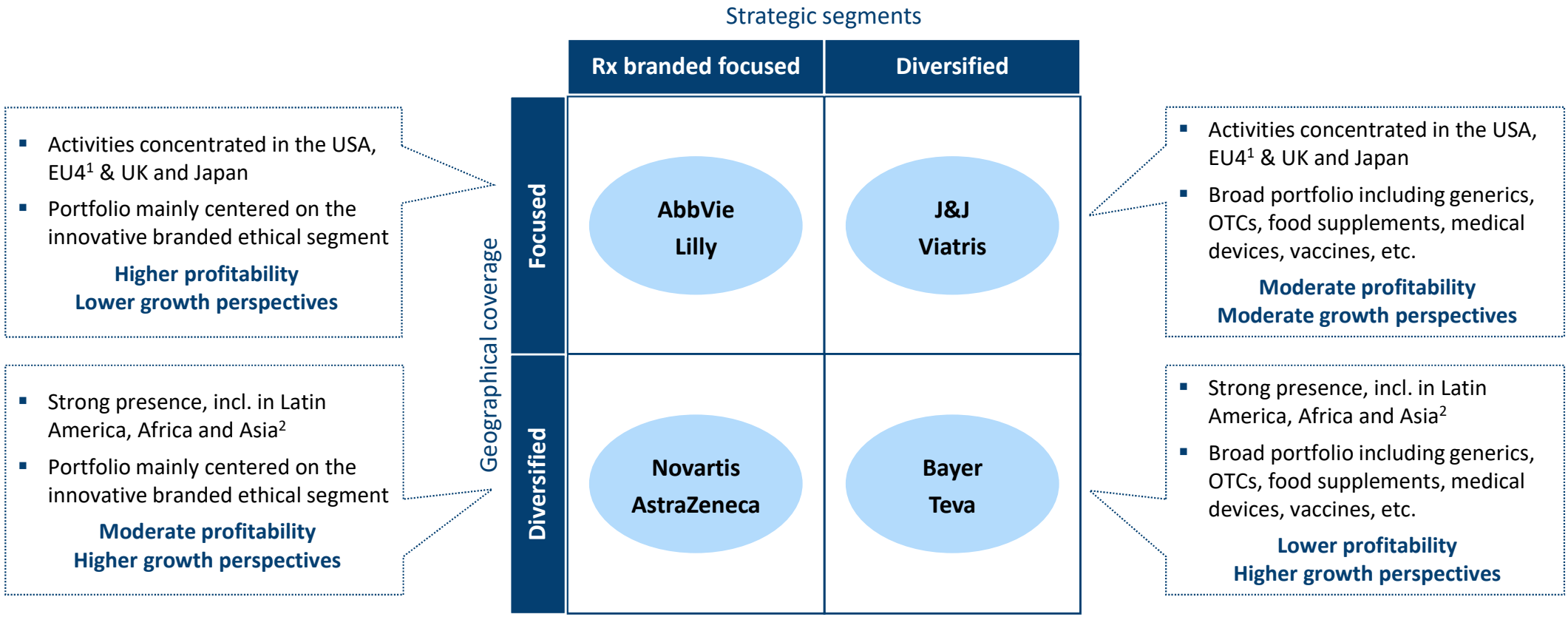
Note: panel of the 20 biggest pharma companies in terms of prescribed sales (drugs & vaccines) in human health in 2020 (excluding diagnostics, medical device, nutrition products and animal heath)

Sources: Companies annual reports (2020) – Forbes: The Global 2000, 2020 – IFM – Smart Pharma Consulting analyses

[1] Return on revenues = net profit / total revenues – [2] Compound annual growth rate – [3] World gross product at market exchange rates – [4] Economic growth percentage in 2019 before Covid-19 crisis was +3.2%

Best performers are focused on innovative Rx-bound drugs and generate an important share of their revenues from the USA, which is the most profitable and dynamic market

Development strategy matrix – Principles



*Note: **Rx branded focused**: Prescribed drugs and vaccines ≥ 75% of total product sales – **Geographically focused**: >50% of sales in a single geographical region (e.g., USA, Europe, Japan, etc.)*

Sources: Smart Pharma Consulting

[1] France, Germany, Italy and Spain – [2] Including segments of the population with lower income and/or from rural areas

Tier-one and tier-two companies are mainly focused on Rx branded segment, but tier-one companies are more geographically diversified

Pharma companies' development strategy (2020)

Tier-one

Strategic segments

Geographical coverage	Rx branded Focused	Diversified
Focused	abbvie, Bristol Myers Squibb, Pfizer	Johnson & Johnson
Diversified	Roche, NOVARTIS, MSD, SANOFI	BAYER, gsk

Tier-two

Strategic segments

Geographical coverage	Rx branded Focused	Diversified
Focused	AMGEN, Lilly, GILEAD	VIATRIS[1]
Diversified	AstraZeneca, Biogen, Boehringer Ingelheim, novo nordisk, Takeda	teva

*Note: **Rx branded focused**: Prescribed drugs and vaccines ≥ 75% of total product sales – **Geographically focused**: >50% of sales in a single geographical region (e.g., USA, Europe, Japan, etc.)*

Sources: Companies annual reports (2020) – Smart Pharma Consulting analyses

[1] *Viatris focused on generics*

Most of the recent M&A operations have been carried out to strengthen pharma companies position on their core strategic segments

Major M&A operations (2016 – 2020)

Acquirer	Acquired (> USD 2.0 B)	Strategic objectives		
		Diversification	Strengthening	Expansion
J&J	▪ **Actelion** *(Pulmonary arterial hypertension)* ▪ **Momenta pharmaceuticals** *(Biotechnology)* ▪ **Auris Health** *(Medical device)* ▪ **Abbott Medical Optics** *(Products for dry & irritated eyes)*		✓ ✓ ✓	 ✓ ✓
Roche	▪ **Sparks Therapeutics** *(Gene therapies)*	✓		
Novartis	▪ **Advanced Accelerator Applications** *(Oncology)* ▪ **AveXis** *(Gene therapies, rare diseases)* ▪ **Endocyte** *(Cancer and inflammatory diseases)* ▪ **The medicine company** *(Critical care)*		✓ ✓ ✓ ✓	
Bayer	▪ **Monsanto** *(Chemical & agricultural biotechnology)* ▪ **Asklepios Biopharmaceutical** *(Gene therapies for genetic disorders)*	✓	 ✓	
MSD	▪ **Antelliq** *(Animal health)*		✓	
Abbvie	▪ **Stemcentrx** *(Oncology)* ▪ **Allergan** *(Branded pharmaceuticals)*	 ✓	✓	
GSK	▪ **Tesaro** *(Oncology)* ▪ **Stiefel** *(Dermatology)*	 ✓	✓	
BMS	▪ **IFM Therapeutics** *(Cancer immunotherapies)* ▪ **Celgene** *(Oncology)* ▪ **MyoKardia** *(Rare cardiovascular disease)*	 ✓	✓ ✓ ✓	

Acquirer	Acquired (> USD 2.0 B)	Strategic objectives		
		Diversification	Strengthening	Expansion
Pfizer	▪ **Medivation** *(Oncology)* ▪ **Anacor** *(Anti-inflammatory)* ▪ **ArrayBiopharma** *(Oncology)*	✓	✓ ✓	
Sanofi	▪ **Boehringer Ingelheim** *(Consumer healthcare business of the company)* ▪ **Bioverativ** *(Rare blood disorders)* ▪ **Ablynx** *(Immunotherapies)* ▪ **Principia BioPharma** *(Oral therapies in immunology & oncology)* ▪ **Synthorx** *(Biotechnology)*	 ✓	✓ ✓ ✓ ✓	
Takeda	▪ **Ariad Pharmaceuticals** *(Oncology)* ▪ **Shire** *(Rare diseases, US-based)*		✓ ✓	 ✓
AstraZeneca	▪ **Acerta Pharma** *(Cancer and autoimmune diseases)* ▪ **Alexion Pharmaceuticals** *(Rare disease, US-based)*		✓ ✓	
Amgen	▪ **Otezla** *(Dermatology)*		✓	
Gilead Sciences	▪ **Kite Pharma** *(Cancer immunotherapies)* ▪ **Forty Seven** *(Cancer immunotherapies)* ▪ **Immunomedics** *(Cancer treatment)*		✓ ✓ ✓	
Eli Lilly	▪ **Loxo Oncology** *(Oncology)*		✓	
Boehringer Ingelheim	▪ **Merial** *(Animal health business of Sanofi)*		✓	
Teva	▪ **Actavis Generics** *(Allergan generics)* ▪ **Rimsa** *(Latin America)*		✓	 ✓
Viatris	▪ **Meda** *(OTC, Emerging markets)* ▪ **Upjohn** *(Pfizer's established medicines)*	✓	 ✓	✓

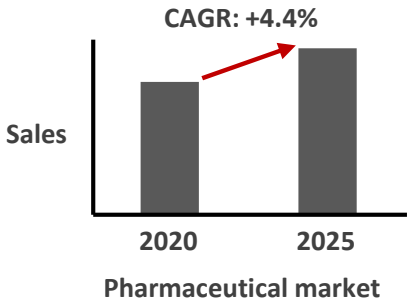
Note: Diversification means entering new strategic segments/balancing minor segments – Strengthening means reinforcing major strategic segments – Expansion means geographical coverage

Sources: Companies annual reports (2020) – Smart Pharma Consulting analyses

The global pharmaceutical market should keep on growing at a pace of 4.4% p.a. by 2025, but pharma companies' profitability would be impacted by strong price cuts

Conclusion (1/2)

Global pharma market
2020-2025 perspectives



The global pharma market should reach USD 1,619 B in 2025, representing a +4.4% CAGR over the 2020-2025 period

- North America should continue to weigh for 43% of the global pharma market in value and should generate ~80% of the global pharmaceutical market (vs. ~75% in 2020)
- EU4[1] & UK countries should see their weight in the global pharma market drop by 2 points from 14% to 12% due to stringent cost containment measures
- All the business segments will be affected by the pandemics-induced economic crisis, resulting into strong price pressure

Top 20 pharma companies
Performance & Strategies

EBITDA[2]	37% of sales
EBIT[3]	~23% of sales
R&D	~20% of sales

Strategic segments

Geographical coverage	Rx branded focused	Diversified
Focused	abbvie, AMGEN, Bristol Myers Squibb, Lilly, Pfizer, GILEAD	Johnson & Johnson, VIATRIS
Diversified	AstraZeneca, Biogen, Boehringer Ingelheim, novo nordisk, Roche, NOVARTIS, MSD, SANOFI, Takeda	BAYER, teva, gsk

Sources: Smart Pharma Consulting

[1] France, Germany, Italy and Spain – [2] Earnings before interest, taxes, amortization and depreciation – [3] Earnings before interest and taxes

To improve their performance, pharma companies tend to refocus on therapeutic areas with high potential for growth (e.g., rare diseases, oncology, gene and cellular therapies)

Conclusion (2/2)

- In recent years, mega-deals aiming at increasing pharma companies' size and/or strengthening their economies of scale have come to an end
- Pharma companies rather seek to refocus their assets on secondary-care therapeutic areas with high potential for growth:
  - Rare diseases (e.g., acquisition of Shire by Takeda or of Alexion by AstraZeneca, etc.)
  - Oncology (e.g., merger of Celgene and BMS, acquisition of Stemcentrx by AbbVie and partnership of the latter with Genmab, etc.)
  - Gene and cellular therapies (e.g., partnership of Biogen with Sangamo, etc.)
- Top-pharma companies increasingly seek to acquire promising early-stage development bio-techs with the aim to add complementary platforms and technologies…
- … and tend to foster their collaborations with other pharma companies, notably in the Covid-19 context (e.g., Pfizer / BioNTech, GSK / Sanofi, AstraZeneca / Oxford University, etc.)
- Conversely, divestments are made in other areas (e.g., separation by Pfizer of its Upjohn mature brands division merged with Mylan into the new Viatris, rethinking by Sanofi of its core activities, sale by GSK of its Consumer Healthcare division[1])

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Pharma Strategy Crafting

A Practical Guide for Pharma Companies

POSITION PAPER

March 2018

Strategy sets long term direction and scope of a company to achieve a competitive advantage through proper capability building and resources allocation

Strategy definition

- Strategy is a consistent, unifying and integrative assembly of decisions defined to achieve the ambition and the corresponding objectives set by a company, in the most effective, efficient and less risky manner
- It attempts to achieve the long-term sustainable advantages the company can maintain in its businesses, by responding to the present and future opportunities and threats in the market segments it covers, through the optimal management of its strengths and weaknesses
- It is concerned with the definition of optimal capabilities and resources configuration to take advantage, better than competition, of the evolving customers needs and wants
- It covers the responsibilities and actions required from all hierarchical levels (corporate, business, operational) in the firm
- It defines the nature of the economic and non-economic contributions the company intends to make to its stakeholders

"A successful strategy meets or, better, exceeds customers, employees and shareholders expectations to raise their respective preference for the company, its products and associated services"

Sources: Smart Pharma Consulting

Corporate strategy selects the strategic segments, business strategy creates a competitive advantage and operational strategy defines the appropriate organization

Multi-level Strategies

1 Corporate strategy — In which strategic segment should we be in?

2 Business strategy — How should we compete in the selected segments?

3 Operational strategy — Which organizational configuration do we need?

How do we generate profits?

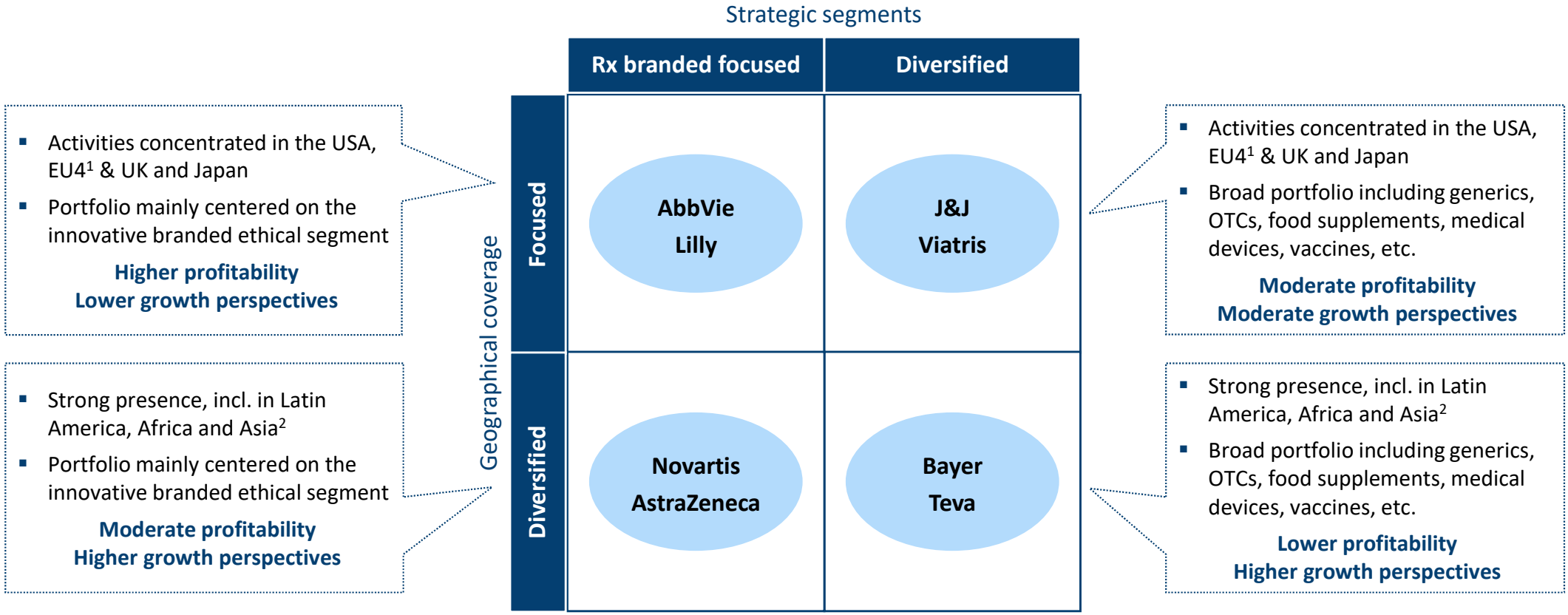
- Corporate strategy defines the purpose and the scope in which a company competes or should compete and how value will be added to its different businesses
- Business or competitive strategy is concerned with how to compete successfully within particular strategic segments (e.g., original brands, generics, OTCs, medical device, etc.)
- Strategic segments correspond to companies within an industry which are subject to the same critical success factors which are addressed by a given business unit of the company
- Operational strategy determines the activities, capabilities, processes, structure[1], culture and resources needed to effectively support the corporate- and business-level strategies

Source: Smart Pharma Consulting, adapted after G. Johnson et al., 2008

[1] Including the headcounts and the organigramme

Concentration strategies use to generate higher profitability ratios, whereas diversification and geographical expansion strategies provide higher profit growth

Development strategy matrix: Principles

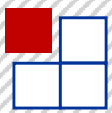
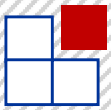
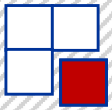
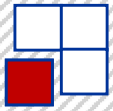


Sources: Smart Pharma Consulting

[1] France, Germany, Italy and Spain – [2] Including segments of the population with lower income and/or from rural areas

Even if there is no one-size-fits-all winning strategy, a "global healthcare" strategy seems to be a reasonable long-term default option for Big Pharma companies

Development strategy matrix: Features

Strategic development directions	Sales evolution*	Profitability evolution*	Profit evolution*	Recommendations
 Local ethicals	+	- -	+ +	▪ Strategy showing the highest return on investment ▪ Moderately risky if portfolio of breakthrough innovations ▪ Reservoir of sales growth on the lower priced me-too markets (e.g., Amgen entering the biosimilars market)
 Local healthcare	+ +	- -	+ +	▪ Diversification in new strategic segments should be carried out preferably through acquisitions to save time, take advantage of brand equity (especially in the OTC market), know-how, and access to clients
 Global healthcare	+ + +	- - -	+ + +	▪ Portfolio diversification is best implemented through the acquisition of global players (e.g., Pfizer and Hospira) ▪ Geographical expansion is preferable through the acquisition of local leaders (e.g., Teva and Rimsa)
 Global ethicals	+ +	- - -	+ +	▪ Geographical expansion implies an "aggressive" direct or indirect presence (through licensing-out deals) ▪ Social "expansion" requires a tiered pricing policy or low-priced products to access low-income patients

** + + + Highly positive* *++ Moderately positive* *+ Slightly positive* *- - - Highly negative* *- - Moderately negative* *- Slightly negative*

Sources: Smart Pharma Consulting

Tier-one and tier-two companies are mainly focused on Rx branded segment, but tier-one companies are more geographically diversified

Pharma companies' development strategy (2020)

Tier-one

Strategic segments

Geographical coverage	Rx branded Focused	Diversified
Focused	abbvie, Bristol Myers Squibb, Pfizer	Johnson & Johnson
Diversified	Roche, NOVARTIS, MSD, SANOFI	BAYER, gsk

Tier-two

Strategic segments

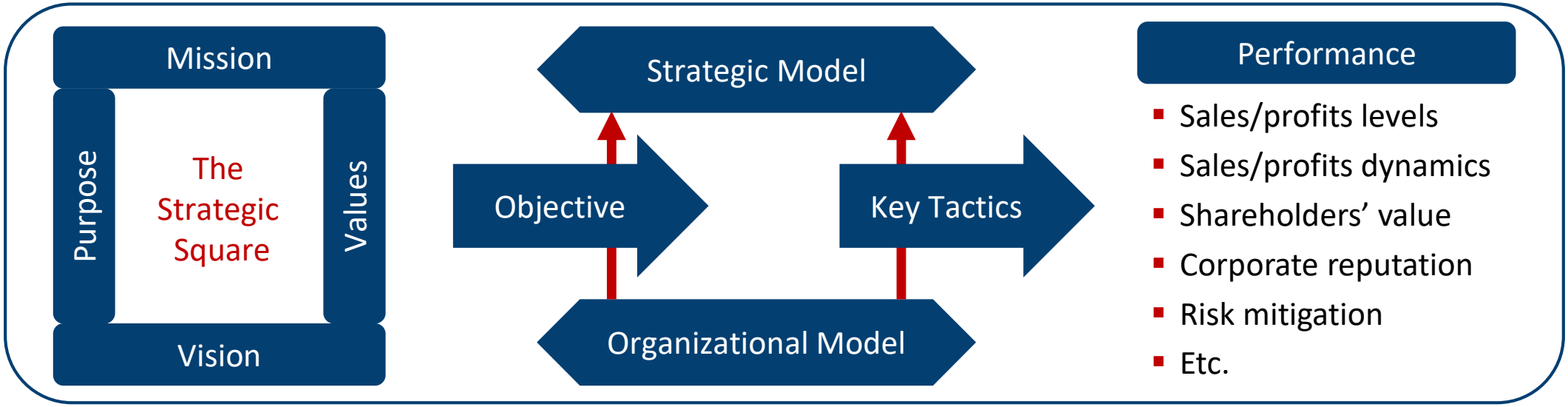
Geographical coverage	Rx branded Focused	Diversified
Focused	AMGEN, Lilly, GILEAD	VIATRIS[1]
Diversified	AstraZeneca, Biogen, Boehringer Ingelheim, novo nordisk, Takeda	teva

*Note: **Rx branded focused**: Prescribed drugs and vaccines ≥ 75% of total product sales – **Geographically focused**: >50% of sales in a single geographical region (e.g., USA, Europe, Japan, etc.)*

Sources: Companies annual reports (2020) – Smart Pharma Consulting analyses

This strategic process should help pharma companies translate their "Strategic Square" into the right strategy and tactics supported by the right organization

Methodology: Smart strategic process



- Purpose: Why do we exit?
- Vision: What do we aspire to become?
- Mission: What do we do and for whom?
- Values: What do we believe in and how do we behave?
- Objective: What do we want to achieve?
- Strategic model: Where do we want to play and how are we going to play to win?
- Organizational model: What are the activities/capabilities, the processes, the structure[1] and culture we need to put in place to execute the strategy?
- Key tactics: How are we going to execute the strategy?
- Performance: What have we quantitatively and qualitatively[2] achieved and what are the gaps and why, if any?

Sources: Smart Pharma Consulting

[1] Including the headcounts and the organigramme – [2] Such as corporate reputation (see our position paper on our website)

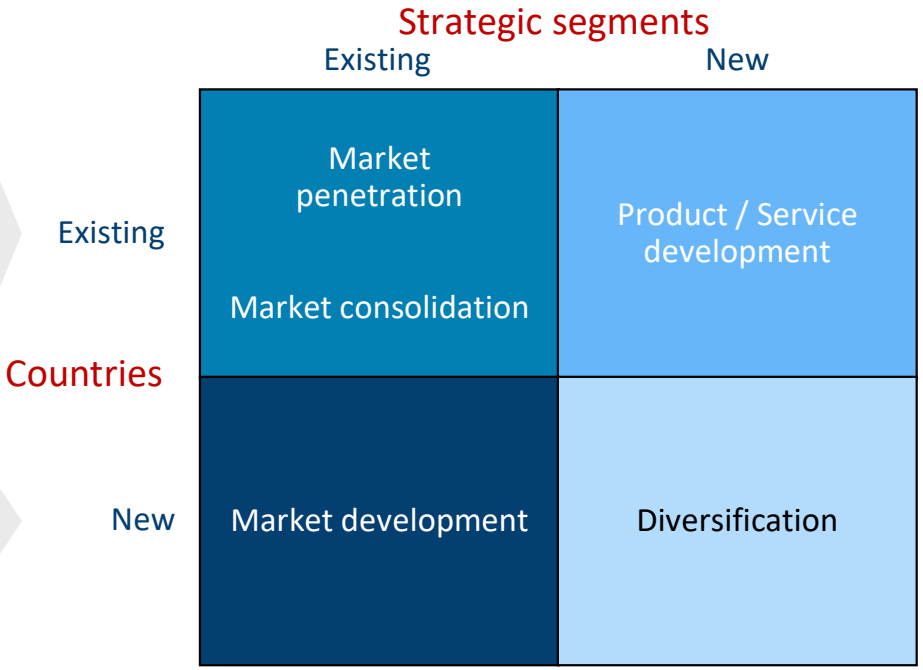
Four basic corporate strategies can be adopted by pharma companies to secure a long-term and profitable growth, in line with their shareholders expectations

Corporate strategy crafting (1/2)

- The Development strategy matrix is a practical tool to select the most attractive sources of growth
- Diversification is in general the riskiest option because the farthest from the company core competencies
- However, playing in diverse strategic segments with different characteristics can enable to mitigate business risks

- Increase market share on existing strategic segments by modifying existing products, developing, acquiring or in-licensing new products

- Enter new geographical areas with existing product portfolio directly, through partnership with licensees, distributors or through acquisitions



- Enter new strategic segments (e.g., OTCs, generics, biosimilars, e-health solutions, homecare services) in countries currently covered

- Diversify by entering new strategic segments in countries not yet covered

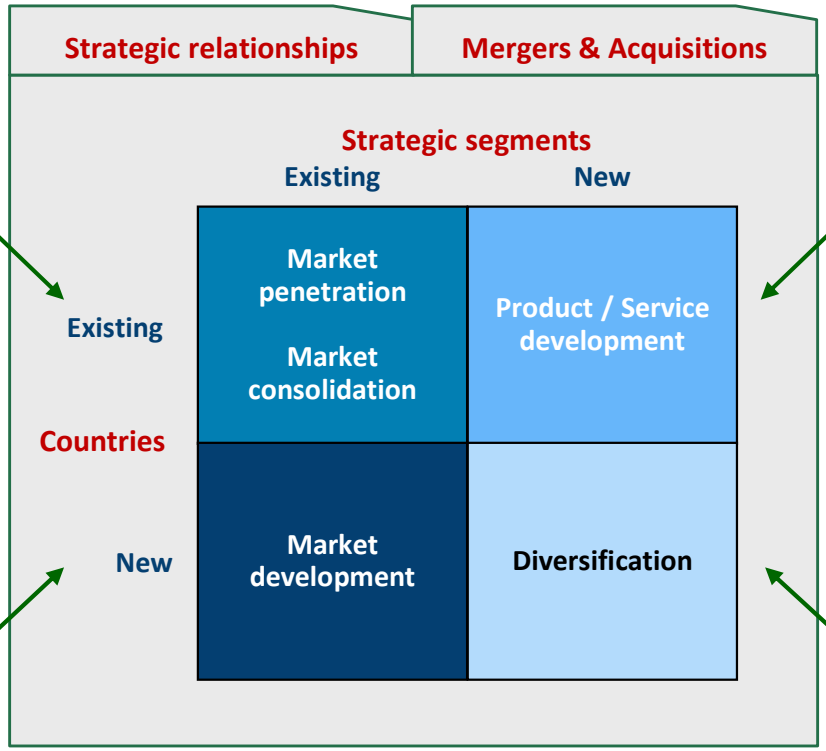
"The purpose of corporate strategy is to decide where to play and how to play to succeed"

Source: Adapted by Smart Pharma Consulting from H. Ansoff

The corporate strategy can be implemented by pharma companies organically or inorganically, through strategic partnerships, mergers or acquistions[1]

Corporate strategy crafting (2/2)

- Collaboration with a third party (e.g., pharma company and/or CSO[2]) to increase share of contacts and/or share of voice
- Co-marketing or co-promotion agreements to increase resources to market a product
- Acquisition of competitors to reduce or better manage competitive intensity



- Entry on new strategic segments can be carried out through in-house R&D and/or through:
  - Horizontal integration (e.g., OTC, generics, homecare services)
  - Downward integration (e.g., distribution business)
  - Upward integration (e.g., toll manufacturing business)
  - Outsourcing to a CRO[3]
  - Etc.

- Direct market entry by setting up its own subsidiary
- Indirect market entry by licensing-out its product portfolio to a third party or with a CSO
- Indirect market entry by acquiring a local player to take advantage of its resources and capabilities

- New strategic segments entry and new geographical coverage can be carried out organically or through acquisition, merger, joint-venture, in-licensing (e.g., with a pharma company) or subcontracting (e.g., with a pharma company, a CSO, a CRO) agreements

Source: Adapted by Smart Pharma Consulting from H. Ansoff

[1] See our position paper "Best-in-Class Pharma BD&L" available on our website – [2] Contract sales organization – [3] Contract research organization

To craft a successful strategy, pharma companies must evaluate their business environment to identify where their competitive advantage will be the strongest

Business strategy crafting (1/3)

- To create a successful business strategy, pharma companies should carefully evaluate the strategic segment landscape they play in by:

Customers

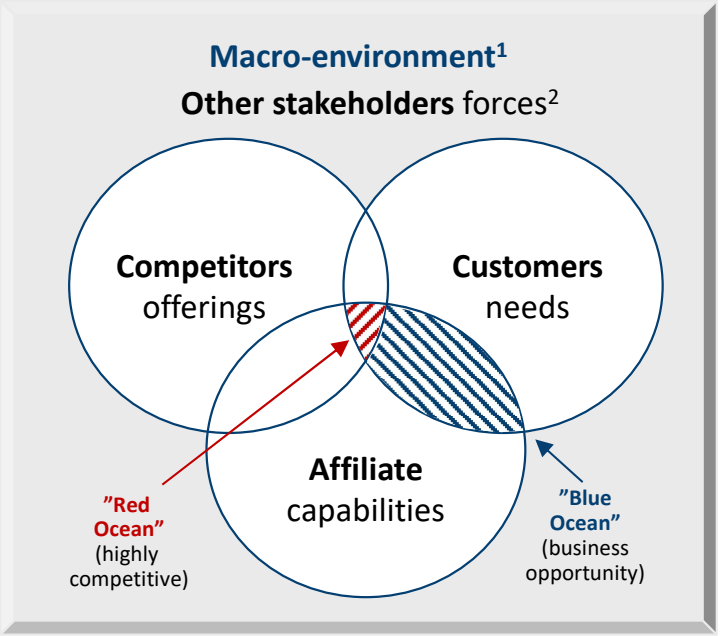
- Developing a detailed understanding of customer needs / wants
- Segmenting and targeting customers
- Identifying unique ways of creating superior value for customers

Competitors

- Analyzing competitors' current strategies, their impact, and predicting how they might change in the future

Company

- Providing products and services fulfilling better than competition, tangible and intangible customers needs / wants
- Finding strategic spaces or “blue oceans” that align the company’s capabilities with customer unmet needs and…
- … raising barriers to prevent competitors to enter



“Don’t just give customers excellent services, make sure they realize how great is the service they get”

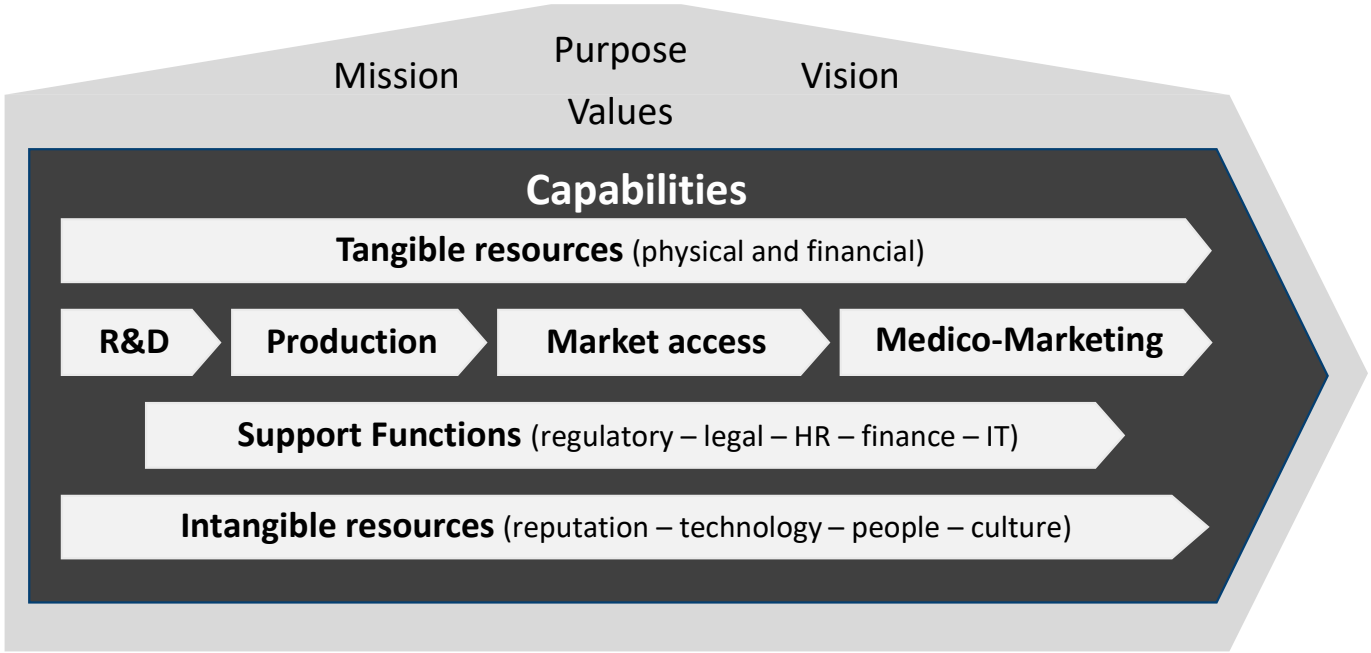
Source: Adapted after C. Kim et R. Mauborgne 2005 - D.J. Collis , HBR April 2008 - Smart Pharma Consulting

[1] Political/legal, Economic, socio-demographic and technological factors –
[2] Including Suppliers, new entrants, substitutes, complements

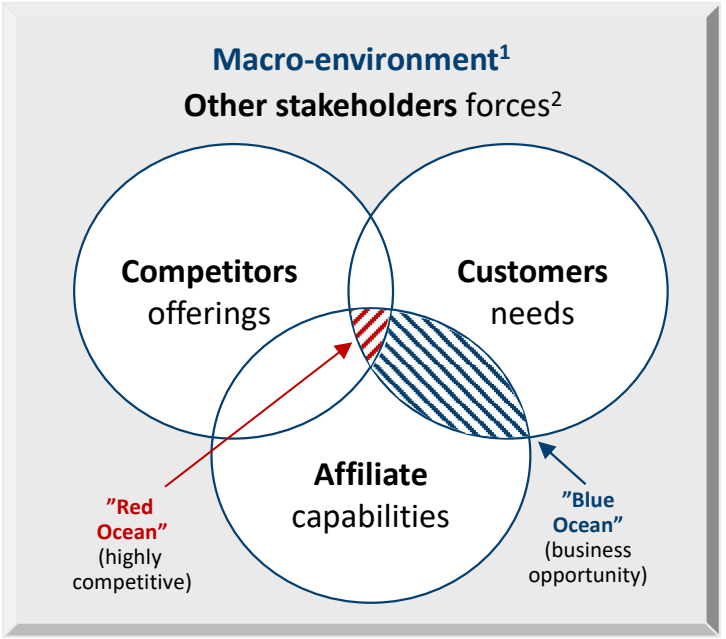
The business strategy must offer a value proposition that meets, better than competition, customers needs and wants, by mobilizing capabilities and resources

Business strategy crafting (2/3)

Business model



Strategic segments
(e.g., Rx-bound brands, generics, OTCs, devices, etc.)



Strengths & Weaknesses
(Competitive advantage)

Opportunities & Threats
(Attractiveness & Key success factors)

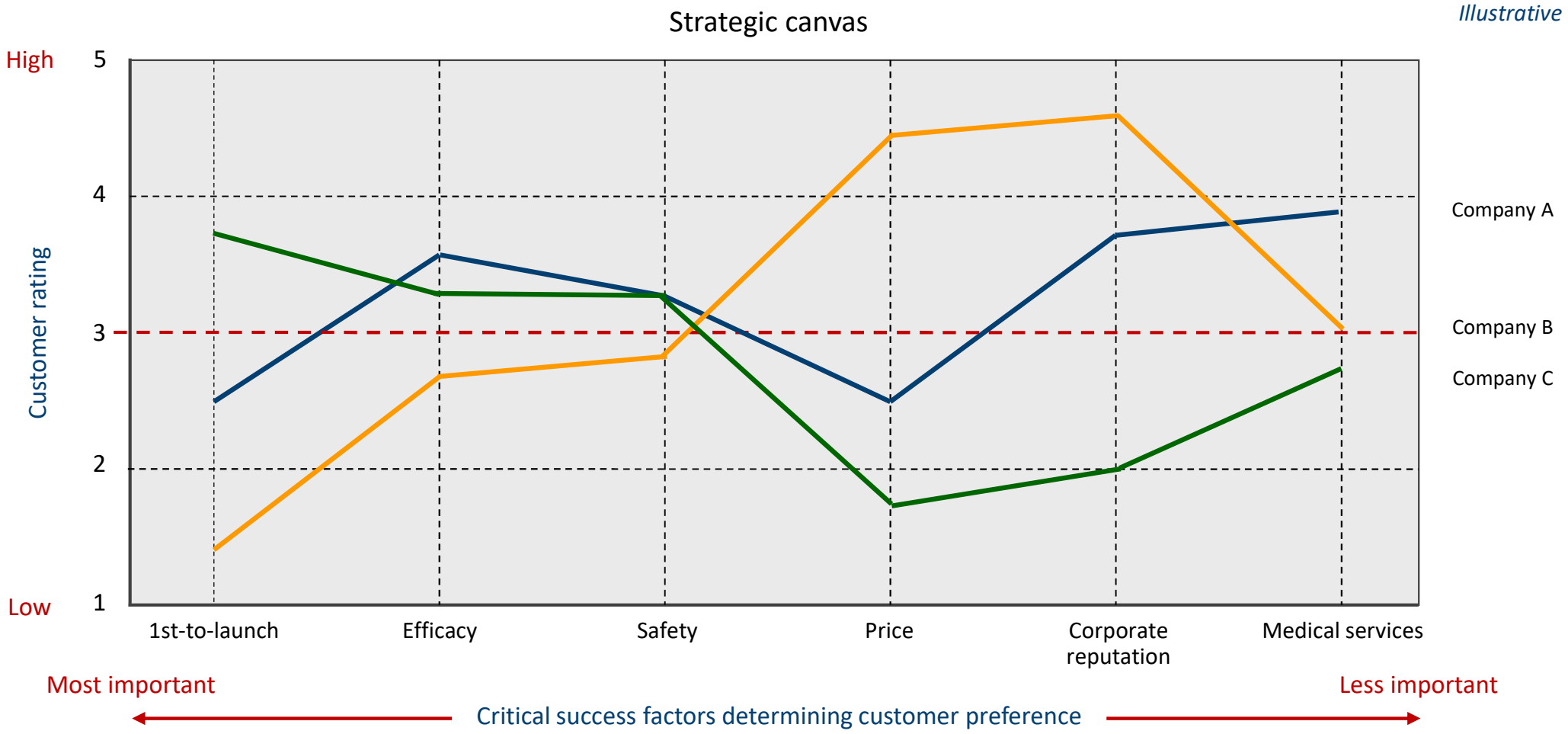
Objectives & Strategic priorities

Sources: Adapted by Smart Pharma Consulting from C. Kim et al. and from D.J. Collis, HBR April 2008

[1] Political / legal, economic, socio-demographic and technological factors –
[2] Including suppliers, new entrants, substitutes, complements

The strategic canvas can help identify strategic gaps which represent opportunities that are not being fully exploited by competition

Business strategy crafting (3/3)

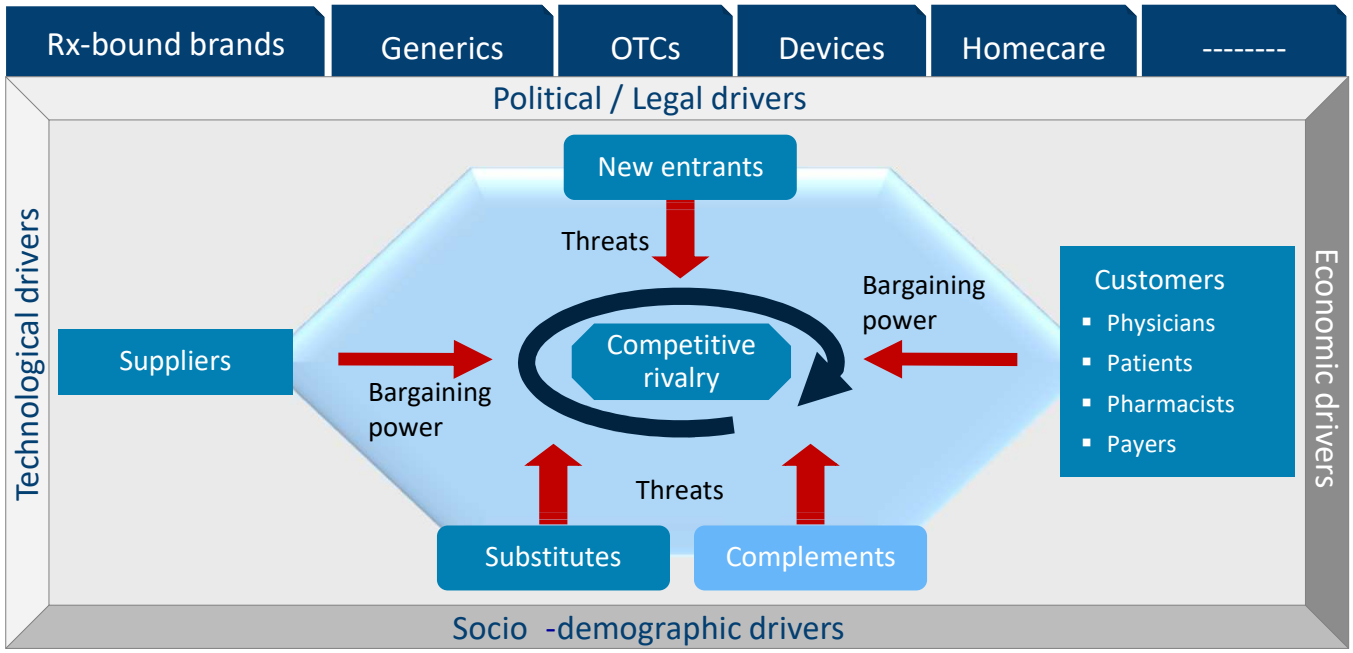


Source: Adapted after C. Kim et R. Mauborgne 2005

[1] Political / legal, economic, socio-demographic and technological factors – [2] Including suppliers, new entrants, substitutes, complements

Business opportunities by strategic segment (e.g., original Rx-bound drugs, generics, OTCs, etc.) can be assessed through PEST analysis and the "5+1 forces framework"

Business strategy – Attractiveness of strategic segments (1/3)



Analysis of Political / Legal – Economic – Socio-demographic – Technological drivers, called PEST analysis, and then the "5+1 forces Framework" will help pharma companies set an appropriate strategy per strategic segment

- The four key macro-environmental drivers:
  - Political / Legal
  - Economy
  - Socio-demography
  - Technology
- The five key micro-environment drivers:
  - Suppliers
  - Customers
  - New entrants
  - Substitutes
  - Competitive rivalry
- … plus, the "Complements" influence the attractiveness of each strategic segment and impact the success or the failure of pharma companies' strategy
- These key drivers for change can be used to build scenarios of possible futures, especially by adopting the "what if" technique

"Porter's five forces" *"Additional force"*

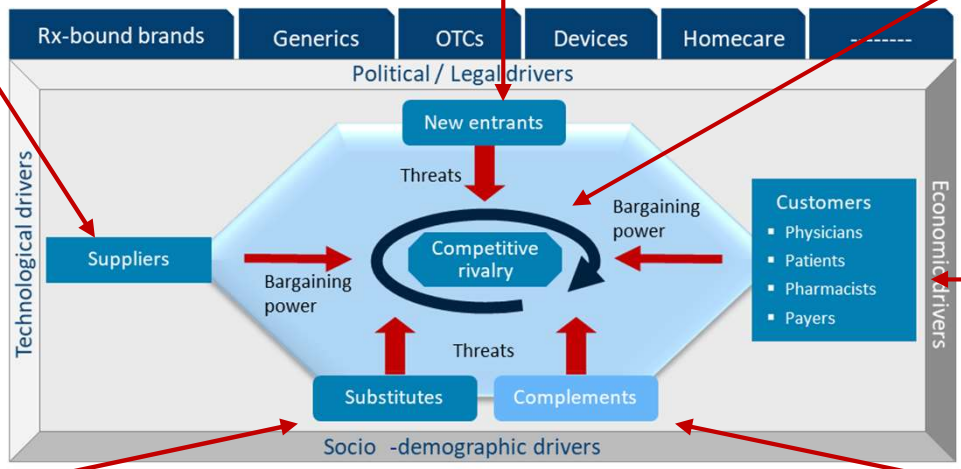
Source: Adapted by Smart Pharma Consulting from M. Porter 2008

The "5+1 forces framework" is particularly helpful to identify the key stakeholders that will influence the long-term structure and profitability of strategic segments

Business strategy – Attractiveness of strategic segments (2/3)

- **Most R&D-based pharma companies** being vertically integrated, threats from suppliers are rarely an issue
- **However, on the generics segment,** API[1] or DDS[2] suppliers may have a stronger bargaining power

- **New entrants** (e.g., innovative products, "me-too" products, generic products) **are likely to modify competitive intensity and therefore pharma companies' performance**



- **Competitive rivalry intensifies with:**
  - Price discounting
  - New formulations, indications, products
  - Commoditization
  - Service improvement
  - Promotional costs

- **Higher pressure from groups of customers:**
  - Patient advocacy groups asking for better services
  - Buying groups have increased the distributors' leverage

- **Substitute products or services include:**
  - Alternative therapies
  - Preventive therapies (e.g., vaccination vs. anti-infective drugs)

The "5+1forces framework" allows to determine how strategic segment's profit will be shared between stakeholders, depending on their respective competitive advantage

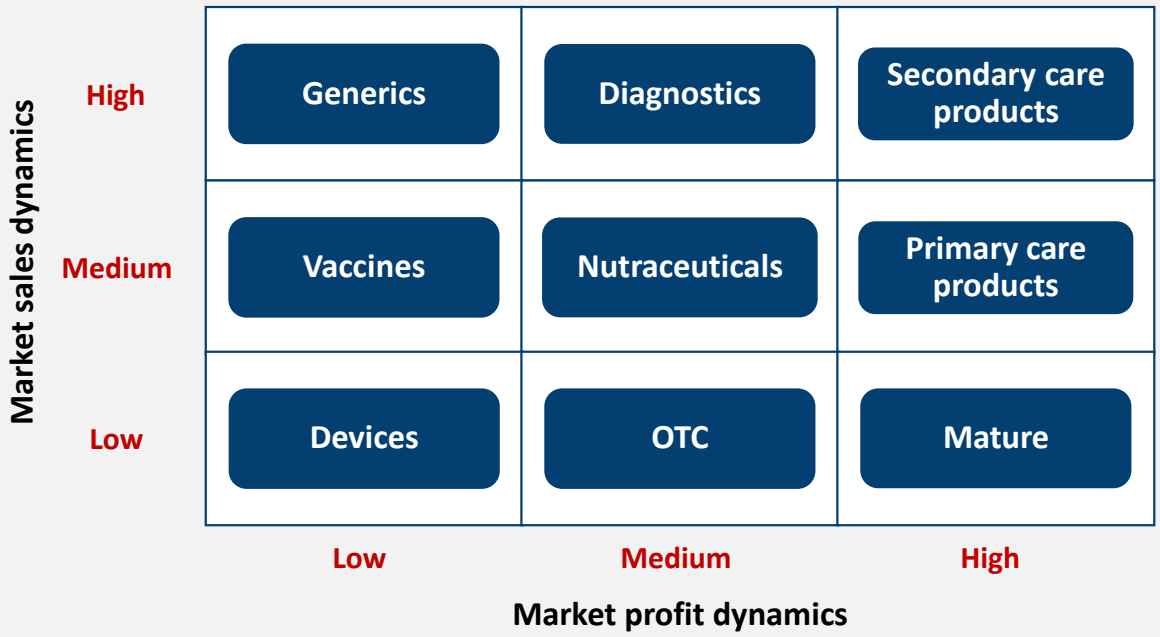
- **Complementary products or services include:**
  - Devices (e.g., BGM[3])
  - Diet food
  - Patient compliance management services

Source: Adapted by Smart Pharma Consulting from M. Porter 2008

[1] Active pharmaceutical ingredients – [2] Drug delivery system – [3] Blood glucose meter

Attractiveness of new strategic segments should be put into a dynamic perspective and potential synergies with existing businesses also be considered

Business strategy – Attractiveness of strategic segments (3/3)



- The attractiveness of a strategic segment should be defined, based on the evolution of economic indicators such as sales and profits
- Additional parameters such as potential synergies with the existing business should also be considered, while evaluating attractiveness of new strategic segments

Sources: Smart Pharma Consulting

Key success factors by strategic segment where business opportunities have been identified are driven from competitive intensity and from customers needs and wants

Business strategy – Key success factors by strategic segment

How do affiliates survive competition?

- Competitive analysis
  - What drives competition?
  - What are the main dimensions of competition?
  - How intense is the competition?
  - How can we obtain a superior competitive position?
  - How can we create customer's preference?

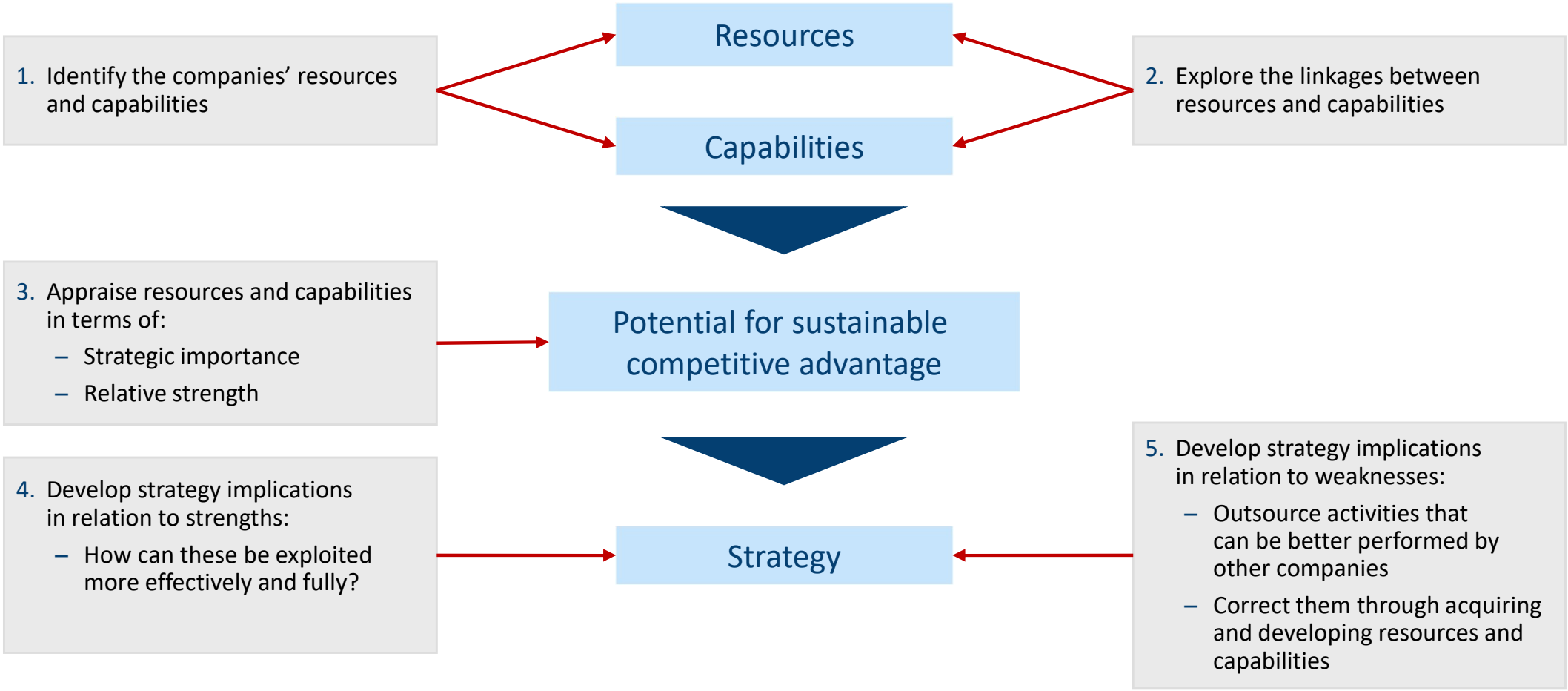
What do customers need and want?

- Demand analysis
  - Who are our customers?
  - What is their respective role? (prescribers, consumers, distributors, payers, influencers, "injectors", etc.)
  - What do they want?
  - What do they need?
  - What are their available alternatives?
  - What does create customers' preference?

Source: Adapted by Smart Pharma Consulting from R. Grant 2008

Systematic appraisal of company's resources and capabilities provides the basis for formulating operational strategy

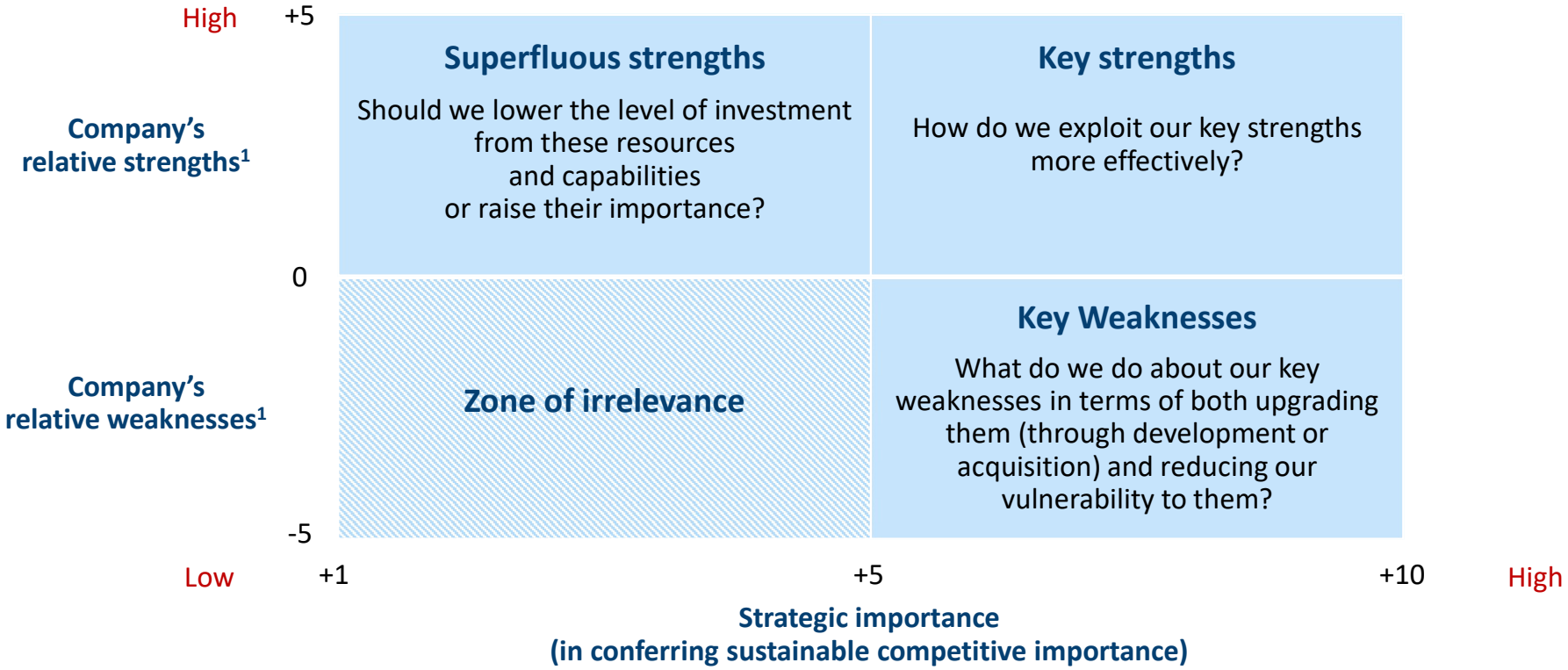
Operational strategy crafting



Source: Adapted by Smart Pharma Consulting from R. Grant 2008

Pharma companies should reinforce resources and capabilities that are critical to establishing a sustainable competitive advantage to generate superior profits

Operational strategy – Resource and capabilities assessment



" Some resources and capabilities are needed to play, but not needed to win"

Source: Adapted by Smart Pharma Consulting from R. Grant 2008

Pharma companies' capabilities can be developed or adjusted internally, as well as externally through outsourcing, strategic alliances or merger and acquisition

Operational strategy – Approaches to capability development

Merger & Acquisition

- Acquiring capabilities should be considered if desired capabilities can only be developed over long periods
- Integrating the acquired capabilities with the acquirer's ones involves major risks such as:
  - Culture clashes
  - Personality clashes
  - Incompatibility of management systems

  resulting in degradation or destruction of the capabilities that were sought

Outsourcing

- Companies can access capabilities (and resources) by borrowing them from other companies through outsourcing arrangements

Internal Development

- Growing capabilities requires that companies replicate them internally…
- … by systematizing the knowledge that underlies capabilities through the formulation of SOPs[1]

Strategic Alliances

- Accessing capabilities through alliances offers a more targeted and cost effective mean than acquisition
- A strategic alliance involves the sharing of resources in pursuit of common goals
- Where both alliance partners are trying to acquire one another's capabilities, the result may well be a "competition for competence" that ultimately destabilizes the relationship

Source: Adapted by Smart Pharma Consulting from R. Grant 2008

[1] Standard operating procedures

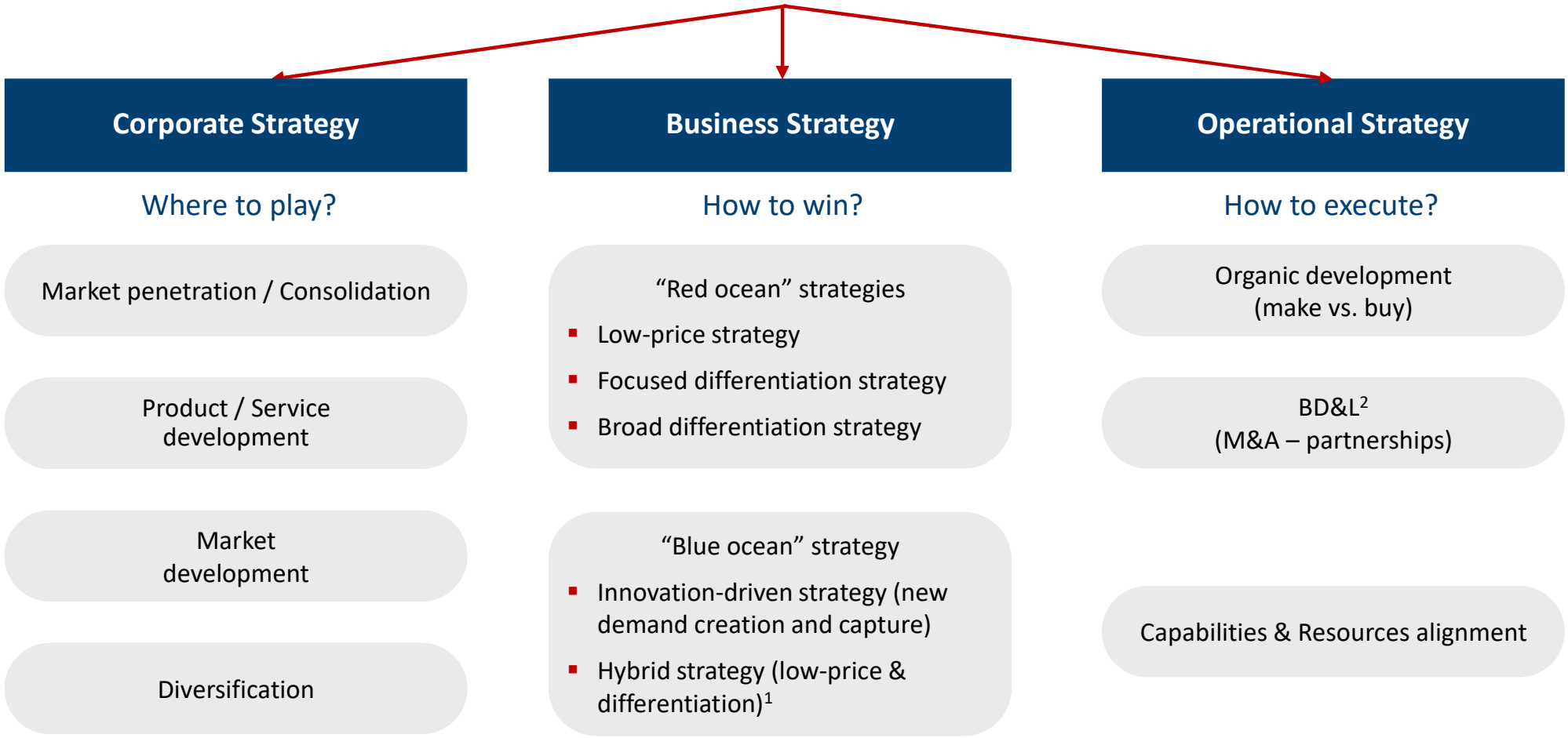
Strategic priorities should be set after capabilities assessment to outperform competitors on key success factors inherent to each targeted strategic segment

Strategic priorities & competitive advantage

Source: Adapted by Smart Pharma Consulting from R. Grant 2008 and D. Waters 2006

The three different strategic levels – corporate, business and operational – must be crafted in a consistent manner to optimize the impact on performance

Multi-level strategic options

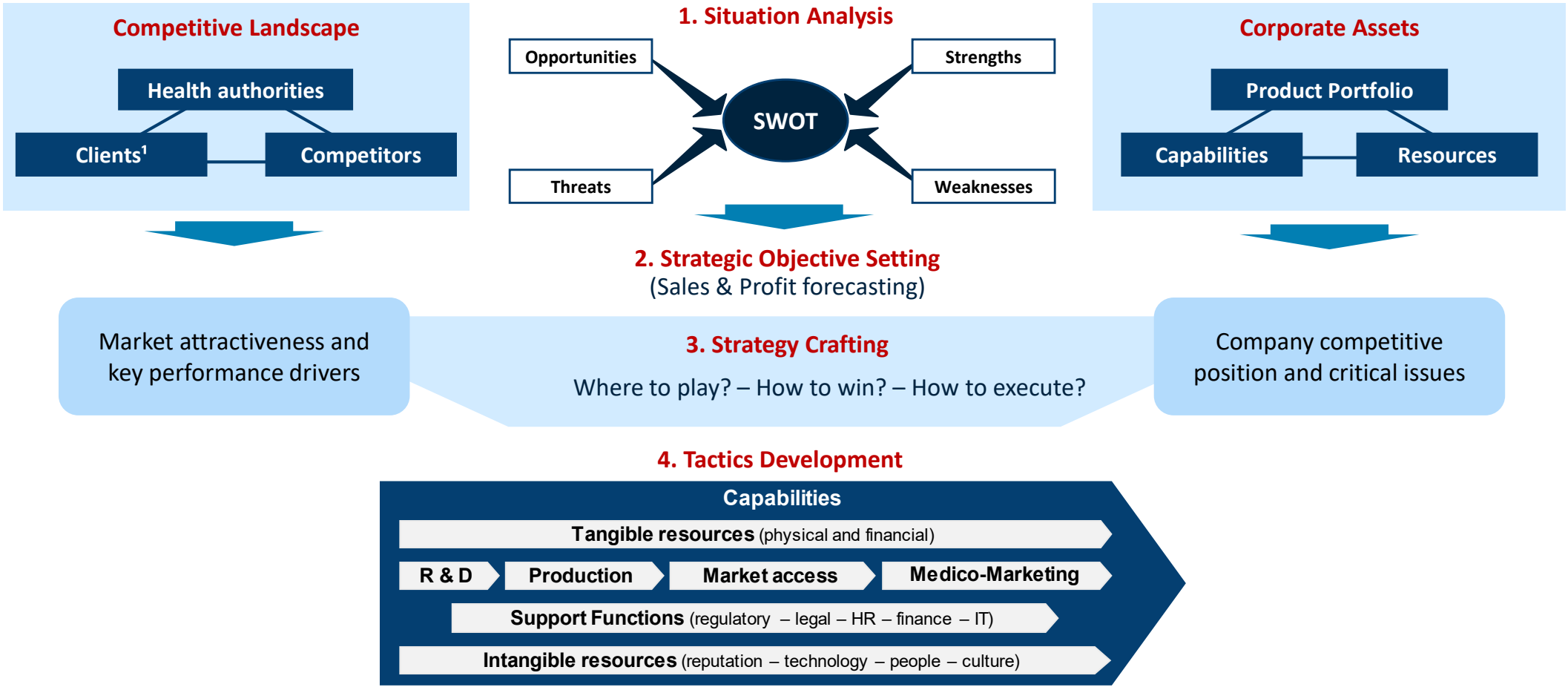


Sources: Adapted by Smart Pharma Consulting from G. Johnson et al., 2008, W.C. Kim & R. Mauborgne, 2005

[1] Eliminating or reducing costs while raising or creating value – [2] Business Development & licensing

The strategic thinking process aims at aligning company's unique capabilities and resources to seize market opportunities and address market threats

Strategic thinking framework (1/3)



Sources: Smart Pharma Consulting

[1] *Including payers, physicians, patients, pharmacists, nurses*

Smart Pharma Consulting recommends the following approach to craft a strategy at corporate, business and operational levels to boost pharma companies' performance

Strategic thinking framework (2/3)

Situation Analysis

- Kick-off meeting organization
  - Agreement on project management, scope and deliverables
- Historical market and product data analysis (2014 – 2017)
  - Internal and external data collection through desk research, and interviews to acquire the right level of insights
  - Analysis of sales and profits per strategic segment:
    - Competitive landscape (health authorities, clients and competitors' opinions and behaviors)
    - Corporate assets (product portfolio, capabilities and resources)
  - Advanced SWOT analysis
- Sales and profits growth modeling (2018 – 2023) by applying the on-going strategy ("as is" scenario)
- Writing of the situation analysis summary

Strategy Formulation

- Strategy crafting workshops
  - Review of situation analysis outputs
  - Reassessment of the strategic square (purpose, mission, vision, values)
  - Strategic objective setting
  - Review and prioritization of multi-level strategic options (corporate, business, operational)
  - Development of tactics that will support the selected strategies (alignment of capabilities and resources along the different components of the value chain)
- Fine-tuning of the strategy
  - Sales and profits growth modeling (2018 – 2023) following the integration of the recommended strategy and tactics ("boosted" scenario)
  - Final selection of the strategic levers (suitability, efficacy / acceptability and feasibility) to boost the performance
  - Tactical recommendations (key activities supporting strategic priorities) and monitoring tools[1]
- Writing of the 2018 – 2023 Strategy Plan

Sources: Smart Pharma Consulting

[1] Key Execution Indicators (KEIs) and Key Performance Indicators (KPIs)

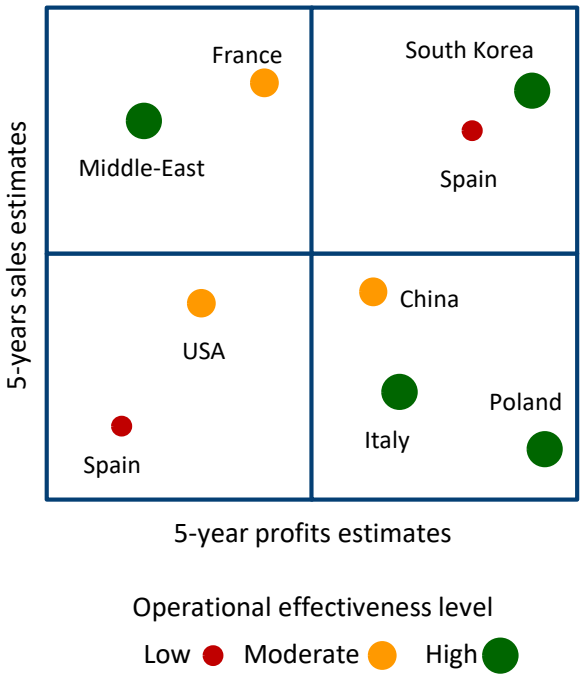
The following enabling tools will help pharma companies make strategic decisions and formalize them in a robust and practical strategic plan

Strategic thinking framework (3/3)

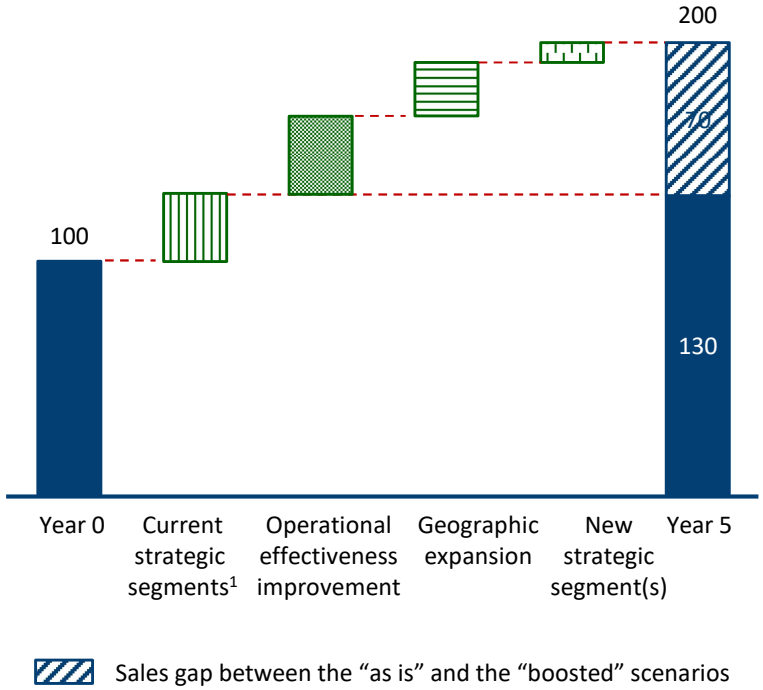
Illustrative

Situation Analysis | **Strategy Formulation**

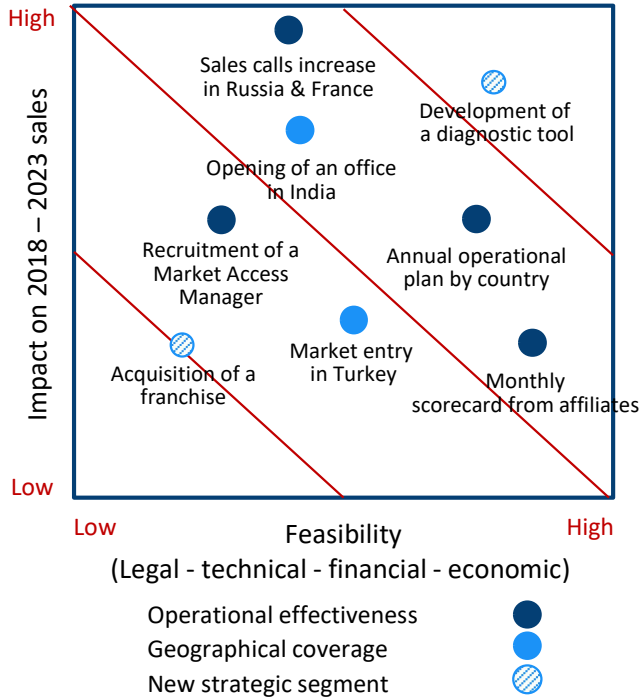
Potential of current strategic segments by country



5-year sales growth estimates



Prioritized strategic levers



Sources: Smart Pharma Consulting

[1] *"As is" scenario*

Smart Pharma
CONSULTING

Pharma Companies Strategy

Best-in-class Series

What to know & understand about Strategy

July 2024

Corporate strategy selects the strategic segments, business strategy creates a competitive advantage and operational strategy defines the appropriate organization

Definitions

- Amongst multiple possibilities, we propose the following definition for strategy:

"Strategy is the long-term direction and scope set by a company to fulfill stakeholders'[1] expectations through proper capability building and resources allocation"

- One can consider three basic strategic levels in any pharma company:

CORPORATE STRATEGY

In which strategic segments should we be in?

- Corporate strategy defines the purpose and the scope in which companies compete or should compete and how to add value to their businesses

BUSINESS STRATEGY

How should we compete in the selected segments?

- Business or competitive strategy defines how to compete successfully in each strategic segment (e.g., R&D-based drugs, vaccines, CHC[2], generics, medical devices)

OPERATIONAL STRATEGY

Which organizational configuration do we need?

- Operational strategy sets the activities, capabilities, processes, structure, culture and resources needed to support corporate and business strategies

Sources: Smart Pharma Consulting, adapted after G. Johnson et al., Exploring Corporate Strategy, Pearson, 2019

[1] Basically authorities, customers, employees and shareholders – [2] Consumer Heath Care, including OTCs, food supplements, minerals, vitamins, etc.

Once corporate and/or business strategies have been designed, it is imperative to define the proper conditions of their execution to produce their expected effect

Positioning of the different strategic levels

Corporate Strategy

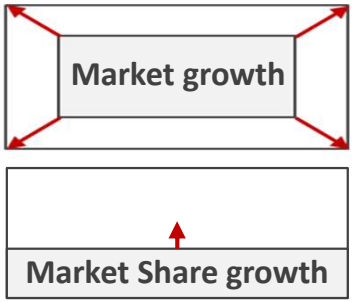
WHERE TO PLAY

Strategic segments

Countries	Existing	New
Existing		
New		

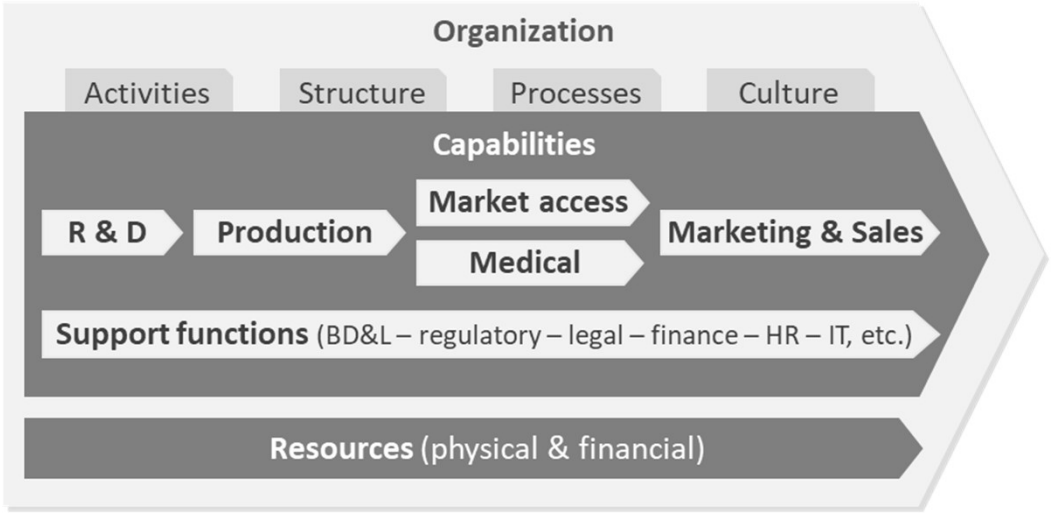
Business Strategy

HOW TO WIN



Operational Strategy

HOW TO EXECUTE



Source: Smart Pharma Consulting analyses

Definition or reaffirmation of the Pharma Company Strategic Square is important to engage collaborators and external stakeholders, before crafting the corporate strategy

CORPORATE STRATEGY

The Strategic Square – Principle

Why do we exist?

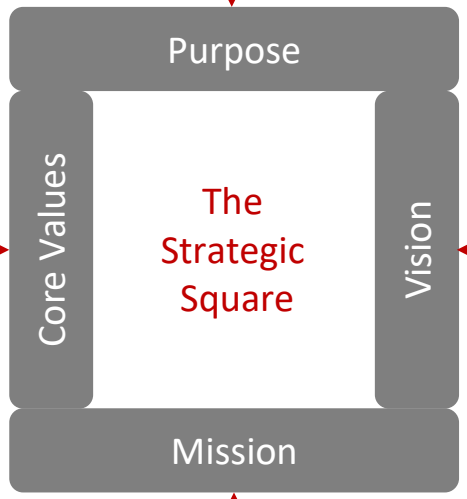
- It explains the companies' reason for existence. Its "raison d'être"

"We use the power of leading-edge science to save and improve lives around the world" – Merck & Co

What do we aspire to become?

- Vision is an indeterminate mid- to long-term goal

"To be the world's leading biopharma company that transforms patients' lives through science" – BMS



What do we believe in and how do we behave?

- They are the underlying principles that guide the company strategy

"Integrity, inclusion, teamwork, accountability and excellence" – Gilead

What do we do and for whom?

- Mission answers how we are going to make the vision a reality

"Our mission is to discover new ways to improve and extend people's lives" – Novartis

Sources: Smart Pharma Consulting and pharma companies' website (2023)

The four dimensions of the Strategic Square should be thoughtfully and carefully implemented to have a positive impact on the opinion and behavior of company's employees and stakeholders

CORPORATE STRATEGY

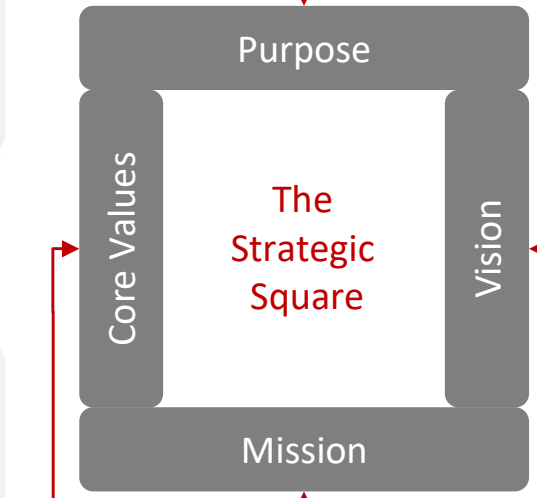
The Strategic Square – Principle

Why do we exist?

- The purpose statement should be:
  - Simple
  - Meaningful
  - Reflected in employees' daily life

What do we aspire to become?

- The corporate vision should contribute to give sense to employees' life and thus…
- … generate a feeling of pride and belonging



What do we believe in and how do we behave?

- The core values should reflect the personality of the company, and thus guide the way the strategy is implemented[2]

What do we do and for whom?

- The mission should clearly define:
  - The customers served
  - The needs to fulfill
  - The solutions[1] proposed to do so

Sources: Smart Pharma Consulting – Adapted from H. Joly, HBR digital (October 2023)

[1] Products and/or services – [2] Values such as "Honesty" or "Ethics" are not recommended because they are not optional but compulsory

The Strategic Square guides companies to set their performance objective, select their preferred strategy at the corporate, business and operational levels

CORPORATE STRATEGY

The Strategic Square – What for?

- Objective: What do we want to achieve?
- Performance: What have we achieved?
- Corporate strategy: Where do we want to play?
- Business strategy: How are we going to win?
- Operational strategy: What are the activities/ capabilities, processes, structure[1] and culture we need to put in place to excel in the execution of the strategy?

Sources: Smart Pharma Consulting

[1] Including the headcounts and the organization chart

Four basic corporate strategies can be adopted by pharma companies to secure a long-term and profitable growth, in line with their shareholders expectations

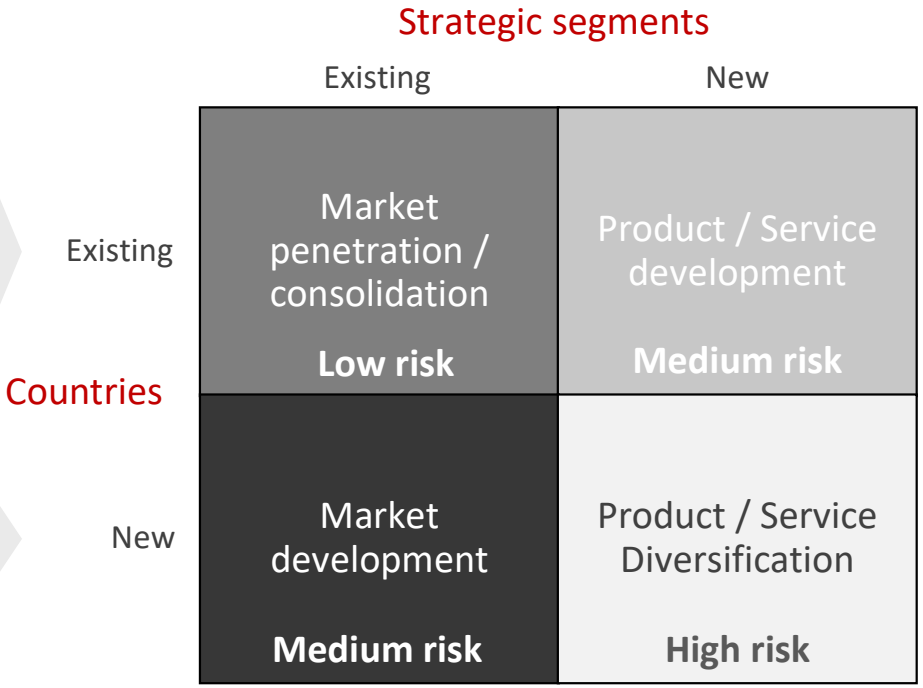
CORPORATE STRATEGY

Where to play? – Principle

- The Development Strategy Matrix[1] is a practical tool to select the most attractive sources of growth
- Diversification is in general the riskiest option because the farthest from the company core competencies
- However, playing in diverse strategic segments[2] with different characteristics may enable to mitigate certain business risks

- Increase market share on existing strategic segments by modifying existing products, developing, acquiring or in-licensing products

- Enter new geographical areas with existing product portfolio directly, through acquisitions or partnerships with licensees or distributors



- Enter new strategic segments (e.g., orphan drugs, generics, biosimilars, vaccines, DTx[3], OTCs, homecare services) in countries currently covered

- Diversify by entering new strategic segments in countries not yet covered, directly or through BD&L initiatives (M&As – licensing agreements)

Sources: Adapted by Smart Pharma Consulting from H. Ansoff (HBR 1957)

[1] Has been adapted from the original Ansoff Matrix whose axes are Markets & Products / Services – [2] A strategic segment encompasses a number of products and/or services characterized by the same combination of key success factors and the same level of attractiveness (e.g., orphan drugs, vaccines, OTCs) – [3] Digital Therapeutics

These four basic corporate strategies can be implemented by pharma companies organically or inorganically, through M&As or strategic alliances[1]

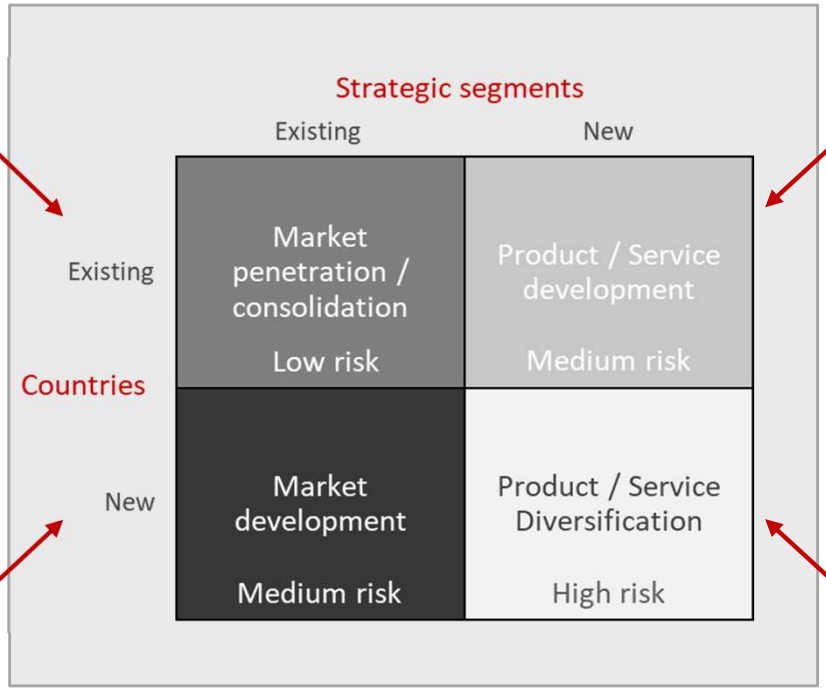
CORPORATE STRATEGY

Where to play? – In Practice (1/2)

Illustrative

- Acquisition of, or merger with other pharma companies to strengthen its presence and/or reduce the competitive intensity
- Co-marketing or co-promotion agreements to increase resources to gain market shares
- Internal development, co-development or in-licensing of new products / services

- Direct market entry by setting up its own subsidiary
- Indirect market entry by acquiring a local player to take advantage of its resources and capabilities
- Indirect market entry by licensing-out agreements or partnerships with distributors



- Entry on new strategic segments through in-house R&D and/or external growth operations, such as:
  - Horizontal integration (e.g., OTCs, generics, homecare services)
  - Downward integration (e.g., distribution business)
  - Upward integration (e.g., toll manufacturing business)
  - In-licensing agreements

- New strategic segments entry and new geographical coverage carried out organically or through M&As, joint-ventures, in-licensing or subcontracting agreements (e.g., with another pharma company)

Sources: Adapted by Smart Pharma Consulting from H. Ansoff

[1] See our position paper "Best-in-Class Pharma BD&L" available on our website

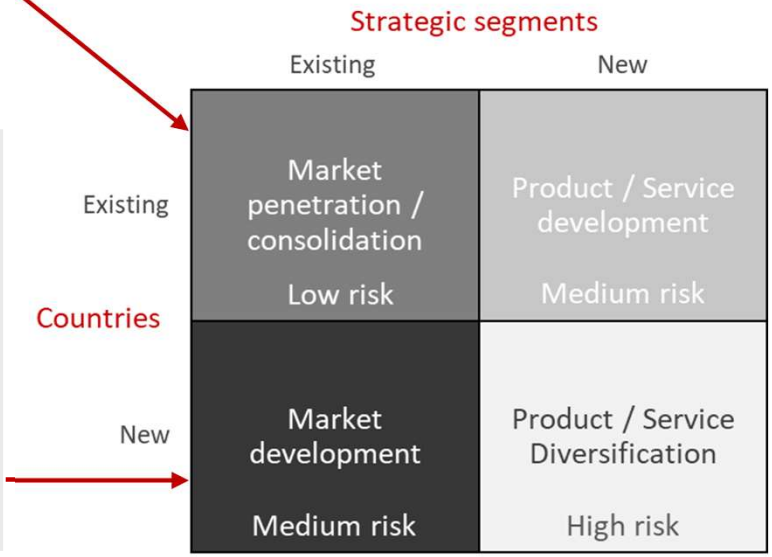
Big and Mid Pharma Companies have accelerated, over the recent years, a combination of M&As and spin-off operations to focus their business on the most attractive strategic segments

CORPORATE STRATEGY

Where to play? – In Practice (2/2)

- Acquisition of Seagen by Pfizer (2023) for USD 43 B to reinforce its oncology portfolio and mitigate the impact of its Covid-19 products sales drops and the imminent LOE for some of its leading brands
- Worldwide agreement between BMS & Pfizer (2007) to develop and commercialize Eliquis (apixaban)

- Acquisition of Alexion by AstraZeneca (2021) for USD 39 B to gain a foothold in the lucrative rare diseases strategic segment
- Entry of Gilead in the oncology market by acquiring Kite Pharma (2017), one of the CAR-T's leaders, offering a novel approach for certain blood cancers



- Decision made by IPSEN to enter the oncology market[1] in the USA with Somatuline Depot (lanreotide) through its own subsidiary to maximize the value creation
- Out-licensing by Incyte to Novartis of Jakavi (ruxolitinib) in the indications of hematology, oncology, and graft-versus host disease outside the USA

- Opening by Servier of a subsidiary in the USA (2018) to market a portfolio of oncology brands acquired the same year from Shire
- Acquisition by Ethypharm of the UK-based company Martindale Pharma (2017) which is specialized in the field of emergency care and sterile injectables

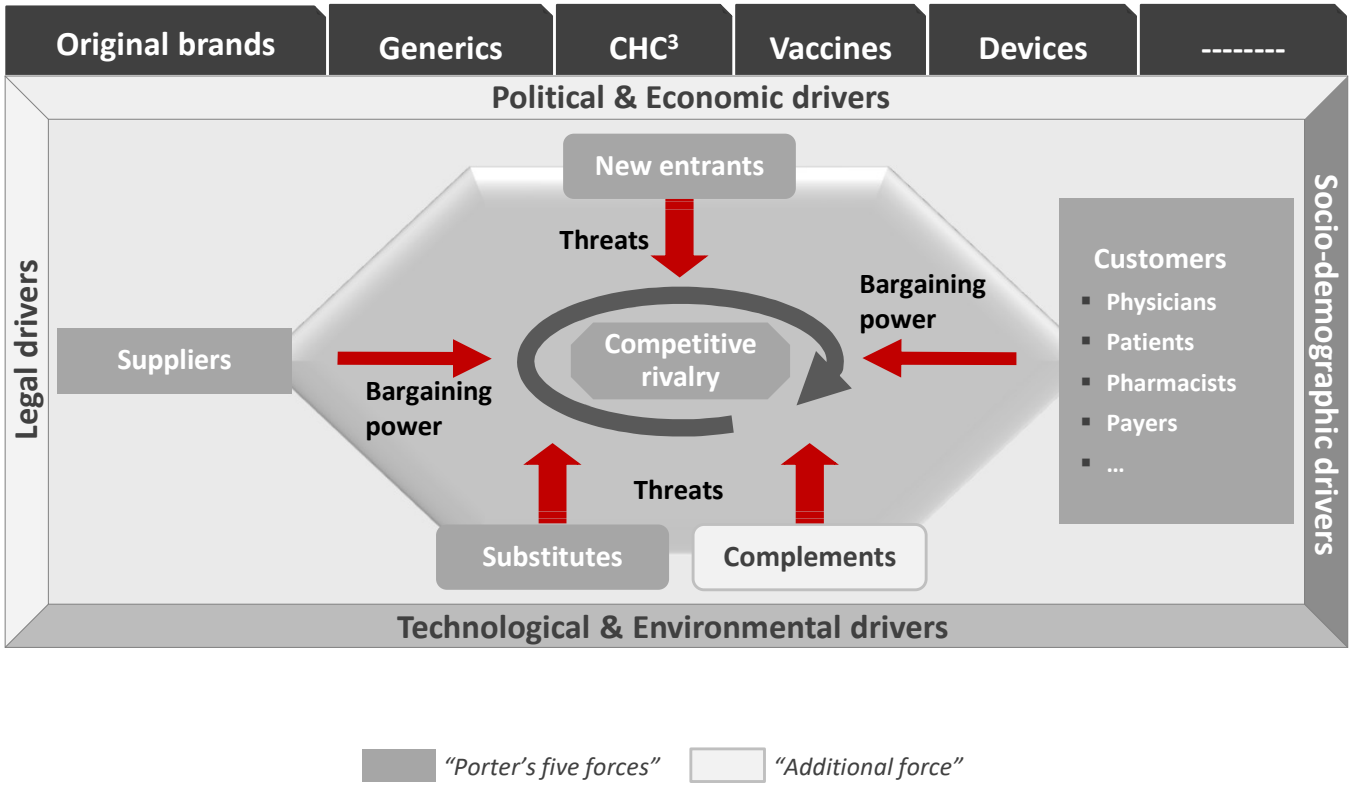
Sources: Adapted by Smart Pharma Consulting from H. Ansoff

[1] *In gastroenteropancreatic neuroendocrine tumors*

Corporate opportunities by strategic segment and country can be assessed through PESTEL[1] analysis and the "5+1 forces framework[2]"

CORPORATE STRATEGY

Attractiveness of strategic segments and countries (1/3)



- The six key macro-environmental drivers:
  - Political
  - Economic
  - Socio-demographic
  - Technological
  - Environmental
  - Legal
- The five key micro-environment drivers:
  - Suppliers
  - Customers
  - New entrants
  - Substitutes
  - Competitive rivalry
- … plus, the "Complements[4]" influence the attractiveness of each strategic segment in various countries and impact the outcomes of pharma companies' strategy
- These key drivers can be used to build scenarios of possible futures, especially by adopting the "what if" technique

Sources: Adapted by Smart Pharma Consulting from M. Porter 2008

[1] Political, Economic, Socio-demographic, Technological, Environmental and Legal – [2] Adapted from Porter's five forces model – [3] Consumer Health Care, including OTCs, food supplements, minerals, vitamins, etc. – [4] Complements can add value to the existing products or services (e.g., biomarkers complementing certain anti-cancer drugs)

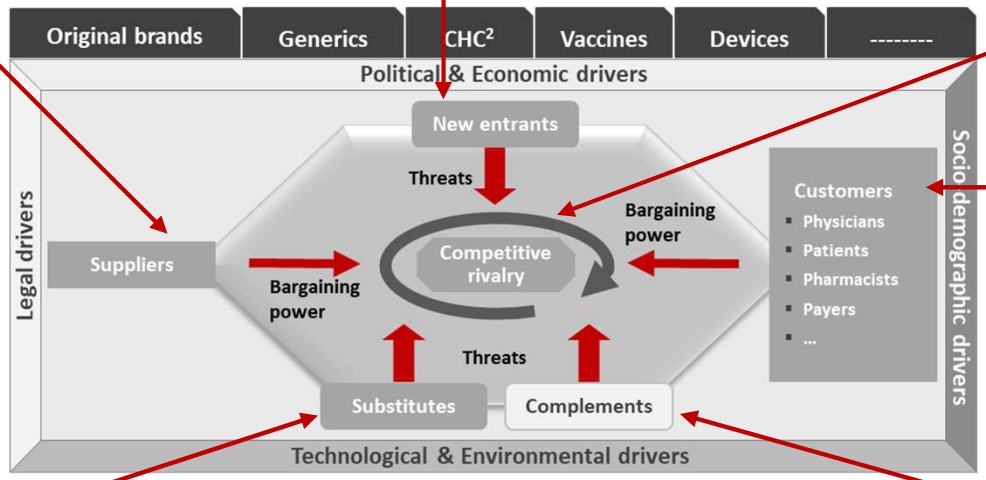
The "5+1 forces framework[1]" is particularly helpful to identify key stakeholders by country who will influence the long-term structure and profitability of each strategic segment

CORPORATE STRATEGY

Attractiveness of strategic segments and countries (2/3)

- Most R&D-based pharma companies being vertically integrated, threats from suppliers are rarely an issue
- However, on the generics or biosimilars segment, API[3] or DDS[4] suppliers may have a stronger bargaining power

- New entrants (e.g., innovative products, "me-too" products, generics or biosimilars) are likely to modify the competitive intensity and thus pharma companies' performance



- Competitive rivalry intensifies with:
  - New products, indications, formulations
  - Commoditization
  - Service improvement
  - Promotional investments
  - Price discounting
  - …

- Higher pressure from customers:
  - Payers (e.g., sickness funds, hospital buying groups) increasing price pressure
  - Patient advocacy groups asking for more and better services

- Substitute products or services include:
  - Alternative therapies (e.g., surgery, DTx[5])
  - Preventive therapies (e.g., vaccination vs. anti-infective drugs)

The "5+1 forces framework" allows to determine how profits in various strategic segments and countries will be shared between stakeholders, depending on their respective competitive advantage

- Complementary products or services include:
  - Devices (e.g., BGM[6], biomarkers)
  - Diet food
  - Patient adherence programs

Sources: Adapted by Smart Pharma Consulting from M. Porter 2008

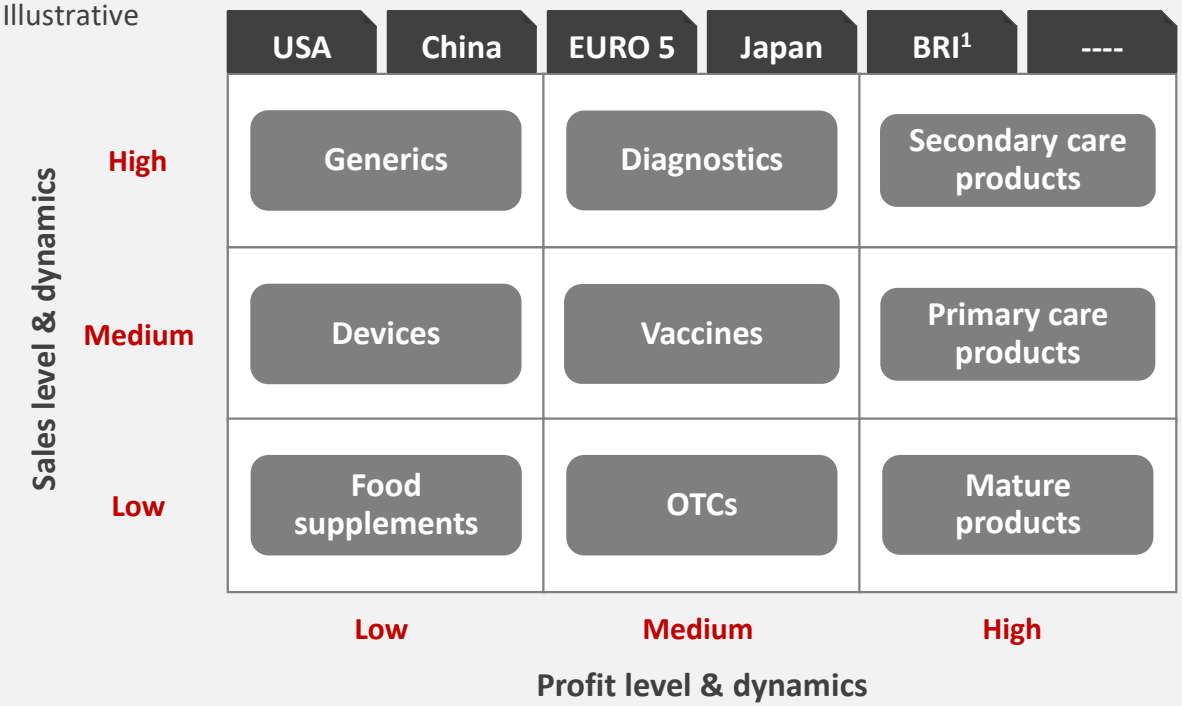
[1] Adapted from Porter's five forces model – [2] Consumer Health Care, including OTCs, food supplements, minerals, vitamins, etc. – [3] Active pharmaceutical ingredients – [4] Drug delivery system – [5] Digital therapeutics – [6] Blood glucose meter

Attractiveness of new strategic segments should be put into a dynamic perspective by country, and potential synergies with existing businesses and available capabilities also considered

CORPORATE STRATEGY

Attractiveness of strategic segments and countries (3/3)

Illustrative



- The attractiveness of a strategic segment should be defined, based on the level and likely evolution of economic indicators such as sales and profits
- Additional parameters such as potential synergies with:
  - Existing businesses
  - Existing capabilities

  should also be considered while evaluating the attractiveness of new strategic segments and new countries

Sources: Smart Pharma Consulting

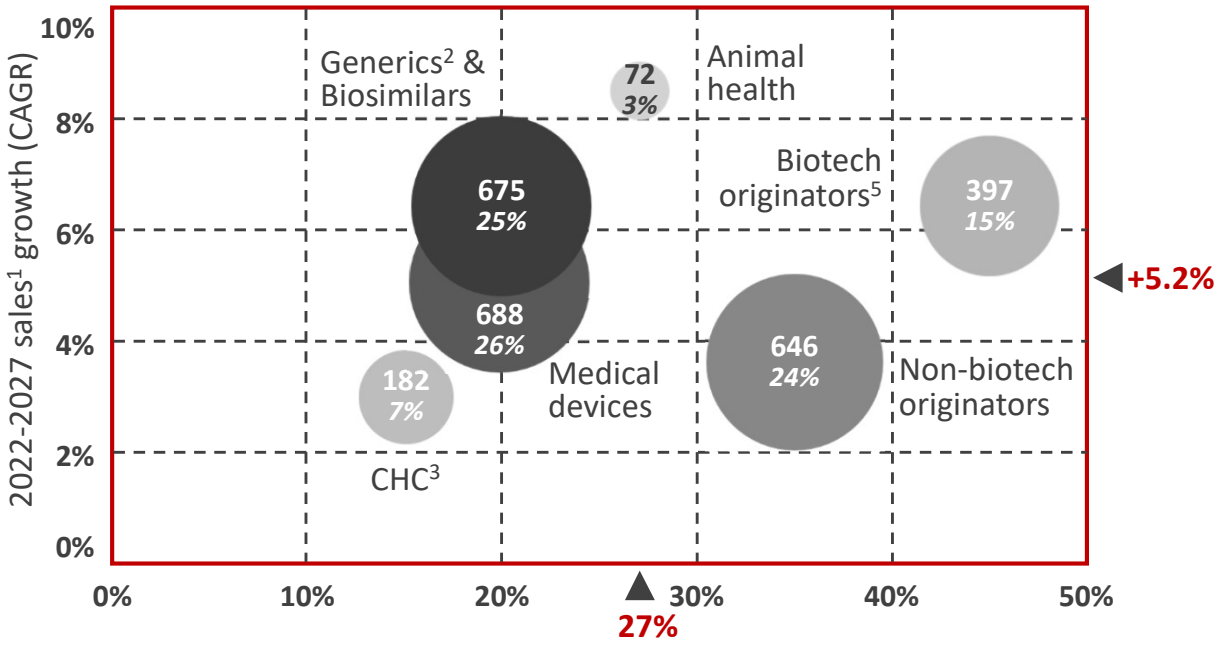
[1] *Brazil, Russia, India*

By 2027, the global healthcare market – across its different strategic segments – should be mainly driven by generics and biotech originators, while its profitability should lose two points

CORPORATE STRATEGY

Strategy crafting – Attractiveness by Strategic Market Segment

Main healthcare strategic market segments



- By 2027, the global healthcare market should reach USD 2,660 B and grow at a pace of +5.2% per year, i.e., 2.1 points of percentage above the forecasted worldwide economic growth of +3.1%
- The average EBITDA of healthcare companies should decrease from ~29% in 2022 to ~27% in 2027, mainly due to increasing price pressure
- In 2027, the average profitability of healthcare companies should be twice higher than the average of other business sectors
- The biotech segment will remain very attractive – despite the ramp up of biosimilars – and…
- … the CHC segment the least attractive one

○ 2027 sales in USD B[1]
(share of the 2027 global healthcare market which is estimated at USD 2,660 B)

Worldwide economic growth – CAGR 2022-2027: +3.1%

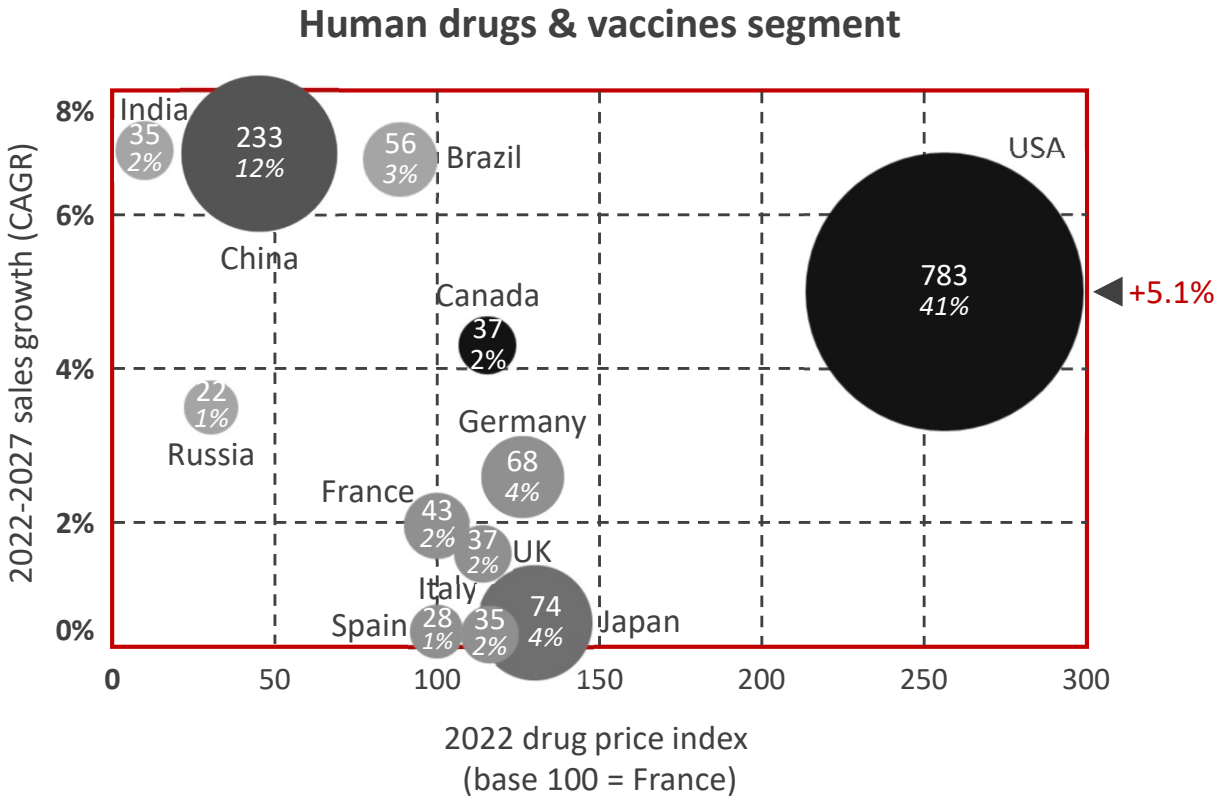
Source: IQVIA Institute (January 2023) – World economic outlook, IMF (October 2023) – Companies' annual reports (2022) – Smart Pharma Consulting estimates

[1] Ex-factory price before rebates – [2] Including branded and unbranded generics – [3] Consumer Heath Care, including OTCs, food supplements, minerals, vitamins, etc. – [4] Earnings before interest, taxes, amortization and depreciation – [5] Excluding biosimilars, already included in the "Generics" segment

By 2027, human drugs & vaccines segment growth should be mainly driven by the USA and China, while EURO 5 countries should grow at a slower pace due to higher price pressure

CORPORATE STRATEGY

Strategy crafting – Attractiveness by Country



○ 2027 sales in USD B[1]
(share of the 2027 global pharma market which is estimated at USD 1,900 B)

- Human drugs & vaccines segment is expected to grow with a CAGR of +5.1% by 2027, despite higher pressure on prices, worldwide
- In 2022, EURO 5 countries accounted for 13% of the worldwide market in value:
  - Germany: 4% – France: 3% – Italy: 2%
  - UK: 2% – Spain: 2%
- By 2027, the weight of EURO 5 countries should drop by 2 points, due to higher price pressure than in the average of the rest of the world
- USA should account for 41% of the segment in value and contribute to 41% to the segment growth over the 2022 – 2027 period, despite the implementation of the Inflation Reduction Act (IRA) enabling Medicare to negotiate drug prices

Worldwide economic growth – CAGR 2022-2027: +3.1%

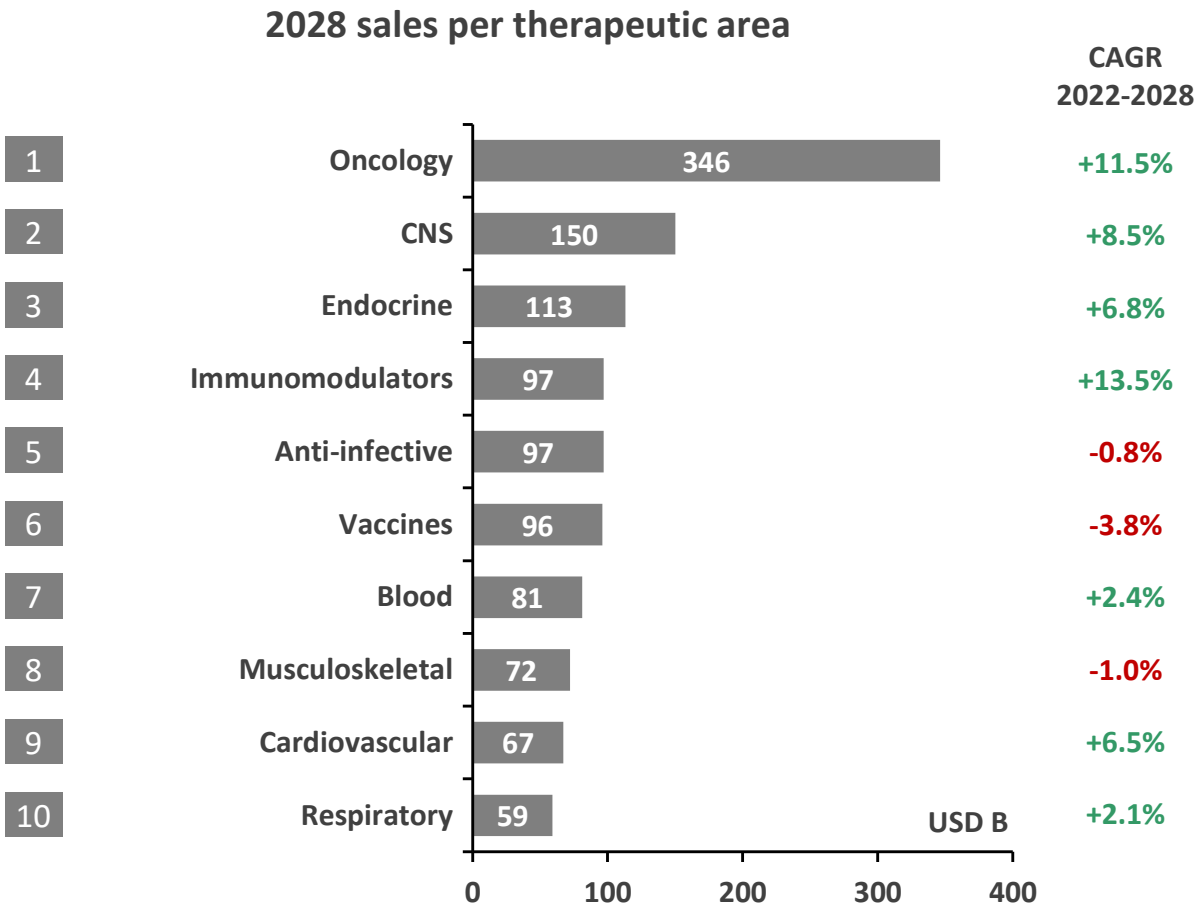
Source: IQVIA Institute (January 2023) – World economic outlook, IMF (October 2023) – TLV (December 2022) – Rand Corporation (2021) – The time of India (November 2019) – Smart Pharma Consulting estimates

[1] *Ex-factory price before rebates*

The important growth in oncology will be mainly driven by anti PD-1 products while immunomodulators will benefit from an increased incidence of chronic diseases

CORPORATE STRATEGY

Strategy crafting – Attractiveness by Therapeutic Area



- The 2028 therapeutic area forecasts confirm the steadily increasing weight of specialty products, sustained by new biologic drugs
- Oncology prevails as the leading therapeutic area and will be mainly driven by anti PD-1 products (e.g., MSD's Keytruda, BMS's Opdivo, Roche's Tecentriq or AstraZeneca's Imfinzi)
- CNS, including both neurological and psychiatric drugs, should be driven by new launches, notably in Alzheimer's disease and schizophrenia
- Endocrine, which will be boosted by the GLP-1 in type 2 diabetes and obesity, will also be impacted by blockbusters' patent expiries (e.g., MSD's Januvia, Lilly's Trulicity)
- Immunomodulators will have the highest CAGR through 2028, driven by an increased incidence of autoimmune and autoinflammatory diseases

Sources: World Preview 2023: Pharma's Age of Uncertainty, Evaluate Pharma (August 2023) – Smart Pharma Consulting analyses

Diversified corporations are under pressure from their shareholders to simplify their structures and increase their focus on the most dynamic and profitable strategic segments

CORPORATE STRATEGY

Pharma strategy trends – Concentration move (1/2)

GSK

- In 2019, GSK combined its CHC[1] portfolio with that of Pfizer named Haleon of which it owned 68% of shares
- In 2022, GSK spined off Haleon to focus on vaccines and human prescription drugs
- In 2022, GSK acquired Affinivax which was developing a novel class of vaccines and…
- … in 2023, Bellus Health to strengthen its respiratory pipeline

J&J

- In 2017, Johnson&Johnson acquired Actelion which is specialized in products for PAH[2]
- In 2022, J&J acquired Abiomed, a world leader in heart, lung and kidney support technologies
- In 2023, Kenvue, the Johnson & Johnson's consumer business, became independent
- Thus, J&J is now focusing its activities on medical devices and Rx-bound drugs

Pfizer

- In 2019, Pfizer combined its CHC portfolio with that of GSK into a joint-venture named Haleon of which it owned 32% of shares
- In 2020, Pfizer sold its established and generics business (Upjohn) to Viatris[3] to focus its activities on innovative products
- In 2022, Pfizer spined off Haleon which became a standalone company

sanofi

- In 2016, Sanofi exchanged Merial[4] with Boehringer Ingelheim CHC business
- In 2018, Sanofi sold its European generic business Zentiva to Advent[5]
- In 2023, Sanofi announced the divestiture of its CHC (Opella) business, to become a pure biopharma player

Source: Smart Pharma Consulting analysis

[1] Consumer Health Care – [2] Pulmonary arterial hypertension, a life-threatening rare disease – [3] Viatris is the company resulting from the merger of Mylan and the Upjohn division of Pfizer – [4] Its animal health business – [5] A private equity firm

Big and Mid Pharma Companies have accelerated, over the recent years, a combination of M&As and spin off operations to focus their business on the most attractive strategic segments

CORPORATE STRATEGY

Pharma strategy trends – Concentration move (2/2)

Bristol Myers Squibb™

- In 2019, BMS sold its CHC[1] business (UPSA), which represented 3% of its total sales, to Taisho Pharmaceutical
- In 2019, BMS acquired Celgene to reinforce its oncology portfolio and…
- … in 2022 Turning Point Therapeutics as well as Mirati Therapeutics in 2023

IPSEN Innovation for patient care

- In 2022, IPSEN sold its CHC business to Mayoly Spindler
- Recently, IPSEN has made several acquisitions (Clementia Pharmaceuticals in 2019, Epizyme in 2022, Albireo in 2023) expanding the scope of its rare disease and oncology portfolio

MERCK

- In 2021, Merck & Co completed the spin-off of Organon & Co, an independent entity including biosimilars, women's health and established brands
- In 2023, Merck & Co acquired the immunology specialist Prometheus
- Its focus is now on vaccines and drugs for diseases threatening people and animals

NOVARTIS

- In 2018, Novartis sold its 36.5% stake in its CHC JV[2] with GSK, to the latter
- In 2019, Novartis sold Alcon, its eye care division, which became a separately traded standalone company
- In 2023, Novartis completed the spin-off of Sandoz, its generics and biosimilars business, to focus on innovative drugs

Source: Smart Pharma Consulting analysis

[1] Consumer Health Care – [2] Joint Venture

Pharma companies focusing on the human Rx-bound drugs & Vaccines strategic segment, whose revenues come mainly from the US market, are more likely to exhibit a superior performance

CORPORATE STRATEGY

Corporate Strategy Matrix (2022[1])

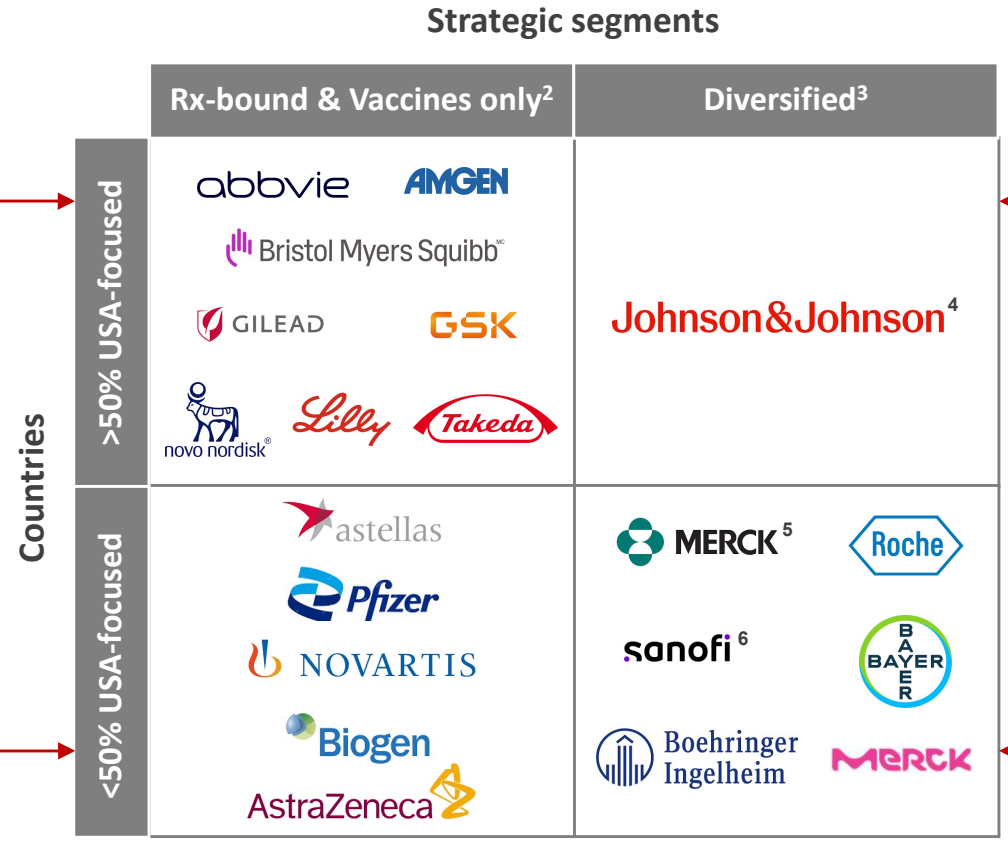
Illustrative

- The US market is the largest national market, with a growth potential of ~5% p.a. over the 2022 – 2027 period
- The US market and the Rx-bound (i.e., biotech and non-biotech originators) & Vaccines segment generate the highest profits

Most attractive quadrant

- The performance of these companies depends on:
  - The therapeutic areas they focus on
  - The valuation of their products by national payers
  - The selling prices they can apply, and thus the related profits by country

Moderately attractive quadrant



- J&J whose 51% of sales comes from the US market, and 56% from Rx-bound drugs & Vaccines generated an EBITDA of 34 % in 2022
- This good performance is driven by J&J focus on high margin therapeutic areas like oncology and immunology

Moderately attractive quadrant

- In principle, diversified companies, with low USA share of revenues, show the lowest profitability
- However, some companies like Merck & Co[5] or Roche who have strong positions in oncology, show excellent performances

Least attractive quadrant

Source: Smart Pharma Consulting analyses based on pharma companies' website

[1] Excepting Takeda and Astellas for which data are from April 2022 to March 2023 – [2] 100% of sales in Rx-bound human drugs and/or vaccines – [3] Including other strategic segments such as: OTCs, animal health, medical devices, diagnostics, and for Bayer only, activities in crop science – [4] In 2023, J&J divested its consumer business – [5] Merck & Co which is named Merck in the USA and Canada, and MSD in other countries – [6] In 2023, after the divestiture of its CHC business, Sanofi has become a 100% Rx-bound & vaccines company

Most of pharma companies operating only on the human Rx-bound drugs & Vaccines strategic segment are focused on the onco-hematology and immunology-respiratory therapeutic areas

CORPORATE STRATEGY

Pharma companies' strategic segments coverage (2022[1])

Illustrative

(% of total revenues)	Human Rx-bound drugs & Vaccines strategic segment								
	Oncology & Hematology	Immunology & Respiratory[2]	Neurology	Cardio-metabolic	Infective diseases[3]	Vaccines	Rare Diseases	Generics & Biosimilars	Others
Bristol Myers Squibb	61%		1%	26%					12%
astellas	50%	13%							37%[4]
AMGEN	36%	44%		5%				8%	7%
NOVARTIS	25%	14%	10%	12%				18%	21%
Lilly	20%	12%	5%	51%					12%
GILEAD	18%				77%				5%
abbvie	11%	50%	13%		3%				23%
Takeda	11%	44%	16%				18%		11%
GSK	2%	31%			20%	27%			20%
novo nordisk				88%			12%		
AstraZeneca	33%	13%		21%		11%	16%		7%

Source: Smart Pharma Consulting analyses based on pharma companies' 2022 annual reports

[1] Excepting Takeda and Astellas for which data are from April 2022 to March 2023 – [2] Immunology includes Rheumatology, Dermatology and Gastroenterology products revenues – [3] Including bacterial, viral, parasitic and fungal infections – [4] Of which 12% in urology products

The most diversified pharma companies usually share their revenues between more than five different therapeutic areas, in addition to one or more other strategic segments

CORPORATE STRATEGY

Pharma companies' strategic segments coverage (2022[1])

Illustrative

(% of total revenues)	Human Rx-bound drugs & Vaccines strategic segment									Other strategic segments			
	Oncology & Hematology	Immunology & Respiratory[3]	Neurology	Cardio-metabolic	Infective diseases[4]	Vaccines	Rare Diseases	Generics & Biosimilars	Others	OTCs	Animal Health	MD / Diagnostic	Others
Pfizer	13%		2%	13%		57%	<1%		13%				1%[6]
Biogen			88%				<1%	7%					5%[6]
MERCK	39%	2%	<1%	9%	12%	18%			8%		9%		3%[6]
Roche	38%	11%	12%		3%				8%			28%	
sanofi	6%	19%	6%	17%		17%	8%		15%	12%			
BAYER[2]	9%		1%	27%					39%[5]	24%			
Boehringer Ingelheim				56%					20%		19%		5%
Johnson&Johnson	17%	18%	7%	8%	3%	2%				16%		29%	
MERCK	8%		8%	13%					6%				65%[7]

Source: Smart Pharma Consulting analyses based on pharma companies' 2022 annual reports

[1] Excepting Takeda and Astellas for which data are from April 2022 to March 2023 – [2] Bayer Pharmaceuticals revenues only which accounts for 50% of Bayer group sales. The remaining 50% come from the Crop Sciences business – [3] Immunology includes Rheumatology, Dermatology and Gastroenterology products revenues – [4] Including bacterial, viral, parasitic and fungal infections – [5] Of which 13% of eye care products – [6] Miscellaneous or contract manufacturing revenues – [7] Of which 47% of Life Sciences and 18% of Electronics revenues

For 16 out of the 20 top pharma companies, the USA account for more than 40% of their total business sales, knowing that it is – by far – the most attractive country for pharmaceuticals

CORPORATE STRATEGY

Pharma companies' geographical coverage (2022[1])

Illustrative

(% of total revenues)	USA	Europe	APAC	LATAM	RoW
abbvie	79%	6%[2]	3%[3]	12%	
AMGEN	72%	28%			
GILEAD	69%	16%	15%		
Bristol Myers Squibb	69%	31%			
Lilly	64%	15%	11%[3]	10%	
Biogen	54%	33%	7%	6%	
Takeda	52%	21%[4]	18%	4%	5%
novo nordisk	52%[5]	25%[6]	9%[7]	14%	
Johnson&Johnson	51%	25%	24%		
GSK	50%	22%	28%		

(% of total revenues)	USA	Europe	APAC	LATAM	RoW
Boehringer Ingelheim	48%[5]	31%	21%		
MERCK	46%	24%[6]	21%	4%	5%
Roche	44%	23%	25%	5%	3%
astellas	43%		19%[8]	38%	
sanofi	43%	23%	34%		
Pfizer	42%	22%	8%[8]	28%	
AstraZeneca	39%	27%	34%		
NOVARTIS	35%	37%	28%		
BAYER[9]	31%	28%[6]	19%	18%	4%
MERCK	29%[5]	28%	35%	6%	2%

Source: Smart Pharma Consulting analyses based on pharma companies' 2022 annual reports

[1] Excepting Takeda and Astellas for which data are from April 2022 to March 2023 – [2] France, Germany, Spain, UK, Italy combined – [3] China & Japan – [4] Europe & Canada – [5] North America – [6] Europe, Middle East & Africa – [7] Chinese region – [8] Japan – [9] Include revenues from all activities

Corporate BD&L initiatives are expected to generate extra revenues, increase profits and/or spread business risks, while leveraging potential synergies

CORPORATE STRATEGY

Expected benefits from corporate BD&L[1] initiatives

Increase revenues

- **Market penetration / consolidation**
- **Development of new products / new services** (extension of the offering)
- **Development of new markets** (expansion of presence in new countries and/or market segments)
- **Diversification** (entry in new strategic segments and/or upward or downward integration in an existing business segment to capture additional value)

Increase profits

- **Economies of scale** having the potential to lower operating costs through a better absorption of fixed costs (e.g., manufacturing, distribution, promotion)
- **Economies of scope** leading to increased efficiency by applying existing resources (tangible and intangible) and/or competences to new products / services and markets (based on cost and competence sharing principles)

Spread business risks

- **Presence in diverse strategic segments** responding to different macro-environmental drivers likely to compensate business risks:
  - R&D-based business: average growth, high profitability, low brand equity after patent expiry
  - OTC business: low growth, average profitability, possible lasting brand equity
  - Generics business: high growth, low to average profitability, low brand equity

Sources: Adapted by Smart Pharma Consulting

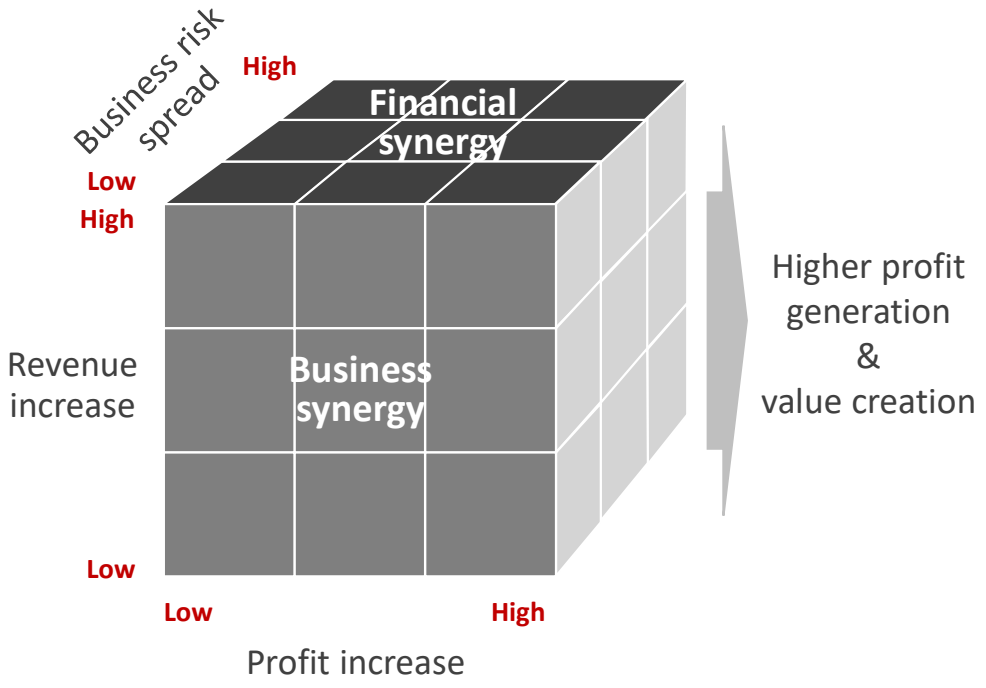
[1] *Including M&A and strategic alliances*

Synergies result from a better mixing and matching of capabilities, and are the greatest when opportunities are in businesses like those in which the pharma company operates

CORPORATE STRATEGY

Synergies applied to corporate BD&L[1] initiatives

Types of synergies



- There are two different types of synergies:
  - **Business synergies** due to cost reduction and/or revenue increase through combination of capabilities (i.e., tangible / intangible resources and competences)
  - **Financial synergies** related to possible spread of business risks if combined strategic segments are subject to different opportunities and threats
- Positive synergies are based on:
  - Shared competences (economies of scope)
  - Shared costs (economies of scale)
- Negative synergies refer to lower profit generation due to:
  - Revenue dynamics impairment[2] and/or
  - Cost increase (costs higher than the sum of the previous businesses when they were operating independently)

  resulting from complexity, mismanagement, problems of integration, lower efficiency, brand cannibalization, etc.

Sources: Adapted by Smart Pharma Consulting from R Koch 2006 and from G. Johnson 2008

[1] Including M&A and strategic alliances – [2] Through the slowdown of the historical sales increase or acceleration of the historical sales decrease

Strategic alliances and M&As enable pharma companies to expand their product portfolio and their geographical coverage, build capabilities and create business synergies

CORPORATE STRATEGY

Corporate BD&L[1] alternatives

Strategic alliances

- Strategic alliances involve the sharing of capabilities[2] in pursuit of common objectives
- Accessing capabilities through alliances offers more targeted and cost-effective means than acquisition
- Where both partners are trying to acquire one another's capabilities, results may be a "competition for competence" that ultimately destabilizes the relationship
- Strategic alliances can take different forms:

Joint-venture	Co-development / Co-promotion
E.g., ViiV healthcare, specialized in HIV, is a company owned by GSK, Pfizer and Shionogi[3]	E.g., Pfizer & BMS collaborate worldwide to co-develop and co-promote Eliquis (apixaban)
Co-marketing	**Out-licensing**
E.g., Januvia / Janumet[4] of MSD was licensed to Sun Pharma in India under different names[5]	E.g., Regeneron has licensed to Bayer the marketing rights of Eylea[6] outside of the USA

Mergers & Acquisitions

- Acquiring capabilities should be considered if desired capabilities can only be developed over long periods
- Integrating the acquiree's capabilities involves major risks:
  - Culture and personality clashes
  - Incompatibility of management systems
  - High organizational integration costs and time

  resulting in degradation or destruction of capabilities
- M&As initiatives may be related to a:

Company	Portfolio	Brands
E.g., Acquisition of Horizon Therapeutics by Amgen in 2022	E.g., Acquisition of Biohaven's calcitonin gene-related peptide (CGRP) franchise by Pfizer in 2022	E.g., Acquisition by Cheplapharm of several matures brands like Seroquel from AstraZeneca

Sources: Adapted by Smart Pharma Consulting from R Koch 2006 and from G. Johnson 2008

[1] Including M&A and strategic alliances – [2] Resources and competences – [3] 78.3% of the company being owned by GSK, 11.7% by Pfizer and 10% by Shionogi – [4] Respectively sitagliptin and sitagliptin/metformin – [5] Sun Pharma uses Sitared for sitagliptin and Sitared-M for the fixed combination sitagliptin/metformin – [6] Aflibercept, was approved for Wet age-related macular degeneration (AMD)

The evaluation of each business opportunity should be determined by its degree of suitability, acceptability and feasibility

CORPORATE STRATEGY

Evaluation of corporate BD&L[1] opportunities

Suitability

- Does the opportunity address key issues related to company's strategic position?
- To what extent strategic options will:
  - Fit with key market drivers?
  - Leverage strategic capabilities?
  - Meet stakeholders' expectations?

Tools

- **Advanced SWOT analysis** to rank strategic options
- **Decision tree** (evaluation of future opportunities by progressively eliminating others as additional requirement criteria are introduced into the evaluation)
- **Scenario building** (strategic options are considered against possible future situations)

Acceptability

- Acceptability refers to the expected performance outcomes (e.g., return, risk) of a strategy
- To what extent do these outcomes meet the expectations of stakeholders?

Tools

- **Return**: expected benefit measurement:
  - Profitability (ROCE[2], payback, DCF[3])
  - Cost-benefit analysis
  - Real options analysis
  - Shareholder value analysis (SVA)
- **Risk**: probability and consequences of the strategy failure:
  - Financial ratio projections
  - Sensitivity analysis
- **Stakeholders' reactions** (mapping)

Feasibility

- The feasibility is concerned with the capabilities of the company to implement the strategy that has been considered

Tools

- **Financial feasibility** assessment through a **cash flow analysis** (forecasting of the needed cash to deliver the strategy and identification of the likely sources to fund that cash)
- Evaluation of **capabilities needed**:
  - **Gap analysis**: available vs. required
  - Required **changes assessment**
  - **Determination of "if" and "how"** to implement changes

Sources: Adapted by Smart Pharma Consulting from G. Johnson 2008

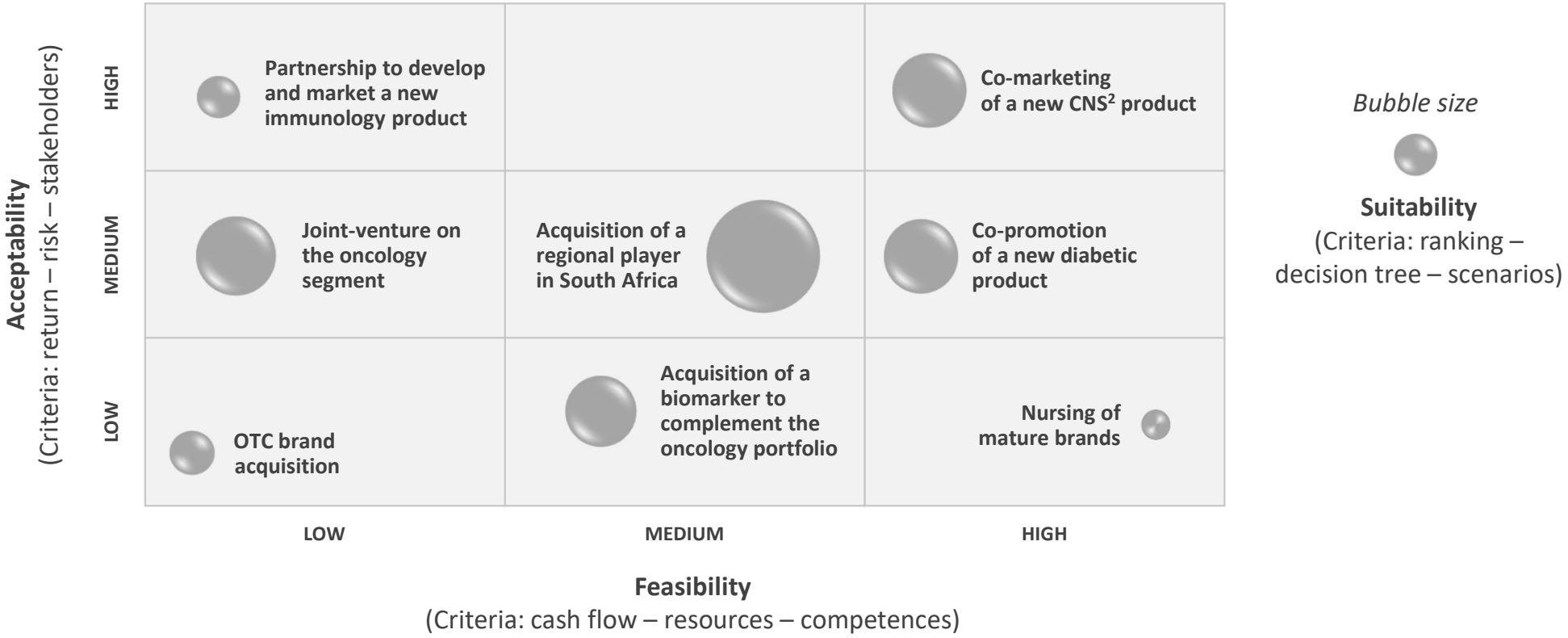
[1] Including M&A and strategic alliances – [2] Return on capital employed – [3] Discounted cash flows

The corporate BD&L evaluation matrix represents a convenient means to put into perspective acceptability, feasibility and suitability of different projects

CORPORATE STRATEGY

Corporate BD&L[1] evaluation matrix

Illustrative



Sources: Smart Pharma Consulting

[1] Including M&A and strategic alliances – [2] Central nervous system

The relevance of the selected strategic segments defined at corporate level depends on companies' capabilities to win on these segments

BUSINESS STRATEGY

How to Win? – Principles

WINNING

Once a playground has been chosen, companies must define…

… What does WINNING mean?

- Prior to answer the question "How to Win?", one must agree on a business definition for "Winning"
- "Winning" is a subjective term which depends on:
  - Companies' Strategic Square[1]
  - Companies' capabilities to fulfil customers' and shareholders' expectations, and preferably better than competitors do

"Winning is delighting your stakeholders, whoever they are, in line with your Strategic Square"

… How to WIN?

- There is not one single recipe to win, it depends on the business environment and the companies' own competitive sets of strengths and weaknesses
- At a high level, the choice is whether to strive to:
  - Grow the market segment, especially on niche markets where there is no or limited competition (e.g., certain rare diseases)

  or
  - Get preferred by stakeholders, to the detriment of competitors

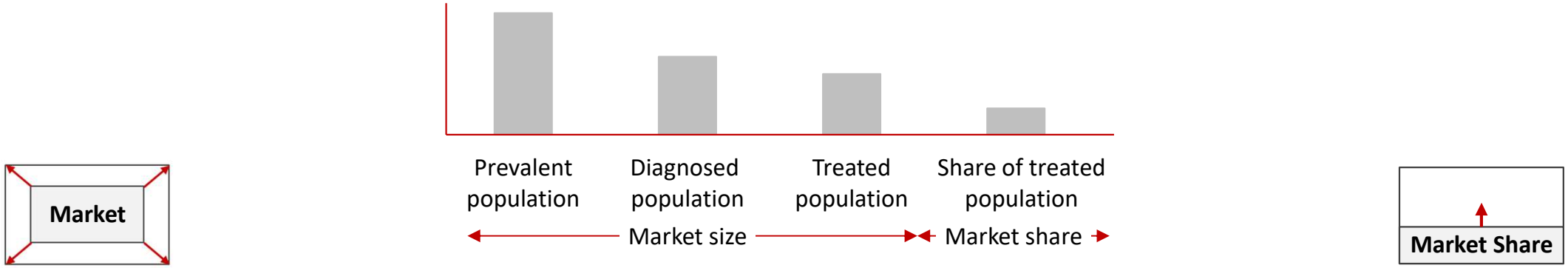
Source: Smart Pharma Consulting analyses

[1] *That is the Purpose, Vision, Mission and Core Values of the company*

Depending on the disease context and the pharma companies' competitive position, the business strategy priority will be crafted to grow the market and/or the market share

BUSINESS STRATEGY

How to Win? – Strategic options



Grow the MARKET SIZE

- In the rare diseases markets and/or when companies' position is largely dominant, the business strategy priority should be to grow the market
- To do so, pharma companies will support:
  - Screening campaigns initiated by health authorities
  - Diagnosis of the disease and prescription of drugs by HCPs
  - Programs to follow up the treated patients

Grow the MARKET SHARE

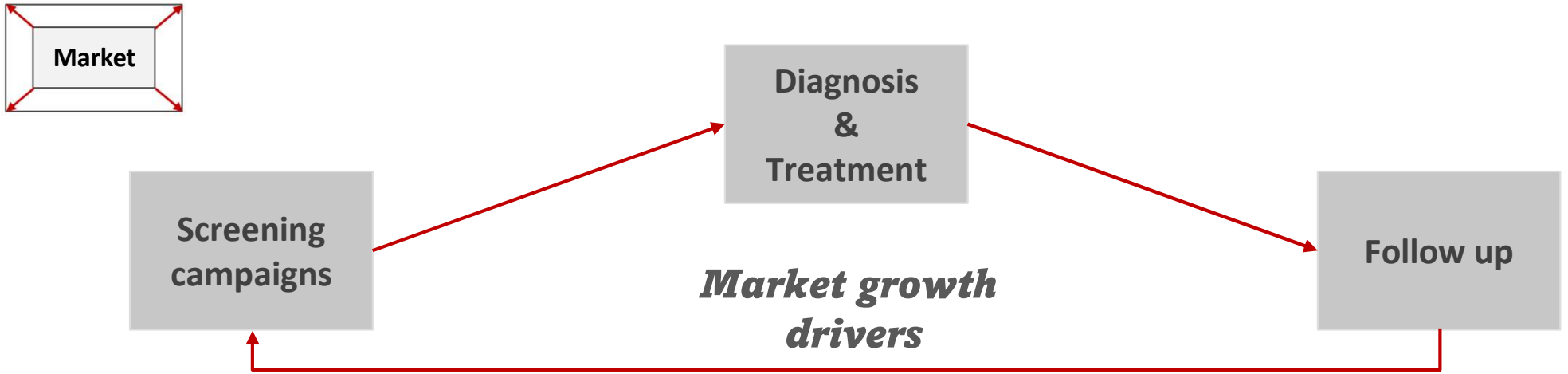
- In the great majority of cases, pharma companies' business strategy consists in fighting to optimize their market share
- To do so, they must activate the 3 drivers of their customers' preference:
  - The benefits provided by their products
  - The quality of their associated services
  - Their corporate reputation

Source: Smart Pharma Consulting analyses

When pharma companies are in a monopolistic or dominant position, their priority should be to grow the market by facilitating the screening, diagnosis, treatment and/or follow up of patients

BUSINESS STRATEGY

How to Win? – Grow the market size



Pharma companies can support healthcare authorities by:

- Co-developing the process to implement the campaign
- Offering its know-how in terms of project management
- Funding or co-funding the project
- Etc.

Pharma companies can help HCPs diagnosing & prescribing drugs by:

- Developing / marketing specific diagnostic processes and/or tools
- Supporting the improvement of diagnostic & therapeutic guidelines
- Organizing training sessions for HCPs
- Etc.

Pharma companies can contribute to improve the follow up of patients by:

- Co-developing and/or cofounding support programs to monitor clinical outcomes and well-being, to foster medical adherence, etc.
- Offering its know-how in terms of project management
- Etc.

Source: Smart Pharma Consulting analyses

To gain market share, pharma companies must activate the three determinants of stakeholders' preference, i.e., the value of their brands and associated services, and their corporate reputation

BUSINESS STRATEGY

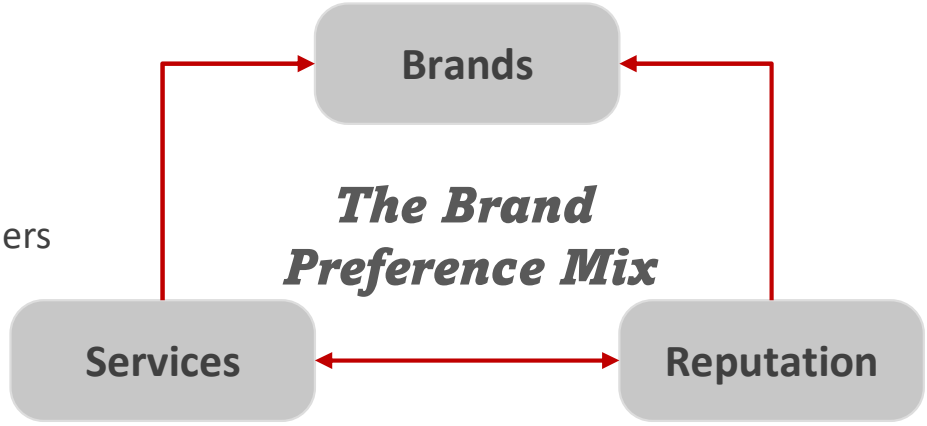
How to Win? – Grow the market share

Market Share

Brands are valued based on:

- Scope of indications
- Efficacy – safety – convenience
- Pricing
- Performance vs. competition

as perceived by various stakeholders



Services are valued based on:

- Usefulness
- Practicality
- Interest
- Execution

as perceived by various stakeholders

Corporate Reputation is valued based on:

- Products pipeline
- Governance & ethics
- Product portfolio
- Business performance
- Collaborators
- Corporate image

as perceived by various stakeholders

Source: Smart Pharma Consulting analyses

The pharma business strategy must offer a value proposition that meets, better than competition, customers' needs, wants and expectations, by mobilizing the company's capabilities and resources

BUSINESS STRATEGY

Pharma business strategy framework

Business model

Purpose

Core values | Mission | Vision

Capabilities

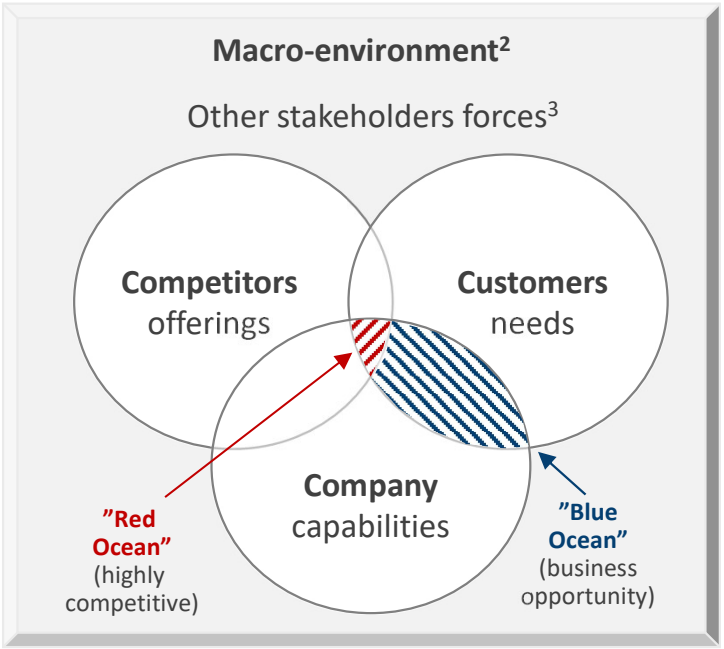
Tangible resources (physical and financial)

R & D | **Production** | **Market access** / **Medical** | **Marketing & Sales**

Support functions (BD&L – regulatory – legal – finance – HR – IT, etc.)

Intangible resources (reputation – technology – people – culture)

Strategic segments[1] by country



Strengths & Weaknesses
(Competitive advantage)

Opportunities & Threats
(Attractiveness & Key success factors)

→ Ambition & Strategic priorities ←

Sources: Adapted by Smart Pharma Consulting from C. Kim et al. and from D.J. Collis , HBR April 2008

[1] Such as: Rx-bound vs. non-Rx bound markets, originators vs. generics or biosimilars, vaccines, OTCs, food supplements, medical devices, diagnostic tools, etc. – [2] Political, Economic, Socio-demographic, Technological, Environmental and Legal (PESTEL) factors – [3] Including suppliers, new entrants, substitutes, complements (adapted from Porter's five forces model)

To craft a successful business strategy, pharma companies must evaluate their business environment to identify where their competitive advantage will be the strongest

BUSINESS STRATEGY

Assessing strategic segments by country (1/2)

To create a successful business strategy, pharma companies should carefully evaluate the strategic segment landscape they play in by:

Customers

- Developing a detailed knowledge and understanding (i.e., insights) of customers' needs, wants and expectations
- Segmenting and targeting customers based on their opinion and behavior
- Identifying unique ways of creating superior value for customers

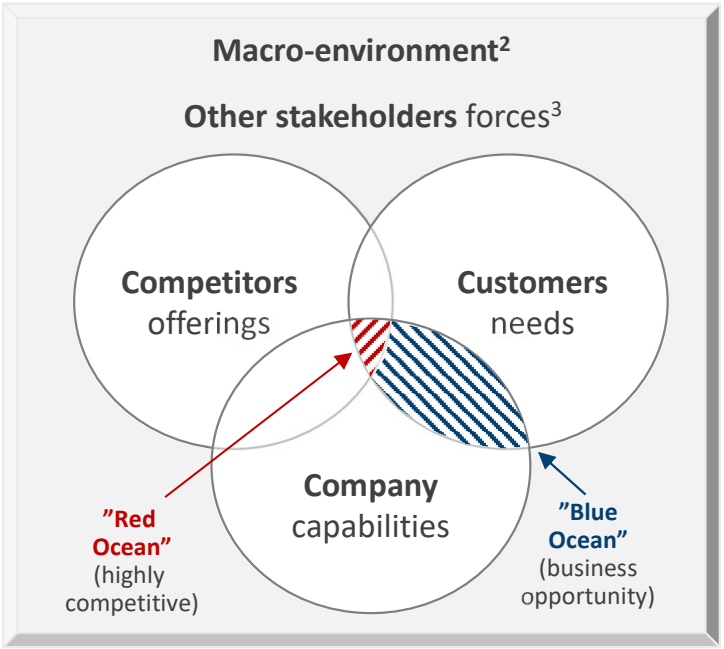
Competitors

- Analyzing competitors' strengths and weaknesses, strategies, impact, and predicting how they might change in the future

Company

- Providing products and services fulfilling better than competition, tangible and intangible customers' needs, wants and expectations
- Finding strategic spaces or "blue oceans" that align the company's capabilities with customers' unmet needs, and…
- … raising barriers to prevent competitors to enter and/or to grow

Strategic segments[1] by country



"Don't just give customers excellent services, make sure they realize how great is the service they get"

Sources: Adapted by Smart Pharma Consulting from C. Kim et al. and from D.J. Collis , HBR April 2008

[1] Such as: Rx-bound vs. non-Rx bound markets, originators vs. generics or biosimilars, vaccines, OTCs, food supplements, medical devices, diagnostic tools, etc. – [2] Political, Economic, Socio-demographic, Technological, Environmental and Legal (PESTEL) factors – [3] Including suppliers, new entrants, substitutes, complements (adapted from Porter's five forces model)

The competitive landscape analysis consists in identifying the current and evolving opinions and behaviors of key stakeholders, the corresponding driving factors and their business implications

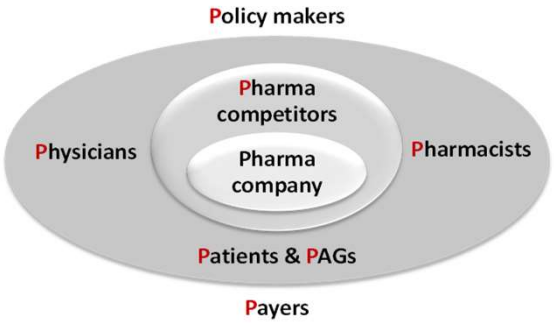
BUSINESS STRATEGY

Assessing strategic segments by country (2/2)

Illustrative

Policy makers / Payers

- Registration process and policies
- Pricing and reimbursement policies
- Medical guidelines developed by health authorities
- Trade regulations
- Public health initiatives



Pharma Competitors

- Customer preference strategy:
  - Product portfolio
  - Service offering
  - Corporate reputation
- Resource allocation (medico-marketing & sales)
- Organizational model

Physicians

- Evolving practice (working time and organization, tele-medicine)
- Prescribing habits and alignment with guidelines
- Budget constraints
- Relationships with patients
- Relationships with pharma companies (in-field and office-based collaborators)
- Unmet needs

Patients / PAGs

- Role of PAGs to influence other stakeholders (e.g., authorities, physicians, individual patients)
- Position vis-a-vis pharma companies
- Relationships with HCPs
- Patients' knowledge re. health and pharma ecosystem
- Unmet needs

Hospital-based pharmacists

- Drug listing and purchasing policy
- Position re. the use of generics and biosimilars
- Power of influence within the hospital

Retail pharmacists

- Role in public health initiatives (e.g., screening, education at the point of sale)
- Purchasing policies and selling priorities

Sources: Smart Pharma Consulting

Pharma companies should evaluate their competitive position by strategic segment and country re. their products, their resources and the configuration of their organization

BUSINESS STRATEGY

Assessing company's assets and capabilities (1/2)

Illustrative

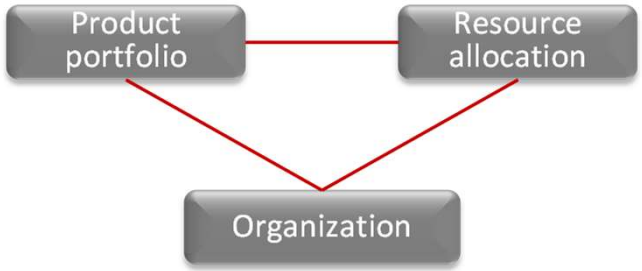
Product Portfolio

In-market brands

- Strategic and mature brands performance[1]
- Brands' competitiveness
- Life-cycle management

In-pipeline products

- Marketing authorization
- Price & Reimbursement
- Readiness launch plans



Resource allocation

- Relative activities vs. competitors in:
  - Market access and medical affairs
  - Marketing and sales
- Efficiency (ROI) and efficacy (sales and profit impact) of medico-marketing and sales investments
- Productivity of business support functions, such as: regulatory affairs, public affairs, finance, HRs, etc.

Organization

Activities / Skills

- Activities carried out (tactics) to support the company's strategy
- Monitoring of activities' execution and outputs
- Skills available vs. required

Structure

- Relevance of the organizational model to carry out the activities (i.e., flat, lean, flexible)
- FTEs available vs. required
- In-house vs. outsourced staffs

Processes

- Information sharing and decision-making processes
- Alignment of objectives, strategies and tactics
- Management of requests from head office
- Standards of excellence

Culture

- Customer management (e.g., search for preference)
- Collaborators management (e.g., working atmosphere, favor initiatives, engagement)
- Search for excellence

Sources: Smart Pharma Consulting

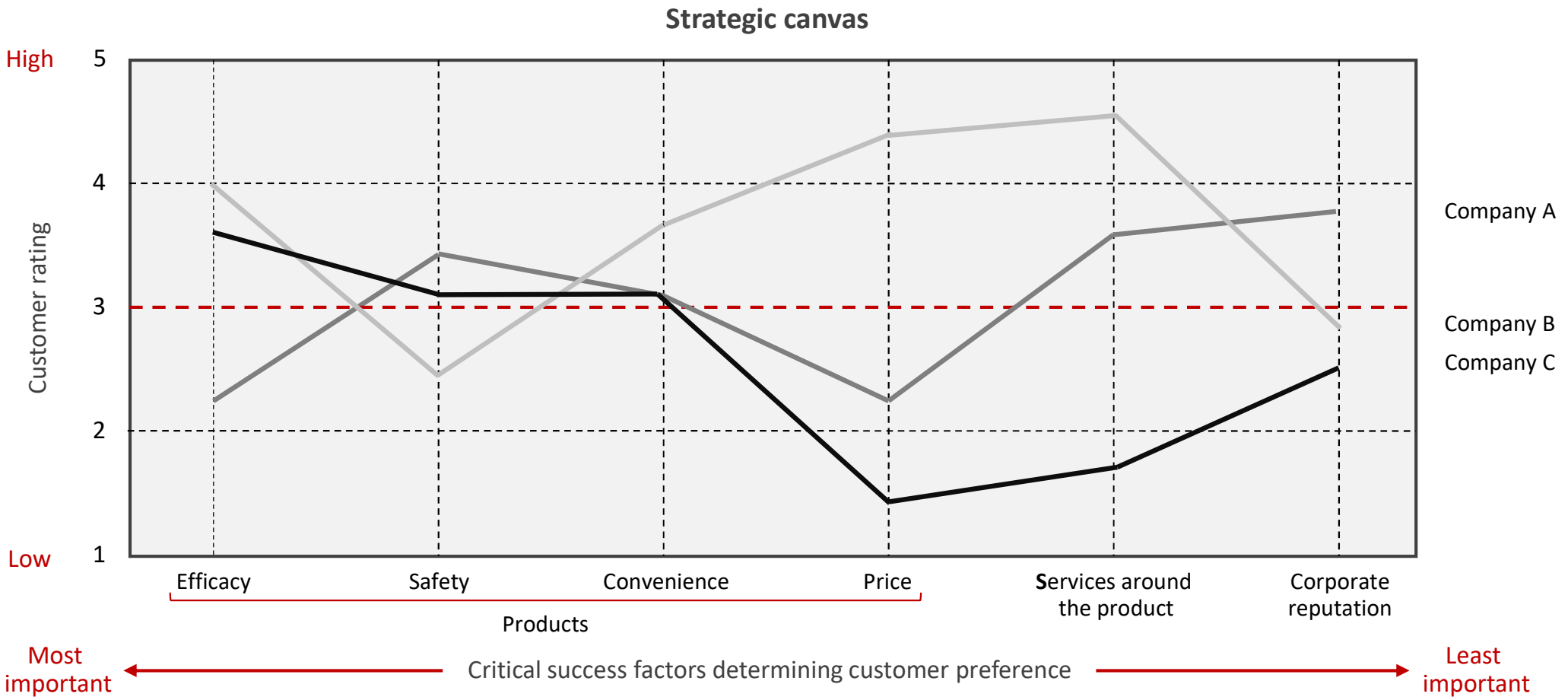
[1] *Sales – profits – market share dynamics*

The strategic canvas can help identify strategic gaps which represent opportunities that are not being fully exploited by competition

BUSINESS STRATEGY

Assessing company's assets and capabilities (2/2)

Illustrative



Sources: Adapted by Smart Pharma Consulting from C. Kim et al. and from D.J. Collis , HBR April 2008

The "Advanced SWOT" facilitates the identification of strategic imperatives which correspond to opportunities to seize, threats to circumvent, strengths to leverage and/or weaknesses to address

BUSINESS STRATEGY

Advanced SWOT & Strategic Imperatives

Illustrative

Market Opportunities	Importance From 1 to 5[1]
Policy makers (incl. health authorities) Clients (Physicians – Pharmacists – PAGs – Patients – Payers) Pharma Competitors	

Market Threats	Importance From 1 to 5[1]
Policy makers (incl. health authorities) Clients (Physicians – Pharmacists – PAGs – Patients – Payers) Pharma Competitors	

Company's Strengths	Importance From 1 to 5[1]
Portfolio (in-market & in-pipeline products) Customers' services Affiliate's reputation & organization	

Company's Weaknesses	Importance From 1 to 5[1]
Portfolio (in-market & in-pipeline products) Customers' services Affiliate's reputation & organization	

Strategic Imperatives

- Strategic imperatives (SIs) on which companies should concentrate their efforts to meet their objectives are of four kinds:
  1. Opportunities to seize
  2. Threats to circumvent
  3. Strengths to leverage
  4. Weaknesses to address
- The crafted strategy can be based on a combination of different types of SIs
- These SIs should be of high importance (rated 4 or 5[1]) and the company have the capabilities to leverage them

Sources: Smart Pharma Consulting

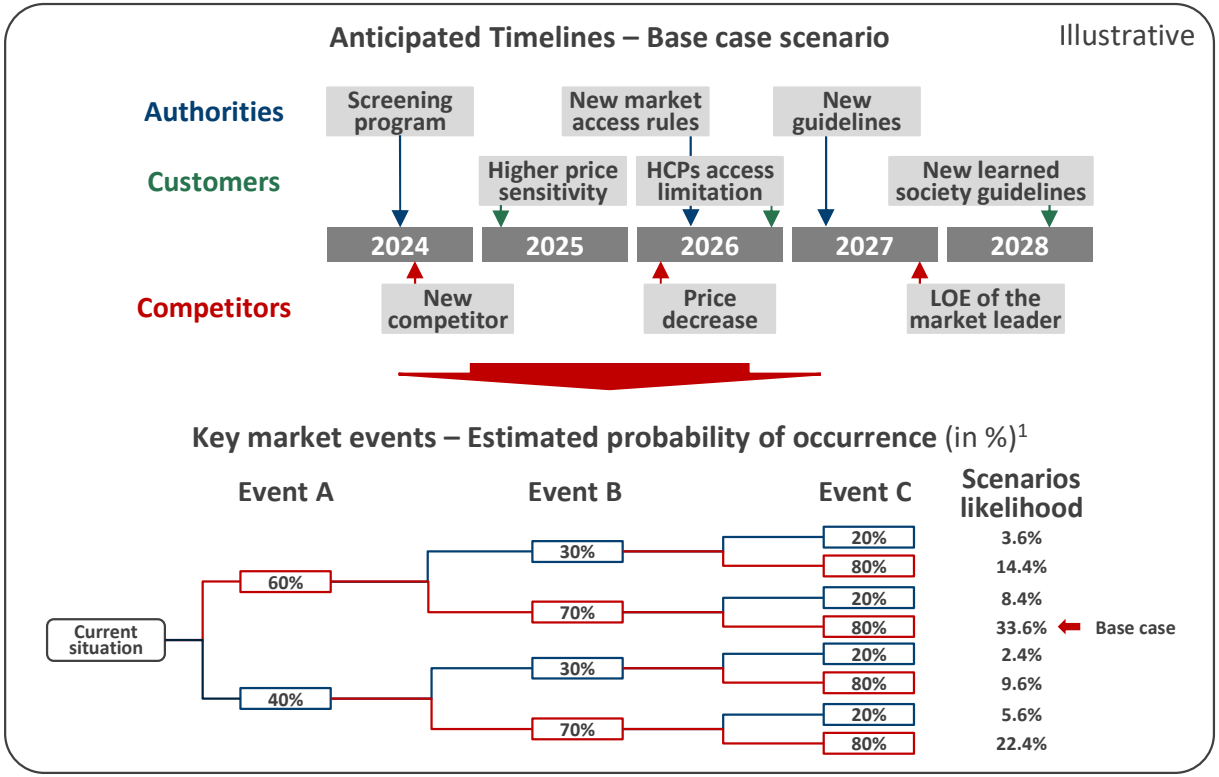
[1] 5 =High to 1 = Low

The scenario planning provides greater insights re. market opportunities and threats; and company's strengths and weaknesses, from which strategic imperatives will be crafted

BUSINESS STRATEGY

Scenario planning

- Scenario planning consists in anticipating the most likely combination of events that may impact company's performance
- Probability of plausible events are estimated, and company's proper reactions defined accordingly, on different time frames



- Key events (related to authorities, customers and competitors) likely to have an impact on the market and the company's business, in the years to come, should be positioned on a time scale
- Then, the probability of occurrence[1] of these key events should be estimated to determine the base case scenario (i.e., the most likely combination of events)
- The magnitude of each event's impact, either negative or positive, should be evaluated
- It is recommended to consider 3 scenarios[2]:
  - The "base case" on which strategy will be crafted
  - The "worst case" to build a contingency plan
  - The "best case" to craft a voluntary strategy

Sources: Smart Pharma Consulting

[1] High to moderate probability: ≥ 60%, High to moderate improbability ≤ 40%, Uncertainty: 50% –
[2] However, it can happen that the "base case" is the "best" or the "worst case"

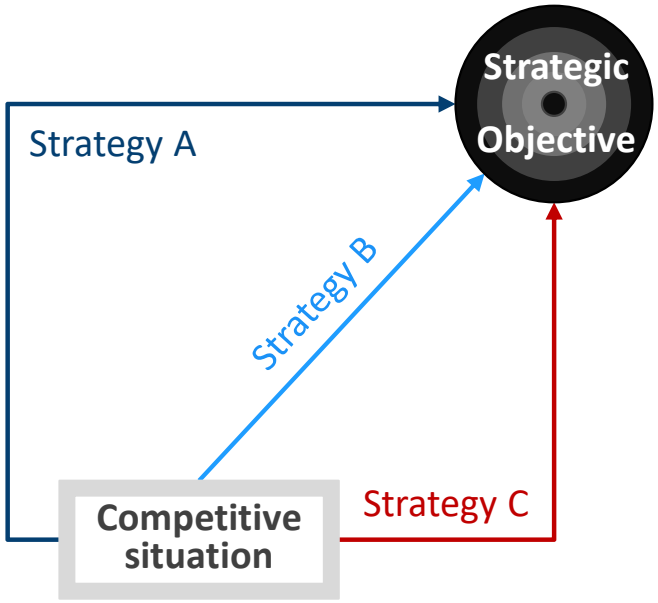
The likelihood to achieve the set strategic objectives in a strategic segment depends as much on the selected strategy as on the supporting activities (tactics) and the excellence of their execution

BUSINESS STRATEGY

Objective setting and strategy crafting

Illustrative

- The competitive situation analysis by strategic segment[1] – or by therapeutic domain[2] within a strategic segment – enables to identify the companies' competitive position, the markets' key success factors and the key challenges
- The aim of the strategy, expressed as a combination of strategic imperatives (priorities) that should be then broken down into consistent tactics (i.e., operational actions), is to achieve the set strategic objective in a time horizon of three to five years
- The strategic objective, which can be expressed in qualitative and quantitative terms, should be *S.M.A.R.T.*[3]



- The preferred strategy should be based on historical and future drivers and limiters[4] related to:
  - Market opportunities and threats depending on stakeholders' behavior:
    - Policy makers (incl. health authorities)
    - Clients (physicians – pharmacists – PAGs – patients – payers[5])
    - Competitors
  - Companies' strengths and weaknesses depending on their competitive position:
    - Brands Preference Mix[6]
    - Specific know-how and capabilities
    - Human and financial resources
- The chosen business strategy should also consider the Pharma Company "Strategic Square" which is defined by its purpose, vision, mission and core values

Sources: Smart Pharma Consulting

[1] Such as: Human Rx-bound drugs & Vaccines, OTC, animal health – [2] Such as oncology, immunology, vaccines within the human Rx-bound drugs & Vaccines strategic segment – [3] Specific, Measurable, Attainable, Relevant, Time-limited – [4] Future drivers and limiters are assessed when building market scenarios – [5] Public and private health insurers, or patients themselves – [6] That is the brands value, the quality of the associated service and the corporate reputation as seen by the stakeholders

Understanding what drive customers' preference and how competition is structured is a prerequisite for an effective business strategy

BUSINESS STRATEGY

Key success factors by strategic segment and country

What do customers need – want – expect?

Demand analysis

- Who are our customers? (prescribers, consumers, distributors, payers, influencers, "injectors", etc.)
- What is their respective role?
- What do they need?
- What do they want?
- What do they expect from pharma companies?
- What are their available alternatives?
- What does create customers' preference?

How to outperform competition?

Competitive analysis

- Who are our competitors?
- What drives competition?
- What are the main dimensions of competition?
- How intense is the competition?
- How to obtain a superior and sustainable competitive position?
- How to create customers' preference?

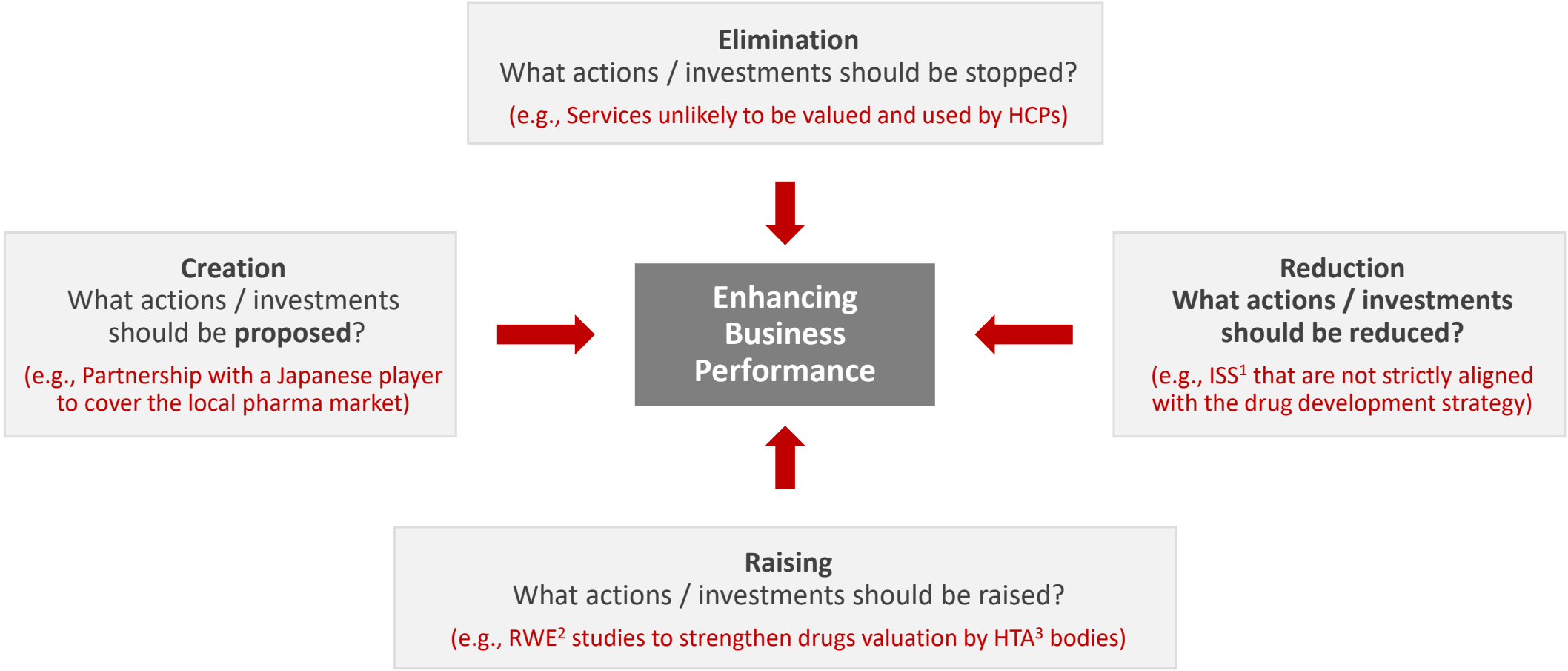
Source: Adapted by Smart Pharma Consulting from R. Grant 2008

Pharma companies can enhance their business performance by reconsidering the management of the key success factors that are specific to the strategic segments they play in

BUSINESS STRATEGY

Performance through key success factors management

Illustrative



Sources: Adapted by Smart Pharma Consulting from C. Kim et al. and from D.J. Collis , HBR April 2008

[1] Investigator-Initiated Studies – [2] Real World Evidence – [3] Health Technology Assessment based on clinical and cost-effectiveness data

The Business Strategy Card is a useful tool to ensure an alignment between the strategic objective, the selected strategic imperatives[1] and the corresponding tactics

BUSINESS STRATEGY

The Business Strategic Card

- The Business Strategy Card describes the strategic objective, the strategic imperatives selected to achieve that objective and the key tactics supporting the strategic imperatives

Illustrative

- The Business Strategy Card helps to ensure the consistency between the objective – the strategic imperatives – the key tactics
- The trickiest part is to select the most relevant strategic imperatives, as derived from the Advanced SWOT, which are:
  - Opportunities to seize
  - Threats to fight again
  - Strengths to capitalize on, and/or
  - Weaknesses to address
- The preferred strategic imperatives are those which are the most likely to have an impact on the business performance so that to achieve the set strategic objective

Sources: Smart Pharma Consulting

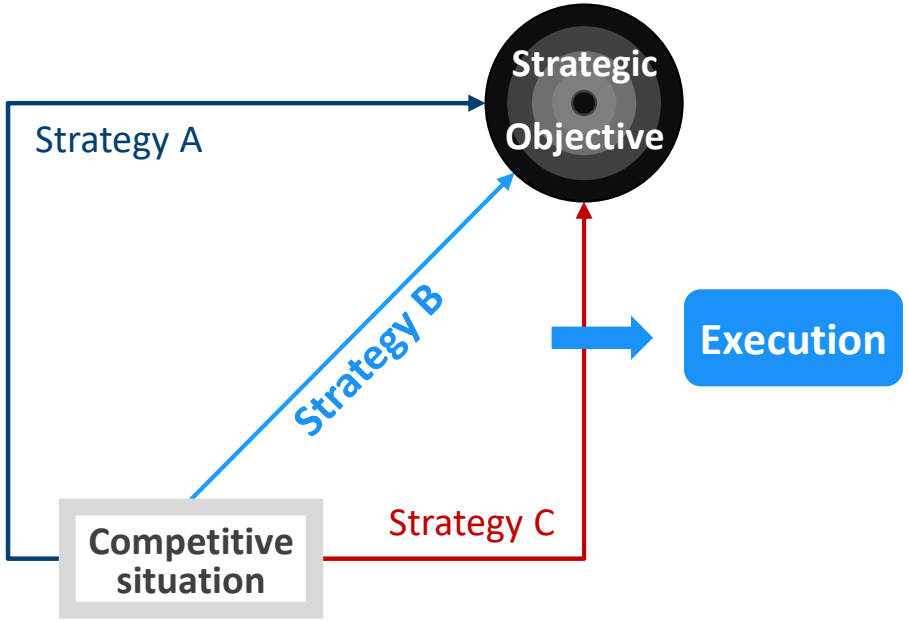
[1] Alternatively called strategic drivers

The likelihood to achieve the set strategic objective, at corporate and/or business levels, depends as much on the selected strategy as on the excellence of its execution

OPERATIONAL STRATEGY

Objective setting – Strategy crafting & execution

- The strategy development – at corporate or business level – starts by analyzing the competitive situation, the associated key success factors and the challenges
- The selected strategy (or strategic priorities) is a means to achieve the set objective in three to five years time horizon
- The strategic objective should be *S.M.A.R.T.*[1] and be consistent with the companies' Strategic Square[2]
- The strategy will be then broken down into tactics that…
- … will require a set of determinants to ensure its success



It is essential not to dissociate strategy development from execution, both being the two sides of the same coin

- Successful strategy execution depends on 3 key determinants:
  1. Understanding, adhesion and engagement of implementers
  2. Adjustment of the organization through its four components (i.e., activities, structure, processes and culture)
  3. Mobilization of capabilities and resources

"The only valid strategy is the one that can be properly executed"

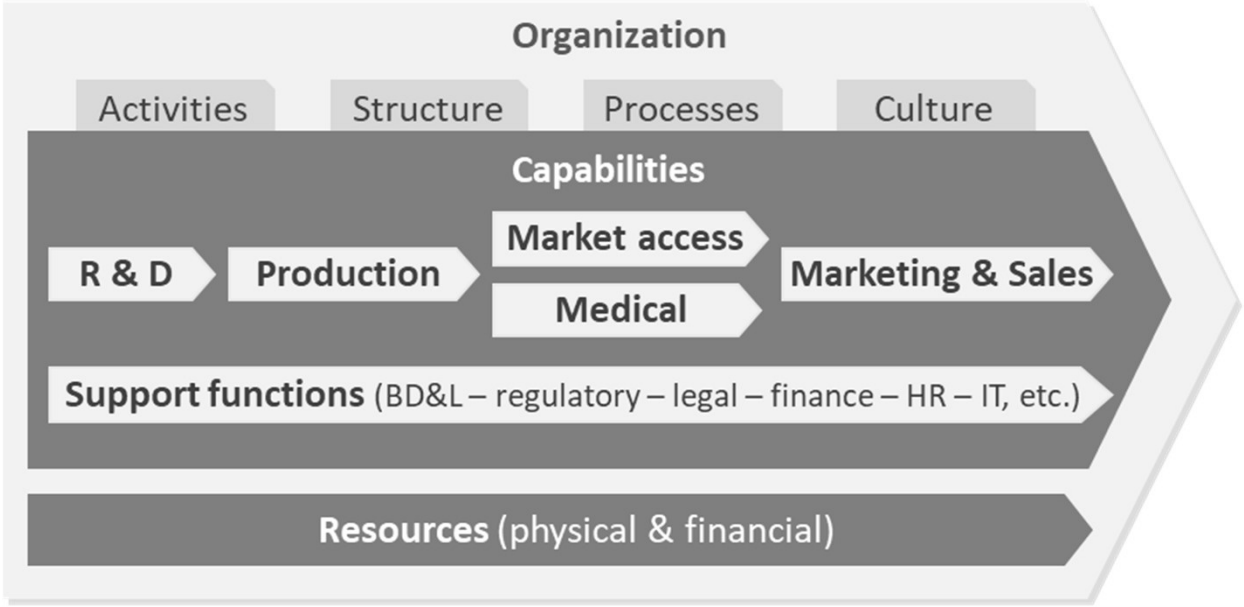
Sources: Smart Pharma Consulting

*[1] Specific, Measurable, Attainable, Relevant, Time-limited – [2] Purpose, Vision, Mission, Core Values (see Smart Pharma Consulting **position paper** on Pharma Corporate Strategy)*

The quality of the strategy execution is mainly driven by the companies' organizational design, its available capabilities and the proper allocation of resources

OPERATIONAL STRATEGY

Operational strategy: How to Execute?



"When a strategy looks brilliant, it's because of the quality of execution" – *Rosabeth Moss Kanter*

How to EXECUTE?

- To ensure an optimal execution of the strategy, at the operational level, pharma companies require to have the right:
  - Organization
  - Capabilities
  - Resources
- The organization should be considered through its four components:

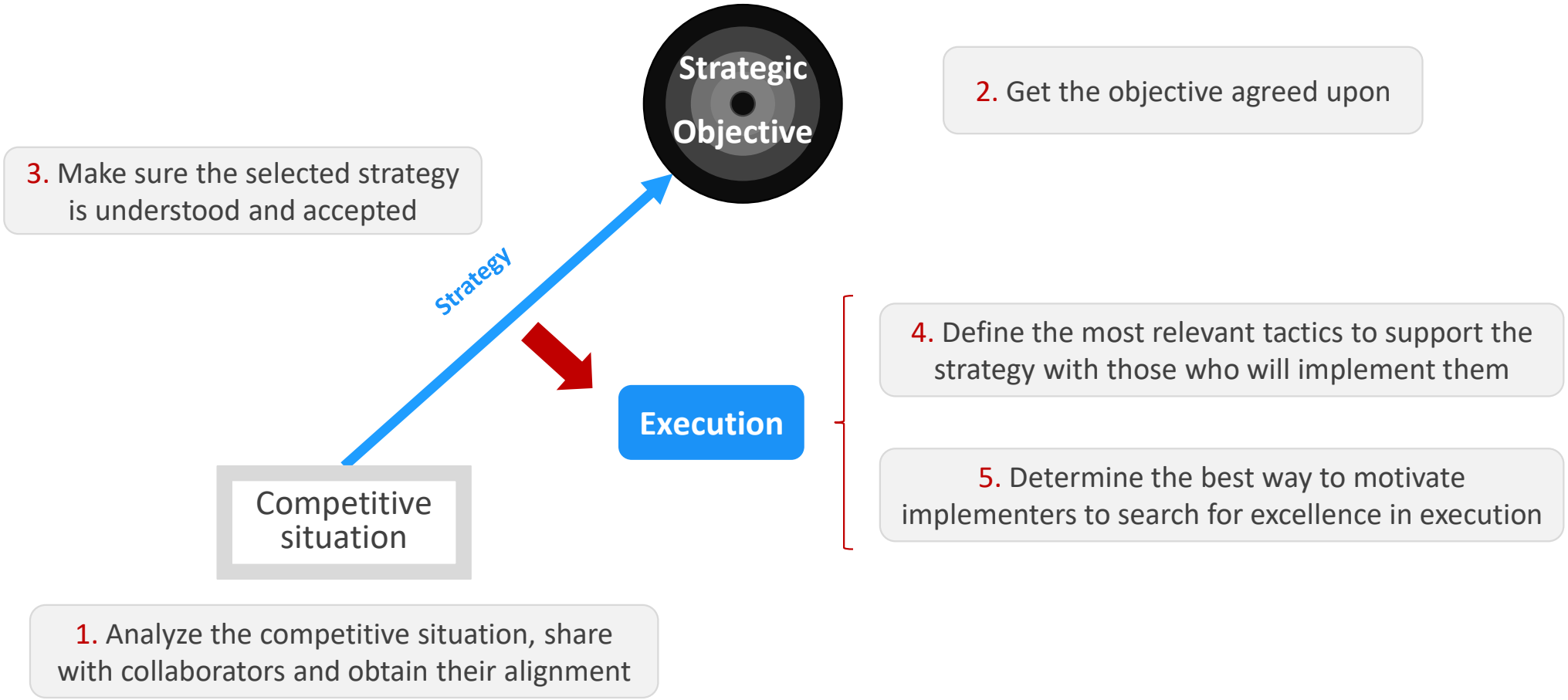
  Activities – Structure – Processes – Culture
- Capabilities assessment along the value chain would define whether the company is able to execute properly the strategy
- Physical (material) and financial resources should be allocated so that to create the conditions necessary for success

Source: Smart Pharma Consulting analyses

The alignment on the objective, the selected strategy and the corresponding tactics of collaborators involved in execution will make it more relevant and more efficient

OPERATIONAL STRATEGY

How to on-board collaborators in strategy execution (1/2)



Sources: Smart Pharma Consulting analysis

[1] Key Execution Indicators – [2] Key Performance Indicators

An effective execution of the strategy requires a participative and collaborative approach, to focus on the most important activities, to develop competence and to ignite passion of collaborators

OPERATIONAL STRATEGY

How to on-board collaborators in strategy execution (2/2)

1. Analyze the competitive situation, share with collaborators and obtain their alignment

- Call in collaborators having a good knowledge and understanding of the competitive situation

2. Get the objective agreed upon

- Set SMART[1] objectives to help managers and frontline employees take ownership over their roles in the execution

3. Make sure the selected strategy is understood and accepted

- Involve employees in strategy design to increase its relevance, facilitate the buy-in, and make execution easier and smoother

4. Define the most relevant tactics to support the strategy with those who will implement them

5. Determine the best way to motivate implementers to search for excellence in execution

- Middle management should set the ways of working, inspire and mobilize their subordinates and monitor carefully their activities
- Empower employees to develop ownership and figure out how best to meet the objective

- Ensure implementers focus on the most critical activities supporting the strategy to achieve the strategic objective…
- … which should be broken down in tactical objectives and thus in cross-team and/or individual objectives
- Build practical working plans (i.e., clear, concrete, familiar), adaptable to market or company changes
- Develop metrics to monitor the quality of activities execution…
- … and their impact

Sources: Smart Pharma Consulting analysis

[1] *Specific, Measurable, Attainable, Relevant, Time-limited*

The careful answers to the five key following questions will contribute to ensure an optimal execution of the designed strategy to achieve the set objective

Key questions related to strategy execution

1. **What to do?** Select the most relevant activities	The translation of the strategy into selected key activities should involve those who will be responsible to implement them
2. **Why to do it?** Document the rationale to carry out these activities	The activities to focus on should effectively and efficiently support the designed strategy to meet the set objective
3. **How to do it?** Define the best practices and the best organization	The execution of the strategy should comply with the best practices to deliver the expected outcomes
4. **How well has it been done?** Monitor the quality of execution	The monitoring of the quality of execution will enable to adjust, if required, the manner things are done to get better outcomes
5. **How close are we from the objective?** Monitor the performance	The monitoring of the outcomes will enable to evaluate if the strategy produces the expected outcomes

Sources: Smart Pharma Consulting analysis

To achieve excellence in their strategy execution, companies must design a holistic organizational system fostering the search for excellence by all its collaborators, either front line or back-office

OPERATIONAL STRATEGY

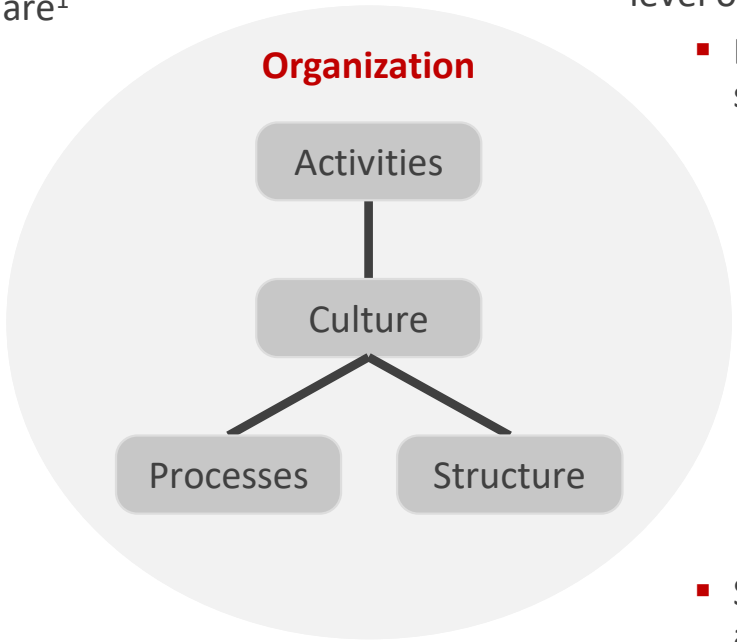
Adjustment of the organization – Overview

Culture

- Develop a culture of excellence to expand the market and/or gain market share through customer preference
- Create a link between the Strategic Square[1] and the strategic objective set so that the collaborators feel connected[2]
- Install a participative culture including the strategy development
- Encourage pro-activity, agility and experiment to boost excellence

Activities

- Focus on activities that best support the strategy and that company excels in, at the level of concerned departments
  - Develop the skills of managers and of subordinates in charge of the execution
    - Motivate collaborators to foster the quality of the execution to get the expected outcomes



Processes

- Align objective, strategy and tactics
- Facilitate and motivate collaborations across departments / project streams
- Set up flexible execution plans
- Measure the quality and the impact of activities
- Streamline processes and set up standards of excellence

Structure

- Design a structure easily scalable according to the changing environment
- Set up a flat and lean organigram favoring accountability and empowerment
- Eliminate needless complexity

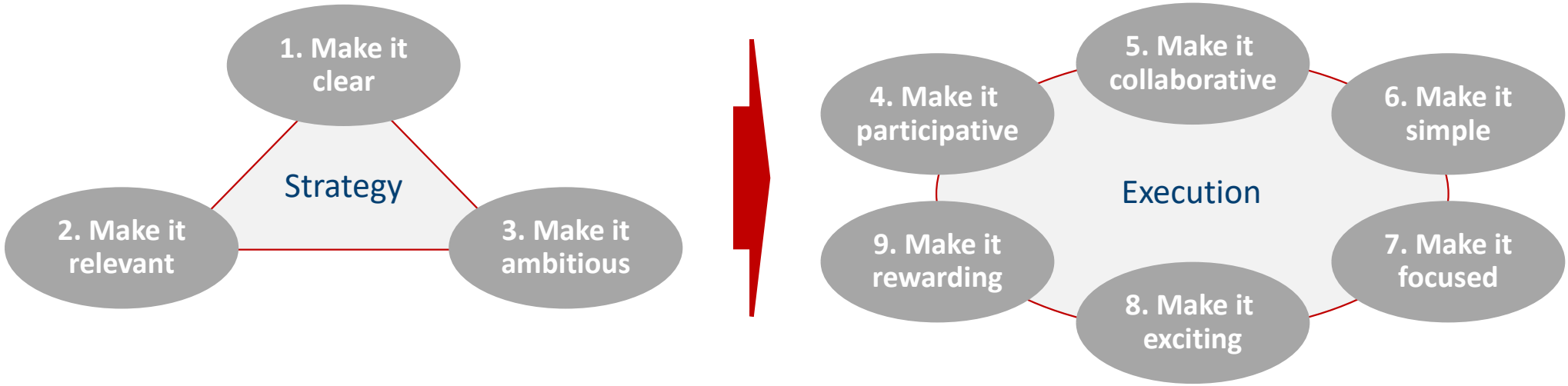
Source: Smart Pharma Consulting analyses

*[1] Purpose, Vision, Mission, Core Values (see Smart Pharma Consulting **position paper** on Pharma Corporate Strategy) – [2] Set clear performance expectations, hold them accountable, give them regular feedbacks, reward their performance, share outcomes, etc.*

The proper translation of a strategy into actions requires to be clearly formulated, make sense, be ambitious enough, while providing implementers a positive experience

OPERATIONAL STRATEGY

Guiding principles to align and engage implementers



- Clarity will help collaborators better realize what it takes to execute the strategy
- The perceived relevance by implementers is key to get their full engagement
- The level of ambition should be high enough to justify the specific effort related to its execution

- Decisions should be as much as possible participative
- On-going coordination across departments is essential
- Keep initiatives simple and focus on the most effective ones
- Make sure the way strategy is implemented is stimulating…
- … and provides implementers a rewarding experience

Sources: Smart Pharma Consulting analysis

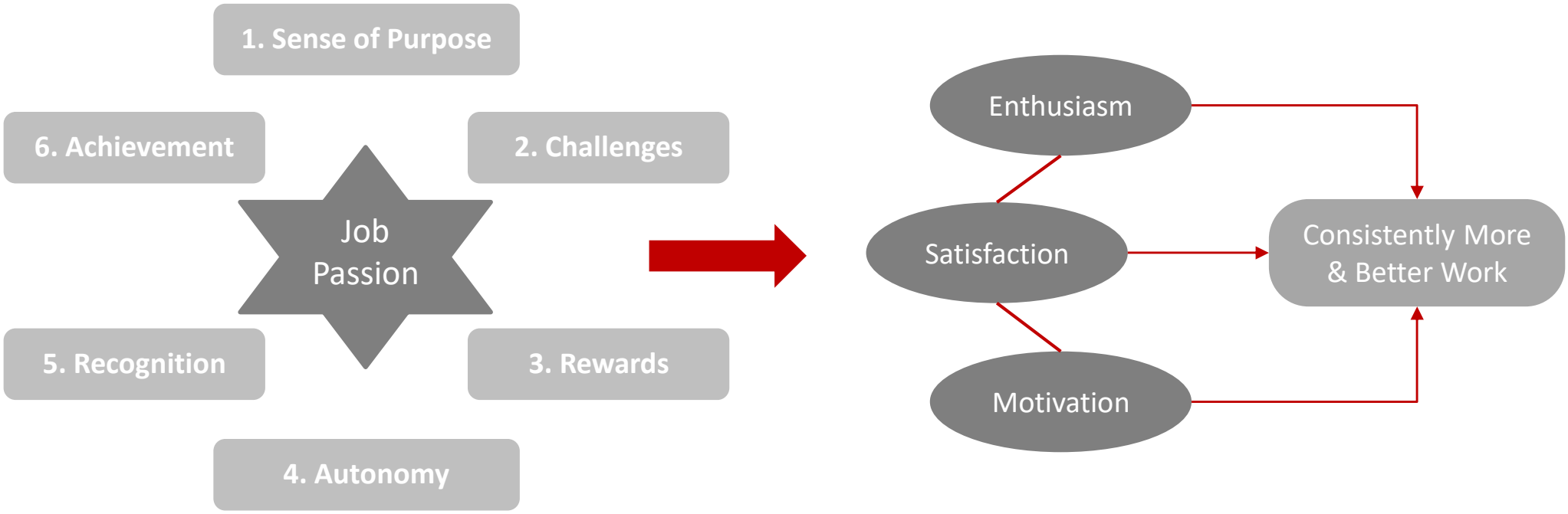
Stimulating collaborators passion for their job is a key performance driver, especially in a context of corporate and/or business strategies execution

OPERATIONAL STRATEGY

Drivers influencing the passion of implementers for their job

Six key drivers of job passion…

… having a positive influence on collaborators' mindset



"Pleasure in the job puts perfection in the work" – *Aristotle*

Sources: Smart Pharma Consulting analysis

The execution of the strategy should be tracked to measure its impact and to evaluate the way it is done, so that to bring possible adjustments to deliver the expected results

OPERATIONAL STRATEGY

Monitoring of strategy execution and impact

KEY EXECUTION INDICATORS (KEIs)

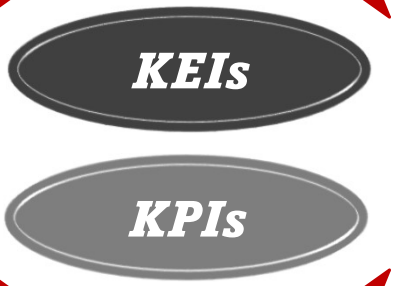
Monitor the execution of the actions

- Choose easy to understand indicators
- Select consistent data over time and across business units
- Favor indicators for which data is easy to collect

KEY PERFORMANCE INDICATORS (KPIs)

Evaluate how far the set objective is achieved

- Limit the number of indicators
- Mix leading and lagging indicators
- Back up indicators with reliable and recurrent data



"There is no successful strategy without a systematic and rigorous monitoring of activities execution and impact"

Sources: Smart Pharma Consulting analysis

It is essential to use metrics to ensure the strategy is correctly implemented and that these activities produce the expected results

OPERATIONAL STRATEGY

Activity-based and performance-based monitoring indicators

Typology	Definitions	Examples of KEIs[1]	Examples of KPIs[2]
Quantitative	Measure by counting, averaging numbers, calculating rates, ratios, etc.	Number of gained and lost customer accounts	Sales generated over a period
Qualitative	Express opinions, traits, characteristics	Opinion of stakeholders	Stakeholders' satisfaction survey
Process	Measure the efficiency or productivity of a business process	Compliance with project deadlines	Days spent to execute a task
Input	Measure assets and resources invested in or used to generate business results	Actual vs. budgeted investment	Investments in a project
Output	Measure the financial and non-financial results of business activities	Number of clients having a positive opinion of products	Revenues – Numbers of new clients
Leading	Measure activities that will have a significant impact on future performance	Quality of tendering planning	Pricing negotiated with payers
Lagging	Measure the output (success or failure) of past activities	Number of applications sent on time for tenders	ROI – profitability

Sources: Smart Pharma Consulting analysis

[1] Key execution indicators – [2] Key performance indicators

The Operational Strategy Card ensures the strategic objective, imperatives and tactics are aligned, while the strategic planning and monitoring table favors the quality of execution and its efficiency

OPERATIONAL STRATEGY

Operational strategy tools

Operational Strategic Card

Illustrative

- The Operational Strategy Card should be developed at department / project level and support the corporate and/or strategic objectives
- The Card which describes the department / project strategic objective, imperatives and key tactics helps ensuring consistency between these three components
- Preferred strategic imperatives impact the business performance so that to achieve the strategic objective

Strategic planning & monitoring table

- Strategic driver:
- Objective:
- Description:

- Stakeholder type:
- Number of stakeholders:

Planning	Actions	Timing	Owner	FTEs	OPEX
Key actions to implement this tactic					

Monitoring	Quantitative / qualitative metrics	Indicator objective	Indicator achievement	Key implications / Comments
Key Execution Indicators (KEIs)[1] (quality of execution)				
Key Performance Indicators (KPIs)[1] (Impact of tactics)				

- The planning of strategy execution should not be fixed, but adapted in real-time to unforeseen evolution of internal and external situations
- Thus, it is necessary to ensure an agile adjustment and reallocation of focus, capabilities and resources considering these possible changes
- Coordination of key tactics with other departments and/or project streams on an ongoing basis is essential for an efficient execution
- The quality and impact of strategy execution should be carefully measured with KEIs[1] and KPIs[1] to possibly carry out adjustments

Sources: Smart Pharma Consulting

[1] Key Execution Indicators and Key Performance Indicators – See our position paper "KPIs & KEIs for Success" available on Smart Pharma Consulting website

The main operational strategic challenge is to concentrate and align – across departments and project streams – capabilities and resources on the most critical actions to meet the set objective

OPERATIONAL STRATEGY

Coordination across project streams and departments

R&D | Production | Access | Medical | Marketing | Sales | Support functions[1]

Strategic Objective

Strategic Imperatives

1. Optimise stakeholders' preference	2. Improve operational efficiency	3. Adjust the organizational model
1.A. Shape the covered market segments	2.A. Improve investment decision process	3.A. Attract and retain talented people
1.B. Optimize portfolio value-proposition	2.B. Evaluate quality of activities execution	3.B. Adapt the FTEs to remain competitive
1.C. Offer high-value services to customers	2.C. Measure the impact of activities	3.C. Promote excellence in execution
1.D. Strengthen corporate reputation	2.D. Challenge the status quo	3.D. Rationalize and simplify key processes

Supportive tactics

Operational Strategic Card

Strategic planning & monitoring table

- Strategic driver:
- Objective:
- Description:

- Stakeholder type:
- Number of stakeholders:

Planning	Actions	Timing	Owner	FTEs	OPEX
Key actions to implement this tactic					

Monitoring	Quantitative / qualitative metrics	Indicator objective	Indicator achievement	Key implications / Comments
Key Execution Indicators (KEIs)[1] (quality of execution)				
Key Performance Indicators (KPIs)[1] (Impact of tactics)				

- Corporate and business strategies should be translated into each department's and/or project stream's specific strategic initiatives, with their objective, imperatives and key tactics
- Strategic roadmaps should be communicated and explained within and across departments / project streams
- The execution should be carried out in a close cooperation and coordination to ensure an optimal operational alignment, the leverage of complementarities and synergies
- In practice, each department / project should define:
  - What specific actions should be started, continued, expended, downsized, stopped
  - The most efficient and effective way to carry out the selected actions by setting quality of execution and performance objectives with KEIs[2] and KPIs[2]
  - The required capabilities and resources
  - The best way to engage and motivate collaborators
- Agility of the test and learn (i.e., experimental) approach would help coping with the volatility of the environment

Sources: Smart Pharma Consulting

[1] BD&L, regulatory, governmental affairs, legal, finance, HR, IT, etc. – [2] Key Execution Indicators and Key Performance Indicators

While corporate strategy defines where pharma companies decide to play…
… business strategy sets the priorities to win

Corporate & Business strategy takeaways

The selected strategic segments – where to play – depends on market attractiveness and companies' capabilities to win

Analysis of current and evolving opinions and behaviors of key stakeholders, of corresponding driving factors and their business implications are a prerequisite to business strategy crafting

Growing the market is the priority in monopolistic or dominant position

It is essential to leverage the "Brand Preference Mix" to gain market share

The "Advanced SWOT" is instrumental to define strategic imperatives and the supporting activities (tactics)

"The only strategy worthwhile is that fulfilling customer's needs, wants and expectations, to get preferred"

The achievement of business objectives is strongly driven by the excellence of the strategy execution

Sources: Smart Pharma Consulting

To ensure the designed corporate and/or business strategies deliver their expected outcomes, pharma companies should pay a special attention to the following six key success factors

Operational strategy takeaways

1. The corporate and/or business strategies should be shared and explained to all implementers

2. Capabilities and resources should focus on activities that are critical to meet the set strategic objective

3. Departments and project streams should prioritize the actions that will best contribute to achieve the overall strategic objective

4. All departments and project streams should cooperate and coordinate in an aligned and synergistic way for optimal outcomes

5. All involved implementers should be empowered and get engaged to give their best to achieve a strategic objective that makes sense to them

"Focus on what is critical, and have the courage to stop non-effective and non-efficient actions"

6. The implementation and impact of actions supporting the strategy should be carefully monitored to determine any required adjustments

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Pharma Corporate Strategy

Survival Toolkit

What to know & understand about Corporate Strategy

POSITION PAPER November 2023

Corporate strategy selects the strategic segments, business strategy creates a competitive advantage, and operational strategy defines the appropriate organization

Definitions

- Amongst multiple possibilities, we propose the following definition for strategy:

"Strategy is the long-term direction and scope set by a company to fulfill stakeholders'[1] expectations through proper capability building and resources allocation"

- One can consider three basic strategic levels in any pharma company:

CORPORATE STRATEGY

In which strategic segments should we be in?

- Corporate strategy defines the purpose and the scope in which companies compete or should compete and how to add value to their businesses

BUSINESS STRATEGY

How should we compete in the selected segments?

- Business or competitive strategy defines how to compete successfully in each strategic segment (e.g., R&D-based drugs, vaccines, CHC[2], generics, medical devices)

OPERATIONAL STRATEGY

Which organizational configuration do we need?

- Operational strategy sets the activities, capabilities, processes, structure, culture and resources needed to support corporate and business strategies

Sources: Smart Pharma Consulting, adapted after G. Johnson et al., Exploring Corporate Strategy, Pearson, 2019

[1] Basically authorities, customers, employees and shareholders – [2] Consumer Heath Care, including OTCs, food supplements, minerals, vitamins, etc.

Definition or reaffirmation of the Pharma Company Strategic Square is important to engage collaborators and external stakeholders, before crafting the corporate strategy

The Strategic Square – Principle

Why do we exist?

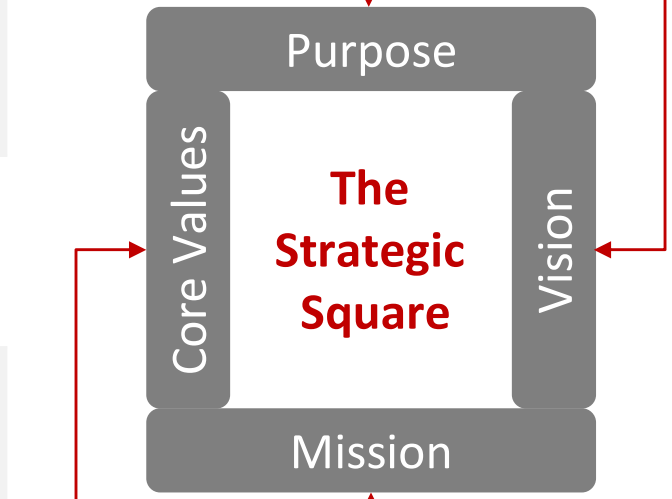
- It explains the companies' reason for existence. Its "raison d'être"

"We use the power of leading-edge science to save and improve lives around the world" – Merck & Co

What do we aspire to become?

- Vision is an indeterminate mid- to long-term goal

"To be the world's leading biopharma company that transforms patients' lives through science" – BMS



What do we believe in and how do we behave?

- They are the underlying principles that guide the company strategy

"Integrity, inclusion, teamwork, accountability and excellence" – Gilead

What do we do and for whom?

- Mission answers how we are going to make the vision a reality

"Our mission is to discover new ways to improve and extend people's lives" – Novartis

Sources: Smart Pharma Consulting and pharma companies' website (2023)

The four dimensions of the Strategic Square should be thoughtfully and carefully implemented to have a positive impact on the opinion and behavior of company's employees and stakeholders

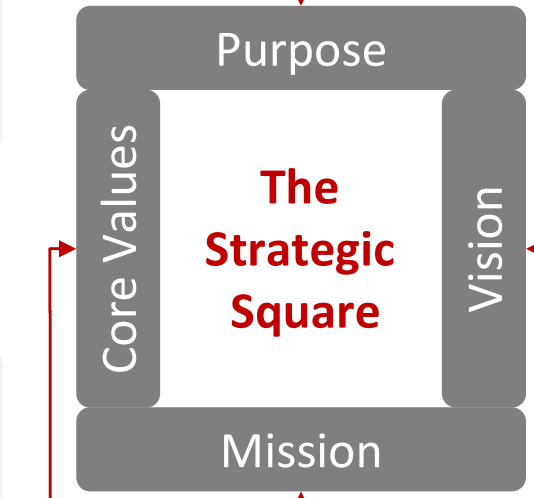
The Strategic Square – Recommendations

Why do we exist?

- The purpose statement should be:
  - Simple
  - Meaningful
  - Reflected in employees' daily life

What do we aspire to become?

- The corporate vision should contribute to give sense to employees' life and thus…
- … generate a feeling of pride and belonging



What do we believe in and how do we behave?

- The core values should reflect the personality of the company, and thus guide the way the strategy is implemented[2]

What do we do and for whom?

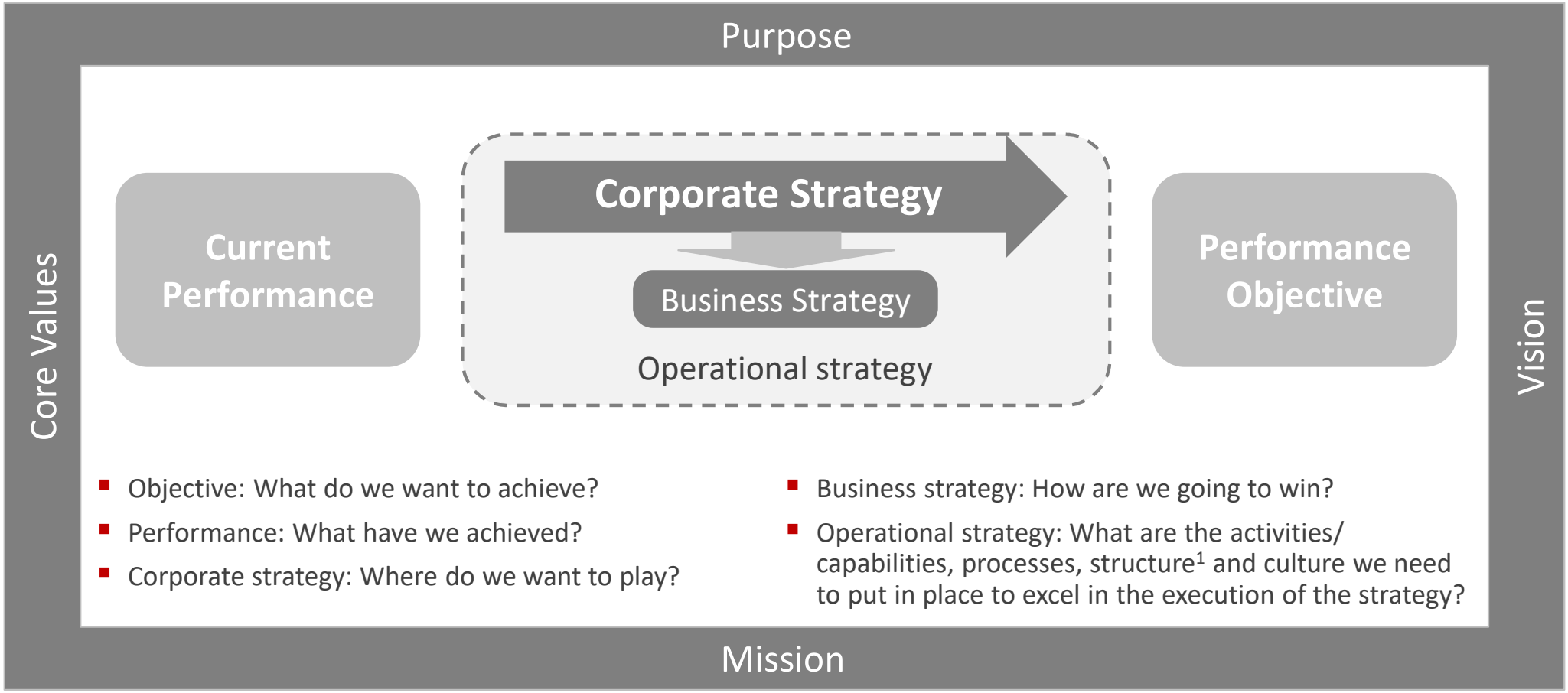
- The mission should clearly define:
  - The customers served
  - The needs to fulfill
  - The solutions[1] proposed to do so

Sources: Smart Pharma Consulting – Adapted from H. Joly, HBR digital (October 2023)

[1] Products and/or services – [2] Values such as "Honesty" or "Ethics" are not recommended because they are not optional but compulsory

The Strategic Square guides companies to set their performance objective, select their preferred strategy at the corporate, business and operational levels

The Strategic Square – What for?



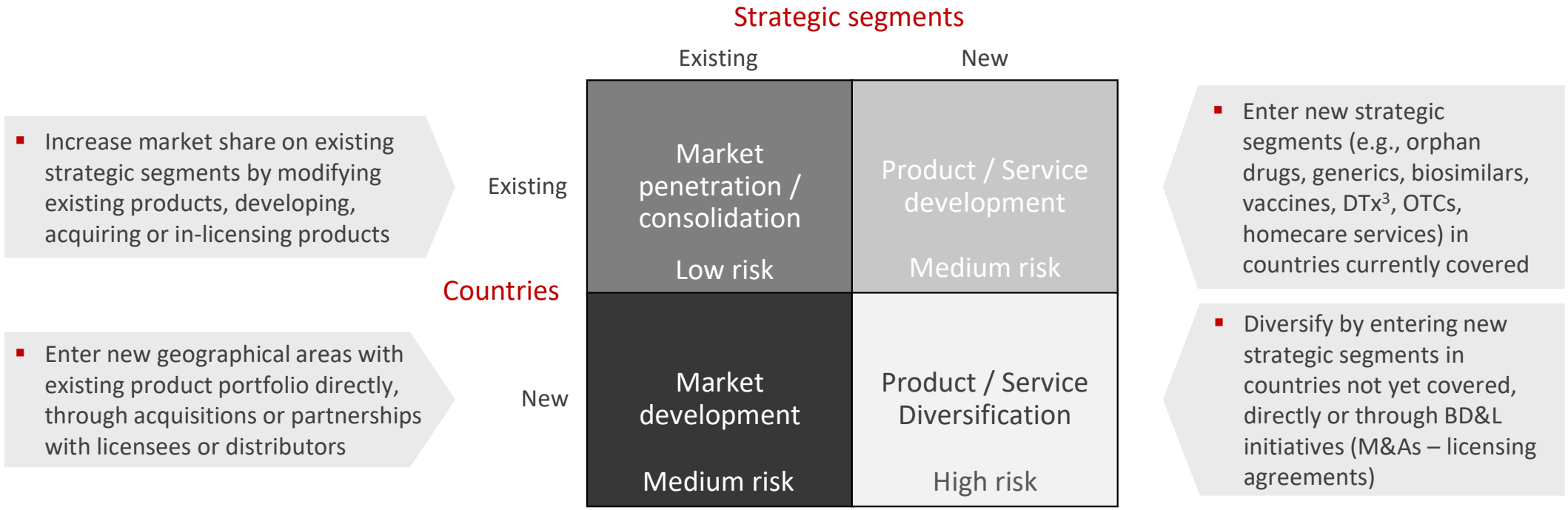
Sources: Smart Pharma Consulting

[1] Including the headcounts and the organization chart

Four basic corporate strategies can be adopted by pharma companies to secure a long-term and profitable growth, in line with their shareholders expectations

Where to play? – Principle

- The Development Strategy Matrix[1] is a practical tool to select the most attractive sources of growth
- Diversification is in general the riskiest option because the farthest from the company core competencies
- However, playing in diverse strategic segments[2] with different characteristics may enable to mitigate certain business risks



Sources: Adapted by Smart Pharma Consulting from H. Ansoff (HBR 1957)

[1] Has been adapted from the original Ansoff Matrix whose axes are Markets & Products / Services – [2] A strategic segment encompasses a number of products and/or services characterized by the same combination of key success factors and the same level of attractiveness (e.g., orphan drugs, vaccines, OTCs) – [3] Digital Therapeutics

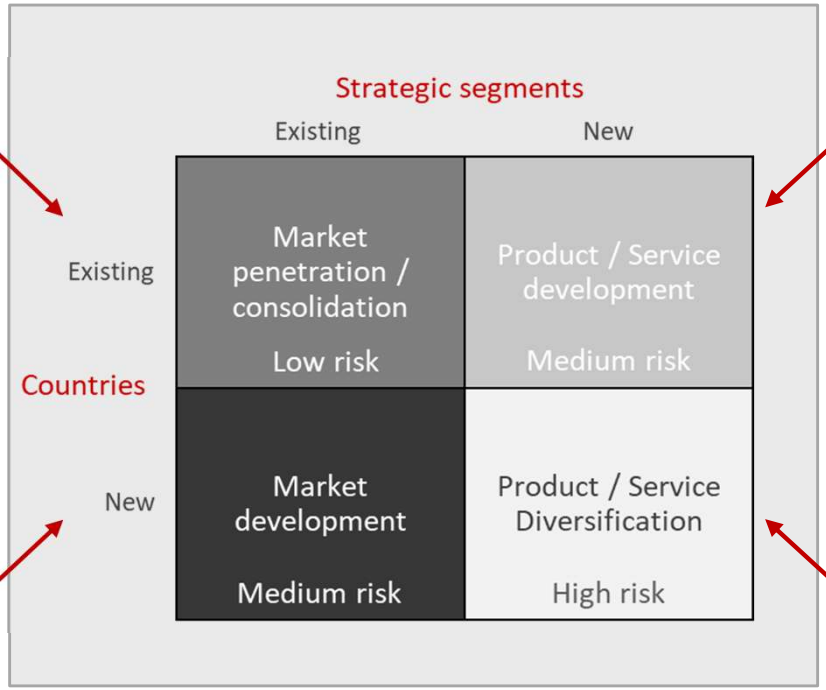
These four basic corporate strategies can be implemented by pharma companies organically or inorganically, through M&As or strategic alliances[1]

Where to play? – In Practice (1/2)

Illustrative

- Acquisition of, or merger with other pharma companies to strengthen its presence and/or reduce the competitive intensity
- Co-marketing or co-promotion agreements to increase resources to gain market shares
- Internal development, co-development or in-licensing of new products / services

- Direct market entry by setting up its own subsidiary
- Indirect market entry by acquiring a local player to take advantage of its resources and capabilities
- Indirect market entry by licensing-out agreements or partnerships with distributors



- Entry on new strategic segments through in-house R&D and/or external growth operations, such as:
  - Horizontal integration (e.g., OTCs, generics, homecare services)
  - Downward integration (e.g., distribution business)
  - Upward integration (e.g., toll manufacturing business)
  - In-licensing agreements

- New strategic segments entry and new geographical coverage carried out organically or through M&As, joint-ventures, in-licensing or subcontracting agreements (e.g., with another pharma company)

Sources: Adapted by Smart Pharma Consulting from H. Ansoff

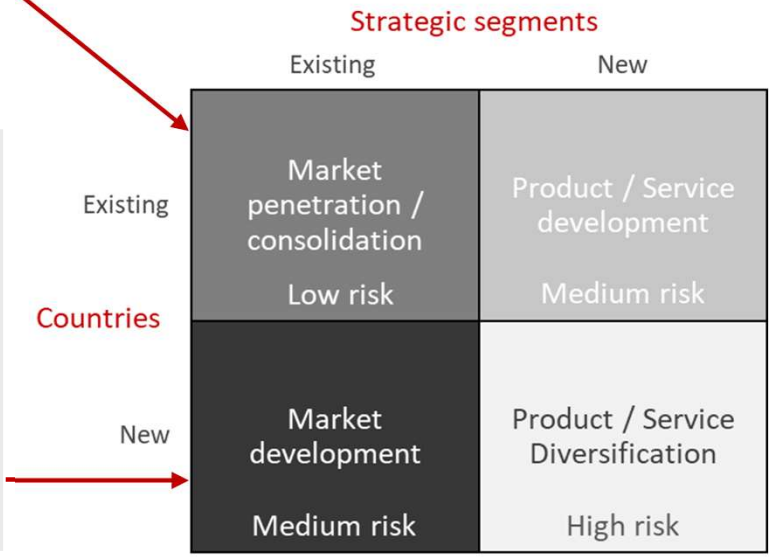
[1] See our position paper "Best-in-Class Pharma BD&L" available on our website

Big and Mid Pharma Companies have accelerated, over the recent years, a combination of M&As and spin-off operations to focus their business on the most attractive strategic segments

Where to play? – In Practice (2/2)

- Acquisition of Seagen by Pfizer (2023) for USD 43 B to reinforce its oncology portfolio and mitigate the impact of its Covid-19 products sales drops and the imminent LOE for some of its leading brands
- Worldwide agreement between BMS & Pfizer (2007) to develop and commercialize Eliquis (apixaban)

- Acquisition of Alexion by AstraZeneca (2021) for USD 39 B to gain a foothold in the lucrative rare diseases strategic segment
- Entry of Gilead in the oncology market by acquiring Kite Pharma (2017), one of the CAR-T's leaders, offering a novel approach for certain blood cancers



- Decision made by IPSEN to enter the oncology market[1] in the USA with Somatuline Depot (lanreotide) through its own subsidiary to maximize the value creation
- Out-licensing by Incyte to Novartis of Jakavi (ruxolitinib) in the indications of hematology, oncology, and graft-versus host disease outside the USA

- Opening by Servier of a subsidiary in the USA (2018) to market a portfolio of oncology brands acquired the same year from Shire
- Acquisition by Ethypharm of the UK-based company Martindale Pharma (2017) which is specialized in the field of emergency care and sterile injectables

Sources: Adapted by Smart Pharma Consulting from H. Ansoff

[1] *In gastroenteropancreatic neuroendocrine tumors*

Corporate opportunities assessment requires to analyze attractiveness of targeted strategic segments and countries, the relative key success factors and required competitive advantages

Corporate strategy opportunity assessment

Business model

Purpose

Core values | Mission | Vision

Capabilities

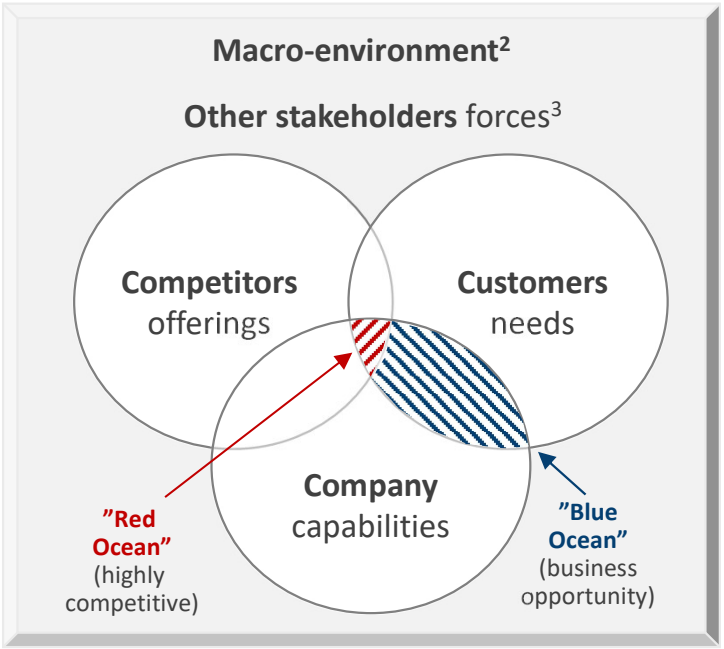
Tangible resources (physical and financial)

R & D | **Production** | **Market access** / **Medical** | **Marketing & Sales**

Support functions (BD&L – regulatory – legal – finance – HR – IT, etc.)

Intangible resources (reputation – technology – people – culture)

Strategic segments[1] & Countries



Strengths & Weaknesses
(Competitive advantage)

Opportunities & Threats
(Attractiveness & Key success factors)

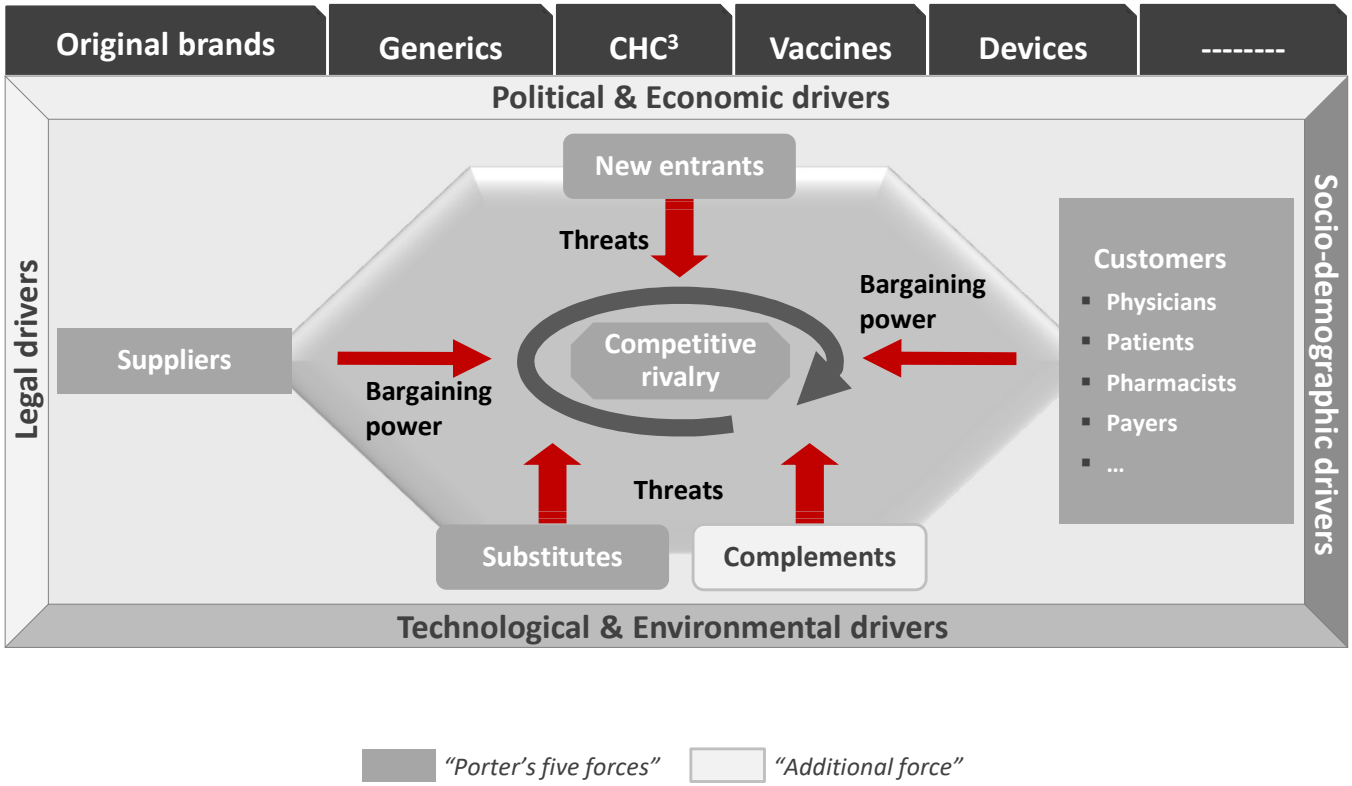
→ Ambition & Strategic priorities ←

Sources: Adapted by Smart Pharma Consulting from C. Kim et al. and from D.J. Collis , HBR April 2008

[1] Such as: Rx-bound vs. non-Rx bound markets, originators vs. generics or biosimilars, vaccines, OTCs, food supplements, medical devices, diagnostic tools, etc. – [2] Political, Economic, Socio-demographic, Technological, Environmental and Legal (PESTEL) factors – [3] Including suppliers, new entrants, substitutes, complements (adapted from Porter's five forces model)

Corporate opportunities by strategic segment and country can be assessed through PESTEL[1] analysis and the "5+1 forces framework[2]"

Attractiveness of strategic segments and countries (1/3)



- The six key macro-environmental drivers:
  - Political
  - Economic
  - Socio-demographic
  - Technological
  - Environmental
  - Legal
- The five key micro-environment drivers:
  - Suppliers
  - Customers
  - New entrants
  - Substitutes
  - Competitive rivalry
- … plus, the "Complements[4]" influence the attractiveness of each strategic segment in various countries and impact the outcomes of pharma companies' strategy
- These key drivers can be used to build scenarios of possible futures, especially by adopting the "what if" technique

Sources: Adapted by Smart Pharma Consulting from M. Porter 2008

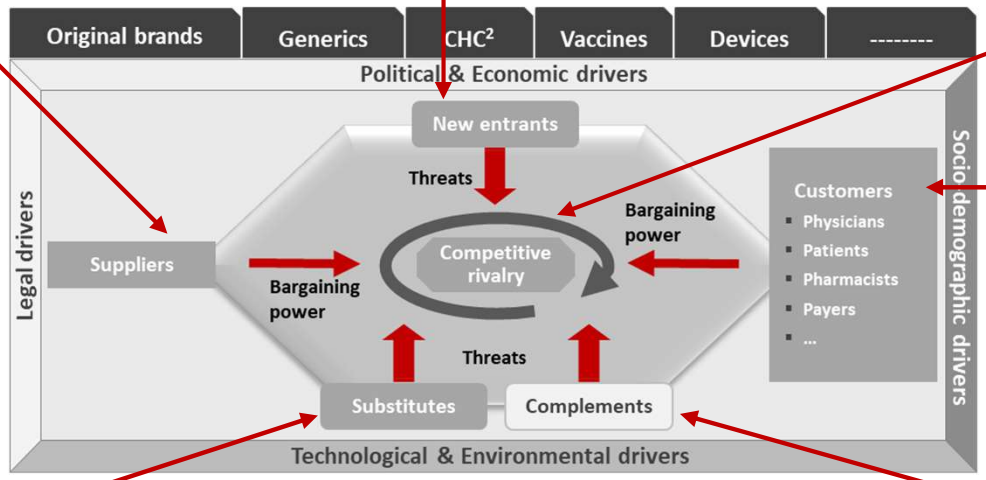
[1] Political, Economic, Socio-demographic, Technological, Environmental and Legal – [2] Adapted from Porter's five forces model – [3] Consumer Health Care, including OTCs, food supplements, minerals, vitamins, etc. – [4] Complements can add value to the existing products or services (e.g., biomarkers complementing certain anti-cancer drugs)

The "5+1 forces framework[1]" is particularly helpful to identify key stakeholders by country who will influence the long-term structure and profitability of each strategic segment

Attractiveness of strategic segments and countries (2/3)

- Most R&D-based pharma companies being vertically integrated, threats from suppliers are rarely an issue
- However, on the generics or biosimilars segment, API[3] or DDS[4] suppliers may have a stronger bargaining power

- New entrants (e.g., innovative products, "me-too" products, generics or biosimilars) are likely to modify the competitive intensity and thus pharma companies' performance



- Competitive rivalry intensifies with:
  - New products, indications, formulations
  - Commoditization
  - Service improvement
  - Promotional investments
  - Price discounting
  - …

- Higher pressure from customers:
  - Payers (e.g., sickness funds, hospital buying groups) increasing price pressure
  - Patient advocacy groups asking for more and better services

- Substitute products or services include:
  - Alternative therapies (e.g., surgery, DTx[5])
  - Preventive therapies (e.g., vaccination vs. anti-infective drugs)

The "5+1 forces framework" allows to determine how profits in various strategic segments and countries will be shared between stakeholders, depending on their respective competitive advantage

- Complementary products or services include:
  - Devices (e.g., BGM[6], biomarkers)
  - Diet food
  - Patient adherence programs

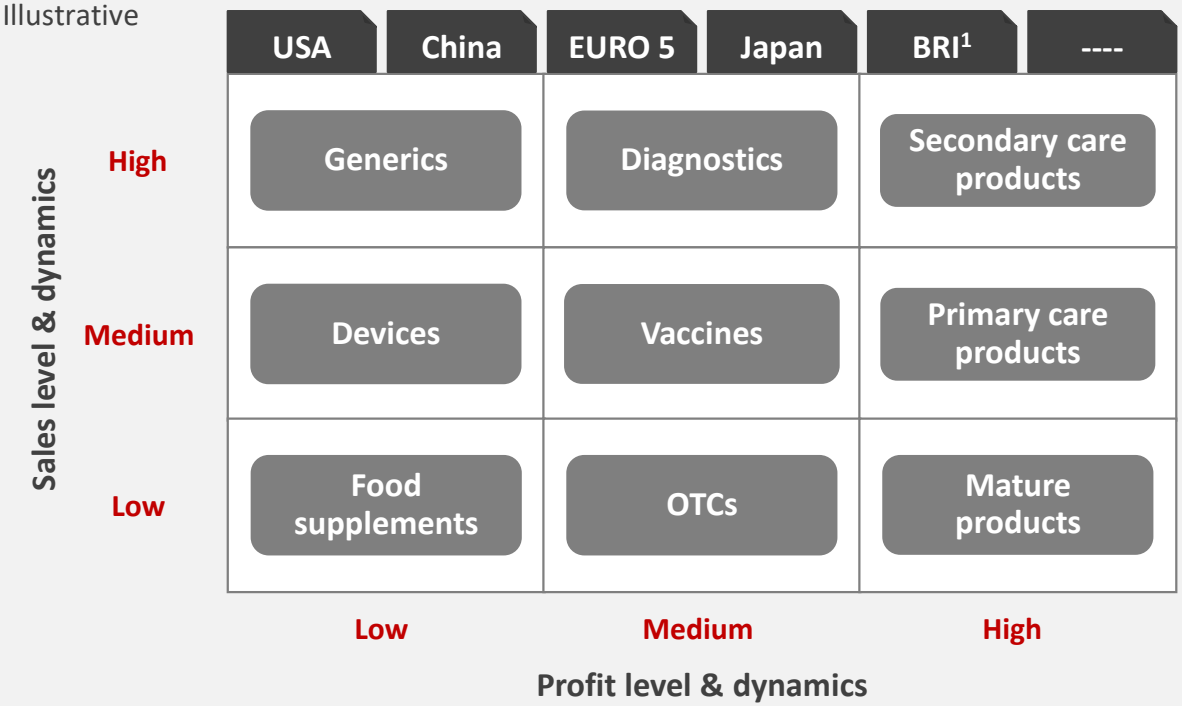
Sources: Adapted by Smart Pharma Consulting from M. Porter 2008

[1] Adapted from Porter's five forces model – [2] Consumer Health Care, including OTCs, food supplements, minerals, vitamins, etc. – [3] Active pharmaceutical ingredients – [4] Drug delivery system – [5] Digital therapeutics – [6] Blood glucose meter

Attractiveness of new strategic segments should be put into a dynamic perspective by key country, and potential synergies with existing businesses also considered

Attractiveness of strategic segments and countries (3/3)

Illustrative



- The attractiveness of a strategic segment should be defined, based on the level and likely evolution of economic indicators such as sales and profits
- Additional parameters such as potential synergies with:
  - Existing businesses
  - Existing capabilities

  should also be considered while evaluating the attractiveness of new strategic segments and new countries

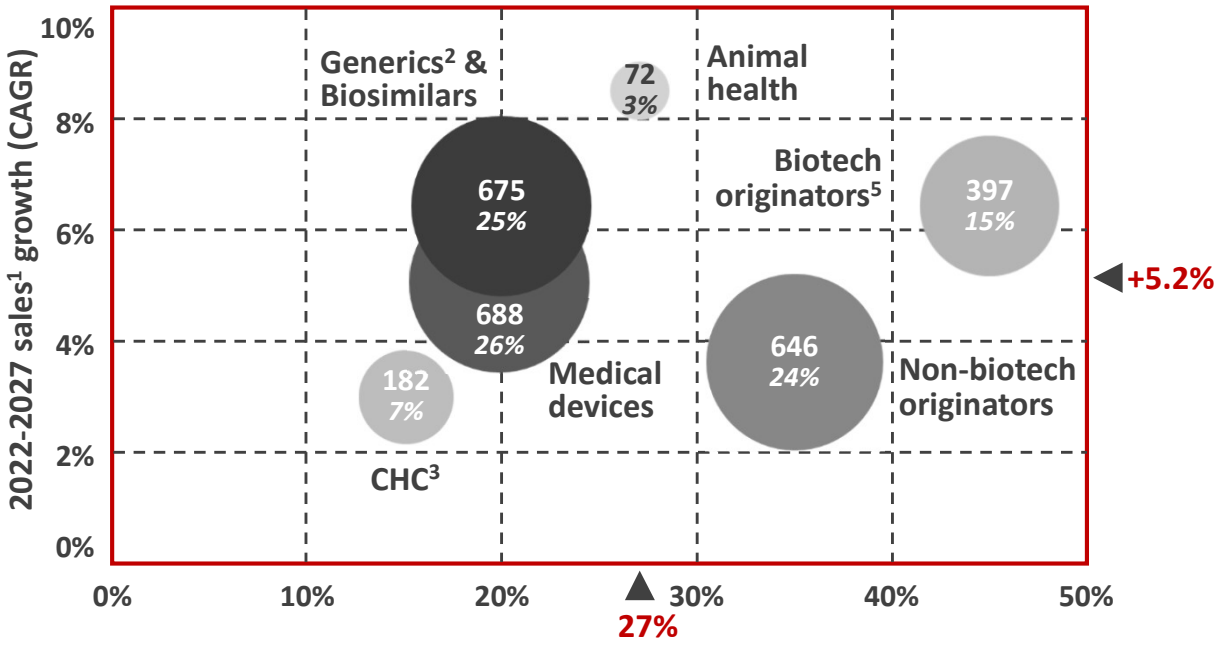
Sources: Smart Pharma Consulting

[1] *Brazil, Russia, India*

By 2027, the global healthcare market – across its different strategic segments – should be mainly driven by generics and biotech originators, while its profitability should lose two points

Corporate strategy crafting – Attractiveness by Strategic Market Segment

Main healthcare strategic market segments



- By 2027, the global healthcare market should reach USD 2,660 B and grow at a pace of +5.2% per year, i.e., 2.1 points of percentage above the forecasted worldwide economic growth of +3.1%
- The average EBITDA of healthcare companies should decrease from ~29% in 2022 to ~27% in 2027, mainly due to increasing price pressure
- In 2027, the average profitability of healthcare companies should be twice higher than the average of other business sectors
- The biotech segment will remain very attractive – despite the ramp up of biosimilars – and…
- … the CHC segment the least attractive one

◯ 2027 sales in USD B
(share of the 2027 global healthcare market which is estimated at USD 2,660 B)

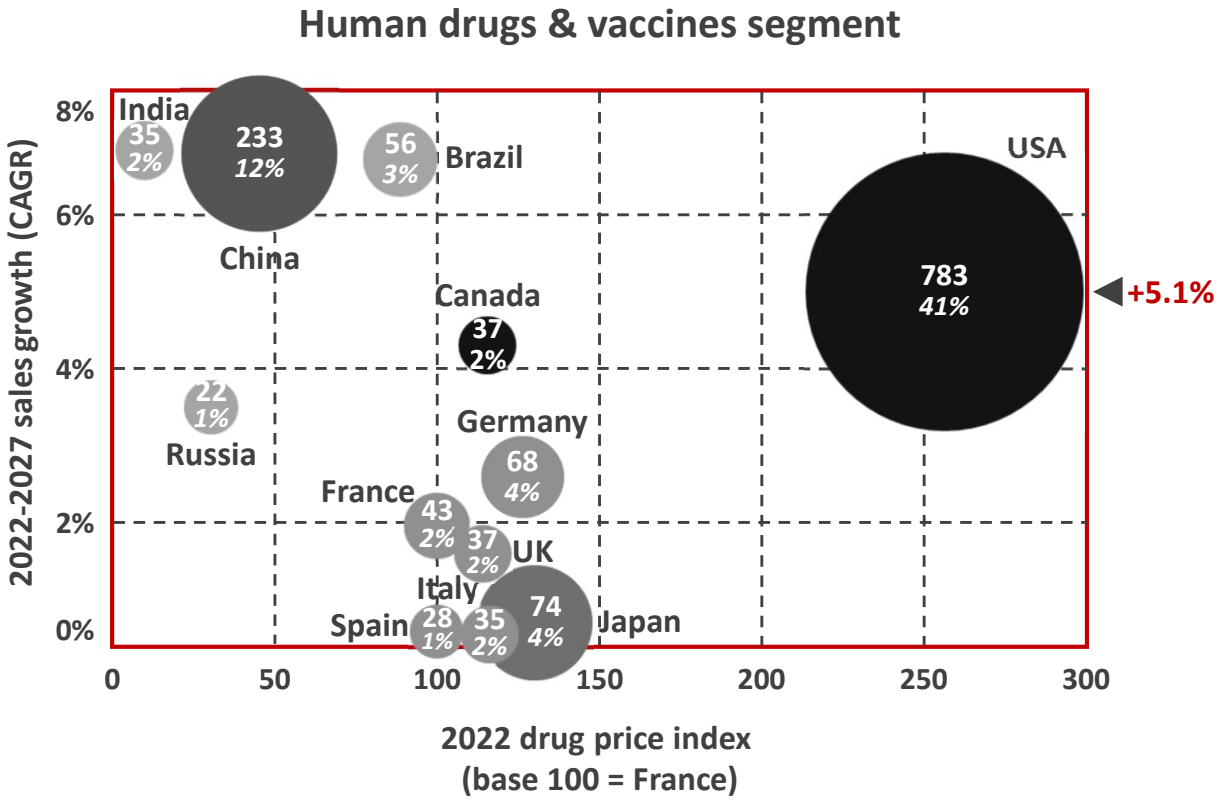
Worldwide economic growth – CAGR 2022-2027: +3.1%

Source: IQVIA Institute (January 2023) – World economic outlook, IMF (October 2023) – Companies' annual reports (2022) – Smart Pharma Consulting estimates

[1] Ex-factory price before rebates – [2] Including branded and unbranded generics – [3] Consumer Heath Care, including OTCs, food supplements, minerals, vitamins, etc. – [4] Earnings before interest, taxes, amortization and depreciation – [5] Excluding biosimilars, already included in the "Generics" segment

By 2027, human drugs & vaccines segment growth should be mainly driven by the USA and China, while EURO 5 countries should grow at a slower pace due to higher price pressure

Corporate strategy crafting – Attractiveness by Country



◯ 2027 sales in USD B[1]
(share of the 2027 global pharma market which is estimated at USD 1,900 B)

- Human drugs & vaccines segment is expected to grow with a CAGR of +5.1% by 2027, despite higher pressure on prices, worldwide
- In 2022, EURO 5 countries accounted for 13% of the worldwide market in value:
  - Germany: 4% – France: 3% – Italy: 2%
  - UK: 2% – Spain: 2%
- By 2027, the weight of EURO 5 countries should drop by 2 points, due to higher price pressure than in the average of the rest of the world
- USA should account for 41% of the segment in value and contribute to 41% to the segment growth over the 2022 – 2027 period, despite the implementation of the Inflation Reduction Act (IRA) enabling Medicare to negotiate drug prices

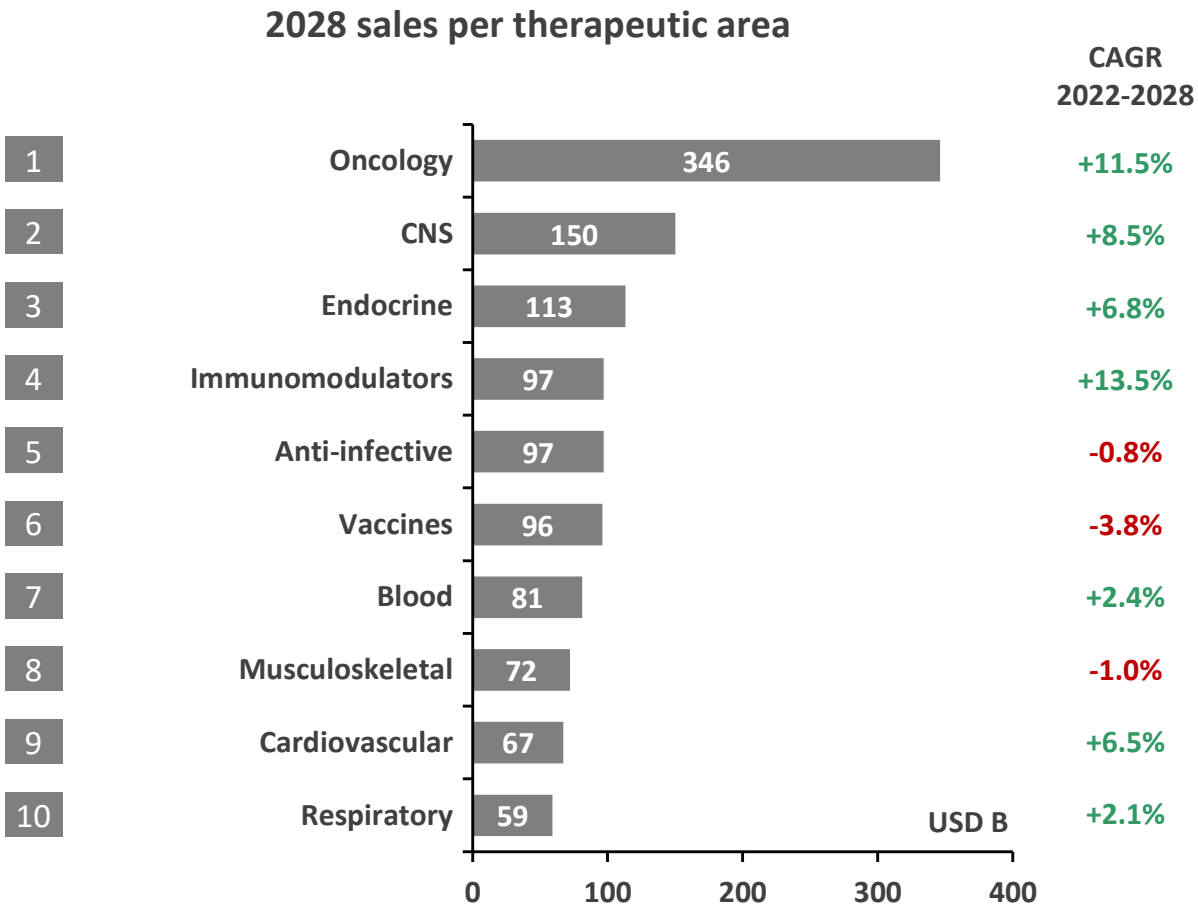
Worldwide economic growth – CAGR 2022-2027: +3.1%

Source: IQVIA Institute (January 2023) – World economic outlook, IMF (October 2023) – TLV (December 2022) – Rand Corporation (2021) – The time of India (November 2019) – Smart Pharma Consulting estimates

[1] *Ex-factory price before rebates*

The important growth in oncology will be mainly driven by anti PD-1 products while immunomodulators will benefit from an increased incidence of chronic diseases

Corporate strategy crafting – Attractiveness by Therapeutic Area



- The 2028 therapeutic area forecasts confirm the steadily increasing weight of specialty products, sustained by new biologic drugs
- Oncology prevails as the leading therapeutic area and will be mainly driven by anti PD-1 products (e.g., MSD's Keytruda, BMS's Opdivo, Roche's Tecentriq or AstraZeneca's Imfinzi)
- CNS, including both neurological and psychiatric drugs, should be driven by new launches, notably in Alzheimer's disease and schizophrenia
- Endocrine, which will be boosted by the GLP-1 in type 2 diabetes and obesity, will also be impacted by blockbusters' patent expiries (e.g., MSD's Januvia, Lilly's Trulicity)
- Immunomodulators will have the highest CAGR through 2028, driven by an increased incidence of autoimmune and autoinflammatory diseases

Sources: World Preview 2023: Pharma's Age of Uncertainty, Evaluate Pharma (August 2023) – Smart Pharma Consulting analyses

Diversified corporations are under pressure from their shareholders to simplify their structures and increase their focus on the most dynamic and profitable strategic segments

Pharma corporate strategy trends – Concentration move (1/2)

GSK

- In 2019, GSK combined its CHC[1] portfolio with that of Pfizer named Haleon of which it owned 68% of shares
- In 2022, GSK spined off Haleon to focus on vaccines and human prescription drugs
- In 2022, GSK acquired Affinivax which was developing a novel class of vaccines and…
- … in 2023, Bellus Health to strengthen its respiratory pipeline

J&J

- In 2017, Johnson&Johnson acquired Actelion which is specialized in products for PAH[2]
- In 2022, J&J acquired Abiomed, a world leader in heart, lung and kidney support technologies
- In 2023, Kenvue, the Johnson & Johnson's consumer business, became independent
- Thus, J&J is now focusing its activities on medical devices and Rx-bound drugs

Pfizer

- In 2019, Pfizer combined its CHC portfolio with that of GSK into a joint-venture named Haleon of which it owned 32% of shares
- In 2020, Pfizer sold its established and generics business (Upjohn) to Viatris[3] to focus its activities on innovative products
- In 2022, Pfizer spined off Haleon which became a standalone company

sanofi

- In 2016, Sanofi exchanged Merial[4] with Boehringer Ingelheim CHC business
- In 2018, Sanofi sold its European generic business Zentiva to Advent[5]
- In 2023, Sanofi announced the divestiture of its CHC (Opella) business, to become a pure biopharma player

Source: Smart Pharma Consulting analysis

[1] Consumer Health Care – [2] Pulmonary arterial hypertension, a life-threatening rare disease – [3] Viatris is the company resulting from the merger of Mylan and the Upjohn division of Pfizer – [4] Its animal health business – [5] A private equity firm

Big and Mid Pharma Companies have accelerated, over the recent years, a combination of M&As and spin off operations to focus their business on the most attractive strategic segments

Pharma corporate strategy trends – Concentration move (2/2)

Bristol Myers Squibb™

- In 2019, BMS sold its CHC[1] business (UPSA), which represented 3% of its total sales, to Taisho Pharmaceutical
- In 2019, BMS acquired Celgene to reinforce its oncology portfolio and…
- … in 2022 Turning Point Therapeutics as well as Mirati Therapeutics in 2023

IPSEN Innovation for patient care

- In 2022, IPSEN sold its CHC business to Mayoly Spindler
- Recently, IPSEN has made several acquisitions (Clementia Pharmaceuticals in 2019, Epizyme in 2022, Albireo in 2023) expanding the scope of its rare disease and oncology portfolio

MERCK

- In 2021, Merck & Co completed the spin-off of Organon & Co, an independent entity including biosimilars, women's health and established brands
- In 2023, Merck & Co acquired the immunology specialist Prometheus
- Its focus is now on vaccines and drugs for diseases threatening people and animals

NOVARTIS

- In 2018, Novartis sold its 36.5% stake in its CHC JV[2] with GSK, to the latter
- In 2019, Novartis sold Alcon, its eye care division, which became a separately traded standalone company
- In 2023, Novartis completed the spin-off of Sandoz, its generics and biosimilars business, to focus on innovative drugs

Source: Smart Pharma Consulting analysis

[1] Consumer Health Care – [2] Joint Venture

Pharma companies focusing on the Rx-bound human drugs & Vaccines strategic segment, whose revenues come mainly from the US market, are more likely to exhibit a superior performance

Corporate Strategy Matrix (2022[1])

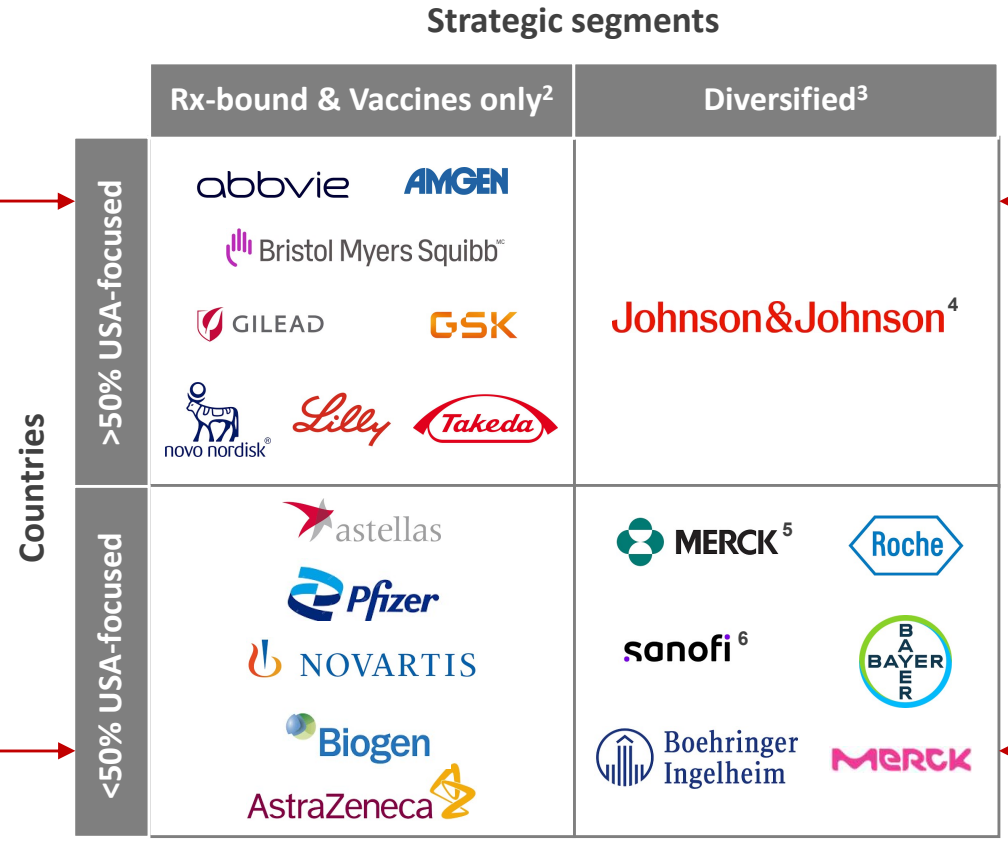
Illustrative

- The US market is the largest national market, with a growth potential of ~5% p.a. over the 2022 – 2027 period
- The US market and the Rx-bound (i.e., biotech and non-biotech originators) & Vaccines segment generate the highest profits

Most attractive quadrant

- The performance of these companies depends on:
  - The therapeutic areas they focus on
  - The valuation of their products by national payers
  - The selling prices they can apply, and thus the related profits by country

Moderately attractive quadrant



- J&J whose 51% of sales comes from the US market, and 56% from Rx-bound drugs & Vaccines generated an EBITDA of 34 % in 2022
- This good performance is driven by J&J focus on high margin therapeutic areas like oncology and immunology

Moderately attractive quadrant

- In principle, diversified companies, with low USA share of revenues, show the lowest profitability
- However, some companies like Merck & Co[5] or Roche who have strong positions in oncology, show excellent performances

Least attractive quadrant

Source: Smart Pharma Consulting analyses based on pharma companies' website

[1] Excepting Takeda and Astellas for which data are from April 2022 to March 2023 – [2] 100% of sales in Rx-bound human drugs and/or vaccines – [3] Including other strategic segments such as: OTCs, animal health, medical devices, diagnostics, and for Bayer only, activities in crop science – [4] In 2023, J&J divested its consumer business – [5] Merck & Co which is named Merck in the USA and Canada, and MSD in other countries – [6] In 2023, after the divestiture of its CHC business, Sanofi has become a 100% Rx-bound & vaccines company

Corporate BD&L initiatives are expected to generate extra revenues, increase profits and/or spread business risks, while leveraging potential synergies

Expected benefits from corporate BD&L[1] initiatives

Increase revenues

- Market penetration / consolidation
- Development of new products / new services (extension of the offering)
- Development of new markets (expansion of presence in new countries and/or market segments)
- Diversification (entry in new strategic segments and/or upward or downward integration in an existing business segment to capture additional value)

Increase profits

- Economies of scale having the potential to lower operating costs through a better absorption of fixed costs (e.g., manufacturing, distribution, promotion)
- Economies of scope leading to increased efficiency by applying existing resources (tangible and intangible) and/or competences to new products / services and markets (based on cost and competence sharing principles)

Spread business risks

- Presence in diverse strategic segments responding to different macro-environmental drivers likely to compensate business risks:
  - R&D-based business: average growth, high profitability, low brand equity after patent expiry
  - OTC business: low growth, average profitability, possible lasting brand equity
  - Generics business: high growth, low to average profitability, low brand equity

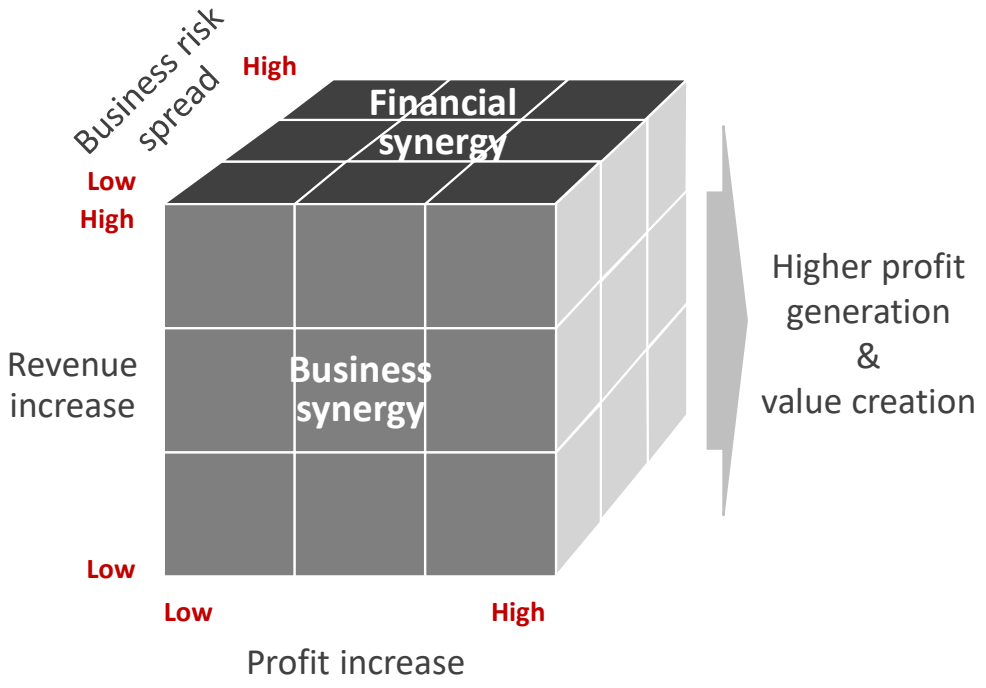
Sources: Adapted by Smart Pharma Consulting

[1] *Including M&A and strategic alliances*

Synergies result from a better mixing and matching of capabilities, and are the greatest when opportunities are in businesses like those in which the pharma company operates

Synergies applied to corporate BD&L[1] initiatives

Types of synergies



- There are two different types of synergies:
  - Business synergies due to cost reduction and/or revenue increase through combination of capabilities (i.e., tangible / intangible resources and competences)
  - Financial synergies related to possible spread of business risks if combined strategic segments are subject to different opportunities and threats
- Positive synergies are based on:
  - Shared competences (economies of scope)
  - Shared costs (economies of scale)
- Negative synergies refer to lower profit generation due to:
  - Revenue dynamics impairment[2] and/or
  - Cost increase (costs higher than the sum of the previous businesses when they were operating independently)

  resulting from complexity, mismanagement, problems of integration, lower efficiency, brand cannibalization, etc.

Sources: Adapted by Smart Pharma Consulting from R Koch 2006 and from G. Johnson 2008

[1] Including M&A and strategic alliances – [2] Through the slowdown of the historical sales increase or acceleration of the historical sales decrease

Strategic alliances and M&As enable pharma companies to expand their product portfolio and their geographical coverage, build capabilities and create business synergies

Corporate BD&L[1] alternatives

Strategic alliances

- Strategic alliances involve the sharing of capabilities[2] in pursuit of common objectives
- Accessing capabilities through alliances offers more targeted and cost-effective means than acquisition
- Where both partners are trying to acquire one another's capabilities, results may be a "competition for competence" that ultimately destabilizes the relationship
- Strategic alliances can take different forms:

Joint-venture	Co-development / Co-promotion
E.g., ViiV healthcare, specialized in HIV, is a company owned by GSK, Pfizer and Shionogi[3]	E.g., Pfizer & BMS collaborate worldwide to co-develop and co-promote Eliquis (apixaban)
Co-marketing	**Out-licensing**
E.g., Januvia / Janumet[4] of MSD was licensed to Sun Pharma in India under different names[5]	E.g., Regeneron has licensed to Bayer the marketing rights of Eylea[6] outside of the USA

Mergers & Acquisitions

- Acquiring capabilities should be considered if desired capabilities can only be developed over long periods
- Integrating the acquiree's capabilities involves major risks:
  - Culture and personality clashes
  - Incompatibility of management systems
  - High organizational integration costs and time

  resulting in degradation or destruction of capabilities
- M&As initiatives may be related to a:

Company	Portfolio	Brands
E.g., Acquisition of Horizon Therapeutics by Amgen in 2022	E.g., Acquisition of Biohaven's calcitonin gene-related peptide (CGRP) franchise by Pfizer in 2022	E.g., Acquisition by Cheplapharm of several matures brands like Seroquel from AstraZeneca

Sources: Adapted by Smart Pharma Consulting from R Koch 2006 and from G. Johnson 2008

[1] Including M&A and strategic alliances – [2] Resources and competences – [3] 78.3% of the company being owned by GSK, 11.7% by Pfizer and 10% by Shionogi – [4] Respectively sitagliptin and sitagliptin/metformin – [5] Sun Pharma uses Sitared for sitagliptin and Sitared-M for the fixed combination sitagliptin/metformin – [6] Aflibercept, was approved for Wet age-related macular degeneration (AMD)

The evaluation of each business opportunity should be determined by its degree of suitability, acceptability and feasibility

Evaluation of corporate BD&L[1] opportunities

Suitability

- Does the opportunity address key issues related to the company's strategic position?
- To what extent strategic options will:
  - Fit with key market drivers?
  - Leverage strategic capabilities?
  - Meet stakeholders' expectations?

Tools

- Advanced SWOT analysis to rank strategic options
- Decision tree (evaluation of future opportunities by progressively eliminating others as additional requirement criteria are introduced into the evaluation)
- Scenario building (strategic options are considered against possible future situations)

Acceptability

- Acceptability refers to the expected performance outcomes (e.g., return, risk) of a strategy
- To what extent do these outcomes meet the expectations of stakeholders?

Tools

- Return: expected benefit measurement:
  - Profitability (ROCE[2], payback, DCF[3])
  - Cost-benefit analysis
  - Real options analysis
  - Shareholder value analysis (SVA)
- Risk: probability and consequences of the strategy failure:
  - Financial ratio projections
  - Sensitivity analysis
- Stakeholders' reactions (mapping)

Feasibility

- The feasibility is concerned with the capabilities of the company to implement the strategy that has been considered

Tools

- Financial feasibility assessment through a cash flow analysis (forecasting of the needed cash to deliver the strategy and identification of the likely sources to fund that cash)
- Evaluation of capabilities needed:
  - Gap analysis: available vs. required
  - Required changes assessment
  - Determination of "if" and "how" to implement changes

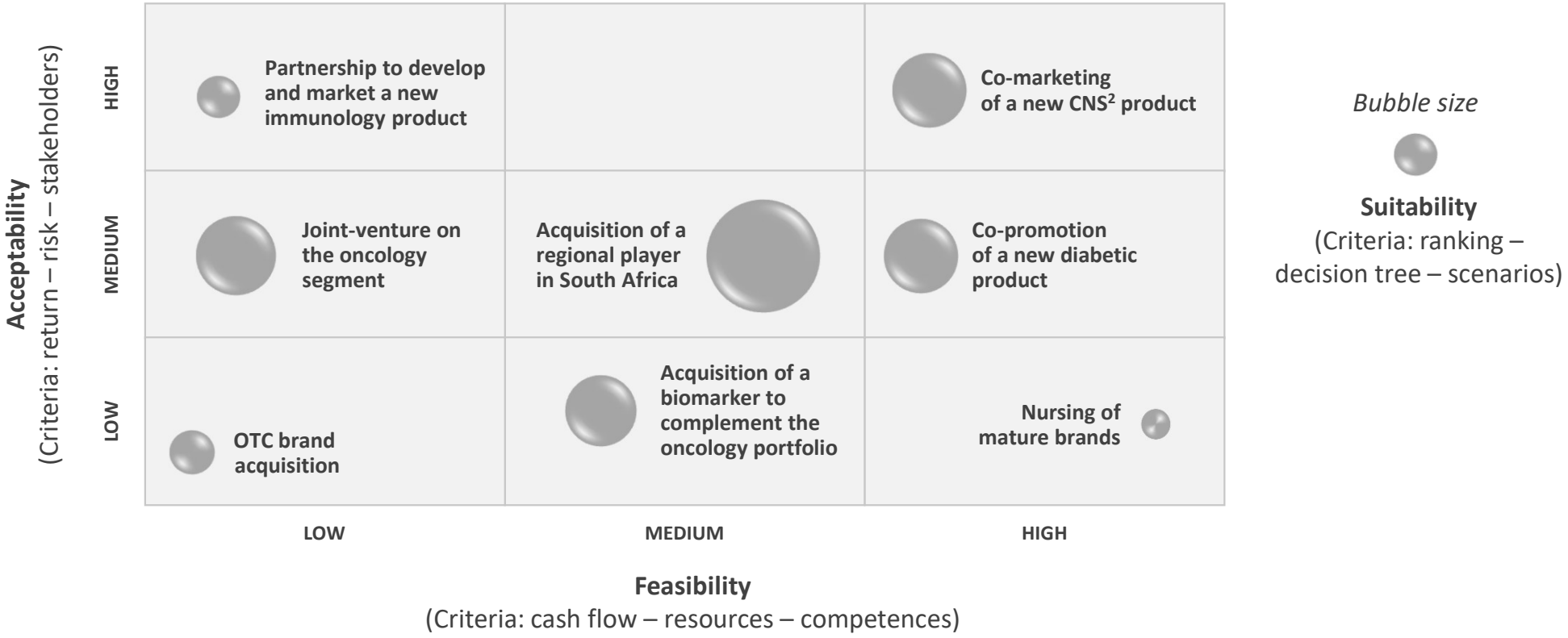
Sources: Adapted by Smart Pharma Consulting from G. Johnson 2008

[1] Including M&A and strategic alliances – [2] Return on capital employed – [3] Discounted cash flows

The corporate BD&L evaluation matrix represents a convenient means to put into perspective acceptability, feasibility and suitability of different projects

Corporate BD&L[1] evaluation matrix

Illustrative



Sources: Smart Pharma Consulting

[1] Including M&A and strategic alliances – [2] Central nervous system

Smart Pharma
CONSULTING

Pharma Business Strategy

Survival Toolkit

What to know & understand about Business Strategy

February 2024

1, rue Houdart de Lamotte – 75015 Paris – France
Tel. +33 6 11 96 33 78 – jmpeny@smart-pharma.com – www.smart-pharma.com

Corporate strategy selects the strategic segments, business strategy creates a competitive advantage, and operational strategy defines the appropriate organization

Definitions

- Amongst multiple possibilities, we propose the following definition for strategy:

"Strategy is the long-term direction and scope set by a company to fulfill stakeholders'[1] expectations through proper capability building and resources allocation"

- One can consider three basic strategic levels in any pharma company:

CORPORATE STRATEGY

In which strategic segments should we be?

- Corporate strategy defines the purpose and the scope in which companies compete or should compete and how to add value to their businesses

BUSINESS STRATEGY

How should we compete in the selected segments?

- Business or competitive strategy defines how to compete successfully in each strategic segment (e.g., R&D-based drugs, vaccines, CHC[2], generics, medical devices)

OPERATIONAL STRATEGY

Which organizational configuration do we need?

- Operational strategy sets the activities, capabilities, processes, structure, culture and resources needed to support corporate and business strategies

Sources: Smart Pharma Consulting, adapted after G. Johnson et al., Exploring Corporate Strategy, Pearson, 2019

[1] *Basically authorities, customers, employees and shareholders –*
[2] *Consumer Heath Care, including OTCs, food supplements, minerals, vitamins, etc.*

The Strategic Square[1] guides companies to set their performance objective, select their preferred strategy at the corporate, business and operational levels

The Strategic Square – What for?

- Objective: What do we want to achieve?
- Performance: What have we achieved?
- Corporate strategy: Where do we want to play?
- Business strategy: How are we going to win?
- Operational strategy: What are the activities/ capabilities, processes, structure[2] and culture we need to put in place to excel in the execution of the strategy?

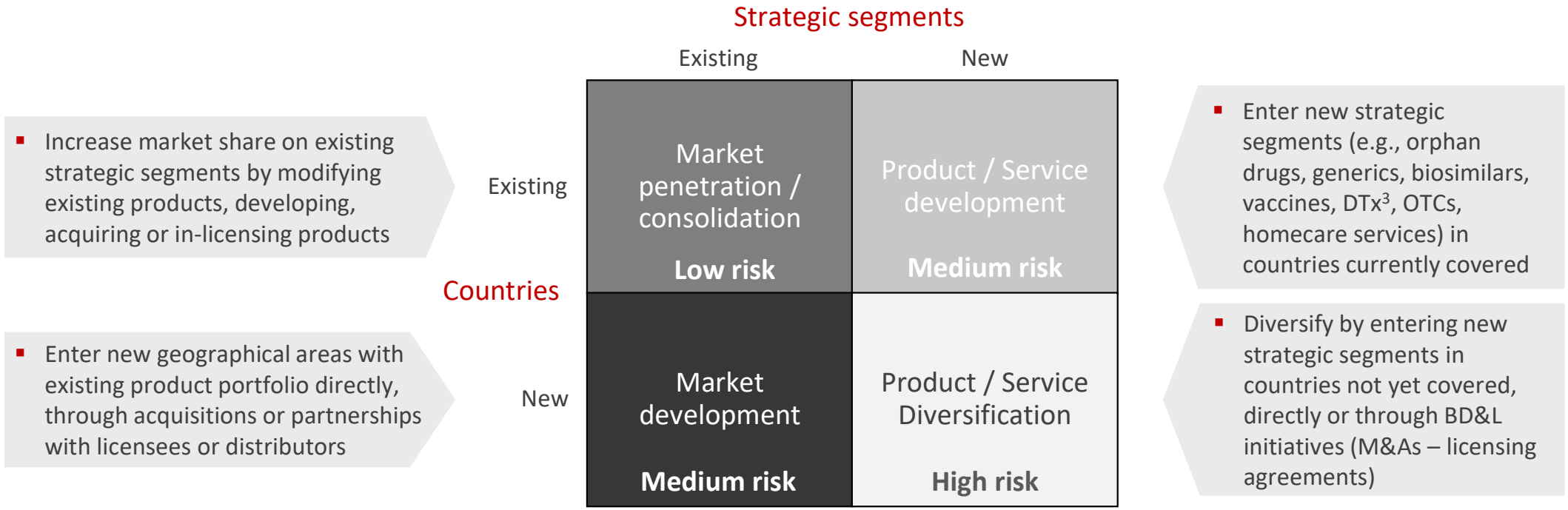
Sources: Smart Pharma Consulting

[1] Purpose, Vision, mission, core values (see Smart Pharma Consulting position paper on Pharma Corporate Strategy) – [2] Including the headcounts and the organization chart

Four basic corporate strategies can be adopted by pharma companies to secure a long-term and profitable growth, in line with their shareholders' expectations

Corporate strategy: Where to Play? – Principles

- The Development Strategy Matrix[1] is a practical tool to select the most attractive sources of growth
- Diversification is in general the riskiest option because the farthest from the company core competencies
- However, playing in diverse strategic segments[2] with different characteristics may enable to mitigate certain business risks



Sources: Adapted by Smart Pharma Consulting from H. Ansoff (HBR 1957)

[1] Has been adapted from the original Ansoff Matrix whose axes are Markets & Products / Services – [2] A strategic segment encompasses a number of products and/or services characterized by the same combination of key success factors and the same level of attractiveness (e.g., orphan drugs, vaccines, OTCs) – [3] Digital Therapeutics

Pharma companies focusing on the human Rx-bound drugs & Vaccines strategic segment, whose revenues come mainly from the US market, are more likely to exhibit a superior performance

Pharma corporate strategy matrix (2022[1])

Illustrative

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Most attractive quadrant

- The performance of these companies depends on:
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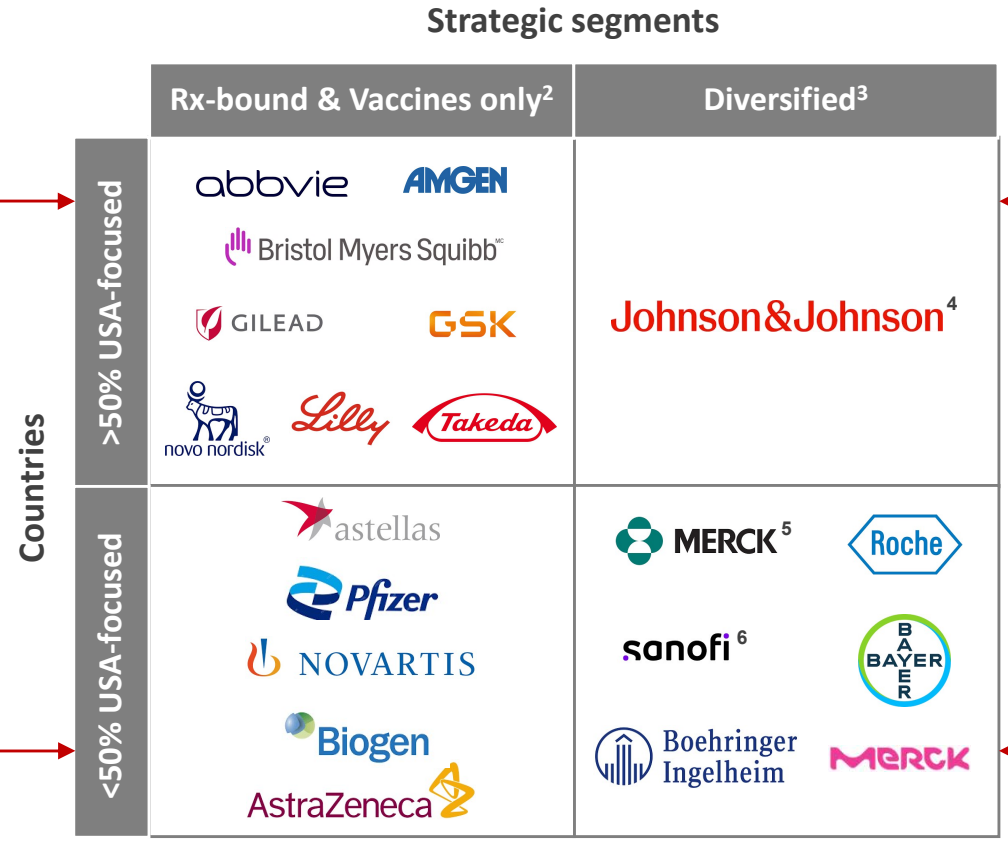
Moderately attractive quadrant



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Moderately attractive quadrant

- In principle, diversified companies, with low USA share of revenues, show the lowest profitability
- However, some companies like Merck & Co[5] or Roche who have strong positions in oncology, show excellent performances

Least attractive quadrant

Source: Smart Pharma Consulting analyses

[1] Excepting Takeda and Astellas for which data are from April 2022 to March 2023 – [2] 100% of sales in Rx-bound human drugs and/or vaccines – [3] Including other strategic segments such as: OTCs, animal health, medical devices, diagnostics, and for Bayer only, activities in crop science – [4] In 2023, J&J divested its consumer business – [5] Merck & Co which is named Merck in the USA and Canada, and MSD in other countries – [6] In 2023, after the divestiture of its CHC business, Sanofi has become a 100% Rx-bound & vaccines company

Most of pharma companies operating only on the human Rx-bound drugs & Vaccines strategic segment are focused on the onco-hematology and immunology-respiratory therapeutic areas

Pharma companies' strategic segments coverage (2022[1])

Illustrative

(% of total revenues)	Human Rx-bound drugs & Vaccines strategic segment								
	Oncology & Hematology	Immunology & Respiratory[2]	Neurology	Cardio-metabolic	Infective diseases[3]	Vaccines	Rare Diseases	Generics & Biosimilars	Others
Bristol Myers Squibb	61%		1%	26%					12%
astellas	50%	13%							37%[4]
AMGEN	36%	44%		5%				8%	7%
NOVARTIS	25%	14%	10%	12%				18%	21%
Lilly	20%	12%	5%	51%					12%
GILEAD	18%				77%				5%
abbvie	11%	50%	13%		3%				23%
Takeda	11%	44%	16%				18%		11%
GSK	2%	31%			20%	27%			20%
novo nordisk				88%			12%		
AstraZeneca	33%	13%		21%		11%	16%		7%

Source: Smart Pharma Consulting analyses based on pharma companies' 2022 annual reports

[1] Excepting Takeda and Astellas for which data are from April 2022 to March 2023 – [2] Immunology includes Rheumatology, Dermatology and Gastroenterology products revenues – [3] Including bacterial, viral, parasitic and fungal infections – [4] Of which 12% in urology products

The most diversified pharma companies usually share their revenues between more than five different therapeutic areas, in addition to one or more other strategic segments

Pharma companies' strategic segments coverage (2022[1])

Illustrative

(% of total revenues)	Human Rx-bound drugs & Vaccines strategic segment									Other strategic segments			
	Oncology & Hematology	Immunology & Respiratory[3]	Neurology	Cardio-metabolic	Infective diseases[4]	Vaccines	Rare Diseases	Generics & Biosimilars	Others	OTCs	Animal Health	MD / Diagnostic	Others
Pfizer	13%		2%	13%		57%	<1%		13%				1%[6]
Biogen			88%				<1%	7%					5%[6]
MERCK	39%	2%	<1%	9%	12%	18%			8%		9%		3%[6]
Roche	38%	11%	12%		3%				8%			28%	
sanofi	6%	19%	6%	17%		17%	8%		15%	12%			
BAYER[2]	9%		1%	27%					39%[5]	24%			
Boehringer Ingelheim				56%					20%		19%		5%
Johnson&Johnson	17%	18%	7%	8%	3%	2%				16%		29%	
MERCK	8%		8%	13%					6%				65%[7]

Source: Smart Pharma Consulting analyses based on pharma companies' 2022 annual reports

[1] Excepting Takeda and Astellas for which data are from April 2022 to March 2023 – [2] Bayer Pharmaceuticals revenues only which accounts for 50% of Bayer group sales. The remaining 50% come from the Crop Sciences business – [3] Immunology includes Rheumatology, Dermatology and Gastroenterology products revenues – [4] Including bacterial, viral, parasitic and fungal infections – [5] Of which 13% of eye care products – [6] Miscellaneous or contract manufacturing revenues – [7] Of which 47% of Life Sciences and 18% of Electronics revenues

For 16 out of the 20 top pharma companies, the USA account for more than 40% of their total business sales, knowing that it is – by far – the most attractive country for pharmaceuticals

Pharma companies' geographical coverage (2022[1])

Illustrative

(% of total revenues)	USA	Europe	APAC	LATAM	RoW
abbvie	79%	6%[2]	3%[3]	12%	
AMGEN	72%	28%			
GILEAD	69%	16%	15%		
Bristol Myers Squibb	69%	31%			
Lilly	64%	15%	11%[3]	10%	
Biogen	54%	33%	7%	6%	
Takeda	52%	21%[4]	18%	4%	5%
novo nordisk	52%[5]	25%[6]	9%[7]	14%	
Johnson&Johnson	51%	25%	24%		
GSK	50%	22%	28%		

(% of total revenues)	USA	Europe	APAC	LATAM	RoW
Boehringer Ingelheim	48%[5]	31%	21%		
MERCK	46%	24%[6]	21%	4%	5%
Roche	44%	23%	25%	5%	3%
astellas	43%		19%[8]	38%	
sanofi	43%	23%	34%		
Pfizer	42%	22%	8%[8]	28%	
AstraZeneca	39%	27%	34%		
NOVARTIS	35%	37%	28%		
BAYER[9]	31%	28%[6]	19%	18%	4%
MERCK	29%[5]	28%	35%	6%	2%

Source: Smart Pharma Consulting analyses based on pharma companies' 2022 annual reports

[1] Excepting Takeda and Astellas for which data are from April 2022 to March 2023 – [2] France, Germany, Spain, UK, Italy combined – [3] China & Japan – [4] Europe & Canada – [5] North America – [6] Europe, Middle East & Africa – [7] Chinese region – [8] Japan – [9] Include revenues from all activities

The relevance of the selected strategic segments defined at corporate level depends on companies' capabilities to win on these segments

Business strategy: How to Win? – Principles

Once a playground has been chosen, companies must define…

… What does WINNING mean?

- Prior to answer the question "How to Win?", one must agree on a business definition for "Winning"
- "Winning" is a subjective term which depends on:
  - Companies' Strategic Square[1]
  - Companies' capabilities to fulfil customers' and shareholders' expectations, and preferably better than competitors do

"Winning is delighting your stakeholders, whoever they are, in line with your Strategic Square"

… How to WIN?

- There is not one single recipe to win, it depends on the business environment and the companies' own competitive sets of strengths and weaknesses
- At a high level, the choice is whether to strive to:
  - Grow the market segment, especially on niche markets where there is no or limited competition (e.g., certain rare diseases)

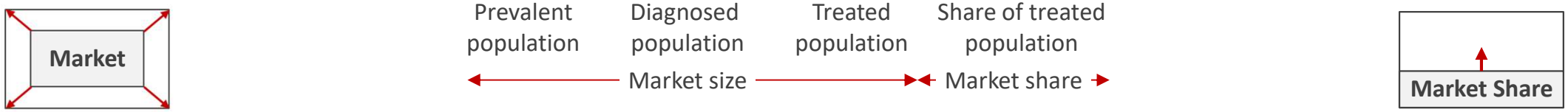
  or
  - Get preferred by stakeholders, to the detriment of competitors

Source: Smart Pharma Consulting analyses

[1] *That is the Purpose, Vision, Mission and Core Values of the company*

Depending on the disease context and the pharma companies' competitive position, the business strategy priority will be crafted to grow the market and/or the market share

Business strategy: How to Win? – Strategic options



Grow the MARKET SIZE

- In the rare diseases markets and/or when companies' position is largely dominant, the business strategy priority should be to grow the market
- To do so, pharma companies will support:
  - Screening campaigns initiated by health authorities
  - Diagnosis of the disease and prescription of drugs by HCPs
  - Programs to follow up the treated patients

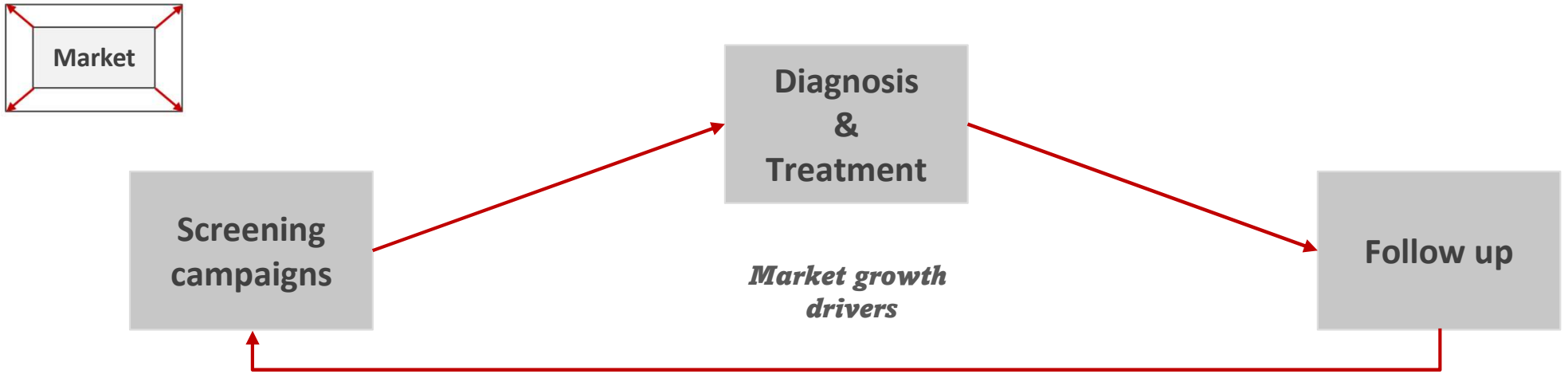
Grow the MARKET SHARE

- In the great majority of cases, pharma companies' business strategy consists in fighting to optimize their market share
- To do so, they must activate the 3 drivers of their customers' preference:
  - The benefits provided by their products
  - The quality of their associated services
  - Their corporate reputation

Source: Smart Pharma Consulting analyses

When pharma companies are in a monopolistic or dominant position, their priority should be to grow the market by facilitating the screening, diagnosis, treatment and/or follow up of patients

Business strategy: How to Win? – Grow the market size



Pharma companies can support healthcare authorities by:

- Co-developing the process to implement the campaign
- Offering its know-how in terms of project management
- Funding or co-funding the project
- Etc.

Pharma companies can help HCPs diagnosing & prescribing drugs by:

- Developing / marketing specific diagnostic processes and/or tools
- Supporting the improvement of diagnostic & therapeutic guidelines
- Organizing training sessions for HCPs
- Etc.

Pharma companies can contribute to improve the follow up of patients by:

- Co-developing and/or cofounding support programs to monitor clinical outcomes and well-being, to foster medical adherence, etc.
- Offering its know-how in terms of project management
- Etc.

Source: Smart Pharma Consulting analyses

To gain market share, pharma companies must activate the three determinants of stakeholders' preference, i.e., the value of their brands and associated services, and their corporate reputation

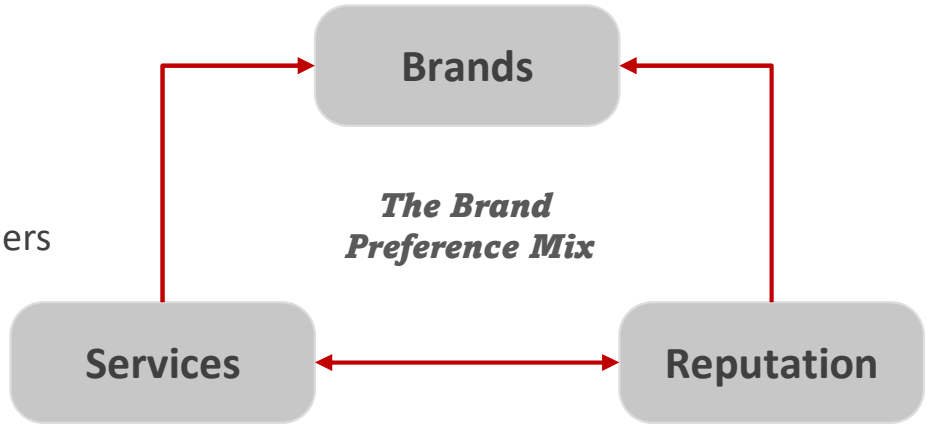
Business strategy: How to Win? – Grow the market share

Market Share

Brands are valued based on:

- Scope of indications
- Efficacy – safety – convenience
- Pricing
- Performance vs. competition

as perceived by various stakeholders



Services are valued based on:

- Usefulness
- Practicality
- Interest
- Execution

as perceived by various stakeholders

Corporate Reputation is valued based on:

- Products pipeline
- Governance & ethics
- Product portfolio
- Business performance
- Collaborators
- Corporate image

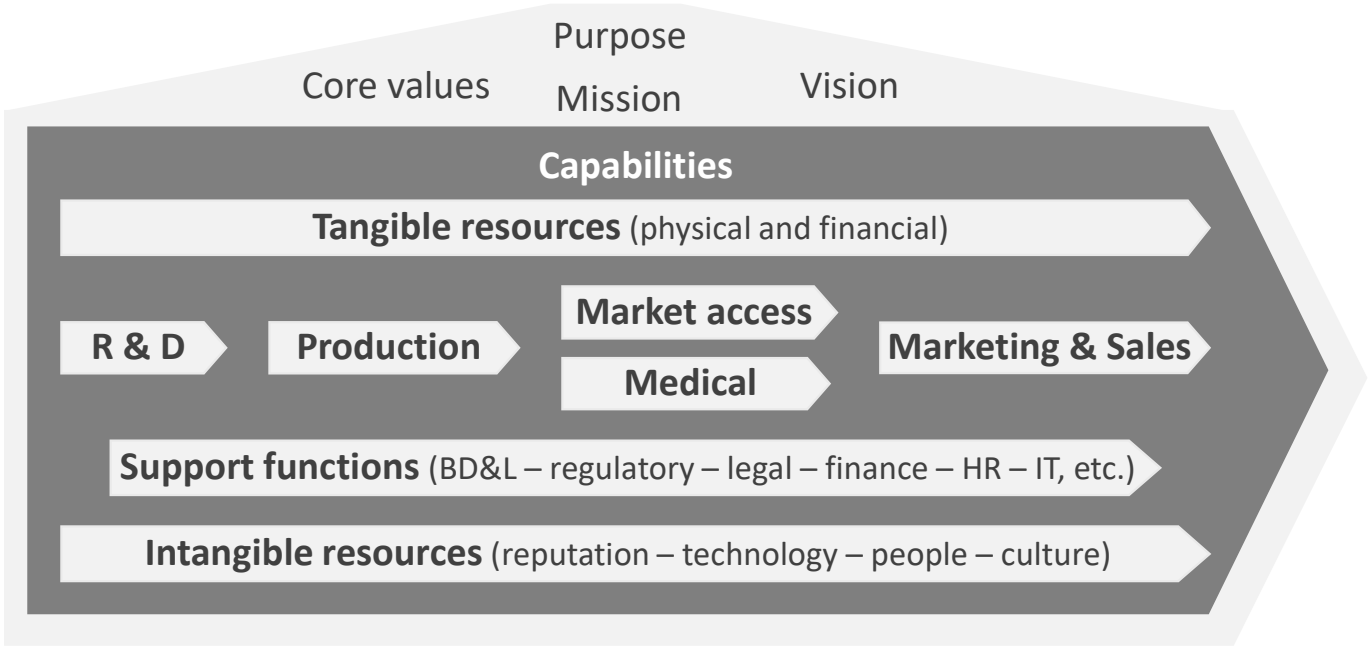
as perceived by various stakeholders

Source: Smart Pharma Consulting analyses

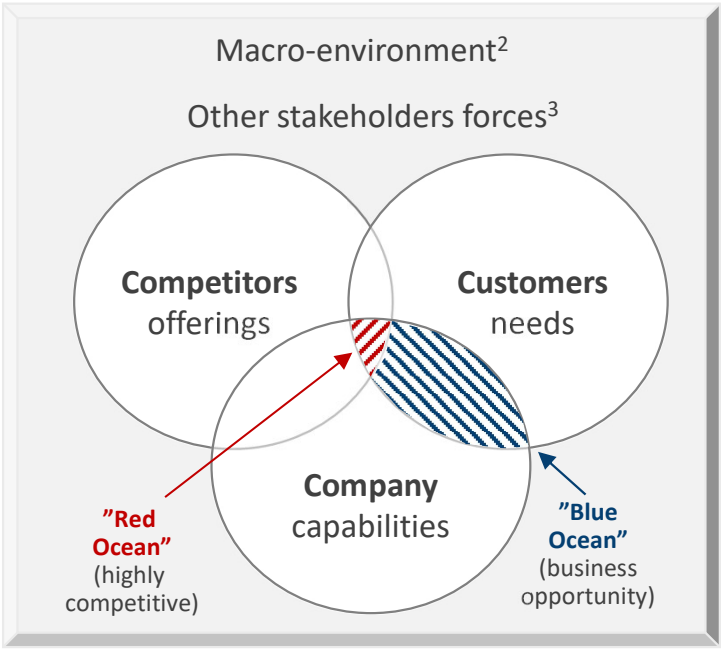
The pharma business strategy must offer a value proposition that meets, better than competition, customers' needs, wants and expectations, by mobilizing company's capabilities and resources

Pharma business strategy framework

Business model



Strategic segments[1] by country



Strengths & Weaknesses
(Competitive advantage)

Opportunities & Threats
(Attractiveness & Key success factors)

→ Ambition & Strategic priorities ←

Sources: Adapted by Smart Pharma Consulting from C. Kim et al. and from D.J. Collis , HBR April 2008

[1] Such as: Rx-bound vs. non-Rx bound markets, originators vs. generics or biosimilars, vaccines, OTCs, food supplements, medical devices, diagnostic tools, etc. – [2] Political, Economic, Socio-demographic, Technological, Environmental and Legal (PESTEL) factors – [3] Including suppliers, new entrants, substitutes, complements (adapted from Porter's five forces model)

To craft a successful business strategy, pharma companies must evaluate their business environment to identify where their competitive advantage will be the strongest

Assessing strategic segments by country (1/2)

To create a successful business strategy, pharma companies should carefully evaluate the strategic segment landscape they play in by:

Customers

- Developing a detailed knowledge and understanding (i.e., insights) of customers' needs, wants and expectations
- Segmenting and targeting customers based on their opinion and behavior
- Identifying unique ways of creating superior value for customers

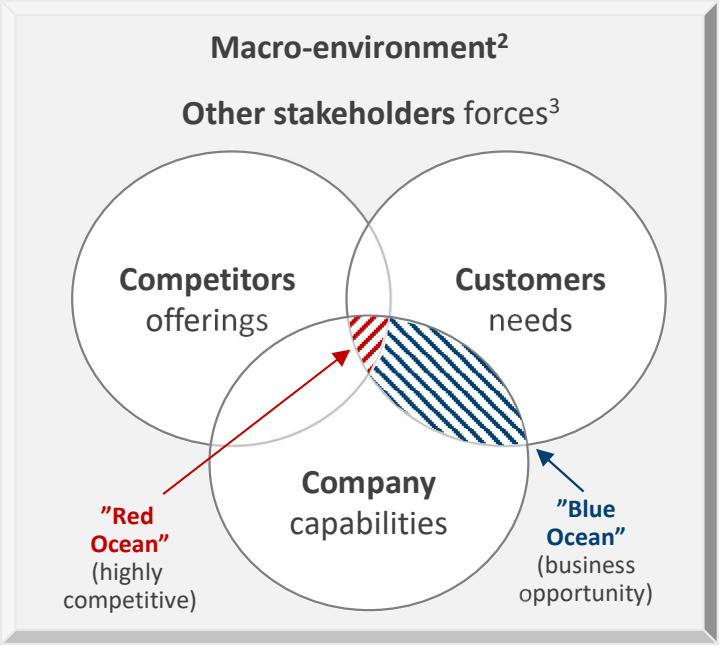
Competitors

- Analyzing competitors' strengths and weaknesses, strategies, impact, and predicting how they might change in the future

Company

- Providing products and services fulfilling better than competition, tangible and intangible customers' needs, wants and expectations
- Finding strategic spaces or "blue oceans" that align the company's capabilities with customers' unmet needs, and…
- … raising barriers to prevent competitors to enter and/or to grow

Strategic segments[1] by country



"Don't just give customers excellent services, make sure they realize how great is the service they get"

Sources: Adapted by Smart Pharma Consulting from C. Kim et al. and from D.J. Collis , HBR April 2008

[1] Such as: Rx-bound vs. non-Rx bound markets, originators vs. generics or biosimilars, vaccines, OTCs, food supplements, medical devices, diagnostic tools, etc. – [2] Political, Economic, Socio-demographic, Technological, Environmental and Legal (PESTEL) factors – [3] Including suppliers, new entrants, substitutes, complements (adapted from Porter's five forces model)

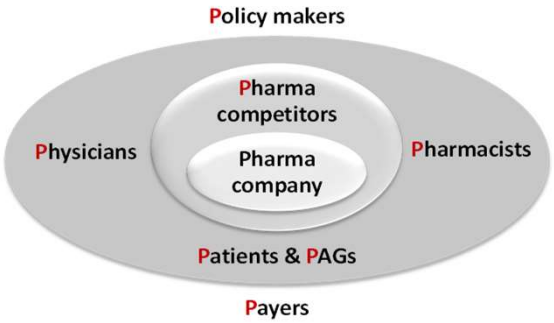
The competitive landscape analysis consists in identifying the current and evolving opinions and behaviors of key stakeholders, the corresponding driving factors and their business implications

Assessing strategic segments by country (2/2)

Illustrative

Policy makers / Payers

- Registration process and policies
- Pricing and reimbursement policies
- Medical guidelines developed by health authorities
- Trade regulations
- Public health initiatives



Pharma Competitors

- Customer preference strategy:
  - Product portfolio
  - Service offering
  - Corporate reputation
- Resource allocation (medico-marketing & sales)
- Organizational model

Physicians

- Evolving practice (working time and organization, tele-medicine)
- Prescribing habits and alignment with guidelines
- Budget constraints
- Relationships with patients
- Relationships with pharma companies (in-field and office-based collaborators)
- Unmet needs

Patients / PAGs

- Role of PAGs to influence other stakeholders (e.g., authorities, physicians, individual patients)
- Position vis-a-vis pharma companies
- Relationships with HCPs
- Patients' knowledge re. health and pharma ecosystem
- Unmet needs

Hospital-based pharmacists

- Drug listing and purchasing policy
- Position re. the use of generics and biosimilars
- Power of influence within the hospital

Retail pharmacists

- Role in public health initiatives (e.g., screening, education at the point of sale)
- Purchasing policies and selling priorities

Sources: Smart Pharma Consulting

Pharma companies should evaluate their competitive position by strategic segment and country re. their products, their resources and the configuration of their organization

Assessing company's assets and capabilities (1/2)

Illustrative

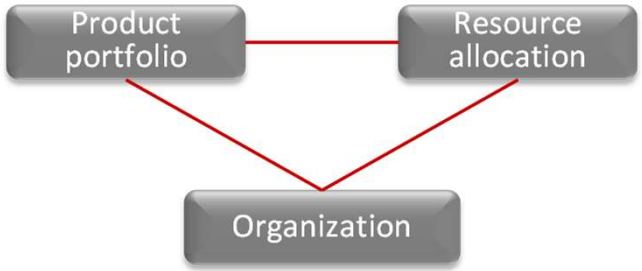
Product Portfolio

In-market brands

- Strategic and mature brands performance[1]
- Brands' competitiveness
- Life-cycle management

In-pipeline products

- Marketing authorization
- Price & Reimbursement
- Readiness launch plans



Resource allocation

- Relative activities vs. competitors in:
  - Market access and medical affairs
  - Marketing and sales
- Efficiency (ROI) and efficacy (sales and profit impact) of medico-marketing and sales investments
- Productivity of business support functions, such as: regulatory affairs, public affairs, finance, HRs, etc.

Organization

Activities / Skills

- Activities carried out (tactics) to support the company's strategy
- Monitoring of activities' execution and outputs
- Skills available vs. required

Structure

- Relevance of the organizational model to carry out the activities (i.e., flat, lean, flexible)
- FTEs available vs. required
- In-house vs. outsourced staffs

Processes

- Information sharing and decision-making processes
- Alignment of objectives, strategies and tactics
- Management of requests from head office
- Standards of excellence

Culture

- Customer management (e.g., search for preference)
- Collaborators management (e.g., working atmosphere, favor initiatives, engagement)
- Search for excellence

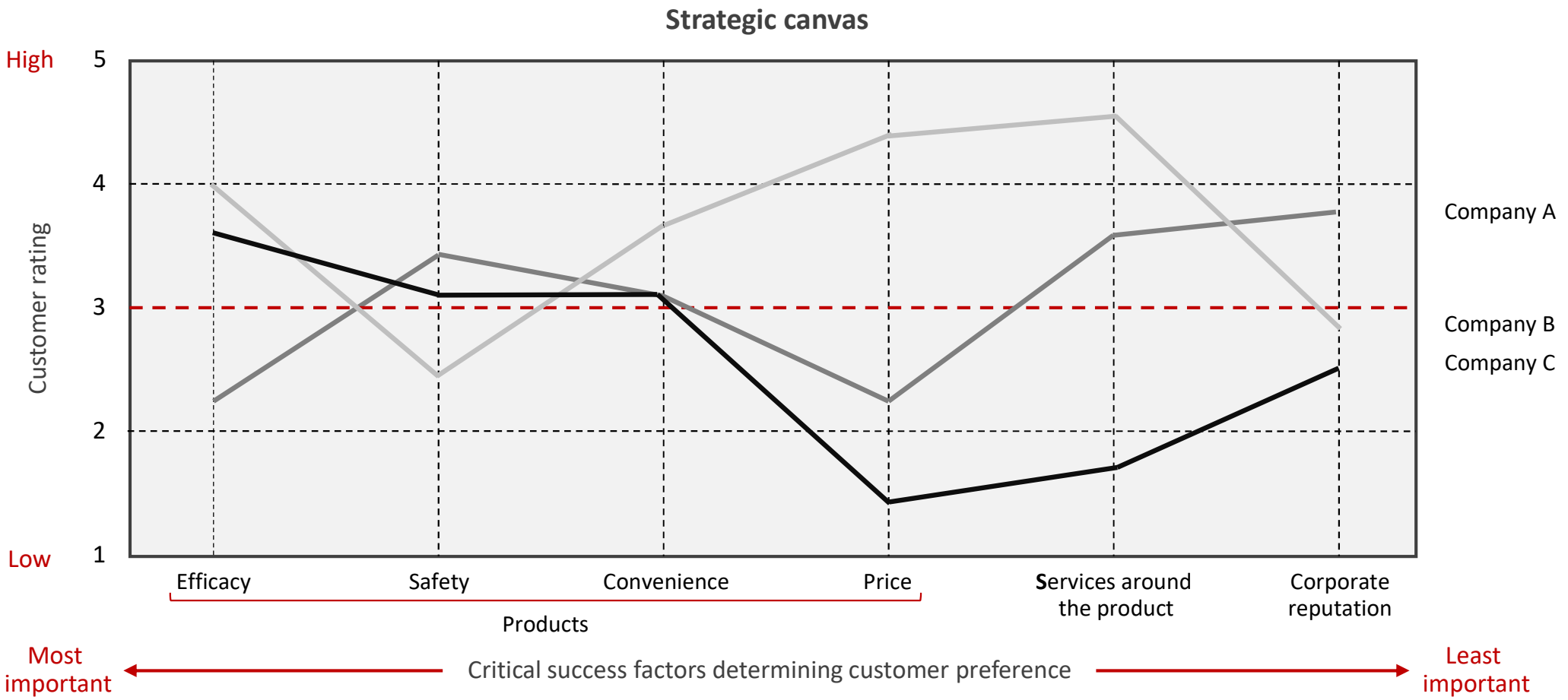
Sources: Smart Pharma Consulting

[1] *Sales – profits – market share dynamics*

The strategic canvas can help identify strategic gaps which represent opportunities that are not being fully exploited by competition

Assessing company's assets and capabilities (2/2)

Illustrative



Sources: Adapted by Smart Pharma Consulting from C. Kim et al. and from D.J. Collis , HBR April 2008

The "Advanced SWOT" facilitates the identification of strategic imperatives which correspond to opportunities to seize, threats to circumvent, strengths to leverage and/or weaknesses to address

Advanced SWOT & Strategic Imperatives

Illustrative

Market Opportunities	Importance From 1 to 5[1]
Policy makers (incl. health authorities) Clients (Physicians – Pharmacists – PAGs – Patients – Payers) Pharma Competitors	

Market Threats	Importance From 1 to 5[1]
Policy makers (incl. health authorities) Clients (Physicians – Pharmacists – PAGs – Patients – Payers) Pharma Competitors	

Company's Strengths	Importance From 1 to 5[1]
Portfolio (in-market & in-pipeline products) Customers' services Affiliate's reputation & organization	

Company's Weaknesses	Importance From 1 to 5[1]
Portfolio (in-market & in-pipeline products) Customers' services Affiliate's reputation & organization	

Strategic Imperatives

- Strategic imperatives (SIs) on which companies should concentrate their efforts to meet their objectives are of four kinds:
  1. Opportunities to seize
  2. Threats to circumvent
  3. Strengths to leverage
  4. Weaknesses to address
- The crafted strategy can be based on a combination of different types of SIs
- These SIs should be of high importance (rated 4 or 5[1]) and the company have the capabilities to leverage them

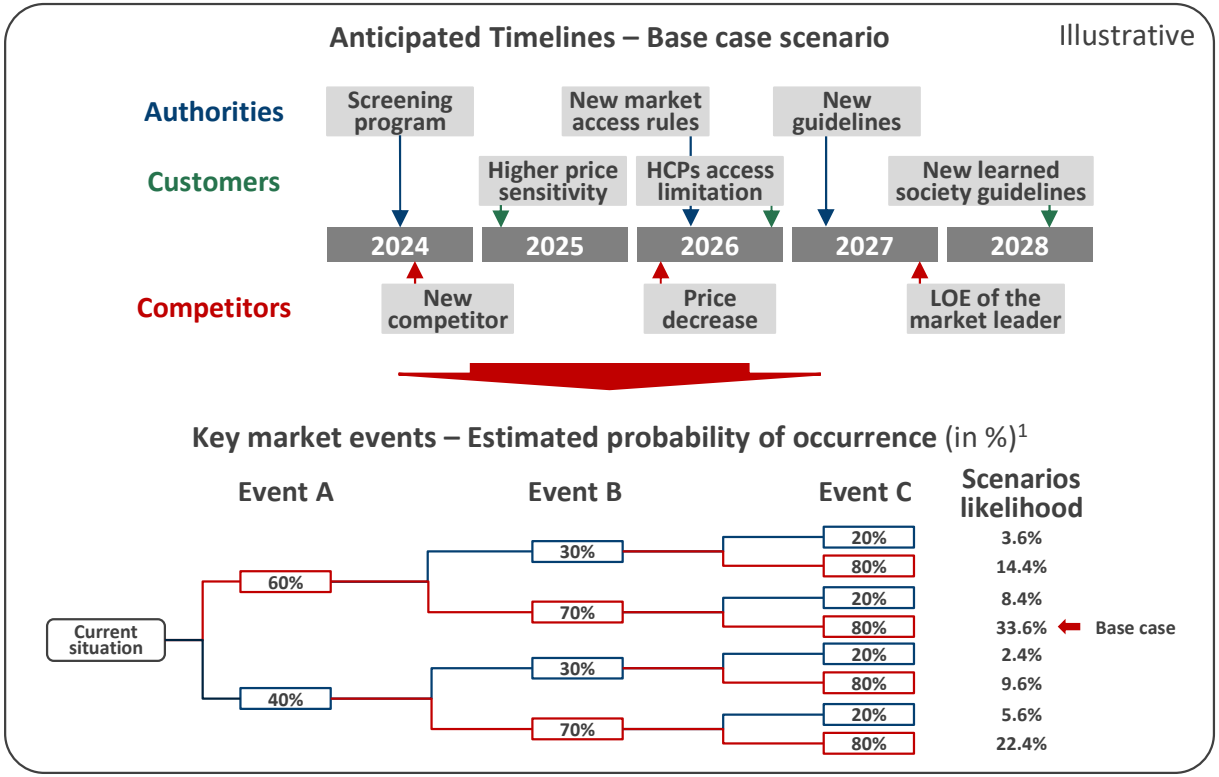
Sources: Smart Pharma Consulting

[1] *5 =High to 1 = Low*

The scenario planning provides greater insights re. market opportunities and threats; and company's strengths and weaknesses, from which strategic imperatives will be crafted

Scenario planning

- Scenario planning consists in anticipating the most likely combination of events that may impact company's performance
- Probability of plausible events are estimated, and company's proper reactions defined accordingly, on different time frames



- Key events (related to authorities, customers and competitors) likely to have an impact on the market and the company's business, in the years to come, should be positioned on a time scale
- Then, the probability of occurrence[1] of these key events should be estimated to determine the base case scenario (i.e., the most likely combination of events)
- The magnitude of each event's impact, either negative or positive, should be evaluated
- It is recommended to consider 3 scenarios[2]:
  - The "base case" on which strategy will be crafted
  - The "worst case" to build a contingency plan
  - The "best case" to craft a voluntary strategy

Sources: Smart Pharma Consulting

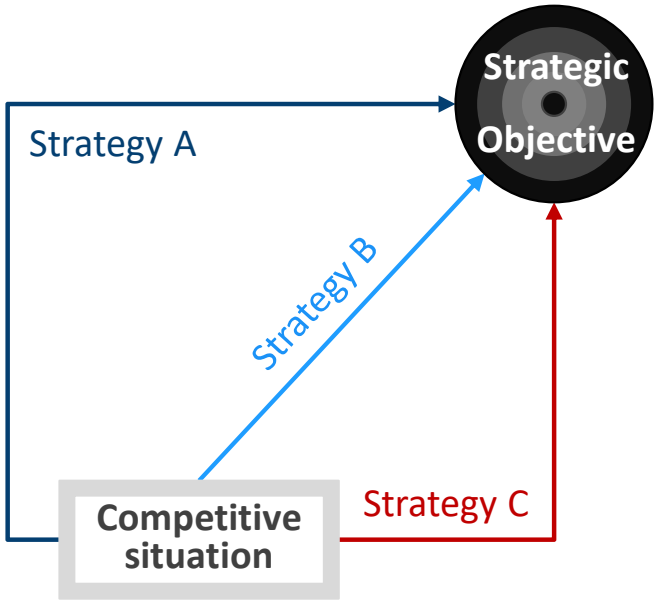
[1] High to moderate probability: ≥ 60%, High to moderate improbability ≤ 40%, Uncertainty: 50% –
[2] However, it can happen that the "base case" is the "best" or the "worst case"

The likelihood to achieve the set strategic objectives in a strategic segment depends as much on the selected strategy as on the supporting activities (tactics) and the excellence of their execution

Objective setting and strategy crafting

Illustrative

- The competitive situation analysis by strategic segment[1] – or by therapeutic domain[2] within a strategic segment – enables to identify the companies' competitive position, the markets' key success factors and the key challenges
- The aim of the strategy, expressed as a combination of strategic imperatives (priorities) that should be then broken down into consistent tactics (i.e., operational actions), is to achieve the set strategic objective in a time horizon of three to five years
- The strategic objective, which can be expressed in qualitative and quantitative terms, should be *S.M.A.R.T.*[3]



- The preferred strategy should be based on historical and future drivers and limiters[4] related to:
  - Market opportunities and threats depending on stakeholders' behavior:
    - Policy makers (incl. health authorities)
    - Clients (physicians – pharmacists – PAGs – patients – payers[5])
    - Competitors
  - Companies' strengths and weaknesses depending on their competitive position:
    - Brands Preference Mix[6]
    - Specific know-how and capabilities
    - Human and financial resources
- The chosen business strategy should also consider the Pharma Company "Strategic Square" which is defined by its purpose, vision, mission and core values

Sources: Smart Pharma Consulting

[1] Such as: Human Rx-bound drugs & Vaccines, OTC, animal health – [2] Such as oncology, immunology, vaccines within the human Rx-bound drugs & Vaccines strategic segment – [3] Specific, Measurable, Attainable, Relevant, Time-limited – [4] Future drivers and limiters are assessed when building market scenarios – [5] Public and private health insurers, or patients themselves – [6] That is the brands value, the quality of the associated service and the corporate reputation as seen by the stakeholders

Understanding what drive customers' preference and how competition is structured is a prerequisite for an effective business strategy

Key success factors by strategic segment and country

What do customers need – want – expect?

Demand analysis

- Who are our customers? (prescribers, consumers, distributors, payers, influencers, "injectors", etc.)
- What is their respective role?
- What do they need?
- What do they want?
- What do they expect from pharma companies?
- What are their available alternatives?
- What does create customers' preference?

How to outperform competition?

Competitive analysis

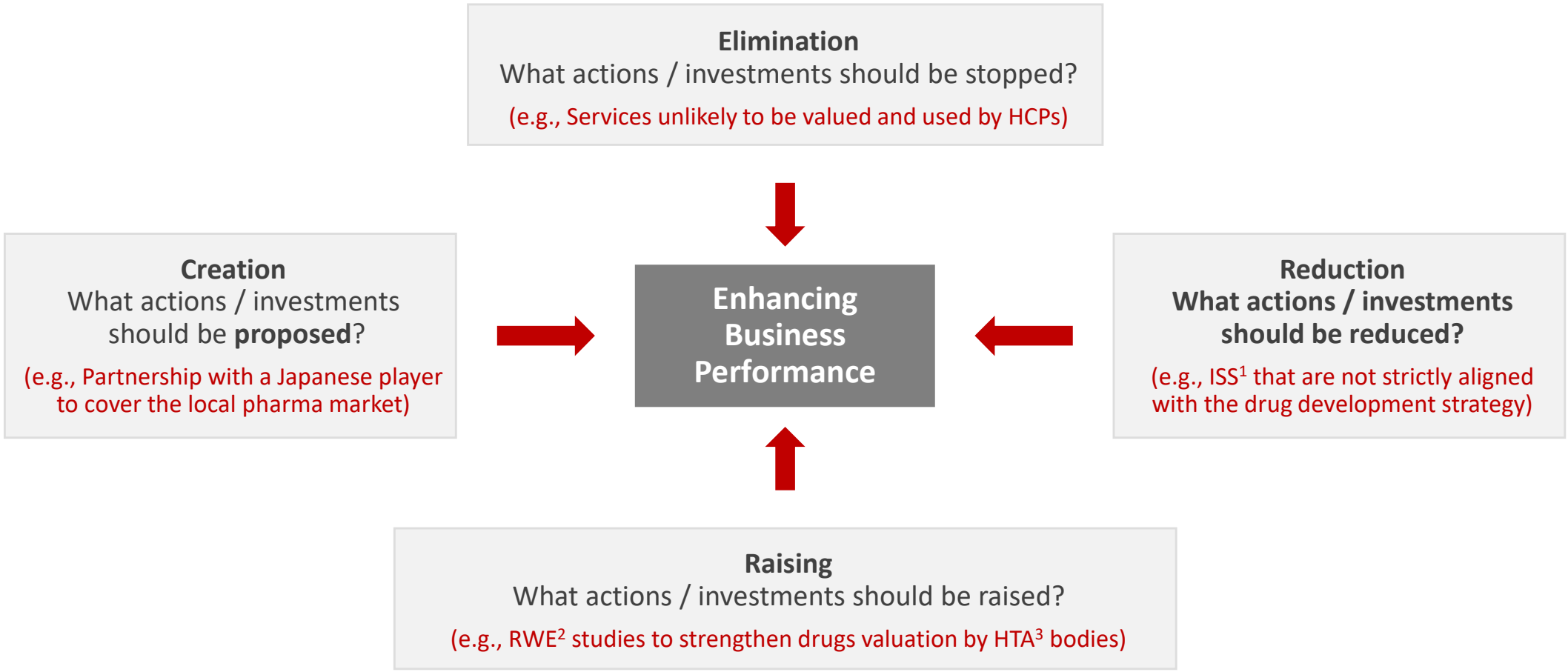
- Who are our competitors?
- What drives competition?
- What are the main dimensions of competition?
- How intense is the competition?
- How to obtain a superior and sustainable competitive position?
- How to create customers' preference?

Source: Adapted by Smart Pharma Consulting from R. Grant 2008

Pharma companies can enhance their business performance by reconsidering the management of the key success factors that are specific to the strategic segments they play in

Enhancing performance through key success factors management

Illustrative



Sources: Adapted by Smart Pharma Consulting from C. Kim et al. and from D.J. Collis , HBR April 2008

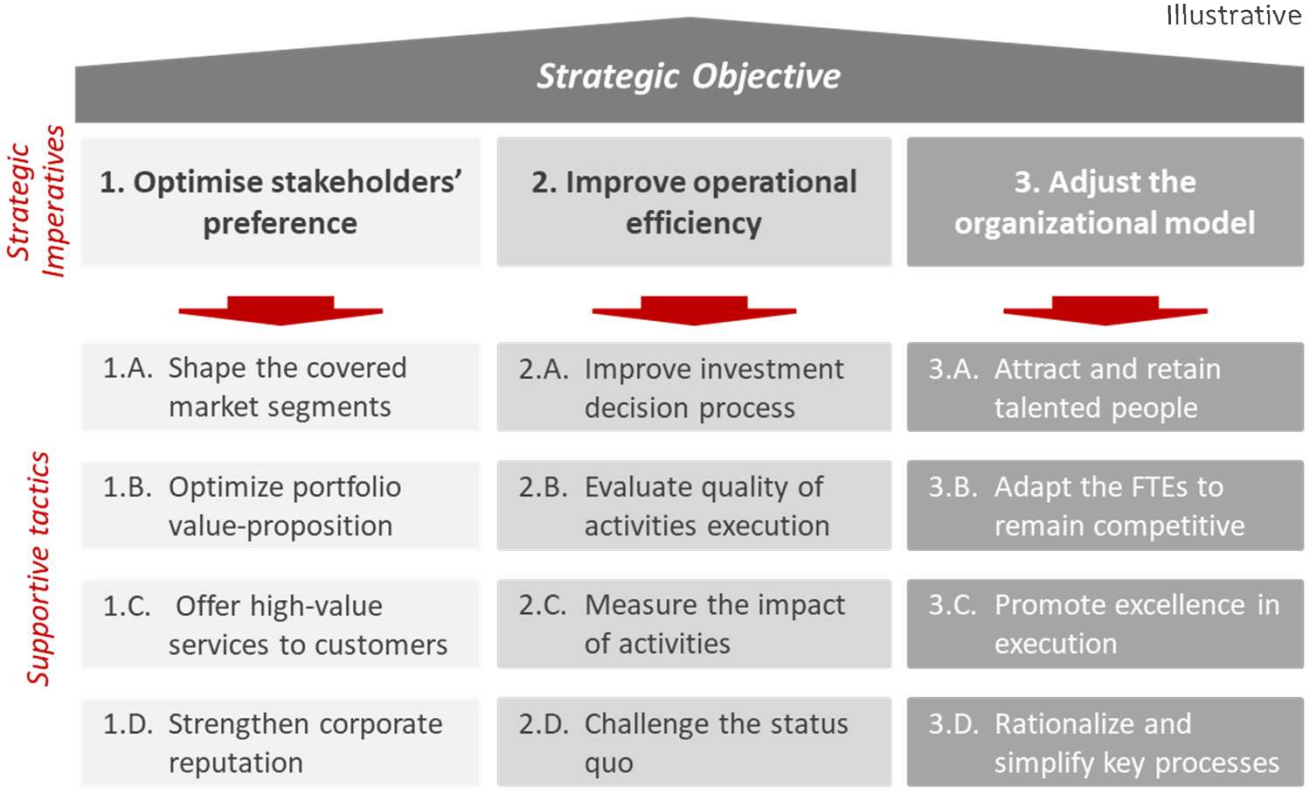
[1] Investigator-Initiated Studies – [2] Real World Evidence – [3] Health Technology Assessment based on clinical and cost-effectiveness data

The Business Strategy Card is a useful tool to ensure an alignment between the strategic objective, the selected strategic imperatives[1] and the corresponding tactics

The Business Strategic Card

- The Business Strategy Card describes the strategic objective, the strategic imperatives selected to achieve that objective and the key tactics supporting the strategic imperatives

Illustrative



- The Business Strategy Card helps to ensure the consistency between the objective – the strategic imperatives – the key tactics
- The trickiest part is to select the most relevant strategic imperatives, as derived from the Advanced SWOT, which are:
  - Opportunities to seize
  - Threats to fight again
  - Strengths to capitalize on, and/or
  - Weaknesses to address
- The preferred strategic imperatives are those which are the most likely to have an impact on the business performance so that to achieve the set strategic objective

Sources: Smart Pharma Consulting

[1] Alternatively called strategic drivers

While corporate strategy defines where pharma companies decide to play…
… business strategy sets the priorities to win

Key Takeaways

The selected strategic segments – where to play – depends on market attractiveness and companies' capabilities to win

Analysis of current and evolving opinions and behaviors of key stakeholders, of corresponding driving factors and their business implications are a prerequisite to business strategy crafting

Growing the market is the priority in monopolistic or dominant position

It is essential to leverage the "Brand Preference Mix" to gain market share

The "Advanced SWOT" is instrumental to define strategic imperatives and the supporting activities (tactics)

"The only strategy worthwhile is that fulfilling customer's needs, wants and expectations, in a way to get preferred"

The achievement of business objectives is strongly driven by the excellence of the strategy execution

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Pharma Operational Strategy

What to know & understand about
Strategy Execution

"Strategy without action is a daydream.
Action without strategy is a nightmare"

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1, rue Houdart de Lamotte – 75015 Paris – France
Tel. +33 6 11 96 33 78 – jmpeny@smart-pharma.com – www.smart-pharma.com

Corporate strategy selects the strategic segments, business strategy creates a competitive advantage, and operational strategy defines the appropriate organization to meet the objectives

Definitions

- Amongst multiple possibilities, we propose the following definition for strategy:

"Strategy is the long-term direction and scope set by a company to fulfill stakeholders'[1] expectations through proper capability building and resources allocation"

- One can consider three basic strategic levels in any pharma company:

CORPORATE STRATEGY

In which strategic segments should we be?

- Corporate strategy defines the purpose and the scope in which companies compete or should compete and how to add value to their businesses

BUSINESS STRATEGY

How should we compete in the selected segments?

- Business or competitive strategy defines how to compete successfully in each strategic segment (e.g., R&D-based drugs, vaccines, CHC[2], generics, medical devices)

OPERATIONAL STRATEGY

Which organizational configuration do we need?

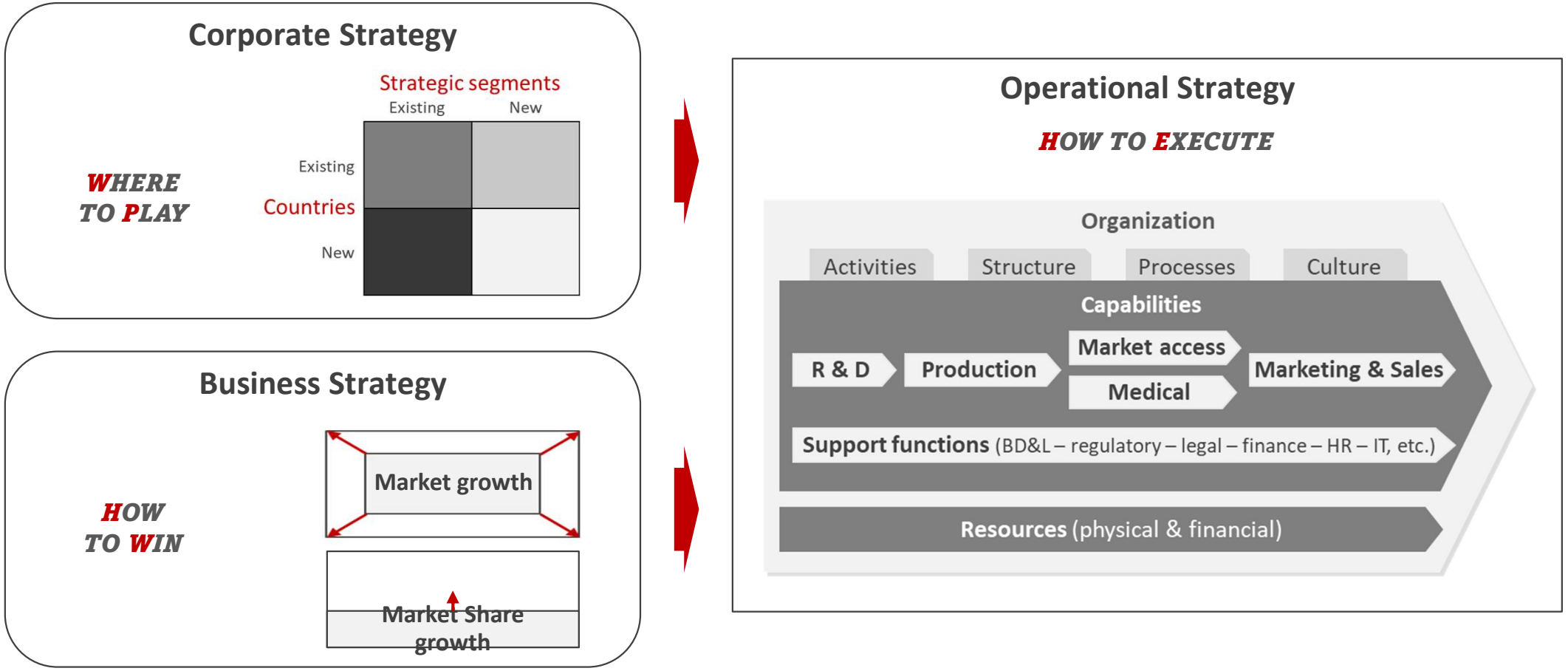
- Operational strategy sets the activities, capabilities, processes, structure, culture and resources needed to support corporate and business strategies

Sources: Smart Pharma Consulting, adapted after G. Johnson et al., Exploring Corporate Strategy, Pearson, 2019

[1] Basically authorities, customers, employees and shareholders –
[2] Consumer Heath Care, including OTCs, food supplements, minerals, vitamins, etc.

Once corporate and/or business strategies have been designed, it is imperative to define the proper conditions of their execution to produce their expected effect

Positioning of the different strategic levels



Source: Smart Pharma Consulting analyses

The Strategic Square[1] guides companies to set their performance objective, select their preferred strategy at the corporate, business and operational levels

The Strategic Square – What for?

- Objective: What do we want to achieve?
- Performance: What have we achieved?
- Corporate strategy: Where do we want to play?
- **Business strategy: How are we going to win?**
- **Operational strategy: What are the activities, structure[2] processes and culture we need to put in place to excel in the execution of the strategy?**

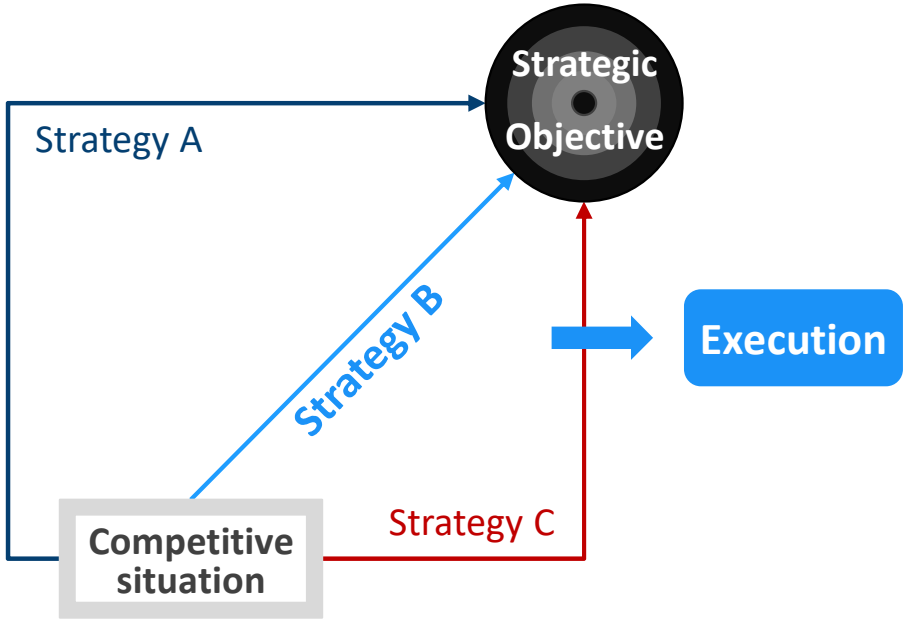
Sources: Smart Pharma Consulting

*[1] Purpose, Vision, Mission, Core Values (see Smart Pharma Consulting **position paper** on Pharma Corporate Strategy) – [2] Including the headcounts and the organizational chart*

The likelihood to achieve the set strategic objective, at corporate and/or business levels, depends as much on the selected strategy as on the excellence of its execution

Objective setting – Strategy crafting & execution

- The strategy development – at corporate or business level – starts by analyzing the competitive situation, the associated key success factors and the challenges
- The selected strategy (or strategic priorities) is a means to achieve the set objective in three to five years time horizon
- The strategic objective should be *S.M.A.R.T.*[1] and be consistent with the companies' Strategic Square[2]
- The strategy will be then broken down into tactics that…
- … will require a set of determinants to ensure its success



It is essential not to dissociate strategy development from execution, both being the two sides of the same coin

- Successful strategy execution depends on 3 key determinants:
  1. Understanding, adhesion and engagement of implementers
  2. Adjustment of the organization through its four components (i.e., activities, structure, processes and culture)
  3. Mobilization of capabilities and resources

"The only valid strategy is the one that can be properly executed"

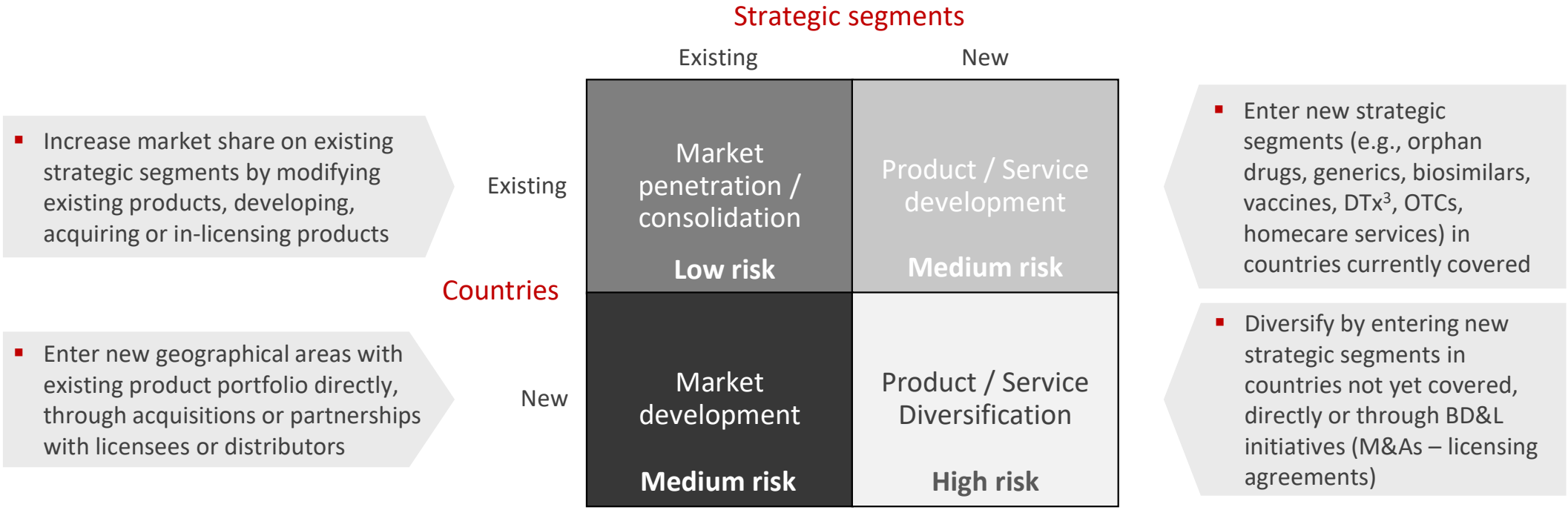
Sources: Smart Pharma Consulting

*[1] Specific, Measurable, Attainable, Relevant, Time-limited – [2] Purpose, Vision, Mission, Core Values (see Smart Pharma Consulting **position paper** on Pharma Corporate Strategy)*

Four basic corporate strategies can be adopted by pharma companies to secure a long-term and profitable growth, in line with their shareholders' expectations

Corporate strategy: Where to Play? – The Development Strategy Matrix[1]

- The Development Strategy Matrix is a practical tool to select the most attractive sources of growth
- Diversification is in general the riskiest option because the farthest from the company core competencies
- However, playing in diverse strategic segments[2] with different characteristics may enable to mitigate certain business risks



Sources: Adapted by Smart Pharma Consulting from H. Ansoff (HBR 1957)

[1] Has been adapted from the original Ansoff Matrix whose axes are Markets & Products / Services – [2] A strategic segment encompasses products and/or services characterized by the same combination of key success factors and the same level of attractiveness (e.g., orphan drugs, vaccines, OTCs) – [3] Digital Therapeutics

The relevance of the selected strategic segments – defined at corporate level – depends on companies' capabilities to win on these segments

Business strategy: How to Win?

Once a playground (segment) has been chosen, companies must define…

… What does WINNING mean?

- Prior to answer the question "How to Win?", one must agree on a business definition for "Winning"
- "Winning" is a subjective term which depends on:
  - Companies' Strategic Square[1]
  - Companies' capabilities to fulfil customers' and shareholders' expectations, and preferably better than competitors do

"Winning is delighting your stakeholders, whoever they are, in line with your Strategic Square"

… How to WIN?

- There is not one single recipe to win, it depends on the business environment and companies' own competitive sets of strengths and weaknesses
- At a high level, the choice is whether to strive to:
  - Grow the market segment, especially on niche markets where there is no or limited competition (e.g., certain rare diseases)

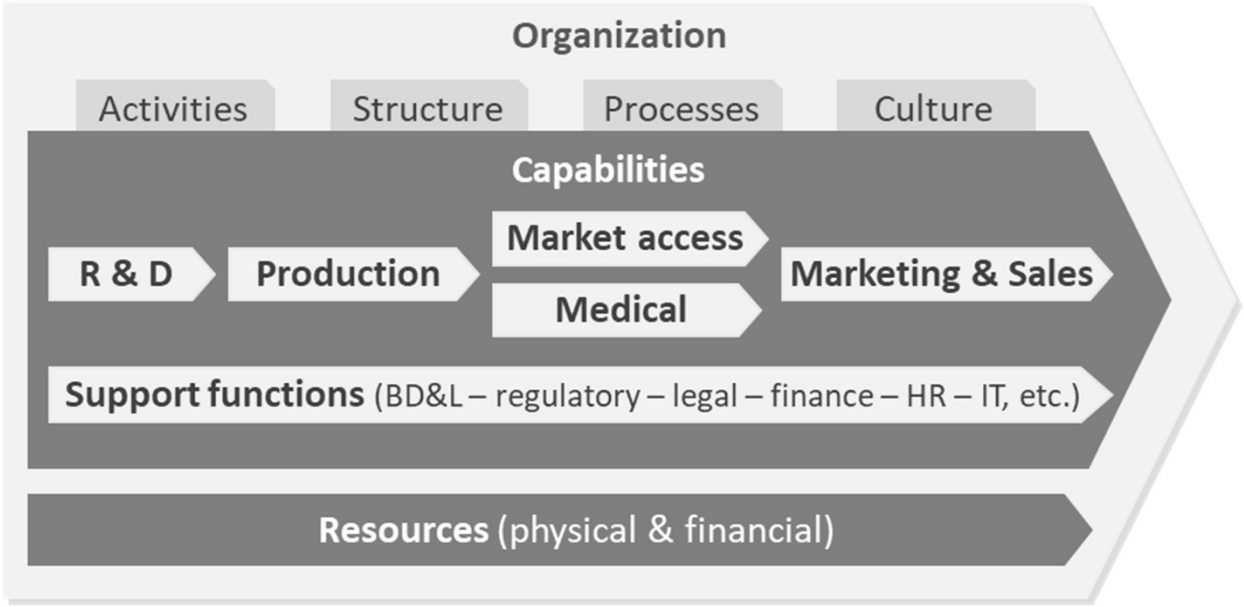
  or
  - Get preferred by stakeholders, to the detriment of competitors

Source: Smart Pharma Consulting analyses

[1] *That is the Purpose, Vision, Mission and Core Values of the company*

The quality of the strategy execution is mainly driven by the companies' organizational design, its available capabilities and the proper allocation of resources

Operational strategy: How to Execute?



"When a strategy looks brilliant, it's because of the quality of execution" – *Rosabeth Moss Kanter*

How to EXECUTE?

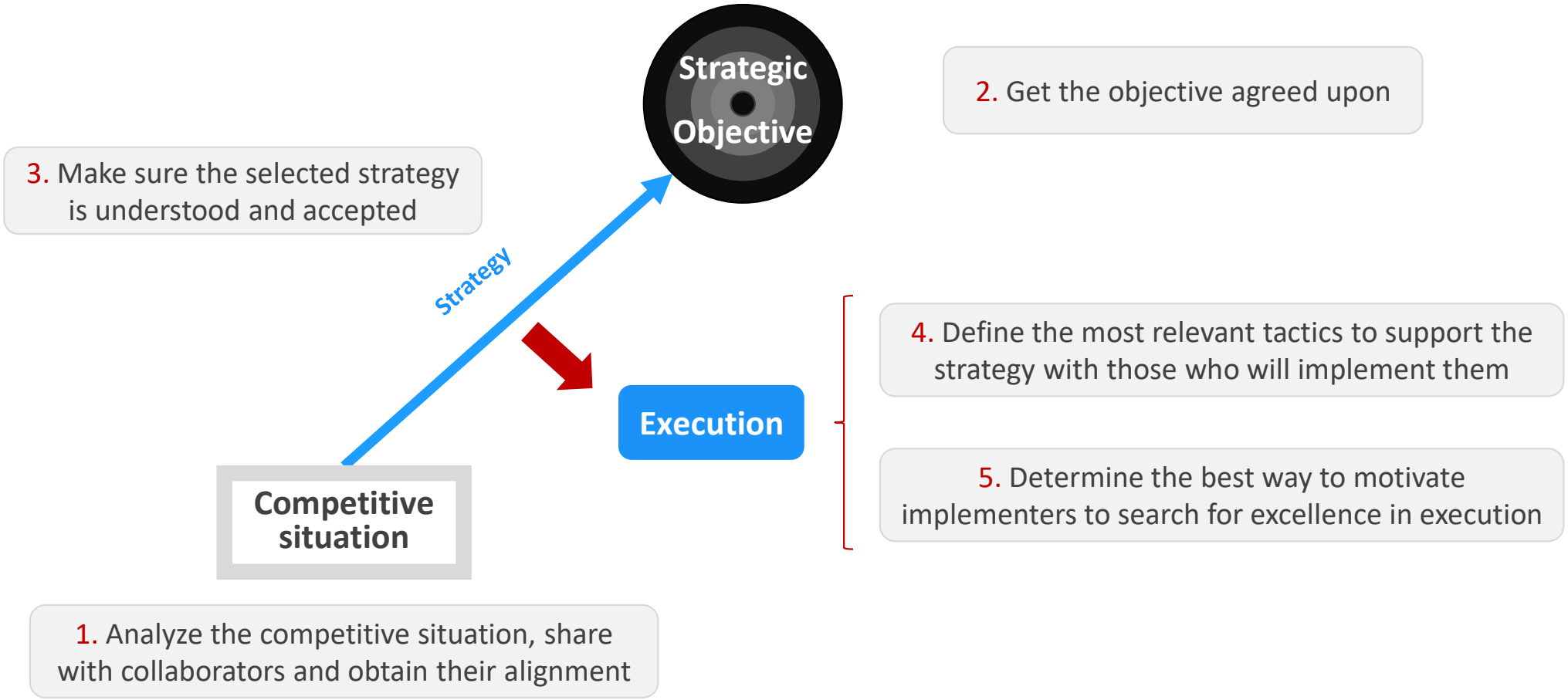
- To ensure an optimal execution of the strategy, at the operational level, pharma companies require to have the right:
  - Organization
  - Capabilities
  - Resources
- The organization should be considered through its four components:

  Activities – Structure – Processes – Culture
- Capabilities assessment along the value chain would define whether the company is able to execute properly the strategy
- Physical (material) and financial resources should be allocated so that to create the conditions necessary for success

Source: Smart Pharma Consulting analyses

The alignment on the objective, the selected strategy and the corresponding tactics of collaborators involved in execution will make it more relevant and more efficient

How to on-board collaborators in strategy execution (1/2)

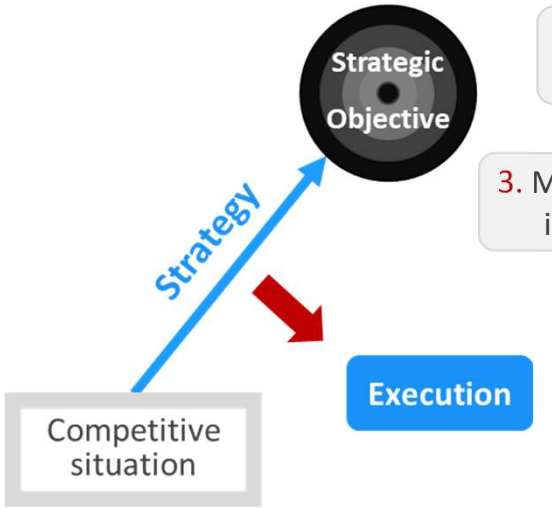


Sources: Smart Pharma Consulting analysis

[1] Key Execution Indicators – [2] Key Performance Indicators

An effective execution of the strategy requires a participative and collaborative approach to focus on the most important activities, to develop competence and to ignite passion of collaborators

How to on-board collaborators in strategy execution (2/2)



2. Get the objective agreed upon

- Set SMART[1] objectives to help managers and frontline employees take ownership over their roles in the execution

3. Make sure the selected strategy is understood and accepted

- Involve employees in strategy design to increase its relevance, facilitate the buy-in, and make execution easier and smoother

4. Define the most relevant tactics to support the strategy with those who will implement them

5. Determine the best way to motivate implementers to search for excellence in execution

- Ensure implementers focus on the most critical activities supporting the strategy to achieve the strategic objective…
- … which should be broken down in tactical objectives and thus in cross-team and/or individual objectives
- Build practical working plans (i.e., clear, concrete, familiar), adaptable to market or company changes
- Develop metrics to monitor the quality of activities execution…
- … and their impact

- Middle management should set the ways of working, inspire and mobilize their subordinates and monitor carefully their activities
- Empower employees to develop ownership and figure out how best to meet the objective

1. Analyze the competitive situation, share with collaborators and obtain their alignment

- Call in collaborators having a good knowledge and understanding of the competitive situation

Sources: Smart Pharma Consulting analysis

[1] *Specific, Measurable, Attainable, Relevant, Time-limited*

The careful answers to the five key following questions will contribute to ensure an optimal execution of the designed strategy to achieve the set objective

Key questions related to strategy execution

1. What to do? Select the most relevant activities	The translation of the strategy into selected key activities should involve those who will be responsible to implement them
2. Why to do it? Document the rationale to carry out these activities	The activities to focus on should effectively and efficiently support the designed strategy to meet the set objective
3. How to do it? Define the best practices and the best organization	The execution of the strategy should comply with the best practices to deliver the expected outcomes
4. How well has it been done? Monitor the quality of execution	The monitoring of the quality of execution will enable to adjust, if required, the manner things are done to get better outcomes
5. How close are we from the objective? Monitor the performance	The monitoring of the outcomes will enable to evaluate if the strategy produces the expected outcomes

Sources: Smart Pharma Consulting analysis

To achieve excellence in their strategy execution, companies must design a holistic organizational system fostering the search for excellence by all its collaborators, either front line or back-office

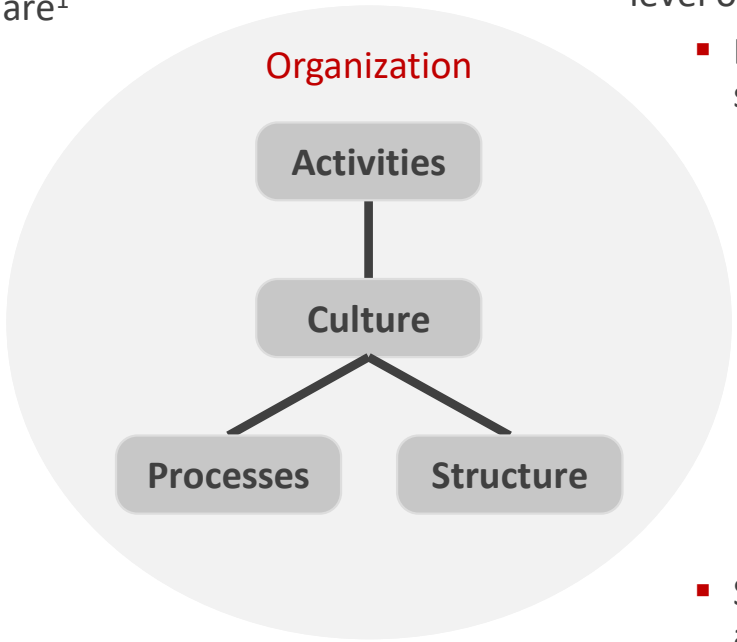
Adjustment of the organization – Overview

Culture

- Develop a culture of excellence to expand the market and/or gain market share through customer preference
- Create a link between the Strategic Square[1] and the strategic objective set so that the collaborators feel connected[2]
- Install a participative culture including the strategy development
- Encourage pro-activity, agility and experiment to boost excellence

Activities

- Focus on activities that best support the strategy and that company excels in, at the level of concerned departments
  - Develop the skills of managers and of subordinates in charge of the execution
    - Motivate collaborators to foster the quality of the execution to get the expected outcomes



Processes

- Align objective, strategy and tactics
- Facilitate and motivate collaborations across departments / project streams
- Set up flexible execution plans
- Measure the quality and the impact of activities
- Streamline processes and set up standards of excellence

Structure

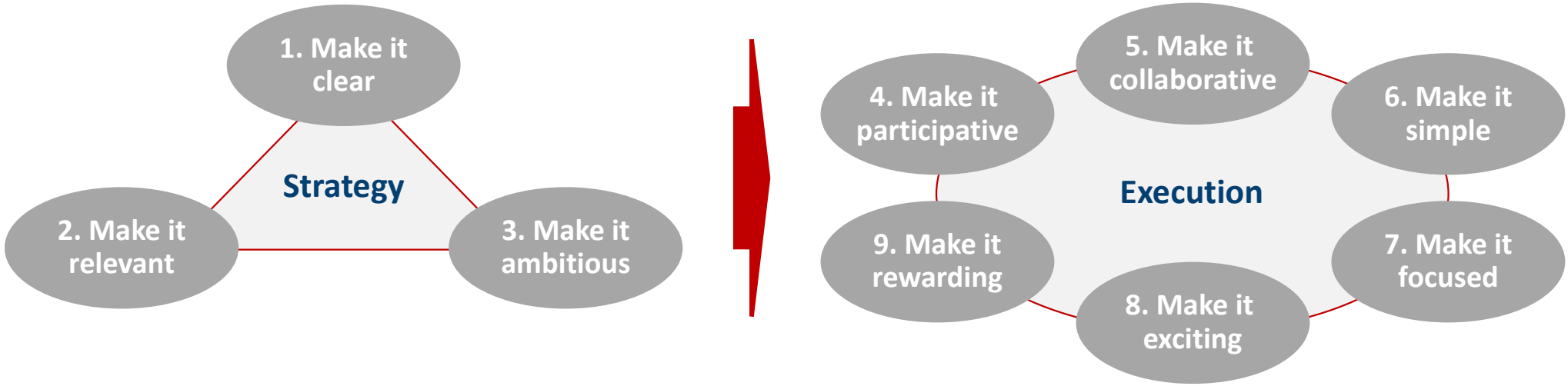
- Design a structure easily scalable according to the changing environment
- Set up a flat and lean organigram favoring accountability and empowerment
- Eliminate needless complexity

Source: Smart Pharma Consulting analyses

*[1] Purpose, Vision, Mission, Core Values (see Smart Pharma Consulting **position paper** on Pharma Corporate Strategy) – [2] Set clear performance expectations, hold them accountable, give them regular feedbacks, reward their performance, share outcomes, etc.*

The proper translation of a strategy into actions requires to be clearly formulated, make sense, be ambitious enough, while providing implementers a positive experience

Guiding principles to align and engage implementers



- Clarity will help collaborators better realize what it takes to execute the strategy
- The perceived relevance by implementers is key to get their full engagement
- The level of ambition should be high enough to justify the specific effort related to its execution

- Decisions should be as much as possible participative
- On-going coordination across departments is essential
- Keep initiatives simple and focus on the most effective ones
- Make sure the way strategy is implemented is stimulating…
- … and provides implementers a rewarding experience

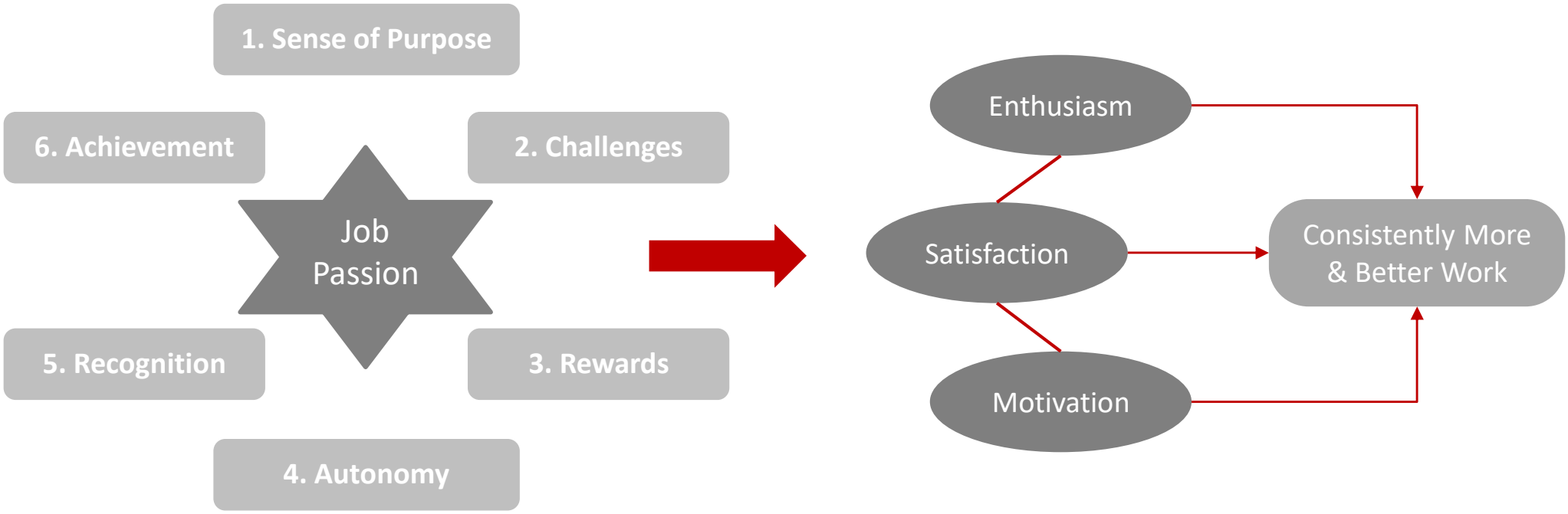
Sources: Smart Pharma Consulting analysis

Stimulating collaborators passion for their job is a key performance driver, especially in a context of corporate and/or business strategies execution

Drivers influencing the passion of implementers for their job

Six key drivers of job passion…

… having a positive influence on collaborators' mindset



"Pleasure in the job puts perfection in the work" – *Aristotle*

Sources: Smart Pharma Consulting analysis

The execution of the strategy should be tracked to measure its impact and to evaluate the way it is done, so that to bring possible adjustments to deliver the expected results

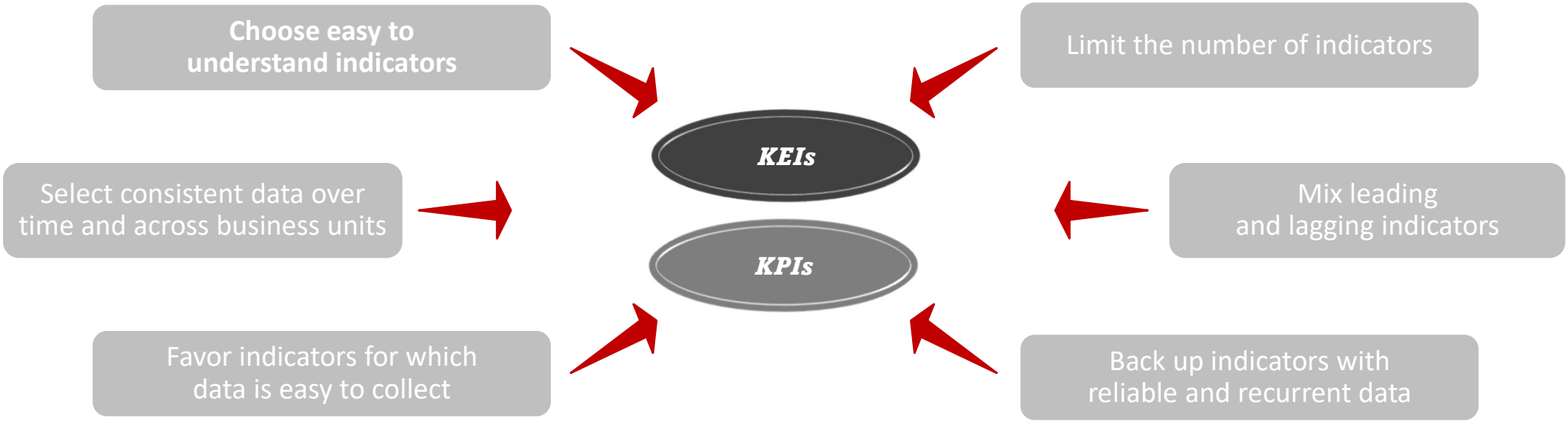
Monitoring of strategy execution and impact

KEY EXECUTION INDICATORS (KEIs)

Monitor the execution of the actions

KEY PERFORMANCE INDICATORS (KPIs)

Evaluate how far the set objective is achieved



"There is no successful strategy without a systematic and rigorous monitoring of activities execution and impact"

Sources: Smart Pharma Consulting analysis

It is essential to use metrics to ensure the strategy is correctly implemented and that these activities produce the expected results

Typology of activity-based and performance-based monitoring indicators

Typology	Definitions	Examples of KEIs[1]	Examples of KPIs[2]
Quantitative	Measure by counting, averaging numbers, calculating rates, ratios, etc.	Number of gained and lost customer accounts	Sales generated over a period
Qualitative	Express opinions, traits, characteristics	Opinion of stakeholders	Stakeholders' satisfaction survey
Process	Measure the efficiency or productivity of a business process	Compliance with project deadlines	Days spent to execute a task
Input	Measure assets and resources invested in or used to generate business results	Actual vs. budgeted investment	Investments in a project
Output	Measure the financial and non-financial results of business activities	Number of clients having a positive opinion of products	Revenues – Numbers of new clients
Leading	Measure activities that will have a significant impact on future performance	Quality of tendering planning	Pricing negotiated with payers
Lagging	Measure the output (success or failure) of past activities	Number of applications sent on time for tenders	ROI – profitability

Sources: Smart Pharma Consulting analysis

[1] Key execution indicators – [2] Key performance indicators

The Operational Strategy Card ensures the strategic objective, imperatives and tactics are aligned, while the strategic planning and monitoring table favors the quality of execution and its efficiency

Operational Strategic Card

Illustrative

- The Operational Strategy Card should be developed at department / project level and support the corporate and/or strategic objectives
- The Card which describes the department / project strategic objective, imperatives and key tactics helps ensuring consistency between these three components
- Preferred strategic imperatives impact the business performance so that to achieve the strategic objective

Strategic planning & monitoring table

- Strategic driver:
- Objective:
- Description:

- Stakeholder type:
- Number of stakeholders:

Planning	Actions	Timing	Owner	FTEs	OPEX
Key actions to implement this tactic					

Monitoring	Quantitative / qualitative metrics	Indicator objective	Indicator achievement	Key implications / Comments
Key Execution Indicators (KEIs)[1] (quality of execution)				
Key Performance Indicators (KPIs)[1] (Impact of tactics)				

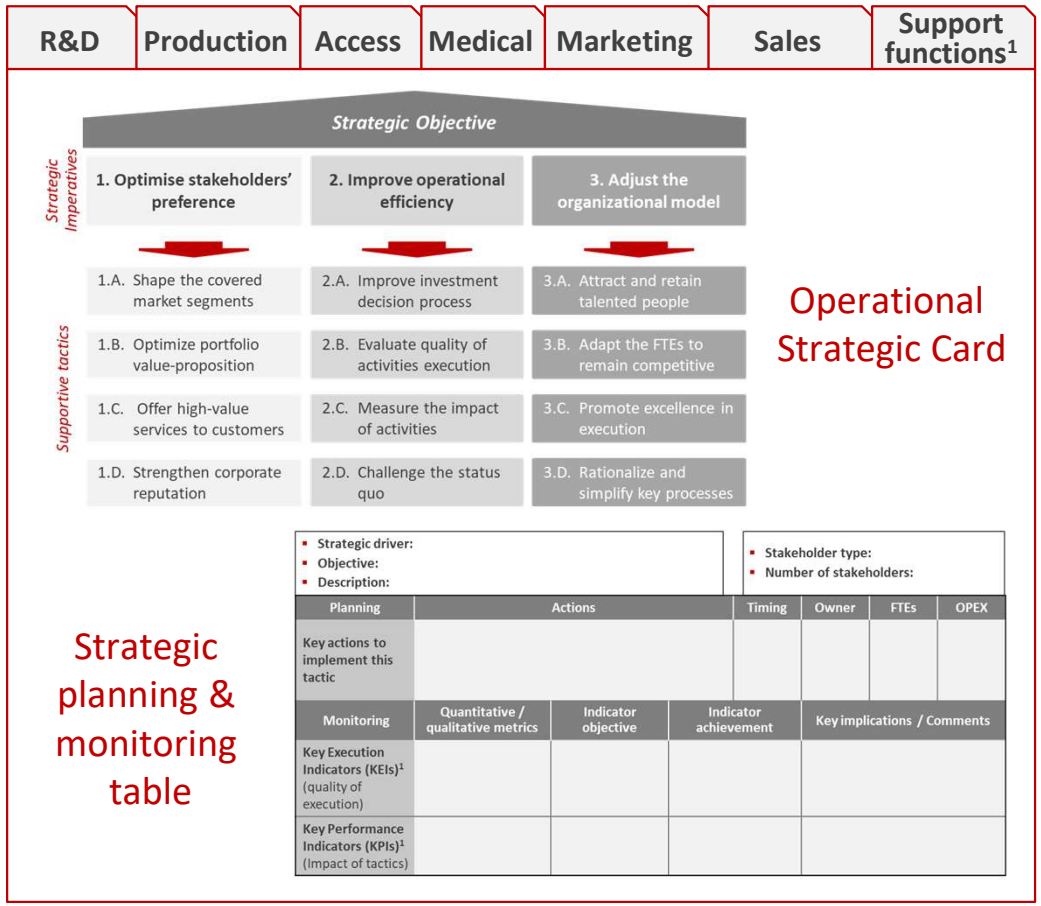
- The planning of strategy execution should not be fixed, but adapted in real-time to unforeseen evolution of internal and external situations
- Thus, it is necessary to ensure an agile adjustment and reallocation of focus, capabilities and resources considering these possible changes
- Coordination of key tactics with other departments and/or project streams on an ongoing basis is essential for an efficient execution
- The quality and impact of strategy execution should be carefully measured with KEIs[1] and KPIs[1] to possibly carry out adjustments

Sources: Smart Pharma Consulting

[1] Key Execution Indicators and Key Performance Indicators – See our position paper "KPIs & KEIs for Success" available on Smart Pharma Consulting website

The main operational strategic challenge is to concentrate and align – across departments and project streams – capabilities and resources on the most critical actions to meet the set objective

Coordination across project streams and departments



- Corporate and business strategies should be translated into each department's and/or project stream's specific strategic initiatives, with their objective, imperatives and key tactics
- Strategic roadmaps should be communicated and explained within and across departments / project streams
- The execution should be carried out in a close cooperation and coordination to ensure an optimal operational alignment, the leverage of complementarities and synergies
- In practice, each department / project should define:
  - What specific actions should be started, continued, expended, downsized, stopped
  - The most efficient and effective way to carry out the selected actions by setting quality of execution and performance objectives with KEIs[2] and KPIs[2]
  - The required capabilities and resources
  - The best way to engage and motivate collaborators
- Agility of the test and learn (i.e., experimental) approach would help coping with the volatility of the environment

Sources: Smart Pharma Consulting

[1] BD&L, regulatory, governmental affairs, legal, finance, HR, IT, etc. – [2] Key Execution Indicators and Key Performance Indicators

To ensure the designed corporate and/or business strategies deliver their expected outcomes, pharma companies should pay a special attention to the following six key success factors

Key Takeaways

1. The corporate and/or business strategies should be shared and explained to all implementers

2. Capabilities and resources should focus on activities that are critical to meet the set strategic objective

3. Departments and project streams should prioritize the actions that will best contribute to achieve the overall strategic objective

4. All departments and project streams should cooperate and coordinate in an aligned and synergistic way for optimal outcomes

5. All involved implementers should be empowered and get engaged to give their best to achieve a strategic objective that makes sense to them

"Focus on what is critical, and have the courage to stop non-effective and non-efficient actions"

6. The implementation and impact of actions supporting the strategy should be carefully monitored to determine any required adjustments

Sources: Smart Pharma Consulting

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Pharma Strategy
at Affiliate Level

A Practical Guide for
Pharma Companies

POSITION PAPER April 2021

This document proposes a methodology and tools to help management committees of Pharma companies' affiliates craft a robust strategy, despite the high uncertainty due to the Covid-19 crisis

Introduction

- An unprecedented crisis triggered by the Covid-19 pandemics has hit the world since early 2020
- All kinds of specialists[1] have emerged to the public, explaining what is going to happen and what should have been done to better manage the crisis
- The problem is that all those thought leaders have been very poor at predicting the future…
- … and quick at making sweeping recommendations, based on hasty and shallow thoughts

- At Smart Pharma Consulting we do think that, more than ever, pharma companies' Affiliates and their management committee should:
  - Carry out a robust analysis of the 2019-2020 period
  - Build scenarios for the 2021-2025 period, based on documented assumptions and a formal process

  to better seize opportunities and address threats while leveraging with a greater efficacy the company's assets
- For so doing, we propose the "Smart Strategic Model" proven methodology, tools and a customized support

"The Covid-19 crisis has discredited a bunch of arrogant forecasters and lazy trouble shooters, reinforcing the value of a formal strategic thinking process"

Sources: Smart Pharma Consulting

[1] *Such as epidemiologists, virologists, intensive care specialists, economists, politicians, and many other self-proclaimed experts of the Covid-19 crisis*

The 4 Ws approach that we have developed enables Affiliates to make evidence-based strategic, tactical and organizational decisions and thus improve their relevance and consistency

The 4 Ws approach

WHAT?

- Identify key market facts and events:
  - Sales and profits data (affiliate and its competitors)
  - Opinion, decisions and / or behavioral changes of key stakeholders (The 7 Ps):
    - Policy-makers
    - Payers
    - Physicians
    - Pharmacists
    - Patients & PAGs
    - Pharma competitors

WHY?

- Identify the factors that have triggered or that are likely to trigger market facts and events:
  - What are the root causes of affiliate's performance and trends?
  - What are the root causes of key stakeholders' opinion, decisions and / or behavior?
  - Etc.

SO WHAT?

- Analyze the implications, for the affiliate and its key stakeholders, related to the key market facts and events that have been identified or anticipated
- Define if these facts and events represent major opportunities or threats for the affiliate (and its brands)

WHAT TO DO?

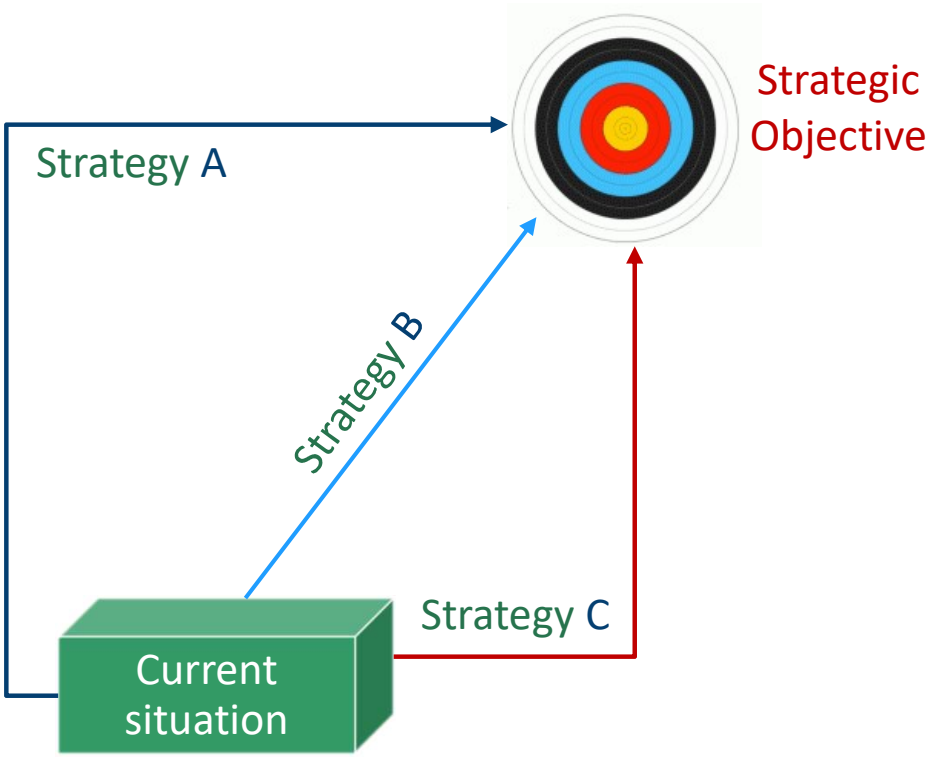
- Based on the three previous steps (WHAT – WHY – SO WHAT) define the relevant strategic and tactical decisions to be made to optimize the performance of the affiliate and its brands
- Then, adjust/redesign the organization of the affiliate to best support its new strategy and the corresponding tactics, if needed

Sources: Smart Pharma Consulting

The 4 Ws approach that we have developed enables Affiliates to make evidence-based strategic, tactical and organizational decisions and thus improve their relevance and consistency

The Smart Strategic Model – Principle

- Strategies at affiliate's level should be considered in a time horizon of 3 to 5 years
- To achieve an objective, different strategies may be considered



- Affiliate's strategy will be based on criteria such as:
  - Constraints (e.g., legal, technical or financial constraints, deadlines, corporate decisions, market threats, competitive weaknesses)
  - Drivers (e.g., capabilities, specific know-hows, market opportunities, competitive advantages)
  - Habits (e.g., willingness to remain or step out of the Affiliate's comfort zone)
- The likelihood to achieve the set objective depends as much on the selected strategy as on supporting activities (tactics) and the excellence in their execution

Sources: Smart Pharma Consulting

The Smart Strategic Model helps to align the "Strategic Triangle" to the strategic objective and then to craft the best strategy and the corresponding tactics supported by the right organization

The Smart Strategic Model – Principle

- Vision: What do we aspire to become?
- Mission: What do we do and for whom?
- Values: What do we believe in and how do we behave?

- Objective: What do we want to achieve?
- Strategy: Where to play and how to win?
- Tactics: How to execute the strategy?
- Organization: What activities, processes, structure[1] and culture we put in place to execute the strategy?

- Expected Outcomes:
  - Are they in line with the strategic triangle?
  - Are they consistent with the set objectives?
  - How are they going to be monitored?

Sources: Smart Pharma Consulting

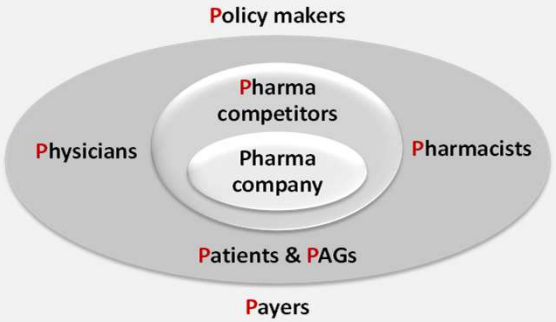
[1] Including headcount and organigram

The strategy should be crafted based on a robust analysis of the situation and its trends, and the strategic objective set, prior to the design/adjustment of the organization

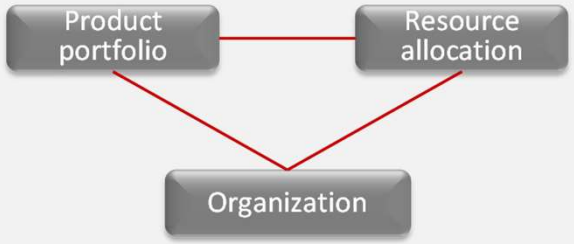
The Smart Strategic Model – Principle

1. Situation & Trends Analysis

Competitive Landscape Analysis

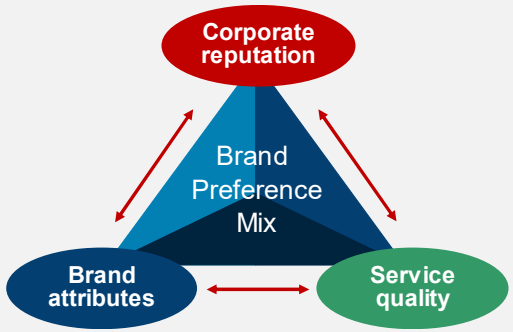


Company Assets Assessment



2. Strategic Objective

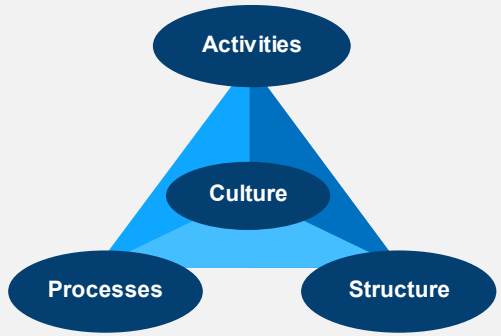
3. Strategy Crafting & Tactics



Affiliates' strategy and related tactics should attempt to raise customer preference and create sustainable competitive advantages by:

- Seizing market opportunities
- Circumventing market threats
- Leveraging on competitive strengths
- Addressing competitive weaknesses

4. Organization Design



The organization should be designed to support effectively and efficiently the crafted strategy and related tactics

Four dimensions should be considered:

- Activities (and skills)
- Structure (FTEs, organization chart)
- Processes (coordination, decision-making, information sharing, etc.)
- Culture (working conditions, etc.)

Sources: Smart Pharma Consulting

The competitive landscape analysis consists in identifying the current and evolving opinions and behaviors of key stakeholders, the corresponding driving factors and the implications for Affiliates

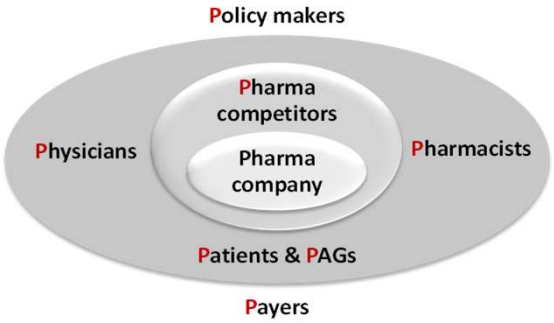
The Smart Strategic Model – 1. Situation & Trends Analysis

Illustrative

Competitive Landscape Analysis

Policy makers / Payers

- Registration process and policies
- Pricing and reimbursement policies
- Medical guidelines developed by health authorities
- Trade regulations
- Public health initiatives



Pharma Competitors

- Customer preference strategy:
  - Product portfolio
  - Service offering
  - Corporate reputation
- Resource allocation (medico-marketing & sales)
- Organizational model

Physicians

- Evolving practice (working time and organization, tele-medicine)
- Prescribing habits and alignment with guidelines
- Budget constraints
- Relationships with patients
- Relationships with pharma companies (in-field and office-based collaborators)
- Unmet needs

Patients / PAGs

- Role of PAGs to influence other stakeholders (e.g., authorities, physicians, individual patients)
- Position vis-a-vis pharma companies
- Relationships with HCPs
- Patients' knowledge re. health and pharma ecosystem
- Unmet needs

Pharmacists (hospital-based)

- Drug listing and purchasing policy
- Position re. the use of generics and biosimilars
- Power of influence within the hospital

Pharmacists (retailers)

- Role in public health initiatives (e.g., screening, education at the point of sale)
- Purchasing policies and selling priorities

Sources: Smart Pharma Consulting

The affiliates should evaluate their assets by reviewing their competitive position about their product portfolio, their available resources and the configuration of their organization

The Smart Strategic Model – 1. Situation & Trends Analysis

Illustrative

Product Portfolio

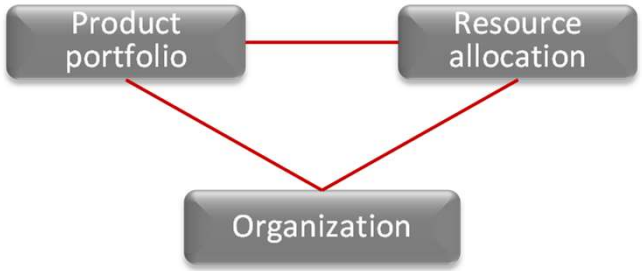
In-market brands

- Strategic and mature brands performance (sales – profits – market share dynamics)
- Brands' competitiveness
- Pre-launch (strategic and mature brands)

In-pipeline products

- Marketing authorization
- Price & Reimbursement
- Readiness launch plans

Company Assets Assessment



Resource allocation

- Relative activities vs. competitors in:
  - Medical affairs
  - Marketing and sales
- Efficiency (ROI) and efficacy (sales and profit impact) of medico-marketing and sales investments
- Productivity of business support functions, such as: market access, regulatory affairs, public affairs, finance, HRs, etc.

Organization

Activities / Skills

- Activities carried out (tactics) to support the Affiliates' strategy
- Monitoring of activities' execution and outputs
- Skills available vs. required

Structure

- Relevance of the organizational model to carry out the activities (i.e., flat, lean, flexible)
- FTEs available vs. required
- In-house vs. outsourced staffs

Processes

- Information sharing and decision-making processes
- Alignment of objectives, strategies and tactics
- Management of requests from head office
- Standards of excellence

Culture

- Customer management (e.g., search for preference)
- Collaborators management (e.g., working atmosphere, favor initiatives, engagement)
- Search for excellence

Sources: Smart Pharma Consulting

The "Advanced SWOT" facilitates the identification of strategic imperatives which are opportunities to seize, threats to circumvent, strengths to leverage and/or weaknesses to address

The Smart Strategic Model – 2. Advanced SWOT & Strategic Imperatives

Illustrative

Market Opportunities	Importance From 1 to 5[1]
Policy makers / Payers	
Clients (Physicians – Pharmacists – PAGs – Patients)	
Pharma Competitors	

Market Threats	Importance From 1 to 5[1]
Policy makers / Payers	
Clients (Physicians – Pharmacists – PAGs – Patients)	
Pharma Competitors	

Affiliate Strengths	Importance From 1 to 5[1]
Portfolio (in-market & pipeline products)	
Customers' services	
Affiliate's reputation & organization	

Affiliate Weaknesses	Importance From 1 to 5[1]
Portfolio (in-market & pipeline products)	
Customers' services	
Affiliate's reputation & organization	

Strategic Imperatives

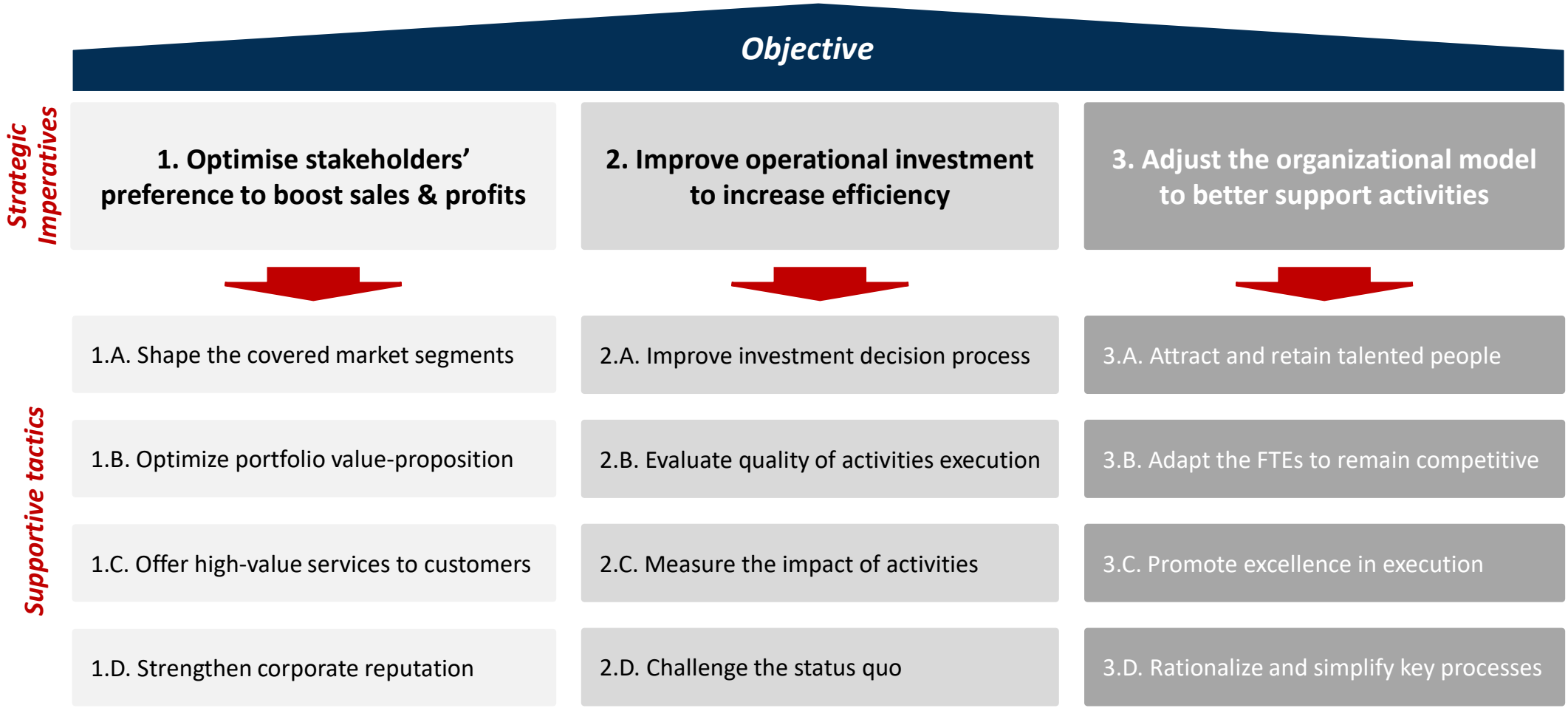
- The strategic imperatives (SIs) on which Affiliates should concentrate their efforts to meet their objectives are of 4 kinds:
  1. Opportunities to seize
  2. Threats to circumvent
  3. Strengths to leverage
  4. Weaknesses to address
- The crafted strategy can be based on a combination of different types of SIs
- These SIs should be of high importance (rated 4 or 5[1]) and Affiliates should be able to leverage them

Sources: Smart Pharma Consulting

The affiliate's strategic card which must be developed by the management committee enables to represent on the same page the strategic objective, the strategic imperatives and the key tactics

The Smart Strategic Model – 3. Strategic card design - Department level

Illustrative



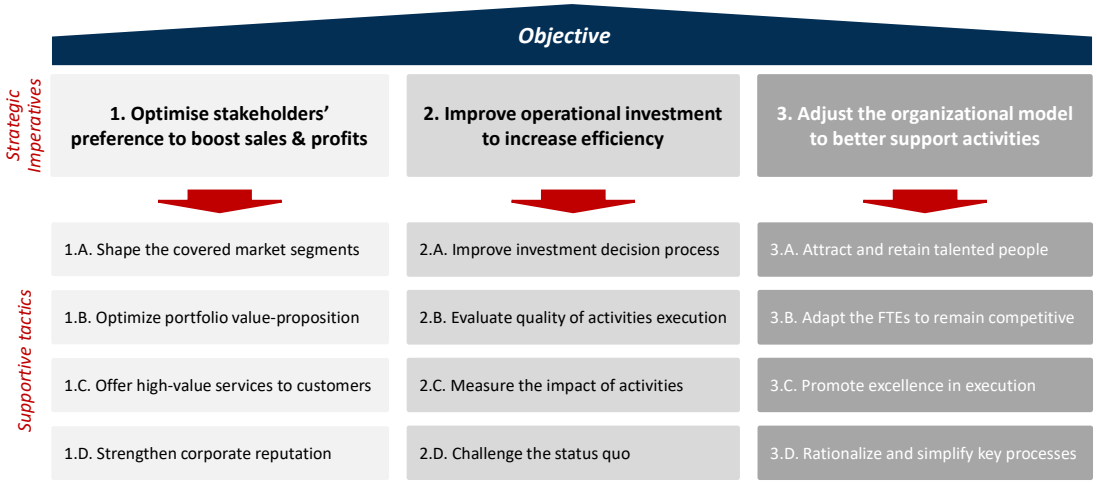
Sources: Smart Pharma Consulting

The affiliate's strategic card will then be translated at each department level by each member of the management committee who will ensure the perfect consistency between the two levels

The Smart Strategic Model – 3. Strategic card design - Department level

Illustrative

Affiliate's strategic card



- The affiliate's strategic card should be crafted by the management committee
- Then, each member of the management committee will develop the strategic card of its own department
- The affiliate's and the Departments' strategic cards should be perfectly consistent

Affiliate's strategic card

Sources: Smart Pharma Consulting

This model of ID card will help management committee members plan and monitor the execution of the key activities that have been selected to support the selected strategic imperatives

The Smart Strategic Model – 4. ID card design by key tactic

Illustrative

▪ SI: precise the SI this tactic is supposed to support ▪ Objective: define the specific objective of this tactic ▪ Description: describe briefly the tactic	▪ Stakeholder type: internal, external (e.g., authorities, payers, HCPs, PAGS) ▪ Number of stakeholders:	Priority One – Two

Planning	Actions	Timing	Owner	FTEs	OPEX
Key actions to implement this tactic					

Monitoring	Quantitative / qualitative metrics	Indicator objective	Indicator achievement	Key implications / Comments
Key Execution Indicators (KEIs)[1] (quality of execution)				
Key Performance Indicators (KPIs)[1] (Impact of the action)				

Sources: Smart Pharma Consulting

[1] See our position paper "KPIs & KEIs for Success" available on Smart Pharma Consulting website: https://smart-pharma.com/wp-content/uploads/2019/07/Smart-Management-Series-KPIs-KEIs-VW.pdf

Smart Pharma Consulting can help Pharma affiliates develop a practical and consistent Strategic Plan, along with a series of tools to monitor the excellence of its execution

Key takeaways & Smart Pharma Consulting Support

- The "Smart Strategic Model" is straightforward to implement by affiliates, irrespective of their size
- The 1st step consists in developing robust and well-structured market insights as illustrated by the report we have just published for the French Pharma market[1]

- During the 2nd step, the management committee of the Affiliate will develop an "Advanced SWOT" from which strategic imperatives will be drawn
- The 3rd step focuses on aligning on one page:
  - The Affiliate 3- to 5-year objective
  - The corresponding strategic imperatives (SIs)
  - The supportive tactics
- Then, the management committee members will develop the Strategic Card of their department…
- … and will plan and monitor their key activities with the help of a "Key Activity ID Cards"

Smart Pharma Consulting has a long experience in supporting Affiliates – of any size – to develop a robust, consistent and relevant Strategic Plan with the help of a simple and proven methodology, and easy-to-use tools

Sources: Smart Pharma Consulting

[1] *See excerpts of our report available on Smart Pharma Consulting website: https://smart-pharma.com/wp-content/uploads/2019/08/French-Pharma-Market-2020-2025-Excerpts-4.pdf*

Smart Pharma
CONSULTING

How to Boost Corporate Reputation?

A Practical Guide for Pharma Companies

"Strong reputation generates stakeholders' preference"

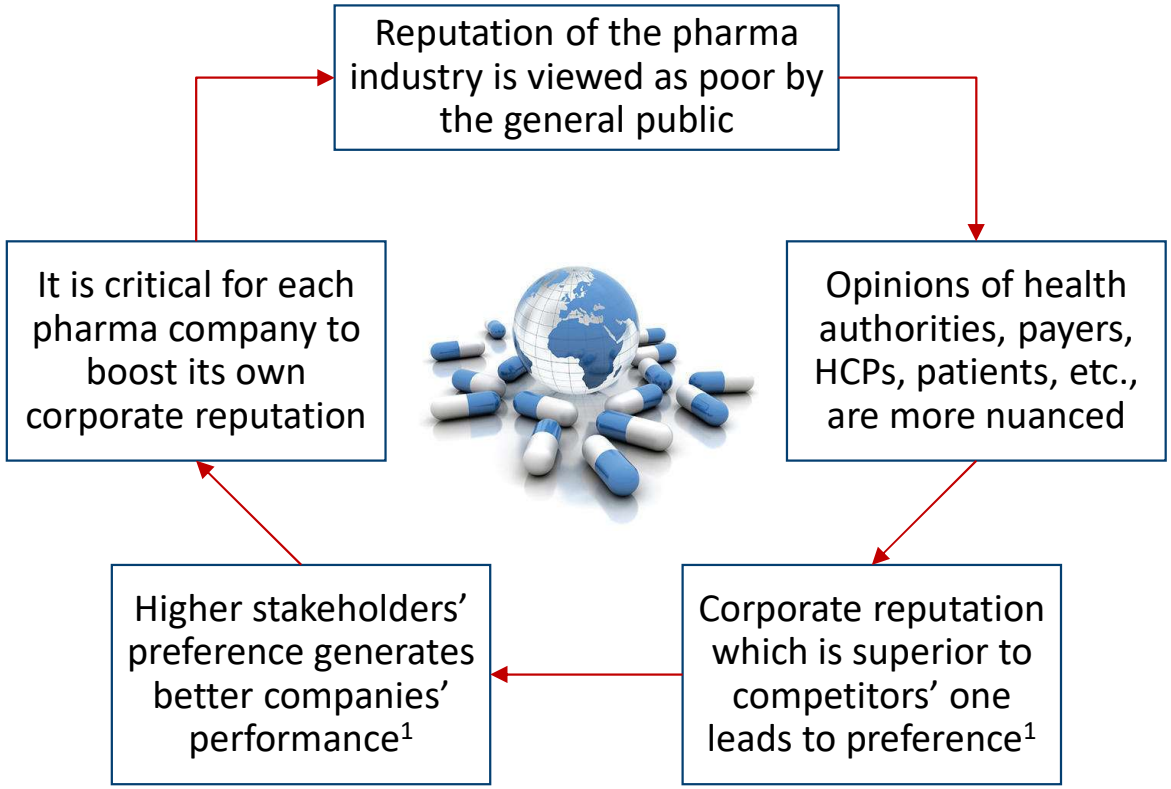
POSITION PAPER September 2021

This position paper analyzes the corporate reputation of the pharma industry and proposes The Pharma Reputation Booster™ approach to help affiliates improve their performance

Introduction

Corporation reputation situation & solutions

Pharma industry situation



Solutions for affiliates at national level

To enhanced their corporate reputation, at national level, affiliates can implement the Pharma Reputation Booster™ approach designed by Smart Pharma Consulting:

Phase 1
- Analyze and map the key stakeholders
- Measure affiliates' reputation with the "Pharma Reputation Index"

Phase #2
- Select the key drivers to pharma companies' reputation by stakeholder
- Develop an action plan and monitoring tools

Step #3
- Make the reputation a priority for employees
- Adjust the organization, whenever required
- Design a Pharma Reputation Scorecard

"Reputation and trust are earned through actions, results, and communication to stakeholders"

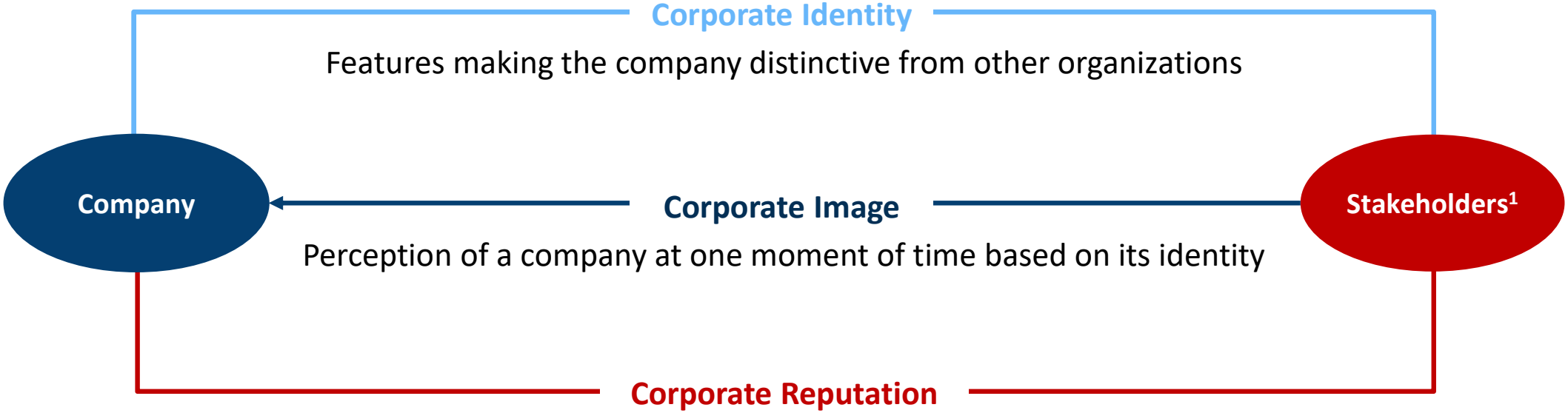
Sources: Smart Pharma Consulting

[1] *See the position paper "Brand Preference optimization" https://smart-pharma.com/wp-content/uploads/2019/07/Stakeholders-Brand-Preference-Mix-2016-EN-web.pdf*

Corporate reputation depends on what the company does, the way it does it, and the results of its actions

Introduction

Link between corporate Identity – Image – Reputation



"It takes 20 years to build a reputation and five minutes to ruin it" *W. Buffet*

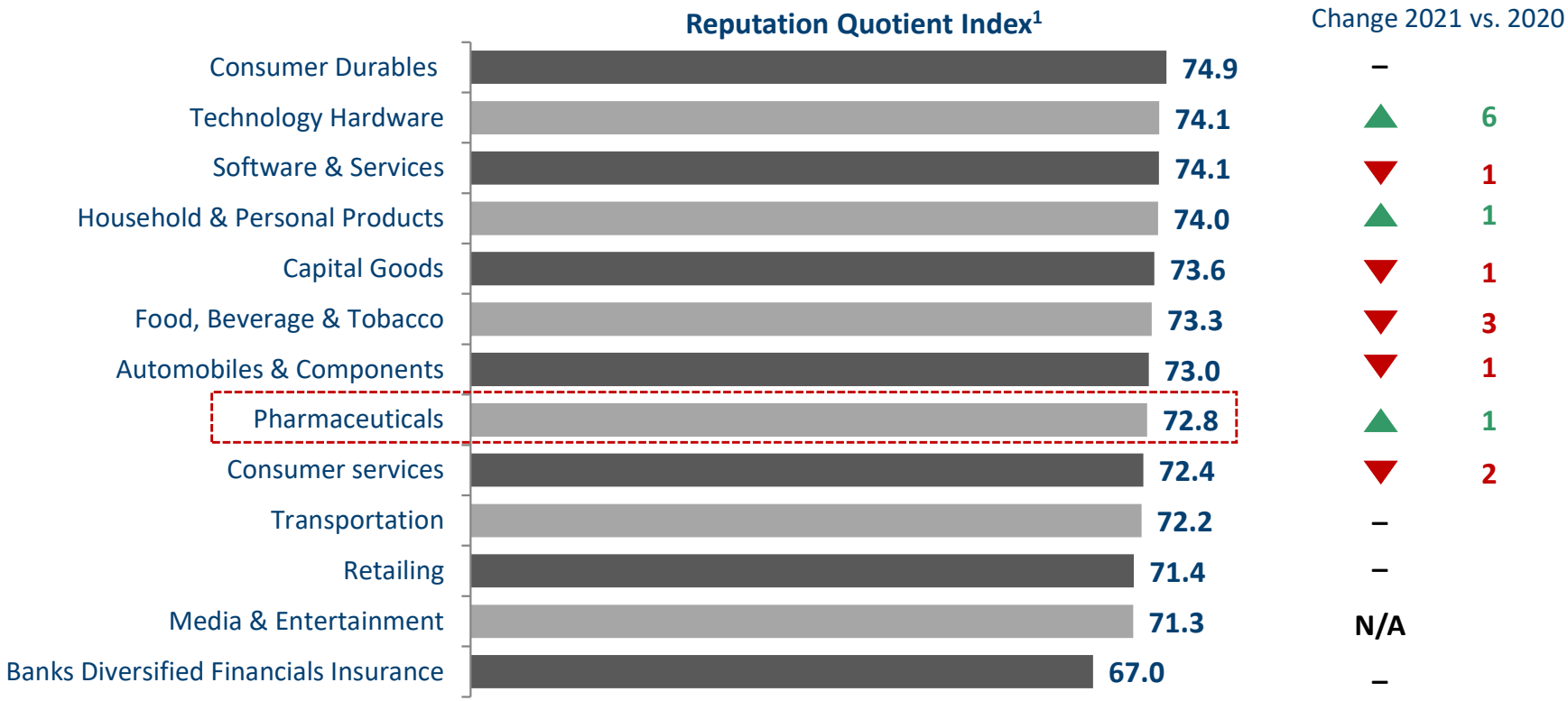
Sources: Adapted by Smart Pharma Consulting from "Corporate reputation: the definitional landscape" (2001-2003), M.L. Barnett, J.M. Jermier, B.A. Lafferty

[1] Internal (employees) and external (authorities, customers, competitors, influencers)

If the pharma industry's role to fight the Covid-19 pandemic has contributed to improve its reputation, it is still behind consumer goods and tobacco, for reasons that are mainly structural

Situation analysis & Key learnings

Corporate reputation ranking by sector (2021)



"Distrust of pharma companies stems from a belief that they have deviated from their mission of improving public health to focus on increasing profits"

Sources: 2021 Global RepTrak 100 Study – Smart Pharma Consulting analysis

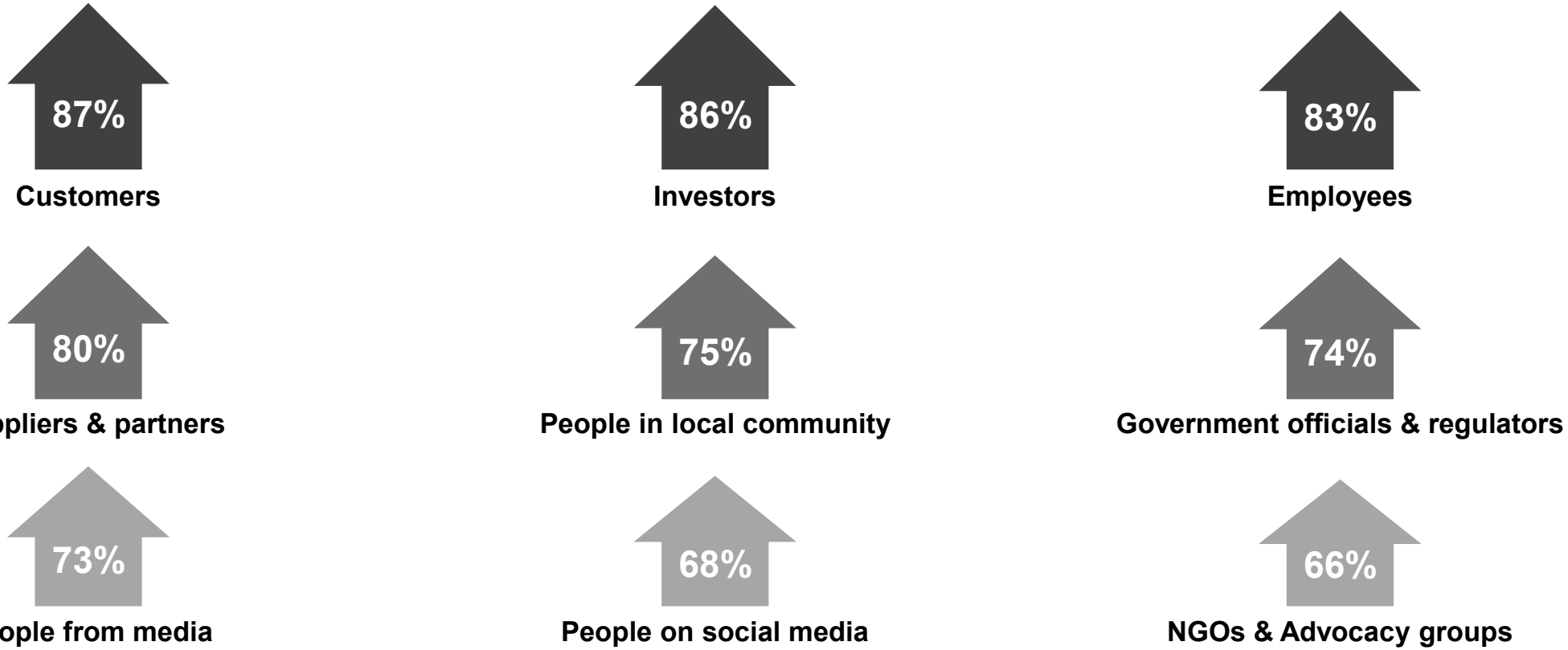
[1] Based on 7 indicators: Products/Services, Innovation, Workplace, Governance, Citizenship, Leadership, Financial performance; and with score > 80 = Excellent/top Tier, 70-79 = Strong/Robust, 60-69 = Average/Moderate, 40-59 = Weak/Vulnerable, < 40 = Poor/Bottom Tier

If all stakeholders are important, some appear to have a greater influence on corporate reputation and should therefore benefit from a special attention

Situation analysis & Key learnings

Importance of various stakeholders on corporate reputation (2020)

% of very / somewhat important impact[1]



Sources: Adapted from Weber Shandwick & KRC Research study (2020) by Smart Pharma Consulting

[1] Based on an online survey conducted among 2,227 executives from 22 countries and a variety of industries around the world

A good corporate reputation contributes to improve operational efficacy and efficiency which impacts companies' performance

Situation analysis & Key learnings

Impact of good corporate reputation on companies

Generate more positive feedback from media and pressure groups

Drive profitable sales in crowded markets

Attract, motivate and retain talented employees

Lead to greater support from policy makers, regulators and rating agencies

Encourage consumers to buy products and services

Enable to better resist to crises and recover faster

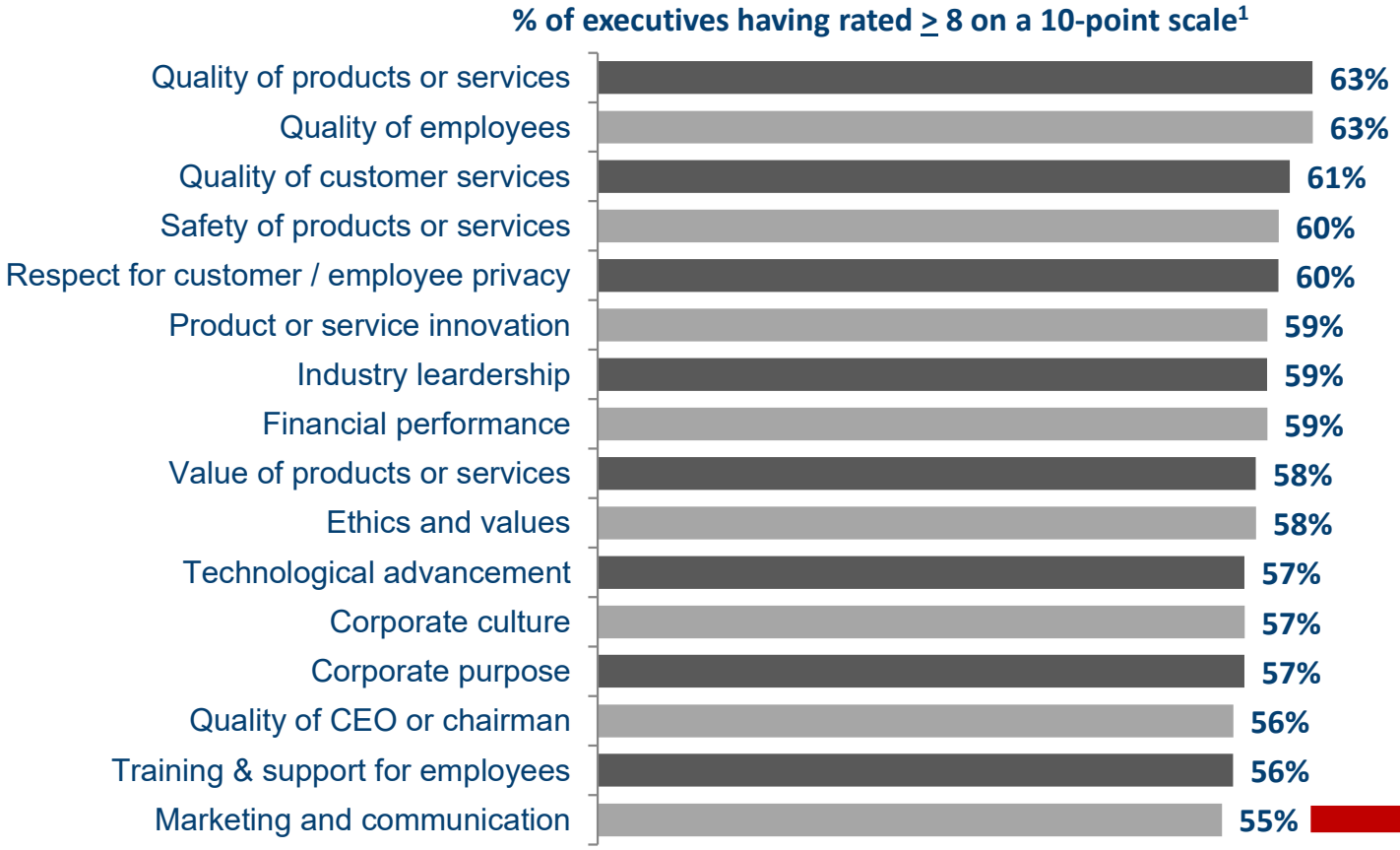
Attract capital resources and strategic business partners

Sources: Adapted from Reptrack (2021) by Smart Pharma Consulting

Irrespective of the sector, corporate reputation depends on multiple factors which requires to implement a multi-directional strategy to enhance the current situation

Situation analysis & Key learnings

Corporate reputation drivers – Executives' view (2020)



Most important components

- How the company responds to and addresses crises, issues
- Ability to communicate and deliver upon its mission, vision and values
- Communication to the public
- Communication to employees
- Awards or ranking on "best of" lists
- Communication and interactions on social media
- Participation of company's leaders to business forums, conferences, etc.
- Presence of company's leaders on the corporate website and social media

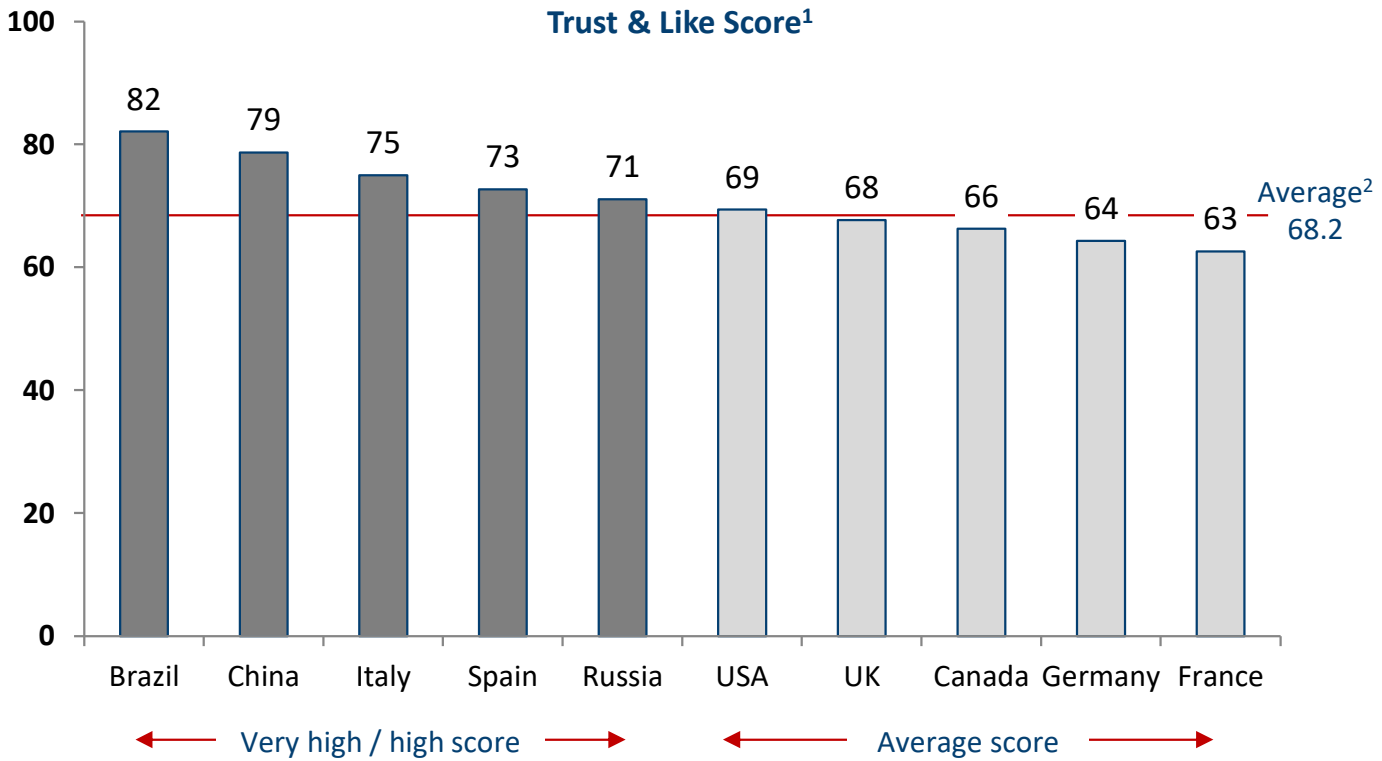
Sources: Adapted from Weber Shandwick & KRC Research study (2020) by Smart Pharma Consulting

[1] Based on an online survey conducted among 2,227 executives from 22 countries and a variety of industries around the world

The reputation of the pharma industry varies by country and appears to be inversely proportionate to the perceived quality of the healthcare system and of the national wealth

Situation analysis & Key learnings

Pharmaceutical industry reputation by country (2020)



- The pharma sector is perceived differently by the general public according to the countries
- Perceptions and expectations are impacted by the local context, the social, economic and political environment
- The overall reputation of pharma companies appears to be higher in emerging and Southern European countries than they are in Northern European ones and the USA
- Analyses carried out by the Caliber Group show that the lower the perceived quality of the healthcare system, the higher the pharma companies' reputation
- There is also an inverse correlation between GDP per capita and perception of pharma companies
- In wealthier countries, with better healthcare system, citizen are less informed about pharma companies' offering which are relatively less valued

Sources: Global Pharma Study 2020 by Caliber – Smart Pharma Consulting analysis

[1] Based on 13,623 people interviewed online in 17 countries (Brazil, Canada, China, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Poland, Russia, Spain, Sweden, Switzerland, the UK and USA – [2] Average of the 17 countries that have been studied. 8 indicators have been used: Offering – Innovation – Integrity – Leadership – Authenticity – Differentiation – Relevance – Inspiration

Assessment of individual pharma companies' reputation by general public can vary significantly according to the study carried out and thus, should be viewed as an indicative information

Situation analysis & Key learnings

Big Pharma companies' reputation ranking by general public

Reputation Quotient Index (2021)

64 SANOFI

71 novo nordisk

94 Bristol-Myers Squibb

82 Lilly

87 Roche

- The 2021 Global RepTrak 100, published by The RepTrack Company is based on data collected:
  - Across the 15 largest economies in the world
  - From 68,577 respondents through online surveys

  … and on 7 indicators: Products/Services – Innovation – Workplace – Governance – Citizenship – Leadership – Financial performance
- Amongst the top 100 most reputable companies that have been assessed, only five belong to the pharma industry
- The study evidenced that the general public is not familiar with pharma companies and thus cannot make an informed opinion

Trust & Like Score[1] (2020)

1 GILEAD
2 novo nordisk
3 abbvie
4 AMGEN
5 Takeda
6 teva
7 SANOFI
8 MSD
9 Lilly
9 Johnson & Johnson
11 AstraZeneca
12 Boehringer Ingelheim
13 Roche
14 NOVARTIS
15 gsk
16 BAYER
17 Pfizer
18 Bristol-Myers Squibb
19 MERCK

19 of the top 20 pharma companies by revenues in 2020 have been ranked by Caliber according to its "Trust & Like Score" methodology (Viatris having not been assessed)

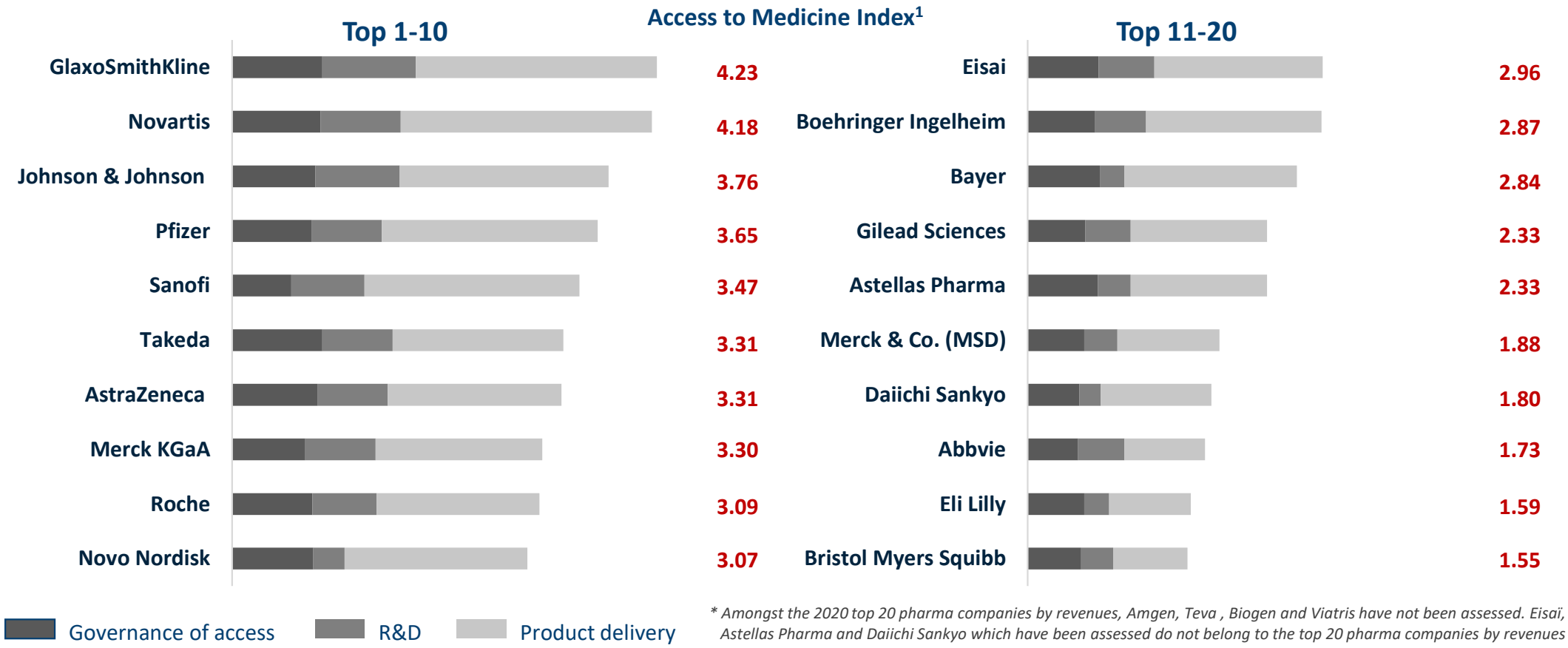
Sources: 2021 Global RepTrak 100 Study – Global Pharma Study 2020 by Caliber – Smart Pharma Consulting analysis

[1] Based on 13,623 people interviewed online in 17 countries (Brazil, Canada, China, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Poland, Russia, Spain, Sweden, Switzerland, the UK and USA. 8 indicators have been used: Offering – Innovation – Integrity – Leadership – Authenticity – Differentiation – Relevance – Inspiration

The Access to Medicine Index which evaluates the biggest pharma companies re. access strategies and practices, provides directions to better address the specific needs of low-income countries

Situation analysis & Key learnings

Big Pharma companies' reputation ranking by the Access to Medicine Foundation* (2021)



** Amongst the 2020 top 20 pharma companies by revenues, Amgen, Teva , Biogen and Viatris have not been assessed. Eisaï, Astellas Pharma and Daiichi Sankyo which have been assessed do not belong to the top 20 pharma companies by revenues*

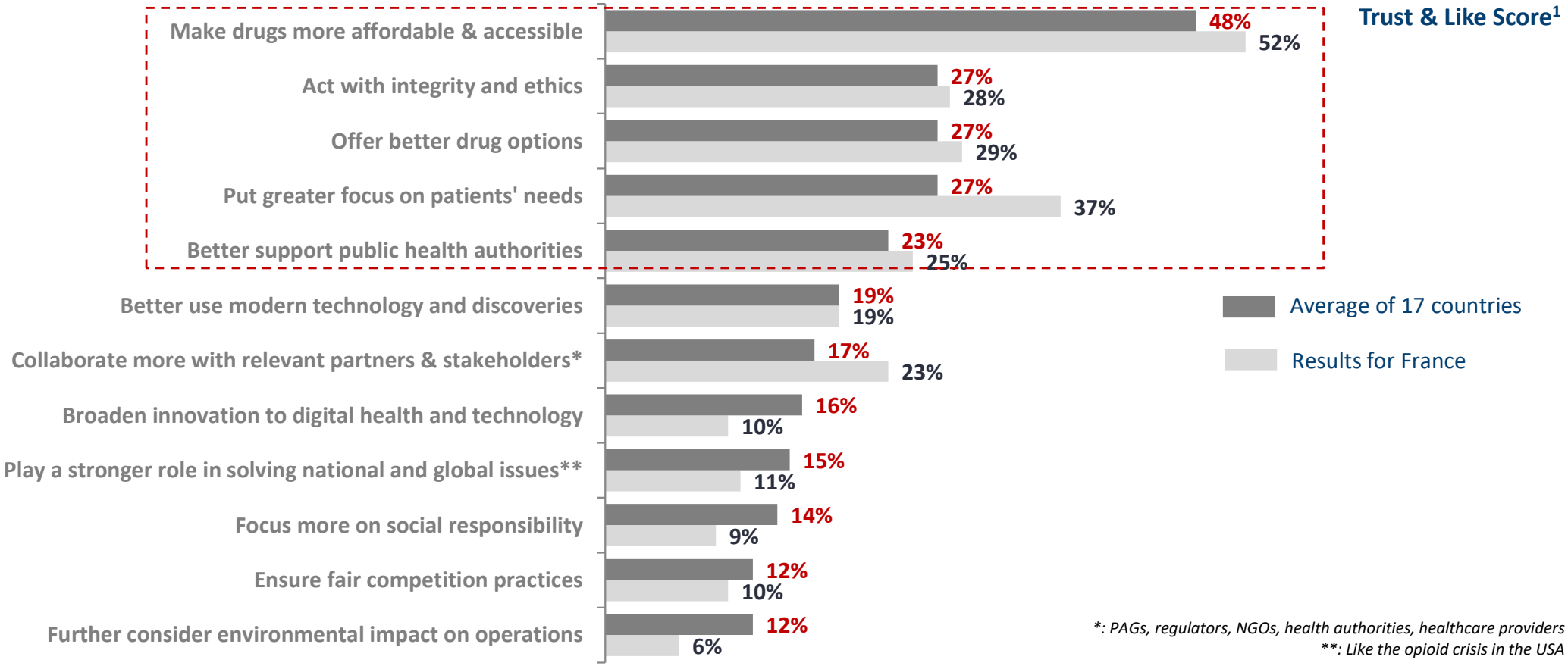
Sources: Access to Medicine Index 2021 (Access to Medicine Foundation) – Smart Pharma Consulting analysis

[1] Based on: Governance of access (responsible business practices, strategic priority given to access), R&D (pipeline targeting greatest burden in low- and middle-income countries, disclosure of resources dedicated to R&D) and Product Delivery (equitable pricing strategies, responsible IP management, capability building initiatives in low- and middle-income countries, donations, continuous supply) . The weight of these three criteria is respectively of 20%, 25% and 55%

HCPs recommend pharma companies to revise their pricing strategy and broaden access to their innovative drugs, while better fulfilling patients' needs and supporting public health authorities

Situation analysis & Key learnings

Specific pharma companies' reputation drivers – HCPs' view (2020)



*: PAGs, regulators, NGOs, health authorities, healthcare providers
**: Like the opioid crisis in the USA

Sources: Global Pharma Study 2020 by Caliber – Smart Pharma Consulting analysis

[1] *Based on 13,623 people interviewed online in 17 countries (Brazil, Canada, China, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Poland, Russia, Spain, Sweden, Switzerland, the UK and USA*

Pharma companies' reputation depends on 5 key drivers, the relative importance of which depends on individual or groups of stakeholders

Situation analysis & Key learnings

Specific pharma companies' reputation drivers – Smart Pharma Consulting's view

1. Access

- Availability and affordability of products and services…
- … as early as possible…
- … for all patients in need

2. Innovation

- Focus of R&D investments on diseases for which unmet needs are important; including rare diseases
- Development of effective, well-tolerated and convenient drugs, services and therapeutic solution, including digital

3. Governance

- Compliance with legal and ethical standards
- Implementation of a stakeholder-driven culture
- Transparent and pro-active communication re. business operations (e.g.; R&D, access, medico-marketing and sales)

4. Corporate Social Responsibility (CSR[1])

- Support of good causes (e.g.; philanthropy)
- Positive impact in the community
- Respect of the environment
- High standards re. employees' management and satisfaction

5. Performance

- Achieving or exceeding financial expectations
- Growth perspectives
- Operational Excellence

Sources: Smart Pharma Consulting based on experience in the pharmaceutical sector and interviews of stakeholders and experts

[1] *Corporate Social Responsibility*

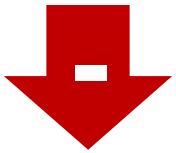
While pharma companies contribute to save and improve health of billions of people, they are regularly and heavily criticized by stakeholders for the manner they accomplish their mission

Situation analysis & Key learnings

Why is the reputation of pharma companies' damaged? (1/2)

Main criticisms from governments, HCPs, media, citizen, etc.:

- High drug costs limiting access to the wealthiest social classes and countries
- Massive profits (~32%)[1] to enrich shareholders
- Aggressive patent protection strategies, limiting access to innovative medicine
- Unethical practices to influence the prescription of HCPs
- Lack of transparency (e.g., drug pricing, clinical study results, collaborations with KOLs, etc.)



Pharma Companies' Reputation

Mission: contribution to prolong life, to improve health and wellbeing of people by developing vaccines and drugs

Sources: Smart Pharma Consulting analysis

[1] Expressed in EBITDA (Earnings before interest, taxes, amortization and depreciation)

Pharma companies should carry out activities that are aligned with their mission, compliant with best practices and communicate properly to their stakeholders

Situation analysis & Key learnings

Why is the reputation of pharma companies' damaged? (2/2)

There is a mismatch between

the mission and the corresponding activities

All pharma companies claim that their mission consists in improving and extending people's lives by offering products and related services

Actions enabling to accomplish their mission are not well-known, nor well-understood by stakeholders, which lead to distrust and suspicion

If stakeholders agree with pharma companies' mission…
… they consider that corresponding actions are not fully in line

Sources: Smart Pharma Consulting analysis

To address their problem of reputation, pharma companies must communicate – regularly and faithfully – about what they do and why they do it that way

Situation analysis & Key learnings

Informing and explaining to boost pharma companies' reputation

To boost REPUTATION → Better INFORM & Better EXPLAIN

INFORM

- Pharma companies should inform stakeholders about their strategy, performance, and key activities such as:
  - R&D
  - Manufacturing & Supply
  - Market Access
  - Medico-Marketing & Sales
- Contribution of their specific drugs to prolong life expectancy and/or quality of life should be highlighted
- Information conveyed must be fact-based, balanced and comprehensive to be trusted and to correct, possibly, misconceptions

EXPLAIN

- The most severe criticisms coming from:
  - The high price of drugs, limiting access of innovations (e.g.; vaccines against Covid-19, immunotherapies) to the least developed countries
  - The high level of profits compared to other industries
  - Certain unethical practices…
- … thus, it is essential to give clear and defendable explanations to justify the situation
- Stakeholders should understand, for instance:
  - Why R&D costs are so high?
  - How are the prices of drugs set?
  - What is the value of marketing and sales activities?

Sources: Smart Pharma Consulting analysis

The Pharma Reputation Booster™ is a specific multi-stakeholder approach to leverage pharma companies' corporate reputation to create a sustainable competitive advantage

Pharma Reputation Booster™

Principle

Phase 1

Situation Analysis

- Review and select key stakeholders
- Profile and map them
- Measure the reputation with the Pharma Reputation Index
- Complete the Pharma Reputation Audit highlighting company's strengths and weaknesses

Phase 2

Strategy Crafting & Tactics

- Definite reputation improvement objectives
- Identify and screen key drivers to strengthen corporate reputation
- Develop an action plan
- Select KPIs[1] and KEIs[2] to measure and monitor the impact of the tactics (actions)

Phase 3

Management & Leverage

- Develop an internal communication plan to make reputation a center piece on collaborators' agenda
- Adjust the organization[3] to carry out the activities to strengthen the reputation
- Design a tracking process to correct / strengthen and leverage corporate reputation

Sources: Smart Pharma Consulting

[1] Key Performance Indicators – [2] Key Execution Indicators – [3] Activities, processes, structure and culture

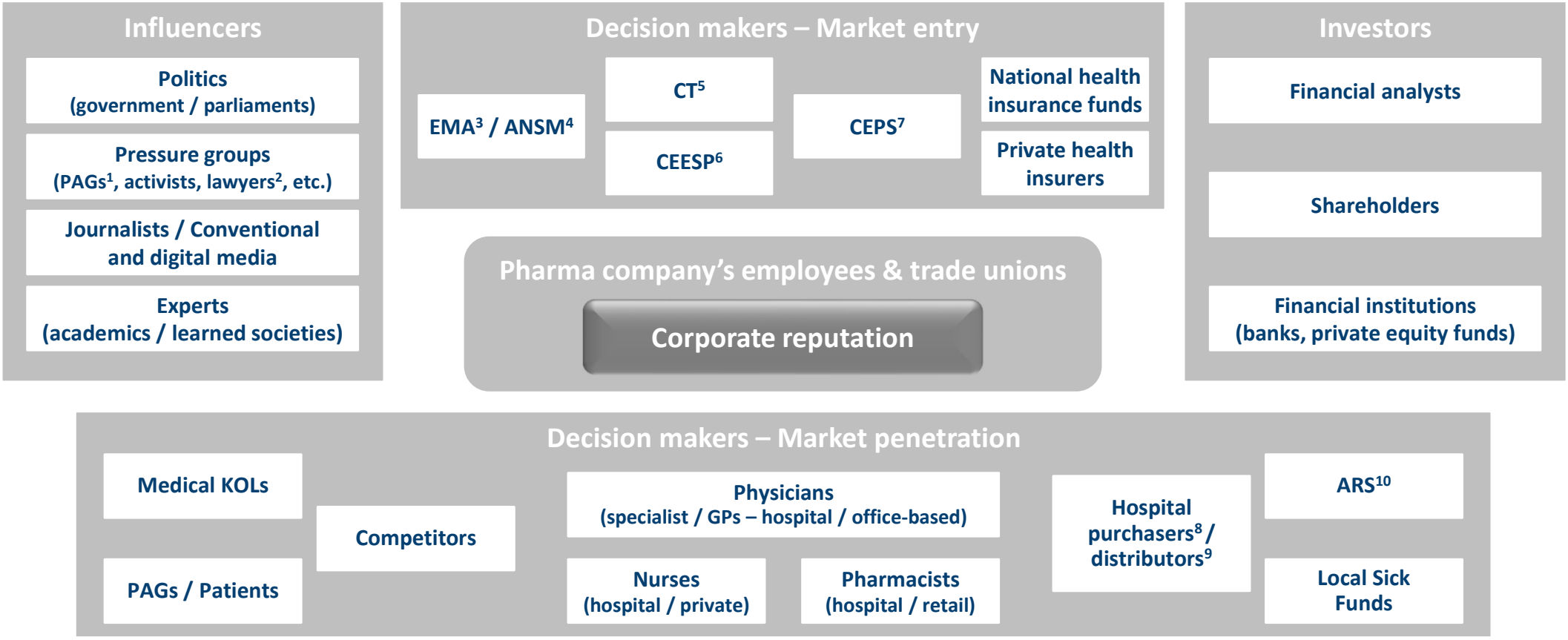
Pharma companies should review, profile and select the most influential stakeholders on their reputation, within the environment they operate

Pharma Reputation Booster™

1. Situation Analysis

Pharma stakeholders' mapping

Illustrative – France



Sources: Smart Pharma Consulting

[1] Patient Advocacy Groups – [2] Specialized in class-action lawsuits – [3] European Medicines Agency – [4] French National Agency for Medicines and Health Products Safety – [5] Transparency Commission – [6] Health Economic Evaluation Committee – [7] Drug Pricing Committee – [8] Purchasing platforms, Territory Hospital Groups (GHT) – [9] Wholesalers, voluntary trade organizations, retail pharmacists – [10] Regional Health Agencies

Corporate reputation depends on drivers that can be measured by stakeholder with the Pharma Reputation Index from which key challenges to create superior corporate reputation will be drawn

Pharma Reputation Booster™

1. Situation Analysis

Pharma measurement of corporate reputation

Illustrative – France

Profiling of stakeholders

Influencers | Decision makers Entry | **Decision makers Penetration** | Investors

---

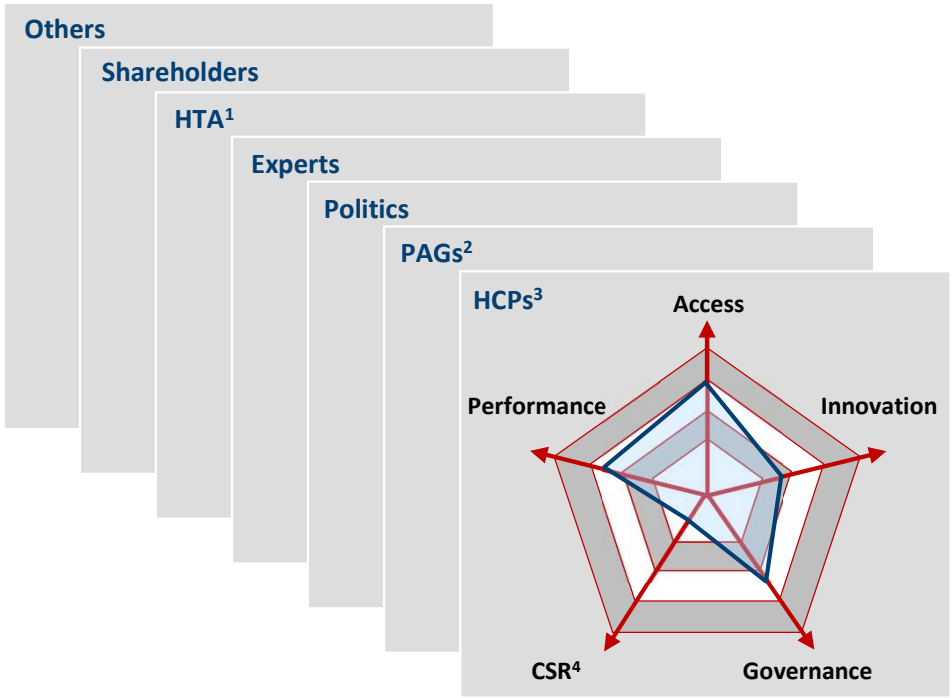
PAGs

KOLs

HCPs
(physicians – pharmacists – nurses)

1. Roles & responsibilities
2. Level and sphere of influence
3. Decision-making power
4. Opinion vis-a-vis the pharma sector
5. Opinion and behavior vis-a-vis the pharma company, its products and services
6. Root causes driving their opinion & behavior
7. Factors likely to modify favorably their opinion and behavior
8. ….

Performance on reputation drivers by stakeholder measure with the Pharma Reputation Index



Sources: Smart Pharma Consulting

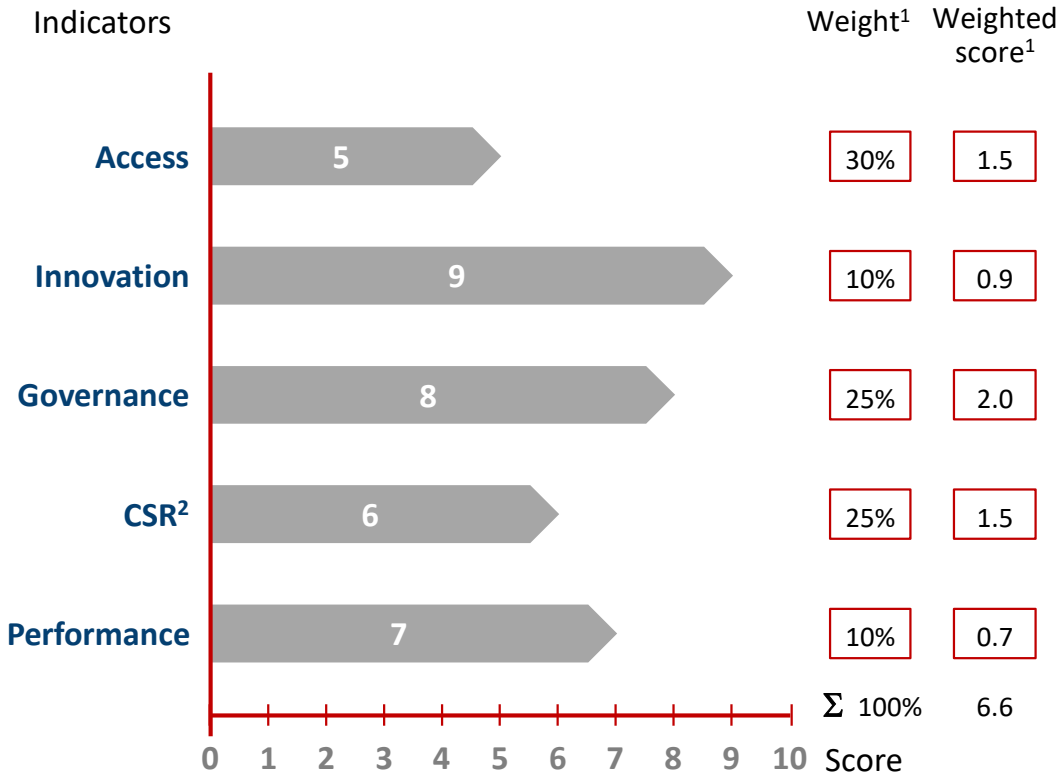
[1] Health Technology Assessment (including: Transparency Commission, Economic and Public Health Assessment Committee) – [2] Patient Advocacy Groups – [3] Health Care Professionals – [4] Corporate Social Responsibility

To assess the reputation of pharma companies, Smart Pharma Consulting has specifically designed the Pharma Reputation Index

Pharma Reputation Booster™

1. Situation Analysis

Pharma Reputation Index



- The Pharma Reputation Index is a tool specifically designed to assess the reputation of pharma companies and its evolution over time
- Each indicator is assessed on a 10-point scale
- The weight of each indicator will differ according to individual or groups of stakeholders (e.g.; financial performance should be more important for investors than for patients or even HCPs)
- The score obtained will reflect the extent to which the company fulfill the stakeholders' expectations
- Each evaluation should be substantiated by facts, so that to define the relevant actions to implement to improve the stakeholders' perception of the company
- The Pharma Reputation Index can be used at global and affiliate levels, directly by the pharma company or through a market study agency

Sources: Smart Pharma Consulting

[1] The allocated weight per driver is illustrative. It depends on individual or groups of stakeholders – [2] Corporate Social Responsibility

The Pharma Reputation Strategy Card can be filled up for individual or groups of stakeholders, from whom an improvement in reputation is expected

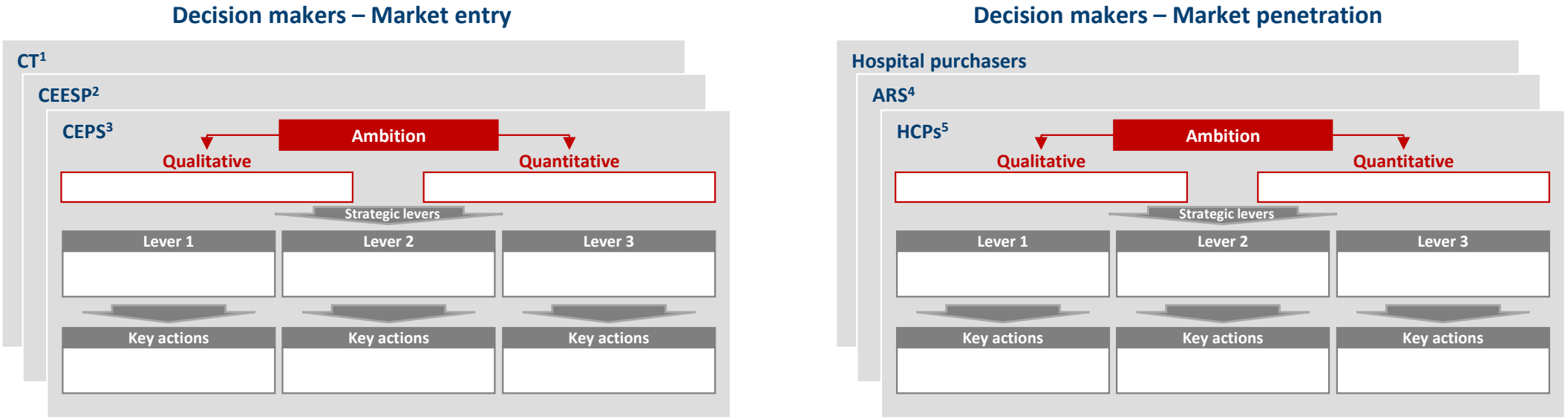
Pharma Reputation Booster™

2. Strategy Crafting & Tactics

Pharma reputation strategy & tactics

Illustrative – France

Pharma Reputation Strategy Card



- Strategy and corresponding tactics aim at achieving the set ambition in terms of corporate reputation improvement
- The Pharma Reputation Strategy Card can be applied for one individual stakeholder (i.e.; the President of the CEPS, one KOL) or for one stakeholder group (i.e.; CT, CEESP, CEPS, etc.)
- Strategic levers correspond to strengths on which to capitalize or weaknesses to be corrected
- KEIs[6] are used to evaluate the quality of implementation of tactics, while KPIs[7] measure their impact

Sources: Smart Pharma Consulting

[1] Transparency Commission – [2] Health Economic Evaluation Committee – [3] Drug Pricing Committee – [4] Regional Health Agencies – [5] Health Care Professionals – [6] Key Execution Indicators – [7] Key Performance Indicators

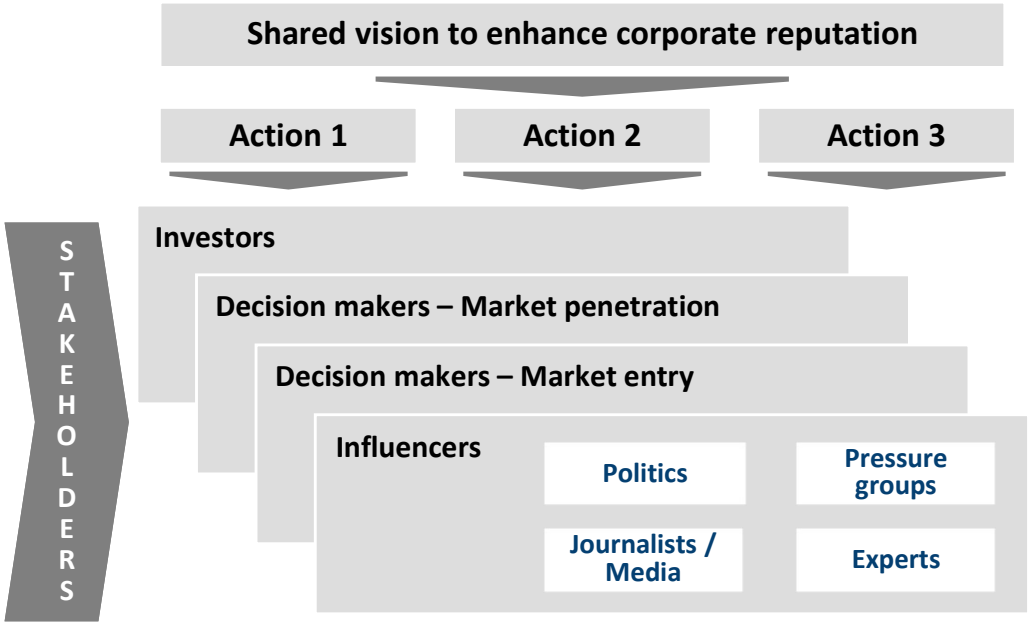
The proper management of corporate reputation is conditioned by internal mobilization of employees and by the adjustment of the company's organization to ensure operational excellence

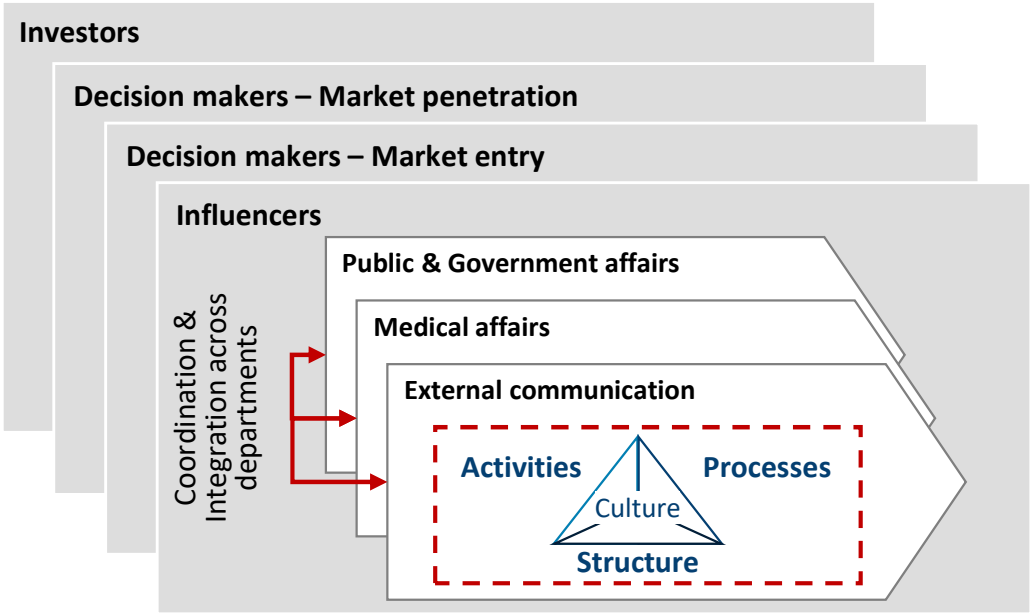
Pharma Reputation Booster™

3. Management & Leverage

Pharma reputation management (1/2)

Illustrative – France





- A common vision, instilled by the top management and consistently communicated is a prerequisite to succeed
- Corporate vision should be translated into specific and relevant actions implemented by employees

- Employees interacting with the same stakeholders should share information and coordinate their actions for a better consistency, efficiency and efficacy and thus, contribute to reinforce the corporate reputation

Sources: Smart Pharma Consulting

The corporate reputation management and its impact on the company's performance should be tracked with tools such as the following Corporate Reputation Scorecard

Recommendations

3. Management & Leverage

Pharma reputation management (2/2)

Stakeholder focus

How do stakeholders see us?

- **Objective: I**mprove corporate reputation to enhance the product - service - reputation value mix proposed to stakeholders
- **Measures:** Corporate reputation assessment, Brand Preference Mix Index, Net Promoter Score (NPS), % market share in € and units…
- **2018-2019-2020 actual** vs. planned performance

Financial focus

How do we look at shareholders?

- **Objective:** Achieve a better financial performance, increase market value of the company by enhancing its intangible assets
- **Measures:**
  - Sales, % of sales growth
  - EBITDA, EBIT, net profits, etc.
  - Evolution of profits in value
  - PER (Price Earning Ratio)
  - Market capitalization
  - RONA (Return On Net Assets)
  - **2018-2019-2020 actual** vs. planned performance

Organizational focus

What must we excel at?

- **Objective:** Create an effective and efficient organization (activities, processes, structure, culture) to properly manage corporate reputation and take the best advantage of it
- **Measures:**
  - Compliance of employees with processes to improve reputation
  - Quality of contacts between employees and stakeholders
  - **2018-2019-2020 actual** vs. planned performance

Ambition & Strategy

Improvement focus

Can we continue to improve and create value?

- **Objective:** Achieve improved operational performance through higher employees' productivity, competence, loyalty, and excellence in execution
- **Measures:** Employees' satisfaction survey, absenteeism rate, personal development, Key Execution Indicators (KEIs), etc.
- **2018-2019-2020 actual** vs. planned performance

Sources: Adapted from R. Kaplan and D. Norton 1996 by Smart Pharma Consulting

[1] *See the position paper "Brand Preference optimization" https://smart-pharma.com/wp-content/uploads/2019/07/Stakeholders-Brand-Preference-Mix-2016-EN-web.pdf*

By considering what matters the most to policy makers / payers and HCPs will ease drugs market access and contribute to strengthen preference

Recommendations

Examples of initiatives to boost pharma reputation by group of stakeholders (1/2)

Illustrative

	What to do?	How to do it?
Policy makers / Payers[1]	▪ Develop top-notch Corporate Social Responsibility practices and policies, aligned with national mandatory schemes, and as per ISO 26000 guidance ▪ Build outstanding value dossiers from the viewpoint of Health Technology Assessment (HTA) reviewers ▪ Adopt a pricing strategy supported by well-founded arguments likely to be understood by payers ▪ Invest in national economy, but with caution[3]	▪ Carry out environmental initiatives (e.g.; electric cars), support philanthropic projects, give wide access to drugs and vaccines in lower income countries ▪ Pay a great attention to the robustness of the value dossier content and to the quality of the page layout ▪ Be transparent on R&D costs and develop defendable arguments to support the requested drug price ▪ Productive and R&D investments are the best valued
Health Care professionals[2]	▪ Provide HCPs with objective and transparent information re. company's pipeline, promoted brands and diseases they address ▪ Propose meaningful services for: – HCPs, themselves – Their patients or… – … the institution for which they work	▪ Strictly comply with local regulations and business ethics in terms of communication to HCPs and services provided ▪ Carefully pre-assess the usefulness, interest, convenience and likely quality of execution of a service before proposing it to HCPs ▪ Inform other stakeholders about the benefits of services delivered, through testimonies, etc.

Sources: Smart Pharma Consulting

[1] Including health authorities, public and private health insurers – [2] KOLs, physicians, pharmacists, nurses – [3] The levels of investments may be very high and the financial return very limited, despite a significant positive reputational impact. Investing in such assets must be considered vs. alternative options in other countries where the return may be better

Employees are the primary source of reputation for most of external stakeholders, along with the quality of products and services offered by the pharma companies

Recommendations

Examples of initiatives to boost pharma reputation by group of stakeholders (2/2)

Illustrative

	What to do?	How to do it?
Patients / Patient Advocacy Groups[1]	▪ Beyond offering drugs, develop – whenever relevant – Patient Support Programs (PSP) to get better medical outcomes and improve quality of life ▪ Propose services at the awareness, diagnosis, prescription and/or monitoring steps of the patient journey to address / prevent potential dysfunctions ▪ Give access to information and to personalized tools on Internet for patients and PAGs	▪ PSP should be co-developed in partnership with PAGs, HCPs and other stakeholders involved in the management of the pathology ▪ Programs should be easy to implement, the quality of execution should excellent; and the results be significant, measurable and widely communicated ▪ Develop or co-develop community websites for patients, give access to an e-library, to specific Apps, etc.)
Employees	▪ Demonstrate a sense of purpose across environment, social, and governance (ESG) topics, including Diversity & Inclusion (D&I) management, to attract candidates, retain employees and convert them into companies' ambassadors to external stakeholders ▪ Instill a culture of excellence to deliver superior services and thus superior experience to external stakeholders when compared to competitors	▪ Maintain a good working atmosphere based on trust, respect, positiveness, cross-functional collaborations and personal development ▪ Engage employees in CSR initiatives that will make them proud to work for the company ▪ Create the conditions to stimulate the passion of employees for their job to prompt them to give their best (e.g.; flexible work arrangements, recognition, rewards, autonomy)[2]

Sources: Smart Pharma Consulting

[1] See the position paper "Patient-centric Strategy" https://smart-pharma.com/wp-content/uploads/2019/07/Patient-centric-Strategy-VF-Prez.pdf –
[2] See the position paper "Be a Smart Manager, not just a good one" https://smart-pharma.com/wp-content/uploads/2019/07/Smart-Manager-2017.pdf

Pharma companies should adjust their communication in terms of content and channels to the expectations of their stakeholders, with a priority given to their own employees

Recommendations

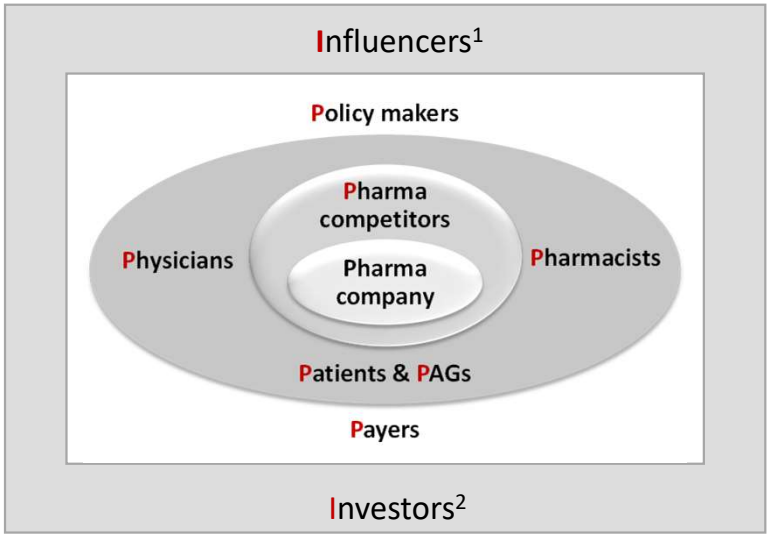
Five communication rules to strengthen pharma companies' reputation

Rule #1

Focus on your company's reputation and not on the pharma sector's reputation on which you cannot do much

Rule #2

Inform and explain your employees and your external stakeholders about your strategic priorities and the implementation of the corresponding tactics (activities)



Rule #3

Adjust the content of your communication, knowing that different stakeholders are sensitive to different drivers

Rule #5

The most important stakeholders you must engage are your employees who directly participate to your reputation

Rule #4

Adapt the communication channels to the information you want to convey and to the targeted stakeholders

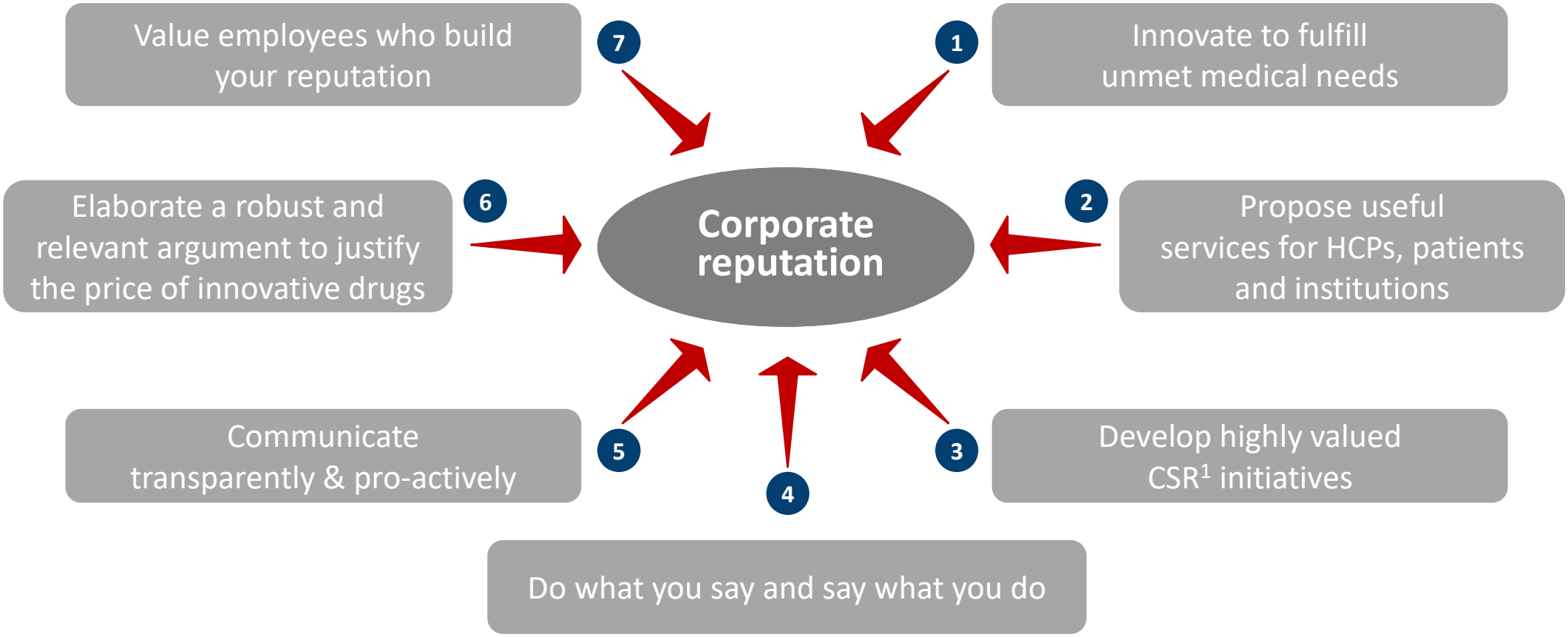
Sources: Smart Pharma Consulting

[1] Politics, pressure groups, journalists, conventional and digital media, experts, etc. – [2] Financial analysts, shareholders, financial institutions

Pharma companies must put their stakeholders in the center of their strategy, "walk the talk", and be as transparent as possible to get trusted, esteemed and preferred

Recommendations

7 imperatives to improve the reputation of pharma companies



Sources: Smart Pharma Consulting

[1] *Corporate Social Responsibility*

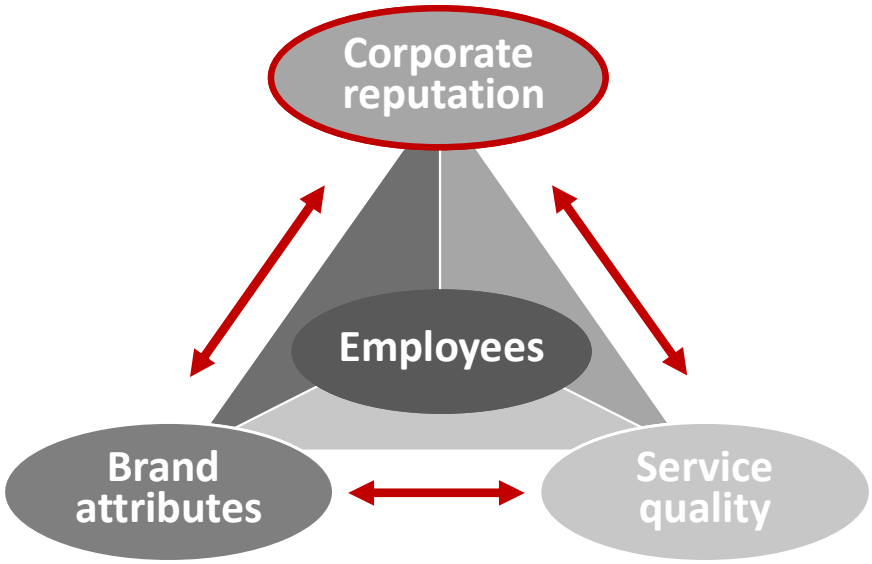
With dwindling drug differentiation, pharma corporate reputation contributes to strengthen the preference of stakeholders (e.g.; authorities, payers, HCPs, patients, investors)

Recommendations

Why superior pharma reputation creates competitive advantage?

- Correlation between financial performance and corporate reputation has been clearly evidenced over the past 20 years
- Higher corporate reputation, than competitors' one:
  - Leads to a more favorable position to negotiate with health authorities and payers, resulting in earlier market entries and better prices
  - Strengthens brand preference by KOLs, HCPs, PAGs, patients, etc., resulting in market share optimization
- Pharma companies' experience / expertise in specific therapeutic areas must be communicated with robust scientific evidence to enhance the perception of brands value by decision makers at market entry and penetration levels
- Strong positive reputation is built on credibility, reliability, responsibility, trust and transparency

Brand Preference Mix[1]



The Brand Preference Mix is an easy and effective approach to strengthen the preference of stakeholders for marketed brands

"Boosting corporate reputation contributes to reinforce stakeholders' preference and companies' performance"

Sources: Smart Pharma Consulting

[1] *See the position paper "Brand Preference optimization" https://smart-pharma.com/wp-content/uploads/2019/07/Stakeholders-Brand-Preference-Mix-2016-EN-web.pdf*

If you have ticked one "No box" or more, it means that there is a room to enhance your corporate reputation

Recommendations

Pharma corporate reputation self-assessment in 10 questions

Most of stakeholders (influencers – decision makers – Investors) are aware and esteem[1] …

		YES	NO
1	… Your high level of R&D investment and your effort to fulfill medical unmet needs, including in rare diseases	☐	☐
2	… The quality of your product pipeline and of your marketed brands	☐	☐
3	… The quality of services you propose to HCPs and/or to the organizations in which they practice	☐	☐
4	… The quality of services you propose to patients / PAGs for better medical outcomes and improved quality of life	☐	☐
5	… Your involvement in "Corporate Social Responsibility" initiatives	☐	☐
6	… Your philanthropic initiatives	☐	☐
7	… Your pro-active and transparent corporate communication	☐	☐
8	… The professionalism and the ethical behavior of your employees	☐	☐
9	… The working atmosphere of your company, as testified by your employees	☐	☐
10	… The good and sustainable financial performance of your company	☐	☐

Sources: Global Pharma Study 2020 by Caliber – Smart Pharma Consulting analysis

[1] If stakeholders do not know, or if you do not know what do your stakeholders think, in both cases tick the box NO

Smart Pharma Consulting experience and methodology can help pharma companies boost their corporate reputation to strengthen their competitive position and their performance

Recommendations

How can Smart Pharma Consulting help you boost your corporate reputation?

Smart Pharma Consulting can support pharma companies and their affiliates throughout all the phases that participate to build a strong corporate reputation and transform it into a sustainable competitive advantage:

- Research and assessment of your current corporate reputation among individual or groups of stakeholders
- Definition of a realistic corporate reputation enhancement objective by individual or group of stakeholders
- Development of an appropriate strategy and selection of the corresponding tactics (actions) to achieve your reputation enhancement objective
- Selection of the KEIs[1] and the KPIs[2] to measure the gap between the current and the improvement objective
- Development of a communication plan (internal and external) and of a management program to create a stakeholder-focused company
- Adjustment of the company's organization (activities, processes, structure, culture) to efficiently implement the strategy and the corresponding tactics (actions), and to leverage the benefits of an enhanced corporate reputation
- Design of a tracking process to improve and leverage corporate reputation

"Select two or three dimensions and strive to be recognized as a role model by stakeholders to differentiate your company from other pharma companies"

Sources: Smart Pharma Consulting analysis

[1] Key Execution Indicators – [2] Key Performance Indicators

Smart Pharma
CONSULTING

Best-in-class
Pharma BD&L

From Theory to Practice

POSITION PAPER May 2021

BD&L opportunities being rare and complex, Pharma BD&L managers would be well-advised to adopt a systematic, rigorous and perfectly planned approach

Key points addressed

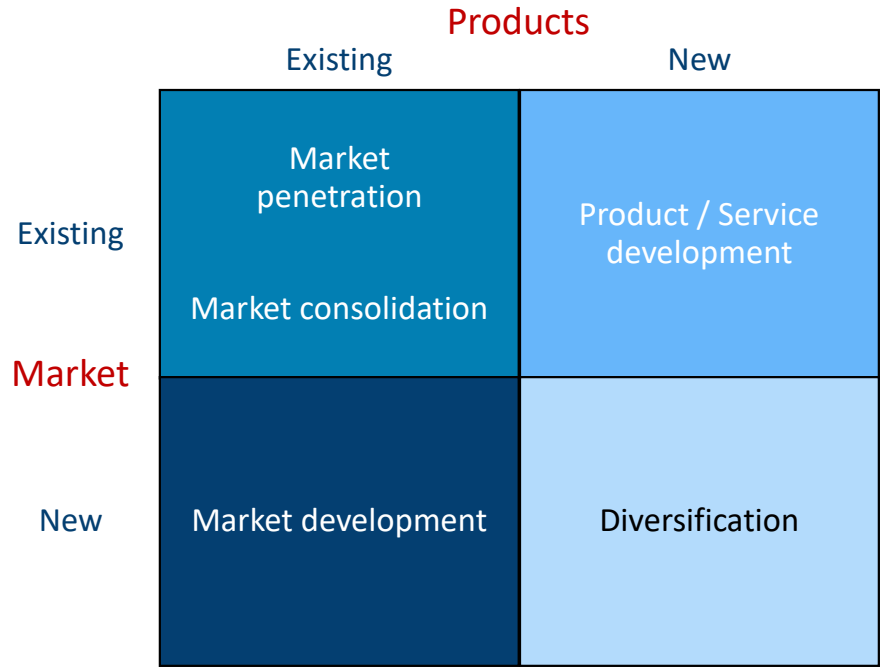
- What is the purpose of BD&L?
- What are the most common types of BD&L deals?
- How to assess BD&L opportunities?
- How to formalize a BD&L strategy?
- How to approach target companies for BD&L opportunity?
- How to assess and select a product eligible for BD&L deal (application)?

Four basic strategic directions can be pursued by affiliates of pharmaceutical companies to boost their strategic development

Alternative directions to ensure strategic development

- Increase market share by strengthening customer preference
- Defend existing market share by building customer loyalty and raising switching costs

- Enter new market segments (subset of patients such as children, new indications) and/or new geographical areas



- Modify existing products (e.g., new dosage, form) or launch new products / services to further penetrate existing markets

- Diversify by entering in new strategic segments (e.g., OTCs, generics, medical devices, nutraceuticals)

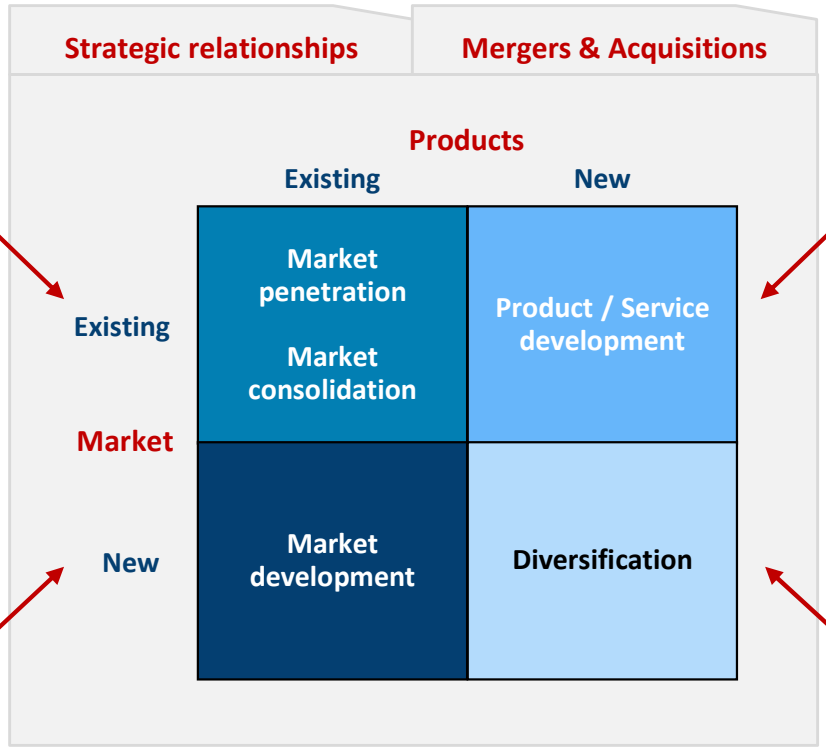
Sources: Adapted by Smart Pharma Consulting from H. Ansoff

BD&L refers to strategic relationships or Merger & Acquisition deals which enable affiliates to grow and strengthen their competitive position

Definition of BD&L

- Collaboration with a third party (e.g., pharma company, CSO[1]) to increase share of contacts and/or share of voice
- Co-marketing or co-promotion agreements to increase resources behind one molecule
- Acquisition of competitors to reduce or better manage competitive intensity

- Collaboration with a CRO[2] to develop new indications
- Co-promotion with a partner to promote to a group of new clients (e.g., pediatricians, neurologists)
- Licensing-out to a third party to:
  - Market in new countries (e.g., biotech products in Africa)
  - Expand presence in second priority territories (e.g., in Mexico, South Africa, India)
  - Etc.



- Outsourcing development of a new combined formulation
- Co-branding of a diagnostic tool and of a drug for a given pathology (e.g., diabetes, hypertension, oncology, etc.)
- Co-development of back-up brands (i.e., isomers, active metabolites, esters, salts of existing molecules)
- Acquisition or in-licensing of new drug delivery systems

- Acquisition, merger, joint-venture or in-licensing deals to enter in:
  - A new strategic segment (e.g., OTC, generics, home care services, etc.) or therapeutic domain (e.g., neurology) through horizontal integration
  - Distribution business through downward integration
  - Toll manufacturing business through upward integration
  - Etc.

Sources: Adapted by Smart Pharma Consulting from H. Ansoff

[1] Contract sales organization – [2] Contract research organization

BD&L initiatives are expected to generate extra revenues, increase profits and/or spread business risk, while leveraging potential synergies

Expected benefits from BD&L initiatives

Increase revenues

- **Market penetration / consolidation**
- **Development of new products / new services** (extension of the offering)
- **Development of new markets** (expansion of presence in new countries and/or market segments)
- **Diversification** (entry in new strategic segments and/or upward or downward integration in an existing business segment to capture additional value)

Increase profits

- **Economies of scale** having the potential to lower operating costs through a better absorption of fixed costs (e.g., manufacturing, distribution, promotion)
- **Economies of scope** leading to increased efficiency by applying existing resources (tangible and intangible) and/or competences to new products / services and markets (based on cost and competence sharing principles)

Spread business risk

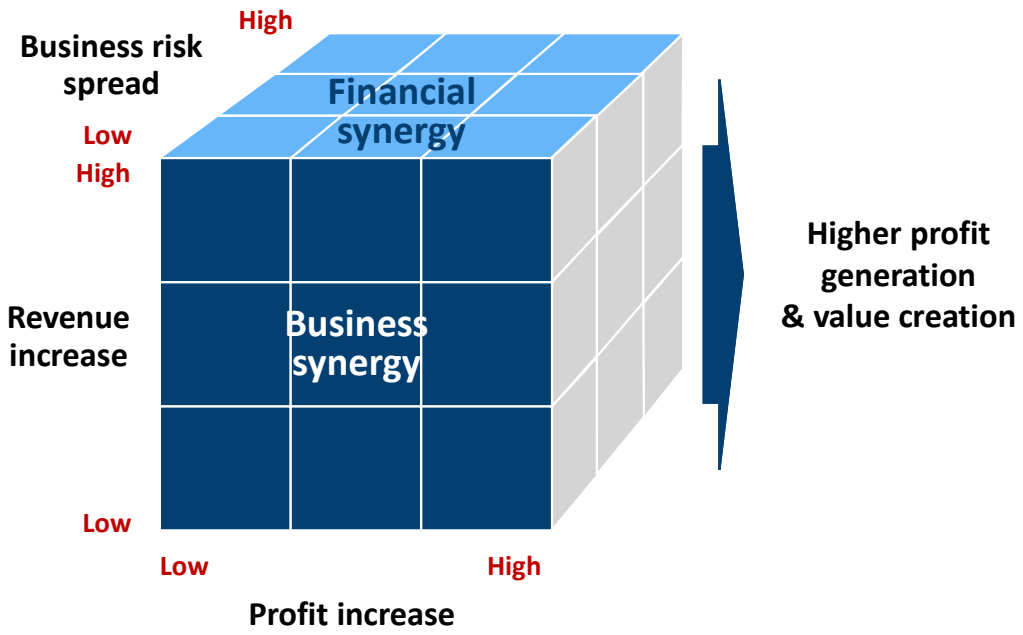
- **Presence in diverse strategic segments responding to different macro-environmental drivers likely to compensate business risks:**
  - OTC business: low growth, average profitability, lasting brand equity
  - Generics business: high growth, average to low profitability, low brand equity
  - R&D-based business: average growth, high profitability, low brand equity after patent expiry

Sources: Smart Pharma Consulting

Synergies result from a better mixing and matching of capabilities, and are the greatest when opportunities are in businesses like those in which affiliate operates

Synergy applied to business development

Types of synergies in the context of BD&L



- Synergy refers to the benefits gained when activities or assets complement each other so that their combined effect is greater than the sum of the parts
- Synergies are supposed to generate higher profits and/or enhance value through:
  - Revenue increase with 1+1>2
  - Cost reduction with 1+1<2
- There are two different types of synergies:
  - Business synergies due to cost reduction and/or revenue increase through combination of capabilities (i.e., tangible / intangible resources and competences)
  - Financial synergies related to possible spread of business risks if combined strategic segments are subject to different opportunities and threats
- Positive synergies are based on:
  - Shared competences (economies of scope)
  - Shared costs (economies of scale)
- Negative synergies refer to lower profit generation and value destruction:
  - Revenue increase (or even decrease) with 1+1<2
  - Cost increase with 1+1>2

  resulting from complexity, mismanagement, problems of integration, lower efficiency, brand cannibalization, etc.

Sources: Adapted by Smart Pharma Consulting from R Koch 2006 and from G. Johnson 2008

Strategic relationships and M&A may contribute to build capabilities and create business synergies, but not without difficulties and risks

Capability building through business development

Strategic relationships

- Strategic alliances involve the sharing of capabilities (resources + competences) in pursuit of common goals
- Outsourcing, which is a form of subcontracting, enables affiliates to access capabilities by borrowing them from other companies (e.g., deals with a CSO[1] or another pharma company)
- Accessing capabilities through alliances offers more targeted and cost-effective means than acquisition
- Where both partners are trying to acquire one another's capabilities, results may be a "competition for competence" that ultimately destabilizes the relationship

Mergers & Acquisitions

- Acquiring capabilities should be considered if desired capabilities can only be developed over long periods
- Integrating the acquiree's capabilities with the acquirer's ones involves major risks such as:
  - **Culture clashes**
  - **Personality clashes**
  - **Incompatibility of management systems**

  resulting in degradation or destruction of the capabilities that were sought

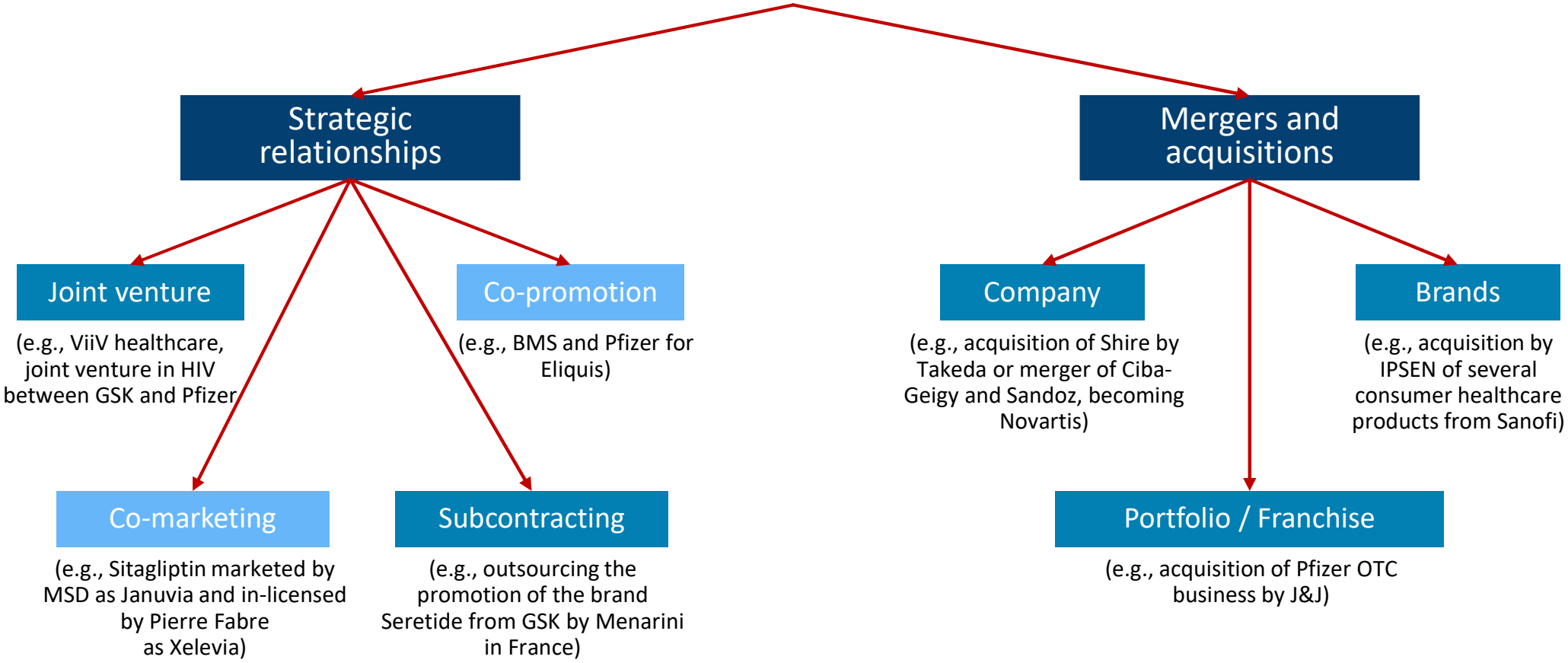
Note: Capabilities can grow internally by systematizing their replication through the formulation and the implementation of SOPs[2]

Sources: Adapted by Smart Pharma Consulting from R. Grant 2008 and D. Waters 2006

[1] Contract sales organization – [2] Standard operating procedures

Co-promotion and co-marketing are the most common forms of business development deals in the pharmaceutical sector

Typology of BD&L deals



Sources: Adapted by Smart Pharma Consulting from R. Grant 2008 and D. Waters 2006

The most important difficulty with co-promotion is to ensure an efficient collaboration between the two partners and a sufficient call pressure per physician

Pros and Cons of co-marketing and co-promotion agreements

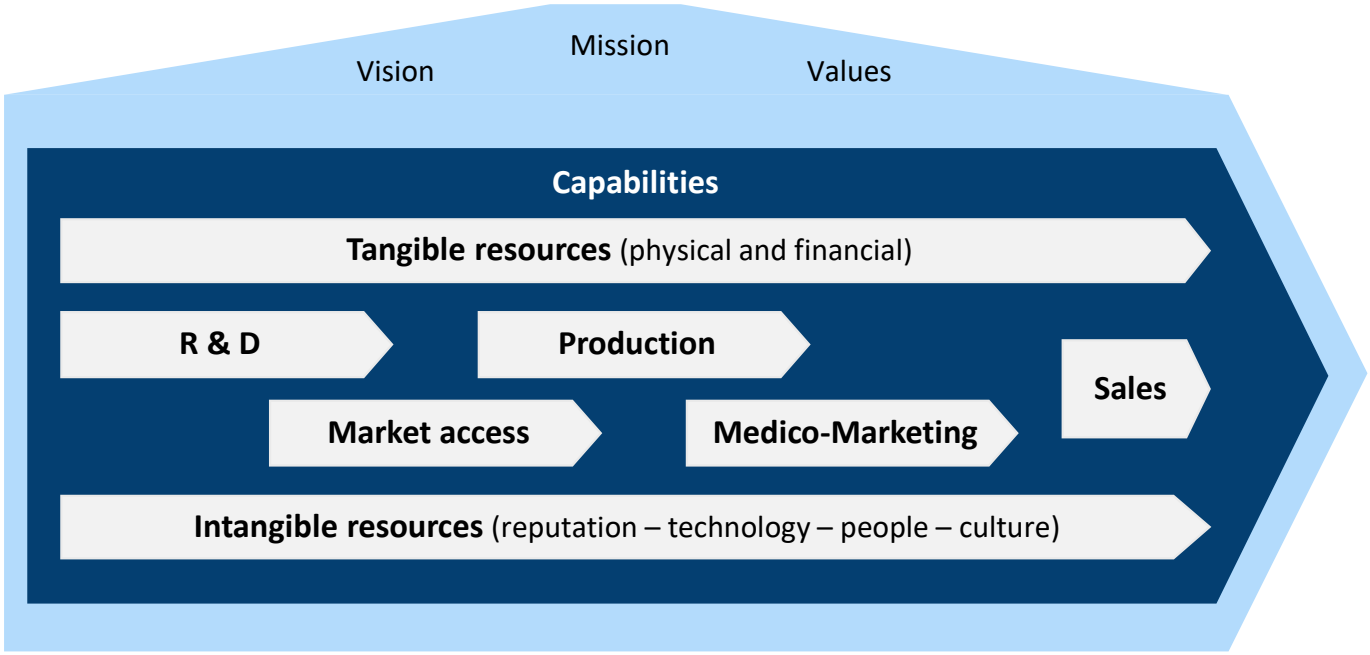
	Co-marketing	Co-promotion
Pros	▪ Quick and easy to implement ▪ No shared decision-making ▪ Increased sales opportunities for the molecule which is promoted by two companies through a dual branding ▪ Possibilities to book sales	▪ Higher recognition as a result of resource concentration ▪ Cost-sharing with co-promoter ▪ Unique product positioning ▪ Leverage of partner's reputation
Cons	▪ Higher promotional spending (absence of shared costs) ▪ Competition between co-marketers (cannibalization)	▪ Difficulty in ascertaining sales credits and reward criteria ▪ Increased management complexity ▪ Increasing number of physicians limiting call pressure per brand per annum

Sources: Smart Pharma Consulting

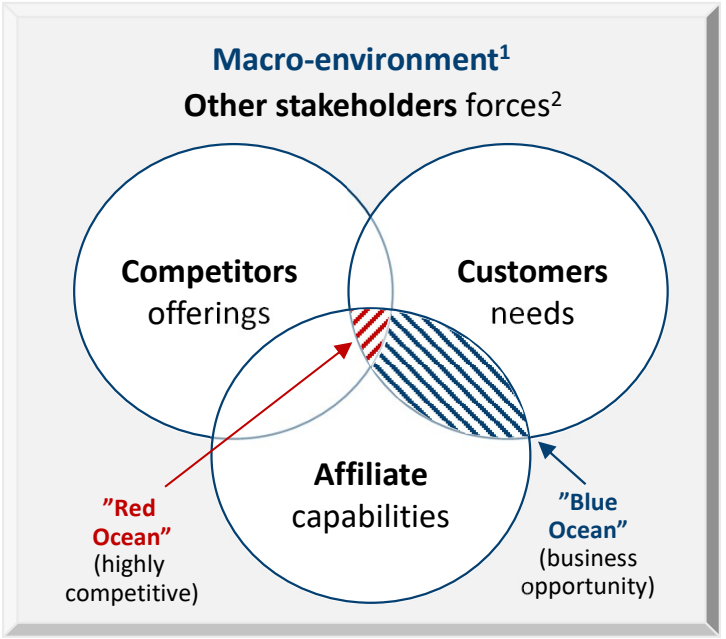
Business opportunity assessment requires to analyze attractiveness and key success factors by strategic segment, and corresponding competitive advantages

Methodology to assess business opportunities

Business model



Strategic segments
(e.g., Rx-bound brands, generics, OTCs, devices, etc.)



Strengths & Weaknesses
(Competitive advantage)

Opportunities & Threats
(Attractiveness & Key success factors)

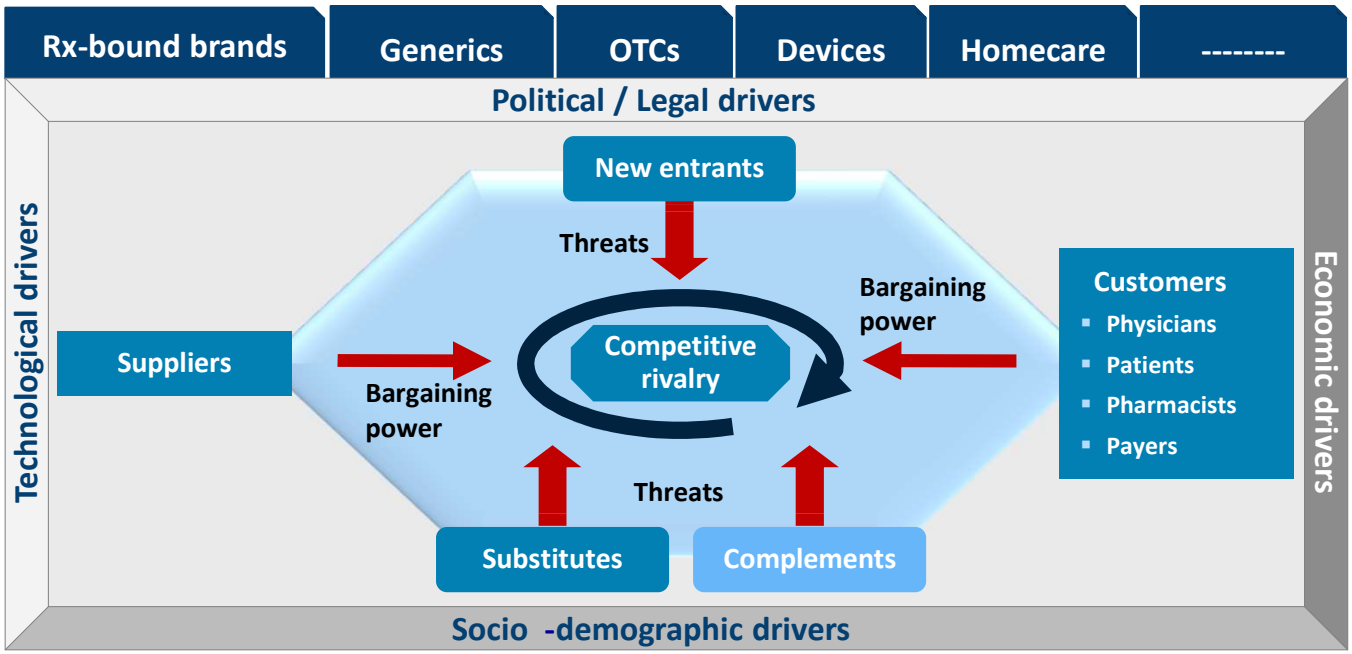
→ Ambition & Strategic priorities ←

Sources: Adapted by Smart Pharma Consulting from C. Kim et al. and from D.J. Collis , HBR April 2008

[1] Political / legal, economic, socio-demographic and technological factors –
[2] Including suppliers, new entrants, substitutes, complements

Business opportunities by strategic segment, such as Rx-bound brands, generics, OTCs, etc. can be assessed through PEST analysis and the "5+1 forces framework"

Attractiveness of strategic segments (1/3)



Analysis of Political / Legal – Economic – Socio-demographic – Technological drivers, called PEST analysis, and then the "5+1 forces Framework" after M. Porter will help pharma companies set an appropriate strategy per strategic segment

"Porter's five forces" *"Additional force"*

- The four key macro-environmental drivers:
  - Political / Legal
  - Economy
  - Socio-demography
  - Technology
- The five key micro-environment drivers:
  - Suppliers
  - Customers
  - New entrants
  - Substitutes
  - Competitive rivalry
- … plus, the "Complements" influence the attractiveness of each strategic segment and impact the success or the failure of pharma companies' strategy
- These key drivers for change can be used to construct scenarios of possible futures, especially by adopting the "what if" technique

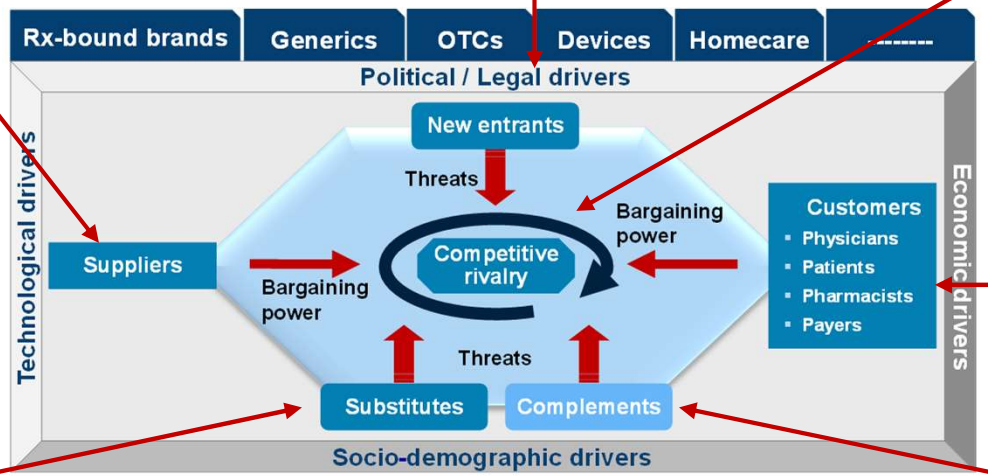
Sources: Adapted by Smart Pharma Consulting from M. Porter 2008

The "5+1 forces framework" is particularly helpful to identify the key stakeholders that will influence the long-term structure and profitability of strategic segments

Attractiveness of strategic segments (2/3)

- Most R&D-based pharma companies being vertically integrated, threats from suppliers are rarely an issue
- However, on the generics segment, API[1] or DDS[2] suppliers may have a stronger bargaining power

- New entrants (e.g., innovative products, "me-too" products, generic products) are likely to modify competitive intensity and therefore pharma companies' performance



- Competitive rivalry intensifies with:
  - Price discounting
  - New formulations, indications, products
  - Commoditization
  - Service improvement
  - Promotional costs

- Higher pressure from groups of customers:
  - Patient advocacy groups asking for better services
  - Buying groups have increased the distributors' leverage

- Substitute products or services include:
  - Alternative therapies
  - Preventive therapies (e.g., vaccination vs. anti-infective drugs)

The "5+1forces framework" allows to determine how strategic segment's profit will be shared between stakeholders, depending on their respective competitive advantage

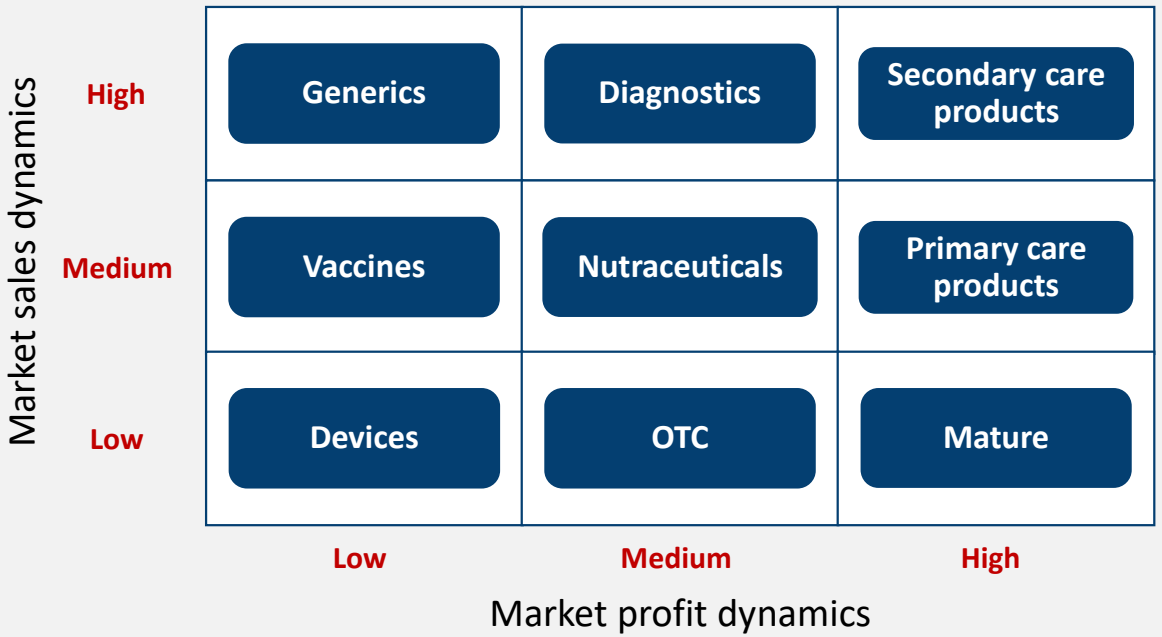
- Complementary products or services include:
  - Devices (e.g., BGM[3])
  - Diet food
  - Patient compliance management services

Sources: Adapted by Smart Pharma Consulting from M. Porter 2008

[1] Active pharmaceutical ingredients – [2] Drug delivery system – [3] Blood glucose meter

Attractiveness of new strategic segments should be put into a dynamic perspective and potential synergies with existing businesses also be considered

Attractiveness of strategic segments (3/3)



- The attractiveness of a strategic segment should be defined, based on the evolution of economic indicators such as sales and profits
- Additional parameters such as potential synergies with the existing business should also be considered, while evaluating attractiveness of new strategic segments

Sources: Smart Pharma Consulting

Key success factors by strategic segment in which business opportunities have been identified are driven from competitive intensity and from customers wants

Key success factors by strategic segment

How do affiliates survive competition?

- Competitive analysis
  - What drives competition?
  - What are the main dimensions of competition?
  - How intense is the competition?
  - How can we obtain a superior competitive position?
  - How can we create customer's preference?

What do customers want?

- Demand analysis
  - Who are our customers?
  - What is their respective role? (prescribers, consumers, distributors, payers, influencers, "injectors", etc.)
  - What do they want?
  - What do they need?
  - What are their available alternatives?
  - What does create customers' preference?

Sources: Adapted by Smart Pharma Consulting from R. Grant 2008

Strategic priorities should be set after capabilities assessment to outperform competitors on key success factors inherent to each targeted strategic segment

Affiliate's competitive advantage and strategic priorities

Key success factors per strategic segment

- Exploiting pharma companies' key strengths and addressing key weaknesses

Strategic priorities

- Deploying existing resources
- Filing resource gaps
- Building capabilities

Pharma companies' competitive advantage

- Resources are the productive assets owned by pharma companies
- Competences condition deployment of resources through activities / processes to create advantage and superior performance

CAPABILITIES

Competences (skills & abilities)

- Tangible resources
  - Financial (cash flow, borrowing capacity, sources of capital, securities, capital, debtors and creditors, etc.)
  - Physical (plant, equipment, facilities, locations, production capacity, access to raw material, etc.)
- Intangible resources
  - Reputation (brand equity, goodwill, corporate equity, relationships with stakeholders)
  - Technology (products, patents, trademarks)
  - Human (number and type of employees, skills, knowledge, loyalty, flexibility, motivation, etc.)
  - Culture (values, traditions, social norms)

Sources: Adapted by Smart Pharma Consulting from R. Grant 2008 and D. Waters 2006

The "Advanced SWOT" is particularly appropriate to help pharma companies assess its potential competitive advantage per strategic segment and the possible synergies

Advanced SWOT analysis

Environment assessment

Opportunities | **Threats**

What environmental changes in targeted strategic segments may favor / hinder affiliate's performance?

- Macro-environmental drivers (PEST factors)
- Competitive forces (5+1 forces framework)

⇨ Favorable / unfavorable impacts on stakeholders resulting from environmental changes

⇨ Growth / profit reservoirs

Affiliate assessment

Strengths | **Weaknesses**

What are the affiliate's strategic resources and competences relative to its competitors?

- Resources (tangible and intangible)[1]
- Competences (skills and abilities)

} Capabilities

⇨ Advantages / disadvantages vs. competitors

⇨ Means to leverage growth / profit reservoirs

Advanced SWOT

Opportunities	Relative importance	Threats	Relative importance
Strengths	**Relative importance**	**Weaknesses**	**Relative importance**

Sources: Smart Pharma Consulting

[1] *Including product and service offerings*

Pharma companies' ambition and strategy to seize business opportunities in new strategic segments can be formalized with the following analytical tools

Strategic options and strategic segment card

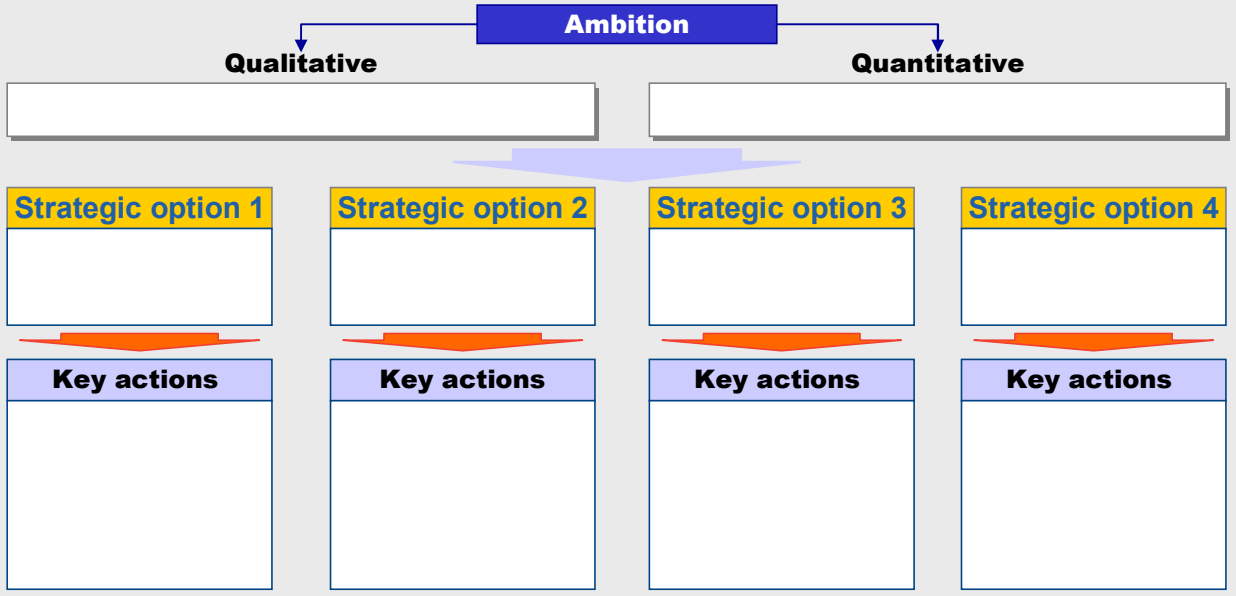
Strategic options

Key success factors per strategic segment	Weighting	Affiliate's capabilities[1] ++	+	=	-	- -	Affiliate's strategic options (strength to leverage or weakness to address)

Higher Lower

+ + Major strength + Minor strength = Neutral
- Minor weakness - - Major weakness

Strategic segment card



Sources: Smart Pharma Consulting

The evaluation of each business opportunity will be determined by its degree of suitability, acceptability and feasibility

Evaluation of business development opportunities (1/2)

Suitability

- Does the business opportunity address the key issues related to the strategic position of the company?
- To what extent strategic options will:
  - Fit with key market drivers?
  - Leverage strategic capabilities?
  - Meet stakeholders' expectations?

Tools

- Ranking of strategic options (based on Advanced SWOT analysis)
- Decision trees (evaluation of future opportunities by progressively eliminating others as additional requirement criteria are introduced into the evaluation)
- Scenarios (strategic options considered against possible future situations)

Acceptability

- Acceptability refers to the expected performance outcomes (e.g., return, risk) of a strategy
- To what extent do these outcomes meet the expectations of stakeholders?

Tools

- Return: expected benefit measurement:
  - Profitability (ROCE[1], payback, DCF[2])
  - Cost-benefit analysis
  - Real options analysis
  - Shareholder value analysis (SVA)
- Risk: probability and consequences of the failure of a strategy:
  - Financial ratio projections
  - Sensitivity analysis
- Stakeholders' reactions (mapping)

Feasibility

- The feasibility is concerned with the capabilities of a company to implement a strategy that has been envisaged

Tools

- Financial feasibility assessment through a cash flow analysis (forecasting of the needed cash to deliver the strategy and identification of the likely sources to fund that cash)
- Evaluation of capabilities needed:
  - Gap analysis: available vs. required capabilities
  - Assessment of changes required
  - Determination of "if" and "how" to implement changes

Sources: Adapted by Smart Pharma Consulting from G. Johnson 2008

[1] Return on capital employed – [2] Discounted cash flows

Discounted cash flows and sensitivity analysis are amongst the most frequently used techniques to assess business acceptability in the pharmaceutical sector

Evaluation of business development opportunities (2/2)

Illustrative

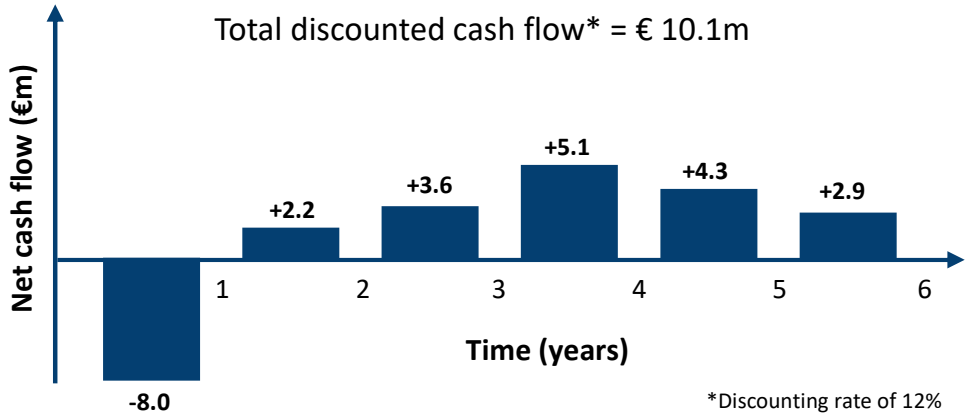
Examples of acceptability criteria

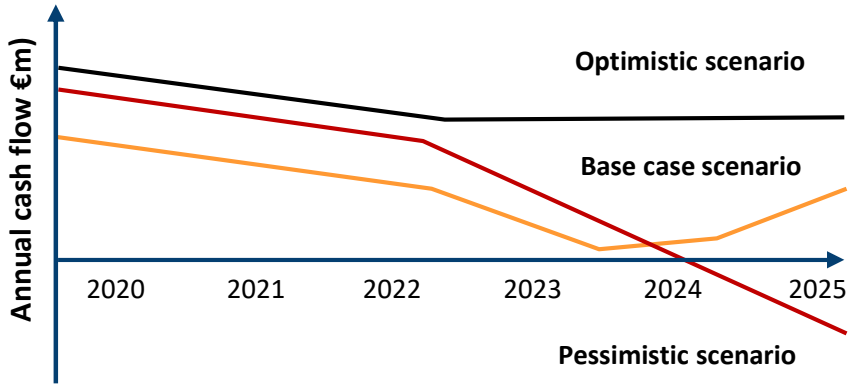
Return: Discounted cash flows (DCF)

- The DCF is an investment appraisal technique that can be used for business development opportunities (e.g., M&A, co-marketing, co-promotion, other strategic relationships)
- The total discounted cash flow or the net present value (NPV) is only as good as the assumptions on which it is based such as: sales forecasts, operating investment required, price changes, etc.

Risk: Sensitivity analysis

- Sensitivity or "what if" analysis is a useful technique for assessing the extent to which the success of a preferred business development opportunity is dependent on the key underlying assumptions, such as sales forecasts, price changes, investment requirements, new entrants, etc.
- This analysis helps estimate both the risk and the degree of confidence attached to an opportunity



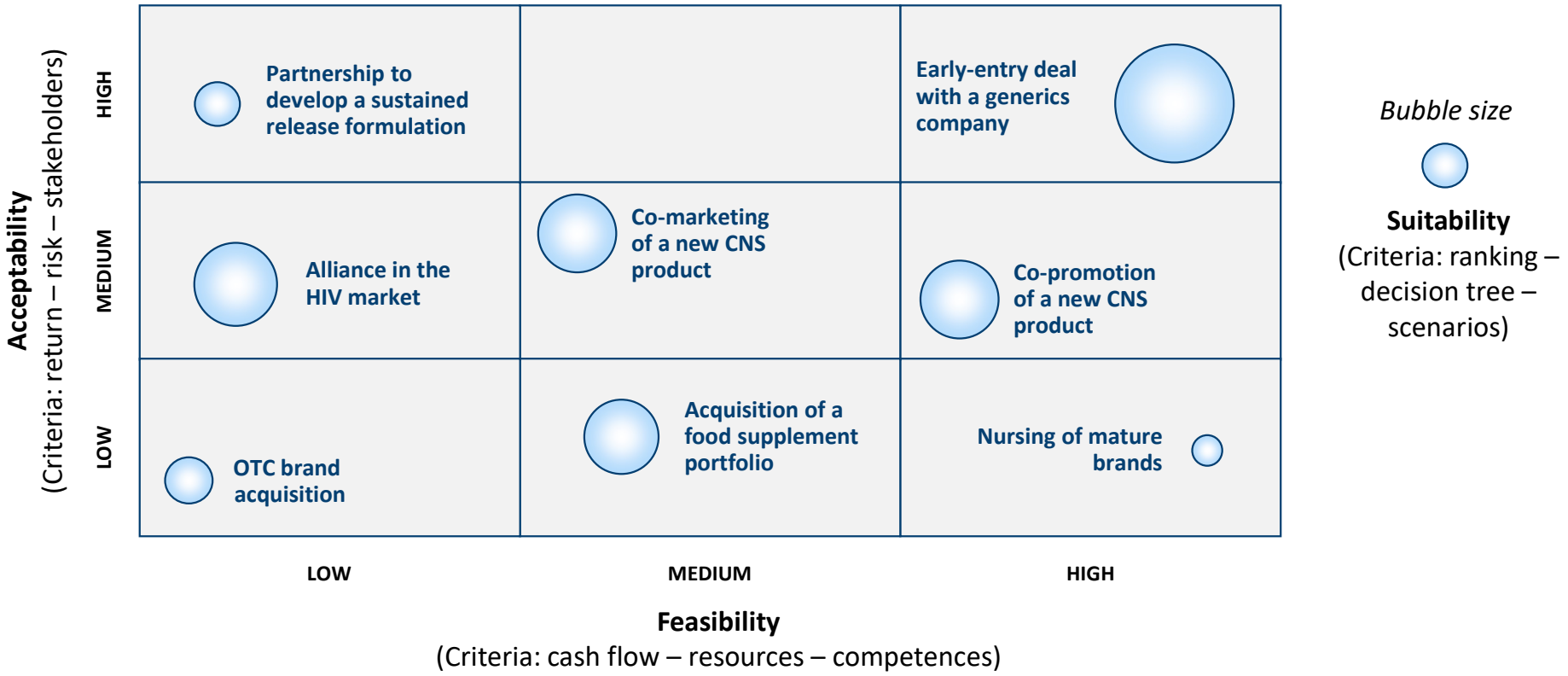


Sources: Adapted by Smart Pharma Consulting from G. Johnson 2008

The strategic evaluation matrix represents a convenient means to put into perspective acceptability, feasibility and suitability of different business development projects

Business development evaluation matrix

Illustrative

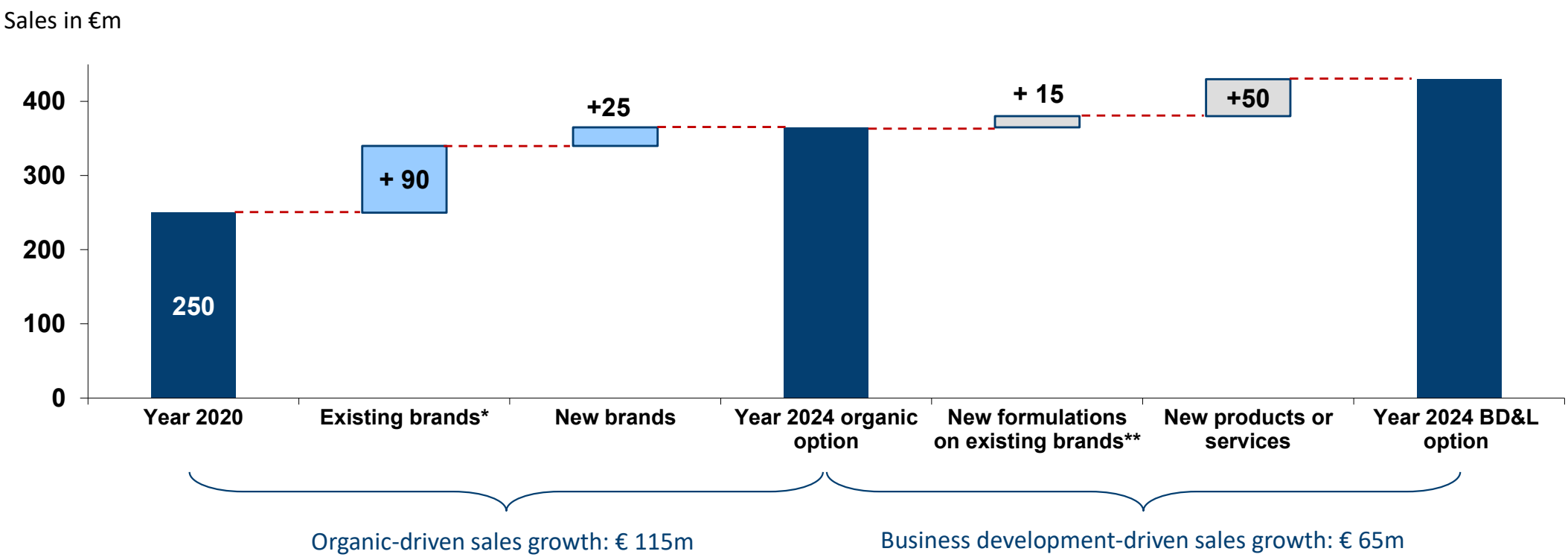


Sources: Adapted by Smart Pharma Consulting from G. Johnson 2008

In general, business development deals boost sales and profit growth, while altering profitability, due to profit sharing agreement and resulting organizational dysfunction

Impact of business development initiatives

Illustrative



Profit[1]	€ 82.5m	€ 128.8m	€ 137.6m
Profitability	33%	35%	32%

Sources: Smart Pharma Consulting

** Including new indications, dosages, formulations internally developed ** If externally developed – [1] EBIT: Earnings before interest and taxes*

Business developers should follow a well-defined process to approach target companies and raise their interest for strategic relationships or M&A opportunities

Process to approach target companies

1 Select target company / owner

- Select most appropriate target companies (owner of a candidate product or portfolio) based on:
  - **Acquirers' ambition**
  - **Targets characteristics vs. ambition**
- Understand strategic priorities of target companies
- Define the most salient cultural traits of target companies (to be considered during the negotiation phase)

2 Develop strategy to approach targets

- Identify appropriate contacts within target companies
- Define positioning of approach, depending on target openness to discussion
- Enroll potential 3rd parties, as appropriate
- Develop contingency plans if preferred approach is rejected

3 Develop negotiation strategy

- Set objectives of negotiation, depending on:
  - **Target openness to discussion**
  - **Target ownership profile (private vs. public)**
- Establish roles and responsibilities at corporate and/or affiliate level
- Define overall negotiation agenda
- Prepare a back-up approach

4 Establish negotiation team

- Assemble a "core team":
  - **"Business Development champion"**
  - **CEO, CFO**
- Assemble "support team":
  - **Strategy and marketing**
  - **Medical**
  - **Production**
  - **Financial, legal, HR, etc.**
- Involve a 3rd party, as relevant (bankers…)
- Appropriately brief each team member on his specific role

5 Conduct negotiations

- Adapt the approach to the personality of the target companies' management
- Highlight the value of the deal for the target companies (based on preparatory work done during the previous phases of the process)
- Capitalize on past successes (if relevant)
- Support arguments with tangibles facts
- Demonstrate commitment to come to a "win-win" agreement

6 Assess targets in detail

- Access non-public information, if available:
  - **Financial performance**
  - **Product and technology portfolio**
  - **relationships type and number…**
- Evaluate strategic fit of target companies with acquirers' ambition
- Check the local reputation and reliability of target companies and brand

7 Create joint memorandum of understanding

- Negotiation wrap-up in a final document
- Memorandum of understanding should cover (but not be limited to):
  - **Purpose**
  - **Objectives**
  - **Decisions**
  - **Financials**
  - **High level transformation plan**

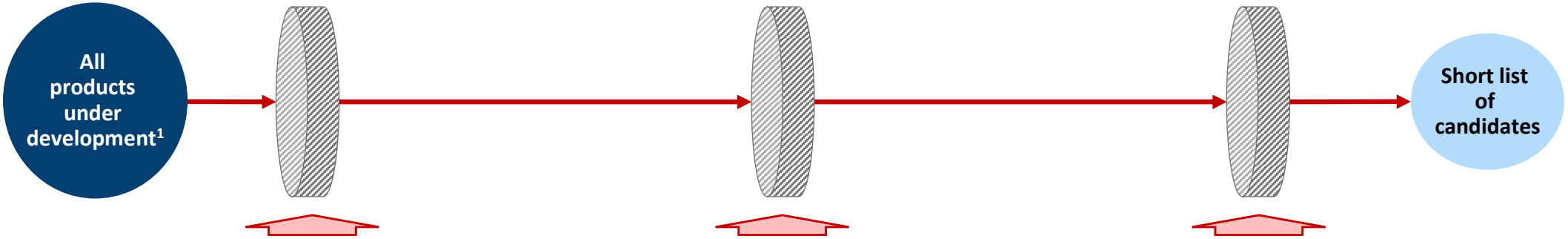
Sources: Smart Pharma Consulting

The selection of most attractive candidate products under development, within a defined strategic segment, can be established through the following methodology

Under-development product screening

Illustrative

Rx-bound products in France



Inclusion criteria

- Cardio-metabolism and rheumatology markets
- Prescription-driven products
- Patented products
- Reimbursable products
- Development phase: pre-registration or after
- Not yet out-licensed (co-marketing, co-promotion, nursing, etc.)

Inclusion criteria

- Market opportunities & threats (incl. market access issues)
- GP driven market (vs. specialist)
- Product strengths & weaknesses (vs. competitors)
- Required level of promotional investments on the market
- Projected sensitivity to promotional investment

Inclusion criteria

- Year 1 sales potential > 25 M€
- 5-year sales potential > 200 M€
- 5-year average profitability: EBIT[2] > 50%
- 5-year profit potential: EBIT > 100 M€

Sources: Smart Pharma Consulting

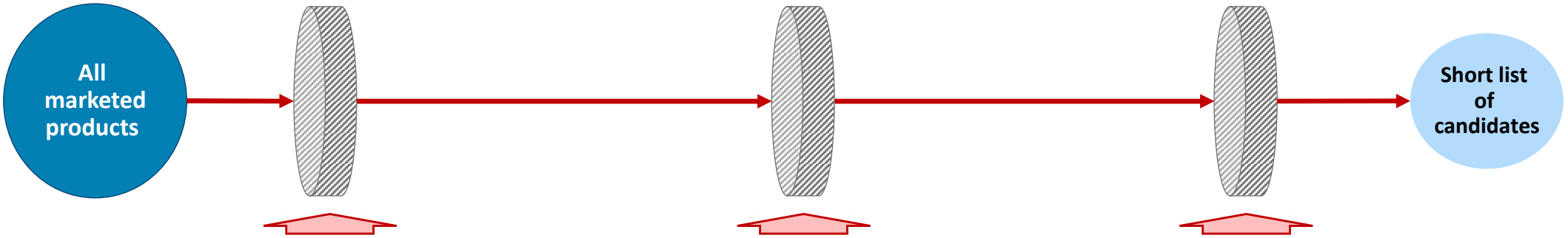
[1] Multiple sources: EMA database, ClinicalTrials.gov, IQVIA Pipeline Intelligence, Pharmaproject , Global data, Smart Pharma Professional Network, etc. – [2] Earnings before interest and taxes

The selection of most attractive candidate products already marketed, within a defined strategic segment, can be established through the following methodology

Marketed product screening

Rx-bound products in France

Illustrative



Inclusion criteria

- Cardio-metabolism and rheumatology markets
- Prescription-driven products
- Patented products
- Reimbursed products
- Not yet out-licensed (co-marketing, co-promotion, nursing, etc.)

Inclusion criteria

- Market opportunities & threats (incl. market access issues)
- GP driven market (vs. specialist)
- Product strengths & weaknesses (vs. competitors)
- Required level of promotional investments on the market
- Projected sensitivity to promotional investment

Inclusion criteria

- 2020 sales > 20 M€
- 2020-2024 sales evolution: CAGR[1] > 5%
- 5-year sales potential > 100 M€
- 5-year average profitability: EBIT[2] > 40%
- 5-year profit potential: EBIT > 40 M€

Sources: Smart Pharma Consulting

[1] Compounded annual growth rate – [2] Earnings before interest and taxes

The results of the screening process, leading to the most attractive candidate products, can be summarized on simple charts to facilitate comparisons

Example of short-listed candidate products

Illustrative

Under development products

Molecule	Brand name	Originator	Licensing agreement	Mode of action	Indications	EU status
Vildagliptin	**GALVUS**	Novartis	No	DPP IV antagonist	• Type 2 dia	Registered
Saxagliptin	**ONGLYZA**	BMS	AZ (worldwide) Otsuka (Japan)	DPP IV antagonist	• Type 2 dia	
Azimilide	**STEDICOR**	P&G US	Mitsubishi Tanabe - Asia	Potassium channel blocker	• Arrhythm	
Lercanidipine + enalapril	**ZANERIL ZANITEK**	Recordati	Meda (G), Solvay (Austria	ACEI+ CCB	• Hyperten	
Olmesartan amlodipine	-	Daiichi-Sankyo	*TBD*	ARAII+CCB	• Hyperten	
Tolvaptan	**SMASKA**	Otsuka	No	Vasopressin 2 antagonist	• Coronary failure	
Aliskiren	**RASILEZ**	Novartis	No	Renin inhibitor	• Hyperten	
Prednisone CR	**LODOTRA**	Nitec & SkyePharma	Merck-Serono	Immuno-depressant	• Rheumat	
Golimumab	-	Centocor (J&J)	Schering Plough (excl. US)	Anti-TNF alpha	• Spondyla • Psoriasic • Rheumat	

Marketed products

Molecule	Brand name	Originator	Therapeutic class	Sales 2020	CAGR 2020 -2024 [1]	Sales 2020 -24	Promotional spend (2020)	Profits 2020 -24
Rosuvastatin	**CRESTOR**	Astra Zeneca	C10A1	162 M€	25%	162 M€	20 M€	142 M€
Pravastatin + aspirin	**PRAVADUAL**	BMS	C10A1	21 M€	30%	21 M€	5 M€	16 M€
Ezetimibe	**EZETROL**	Merck&Co	C10A9	75 M€	12%	75 M€	7 M€	68 M€
Ibandronic acid	**BONVIVA**	Roche	M05B3	32 M€	15%	32 M€	16 M€	16 M€
Eletriptan	**RELPAX**	Pfizer	N02C1	26 M€	4%	26 M€	6 M€	20 M€
Hydroxyzine	**ATARAX**	UCB Pharma	N05C	20 M€	2%	20 M€	4 M€	16 M€
Mometasone furoate	**NASONEX**	Schering - Plough	R01A1	42 M€	5%	42 M€	9 M€	33 M€
Montelukast	**SINGULAR**	Merck&Co	R03J2	101M€	4%	101 M€	9 M€	92 M€
Levocetirizine	**XYZALL**	UCB Pharma	R06A	36 M€	-5%	36 M€	11 M€	25 M€

Source: Adisinsight – GERS data – Analyses Smart Pharma Consulting

[1] *Compound annual growth rate*

"ID" cards collecting key facts, figures and analyses related to each candidate product are particularly useful before approaching their respective owner

Example of identity card for short-listed candidate products

Molecule:---------- **Brand name:** ---------- **Originator:** ---------- **Therapeutic class:** ----------

Product attributes

Sales 2020	CAGR[1] 16-20	Sales 16-20	Promo spend[2]	Profits 16-20
-------M€	-------%	-------M€	-------%	-------M€

Indications	Side effects	Status
1.	1.	▪ **Patent expiry date:** ----------
2.	2.	▪ **Reimbursement level:** --------%
3.	3.	▪ **Price:** a:---------- b:----------
		▪ **Promotional sensitivity:**

SWOT analysis

Market Opportunities	Market threats
▪ ----------	▪ ----------
▪ ----------	▪ ----------
▪ ----------	▪ ----------

Product strengths	Product weaknesses
▪ ----------	▪ ----------
▪ ----------	▪ ----------
▪ ----------	▪ ----------

Value for the acquirer	Value for the owner
----------	----------
----------	----------
----------	----------
----------	----------
----------	----------
----------	----------
----------	----------

Recommandations

[X] GO

[ ] NO GO

Preferred types of deals

[X] Exclusive marketing license [X] Co-marketing [ ] Co-promotion

[ ] Non-exclusive marketing license [ ] Nursing [ ] Acquisition

[ ] Other:----------

Sources: Smart Pharma Consulting

Note: = high = medium = low

[1] Compound annual growth rate – [2] In 2020

BD&L opportunities may play a key role in improving pharma companies' overall performance (top and bottom lines) while mitigating their business risk

Key learnings (1/2)

- BD&L refers to **strategic relationships** or **merger & acquisition** deals which enable pharma companies to strengthen their competitive position
- BD&L initiatives are expected to **generate extra revenues**, **increase profits** and/or **spread business risk**, while **leveraging potential synergies**
- **Synergies** result from a better **mixing** and **matching of capabilities**, and are the greatest when opportunities are in businesses like that in which pharma companies operate
- **Strategic relationships** and **M&A** may contribute to **build capabilities** and **create** business **synergies**, but not without **difficulties** and risks
- **Co-promotion** and **co-marketing** are the **most common forms** of business development **deals** in the pharmaceutical sector, especially at affiliate level
- Business opportunity **assessment** requires to analyze **attractiveness / key success factors** by strategic segment and pharma companies corresponding **competitive advantage**
- **Business opportunities** by strategic segment, such as Rx-bound brands, generics, OTCs, etc., can **be assessed** through **PEST analysis** and the **"5+1 forces framework"**

Sources: Smart Pharma Consulting

Business opportunities should be carefully assessed through strategic analyses and with specific processes and tools to maximize the chances of success

Key learnings (2/2)

- The **"5+1 forces framework"** is particularly helpful to **identify** the **key stakeholders** that will **influence the long-term structure** and **profitability** of strategic segments
- **Attractiveness** of new strategic segments should be put into a **dynamic perspective** and **potential synergies** with pharma companies existing businesses should also **be considered**
- The proposed **"Advanced SWOT"** is particularly appropriate to help pharma companies **assess** their potential **competitive advantage** per strategic segment and **possible synergies**
- The **evaluation** of each business opportunity will be determined by its degree of **suitability**, **acceptability** and **feasibility**
- **Discounted cash flows** and **sensitivity analysis** are amongst the most frequently used techniques **to assess business acceptability** in the pharmaceutical sector
- In general, BD&L **deals boost sales** and **profit growth** while **altering profitability**, due to profit sharing agreements and organizational dysfunctions
- **Business developers** should **follow** a well-defined **process to approach target companies** and raise their interest for strategic relationships or M&A opportunities

Sources: Smart Pharma Consulting

Smart Pharma Consulting has helped pharma companies and private equity companies assess business opportunities in various therapeutic areas

Smart Pharma Consulting Services

Experiences & competencies in BD&L and Strategic Due Diligences

- Smart Pharma Consulting has carried out several BD&L and Strategic Due Diligence projects for big and mid-sized pharma companies or for private equity firms:
  - Pharmaceutical companies such as:

    ALK – Amgen – Chiesi – EHC – Esteve – Ethypharm (CMO/Drug delivery company) – Indivior – IPSEN – Nemera – NextPharma (CMO) – Nordic Pharma – Polymedic (CMO) – MundiPharma – Pierre Fabre – Roche – Schering-Plough – Servier – Synerlab (CMO) – Schwabe – UCB Pharma
  - Private equity firms such as:

    Alma Capital – Astorg – Cinven – Exane – Keensight Capital – PAI – Rothschild – Sagard – Weinberg
  - In various geographic areas:

    Western and Eastern Europe – USA – Latin America – Middle East – Africa
  - For innovative and generic products belonging to many different therapeutic areas such as:

    Oncology – Immunology – Ophthalmology – Allergy – Cardiology – Endocrinology & Diabetes – Pulmonology. etc.

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Digitalization of the Value Chain

Application to Pharma Companies

POSITION PAPER

September 2022

Smart Pharma Consulting proposes to share facts, figures and thoughts regarding the impact of digitalization on the value chain of pharma companies

Introduction

Context

- The purpose of this issue is not to evaluate if digitalization creates value for pharma companies
- There are yet enough evidence showing the efficacy and efficiency gains driven by digitalization along the value chain of pharma companies
- However, the key issue which remains to be addressed is:

"How to take full advantage of digitalization and its components[1]"

Objectives

- This position paper intents to:
  - Show through selected examples how digitalization can significantly enhance pharma companies' performance along their value chain
  - Highlight operational and organizational hurdles associated to digitalization
  - Make recommendations to take full advantage of digitalization

Methodology

- Literature search and selection of cases illustrating the digitalization of pharma companies' value chain
- Analysis of the benefits created by digitalization and of the strategic implications for pharma companies

Sources: Smart Pharma Consulting

[1] *Big data, artificial intelligence, machine learning programs, information systems*

Big data, artificial intelligence and machine learning programs largely simplify complicated processes in the healthcare sector and have a significant impact across the value chain

Digitalization – Key principles

Data

Data

Data

Big Data Refinery

Big data analytics

Value-added Information

Loading

BI[1]
- Dashboards
- Reports
- Visualization

What happened?

Insights

Human Decisions

Modeling

Automated Decisions

What will happen?

Automated Actions

Automated Recommendations

Autonomous decision-making

Predicting

Evolutive Automated Decisions

What is the best that can happen?

Evolutive Automated Actions

Evolutive Automated Recommendations

What should be the best to do?

Collection, storage, aggregation and transformation of multistructural data into useful and relevant information

5Vs big data challenges:
Volume, Velocity, Variety, Veracity and Value

Sources: Smart Pharma Consulting analyses

[1] *Business Intelligence*

Pharma companies are directly concerned by the growing importance of digitalization of their business model and the arrival of new entrants likely to be competitors and/or partners

Context of digitalization in the pharma industry

Big Data role

- The role of Big Data in pharma companies is growing as time goes on due to the **business model transition:**
  - Ongoing and mounting pressure to decrease global pharma costs
  - Need for emergence of value-based medicine reimbursement models
  - Acceleration of the precision medicine demand due to imprecise medicine side-effects
  - Decline in healthcare quality
  - Digitalization of the pharma industry approach
  - Decline in R&D productivity
  - Falling of operating margins

Digital new players entry

- Beside traditional health actors, a myriad of new entrants appears and participates in the creation of value around the data health:
  - The GAFAM[1]
  - The BATX[2]
  - E-health start-ups
  - Collectors, carriers, hosts and scientists of data, etc.
- Health data market is organized around a new value chain where **disruptive innovations** are often led by new players or through strategic partnerships combining technological and health expertise
- The pharmaceutical sector has undertaken a **digital transformation** with a gradual adoption of digital techniques and tools

Sources: Smart Pharma Consulting analyses

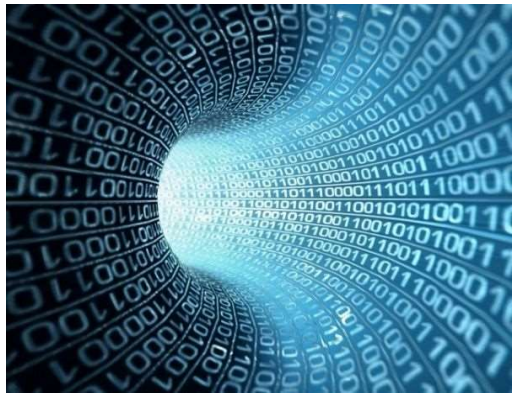
[1] Google, Apple, Facebook, Amazon, Microsoft – [2] Baidu, Alibaba, Tencent and Xiaom

Accessing and analyzing the right data to deliver sustainable business value is the main challenge for pharma companies

Digitalization opportunities and challenges in the pharma industry

OPPORTUNITIES

1. Improved decision making
2. Improved healthcare quality
3. Improved healthcare efficiency (cost reduction)
4. Customer relationships optimization
5. New services development



90% of worldwide data have been generated in the last 2 years

CHALLENGES

1. Data volume (storage, access)
2. Data quality and variety (standardization)
3. Data privacy and security (anonymization, data governance)
4. Data analysis (algorithm, predictive analysis, artificial intelligence)

Sources: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5138448/ – IBM big data encyclopedia – Smart Pharma Consulting analyses

Digitalization opens horizons to improve the relevance of decisions made by pharma companies along each component of their value chain

Digitalization of pharma companies' value chain

- AI enables to reduce costs and delays of R&D projects
- Exscientia uses AI to optimize efficiency of treatments
- Microsoft launched a bot[1] in 2019 to improve patients' recruitment

- Digital tools have enabled market access and reimbursement models to evolve, requiring adjustment of P&MA[2] strategies
- ValueScope tool, powered by artificial intelligence, can generate price forecasts through complex data analysis

- Clinical trials and real-world data generation are facilitated by digitalization
- Digital solutions and treatments are proposed in various diseases (e.g., lung cancer, diabetes)
- Digitalized tools and channels have contributed to change the way to communicate with KOLs

- Integrated and autonomous production systems characterize the digitalized factory
- Sanofi opened a digitally-enabled manufacturing facility in the US with state-of-the-art technologies to optimize its biologics production

- Digitalization allows to individualize marketing strategy and tactics targeted at customers and…
- … contributes to increase pharma sales forces productivity
- Relationship with patient advocacy groups is evolving and is reinforced by digital tools
- Sanofi proposes on Internet innovative podcasts and communication formats for patients and HCPs
- With the arising of Big Data, the communication ways of pharma companies working with KOLs is shifting to the use of Digital Opinion Influencers on social media

Sources: Smart Pharma Consulting analysis

[1] A bot is an application programmed to perform automated and repetitive tasks – [2] Pricing & Market Access

AI enables to reduce costs and delays, and thus improve return on R&D investment, notably through predictive models and connected devices, facilitating the design and execution of trials

R&D digitalization

R&D

Digitalization

- R&D costs represent ~**25%** of pharma companies sales, while it takes ~12 years to bring a treatment to market
- In silico research[1] increases **effectiveness** and **safety** of treatments developed and reduces costs and time
- Clinical trial protocols are becoming more complex and **competition** for **sites** and **patients** is **increasing**
- **80%** of the **trials** do **not meet** the initial **deadlines**
- The **advanced analysis** of protocols by **predictive algorithms** allows to **evaluate** the impact of each decision on the **feasibility** of **trials**…
- …and makes it possible to **anticipate** low signal level problems and thus **prevent** occurrence of a **delay**
- **Connected solutions** facilitate **remote monitoring** and **real-life data collection**, and **decentralization** (partial / complete) of **trials improves** their **efficiency**, from recruitment to analysis

Applications

- Insilico Medicine **designed, synthesized** and preclinically **validated** a DDR1 kinase inhibitor involved in fibrosis in 46 days, which is **15 times faster** than traditional pharma companies, by using AI
- Benevolent[AI] selected, in **3 days**, 6 molecules among 370 potentially effective on Covid-19, thanks to an AI platform
- Stanford University **recruited 11,000 patients** in **24 hours** for a study on cardiovascular disease using **Apple's ResearchKit**,…
- …a software platform that offers a series of applications for researchers
- **Roche** has developed a **remote monitoring platform** for **Huntington's disease**, designed **to collect data** from patients' smartphones and smartwatches as **part of a phase I-II trial**

Sources: Digitalising pharma R&D (PwC 2020) – Integrating artificial intelligence into the drug discovery phase of pharmaceutical R&D (Capgemini 2020) – Digital R&D The Next Frontier for Biopharmaceuticals (McKinsey 2017) – Smart Pharma Consulting analyses

[1] Research using computer models (e.g., use of AI in predictive modeling, to autonomously prioritize candidate molecule structures likely to be optimal)

Exscientia uses AI to optimize efficiency in treatment R&D, while Microsoft launched a bot[1] in 2019 to improve patients' recruitment

R&D digitalization: case studies

R&D

Exscientia

Microsoft

Exscientia

- Exscientia is a UK-based company that uses AI to discover, design and develop drugs faster and more efficiently
- The method consists of combining **genetic and scientific global literature data** in Machine Learning algorithms to **identify or confirm drug targets** of interest
- In 2020, a molecule in their pipeline went from preclinical to clinical in **12 months**, compared to 5 years without AI
- Recently, Exscientia has signed **multiple partnerships** with pharma companies such as Sanofi and BMS

Microsoft's lab

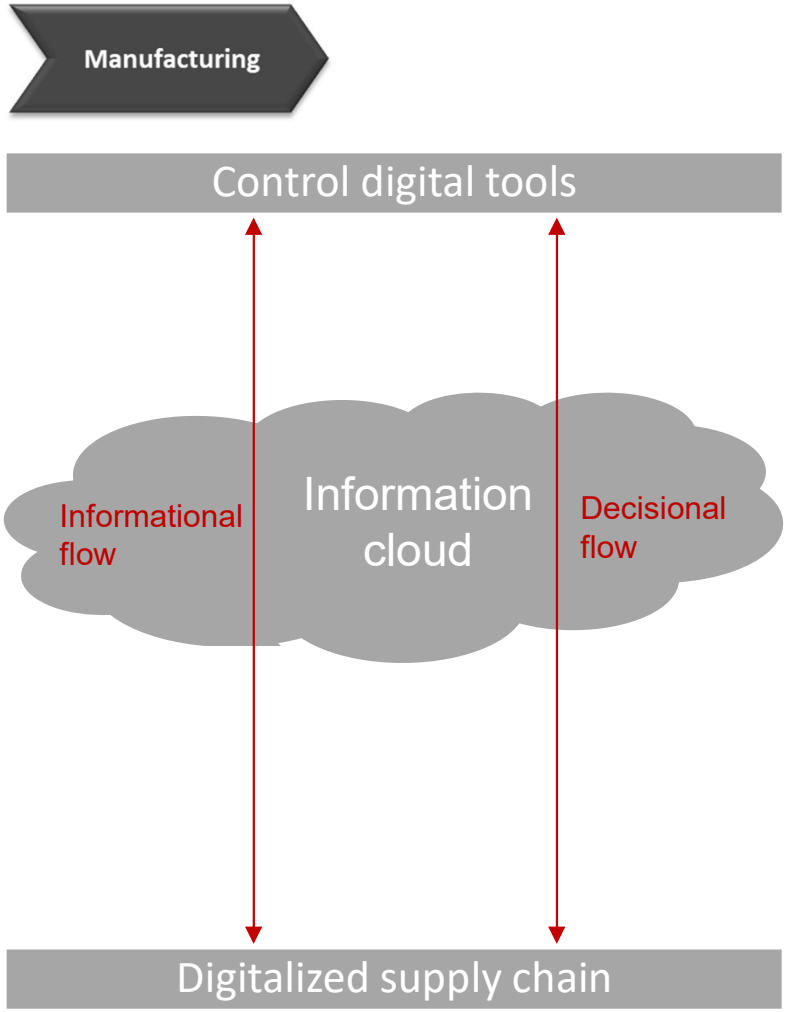
- Microsoft has developed a chatbot – originally started as a hackathon project in Israel and named **Clinical Trials Bot** – to connect patients with clinical trials
- The AI-based **automatic reading system** proposes, after the patient answers a questionnaire, links to clinical trials with corresponding inclusion/exclusion criteria
- This initiative, that **facilitates recruitment,** is part of a larger Microsoft project to create automated **patient triage programs**
- The solution is **proposed to pharma companies** which may use it to **find trial participants**

Sources: Exscientia website – Clinical Trials Bot from Microsoft to bolster trial recruitment (Outsourcing-pharma 2019) – Smart Pharma Consulting analyses

[1] *A bot is an application programmed to perform automated and repetitive tasks*

Industry 4.0 is characterized by integrated, autonomous production systems, segmented into 3 levels: control tools, information cloud and digital production chain

Production digitalization



- **Industry 4.0**, refers to the use of digital tools in production activities for **continuous improvement, integration, optimization** and **empowerment of processes**

- It is declined in 3 levels:
  - **Set of virtual tools** offering mobile, collaborative, dynamic decision-making interfaces and advanced analysis on the production performance (e.g., mobile app)
  - **The information cloud** centralizing the data of the supply chain, including internal and external information, and allowing their exploitation (e.g., CMO[1] information)
  - **The digitalized production chain** or "smart" factories that are connected and equipped with tools that contribute to improve industrial performance (e.g., RFID[2] tag, sensors)

Sources: Digitization in pharma: Gaining an edge in operations (Strategy& 2016) – Industry 4.0 for pharmaceutical manufacturing: Preparing for the smart factories of the future (Kopcha 2021) – Smart Pharma Consulting analyses

[1] Contract Manufacturing Organization – [2] Radio Frequency Identification

Sanofi opened its first digitally-enabled manufacturing facility in the USA with state-of-the-art technologies to optimize its biologics production

Production digitalization: case study

Manufacturing

sanofi

Sanofi digitally-enabled manufacturing facility

- Sanofi opened, in 2019, its **first digitally-enabled manufacturing facility** in Framingham (US) to manufacture biologics for its Specialty Care portfolio
- Sanofi's **$400 million investment** in R&D, biologics manufacturing and production improvements means that all manufacturing stages are controlled through state-of-the-art analytical techniques that forecast and avoid variations to improve performance and ensure quality
- The facility's advanced **data-driven** manufacturing technologies enable Sanofi to achieve higher levels of productivity, agility, flexibility and real-time adjustment
- The whole industrial process is **80 times more productive** than a traditional factory
- It can make medicines in **less time for twice the number of patients** and all within a **smaller environmental footprint**
- The digital transformation of Sanofi's manufacturing network is a key element of the company's goal to leverage **better use of data** to respond to fast changing patient needs, and speeding up the production of new medicines

Sources: Sanofi opens its first digitally-enabled continuous manufacturing facility (2019) – Smart Pharma Consulting analyses

Market access and reimbursement models have evolved with the advent of digital tools, requiring a transformation of the P&MA[1] strategies adopted by pharma companies

Market Access digitalization

Market Access

Pharma companies

- Combining a digital solution with a traditional therapeutic product can improve the **value proposition** to patients...
- **...** and allow to claim a **better price level** and **reimbursement** conditions
- Those solutions require the development of **innovative P&MA strategies** and therefore an adaptation of current Market Access (MA) activities, processes and functions
- Digital has also brought 2 types of tools impacting MA:
  - Activity optimization tools (e.g., price prediction)
  - Internal communication platforms (e.g., application that automatically adapt to regulatory constraints)

Authorities and payers

- Digital solutions contribution is attracting a lot of interest from authorities, payers and healthcare providers...
- …but also generates a certain apprehension because of the difficulties related to the:
  - Supervision of their use
  - Evaluation of their benefits
  - Determination of their price
- Current methods for evaluating these new digital solutions, whether stand-alone or combined with a drug, are ill-suited
- Digital communication tools help strengthen pharma companies' interactions with the authorities

Sources: Preparing pricing and market access teams for the digital future (Simon-Kucher & Partners 2019) – This is how pharmaceutical industry will look like in 2030 – Market Access Pathways for Digital Health Solutions – Smart Pharma Consulting analyses

[1] *Pricing & Market Access*

Artificial intelligence has a strong potential of use within Market Access as illustrated by the ValueScope tool, capable of generating price forecasts through data analysis

Market Access digitalization: case study

Market Access

Okra technologies' ValueScope tool

- Okra technologies, a UK-based company, has been developing **AI-based solutions in P&MA**[1], Sales and Medical since 2015
- The ValueScope tool allows teams to perform **scenario analysis** of negotiations with payers to determine the pricing outlook for a new treatment
- It uses **deep learning algorithms** that analyze millions of data points (e.g., clinical trial results, latest pricing data, regulatory submissions)
- The system allows to:
  - Generate price forecasts with over **90% accuracy**
  - Model **customized** scenarios (e.g., profile analysis vs. competitors)
  - Drastically reduce **analysis time**

Sources: Okra technologies website – Smart Pharma Consulting analyses

[1] *Pricing & Market Access*

The use of digital technology in clinical trials facilitates patient recruitment and retention, reduces associated costs and generates real-world data

Medical Affairs digitalization: clinical data generation

Medical Affairs

sanofi

Real-world data generation

- Digital technology represents an opportunity to generate **real-world data** and thus allows patients to play an increased role to determine the value of marketed drugs and to design next-generation products
- Their development has been facilitated by **rapid advances in technology tools**[1]
- The generation of these data offers a better understanding of **real-world care pathway** with the help of new indicators such as PROMs (Patient-Reported Outcomes Measures) and PREMs (Patient-Reported Experience Measures) enabling to evaluate the quality of care as perceived by patients

Case study: VERKKO trial application

- A Phase IV trial has been launched, fully digitally using a **connected blood glucose meter**, by Sanofi in collaboration with Mendor and eClinicalHealth
- 60 patients **recruited via Facebook** with an 81% conversion rate (recruitment/application), which is better than typical recruitment results
- The digitalization of the study resulted in a:
  - High patient satisfaction
  - Reduced coordination time by 2/3
  - Patient-centered study design

Sources: eClinicalHealth Announces Successful Results for an Entirely Remote Online Clinical Trial (Businesswire 2016) – From recruiting to data collection, the impact of connected digital health in clinical trials (Nadir Ammout 2016) – Smart Pharma Consulting analyses

[1] *Smartphones, tablets, electronic medical records, big data analysis through AI, etc.*

Digital solutions have recently been developed to treat or support treatment, as illustrated by Moovcare in lung cancer and mySugr in diabetes

Medical Affairs digitalization: e-health

Medical Affairs

E-health solutions

- E-health solutions offer new opportunities in prevention, diagnosis, treatment and patient care...
- ...and represent a differentiation axis for pharma companies with patients and HCPs
- Among these technologies, **Digital Therapeutics (DTx)** are therapies developed in digital formats, clinically validated, allowing to complement or replace traditional drugs
- They are subject to a MA and can potentially be reimbursed

Movecare

- **Digital therapeutic** based on a weekly questionnaire to detect recurrence or complication during **follow-up of lung cancer**
- Patient data analyzed by artificial intelligence and results transmitted to the HCP
- Significant improvement in **overall survival** (+7.6 months)

MySurg

- **Application connected** to blood glucose monitoring devices acquired by Roche in 2017
- Blood glucose management dashboard can be shared with the physician and **provides personalized recommendations** to the patient (e.g., nutrition, insulin dose calculation)

Sources: Digital therapeutics as a new way of healing for the 21st century (Capgemini Invent 2021) – Moovcare website – MySugr website – Smart Pharma Consulting analyses

Digital tools and channels offer a wider choice of innovative ways to deploy medical communication strategy and have changed the profile of KOLs

Medical Affairs digitalization: medical communication

Medical Affairs

Digital channels

- Use of **innovative formats** to communicate with HCPs (e.g., chatbots, podcasts, webinars) is increasing
- **Digitalization** of **MSL activities** and of **interactions with KOLs** has become increasingly important
- Post-Covid-19, **66% of KOLs** surveyed by the MSL Society indicated that they preferred to use **digital tools over face-to-face visits** with MSLs
- Thus, more and more MSLs and medical advisers adopt an **omnichannel approach** with KOLs

Content personalization

- As for medical reps, AI-based tools provide a **better understanding** of HCPs' needs (e.g., habits, learning preferences)…
- …and **advanced analysis** of interactions allows to propose the most engaging and impactful content for HCPs
- Digital tools are particularly useful to **disseminate specific data** to KOLs because they facilitate the identification, collection, storage and structure of scientific and medical information

KOL / DOL

- The emergence of **digital channels** has changed the landscape of medical influencers:
  - **DOLs** (Digital Opinion Leaders) who have an influential role in sharing medical information on social networks, coexist with…
  - **KOLs**, knowing that less than 30% of the latter have a social media presence
- Ideally, companies will identify experts that combine the strengths of **traditional and digital** thought leaders and develop relationships with the most relevant of them

Sources: Transforming Medical Affairs: Tapping the alchemy of storytellers and digital start-ups (McKinsey 2019) – Medical Affairs Digitization (PharmExec.com 2021) – Digital Medical affairs with a human touch – To maximize KOL impact, Medical Affairs needs a digital strategy too (PharmaSpectra resources 2021) – How to digitalize MSL teams for increased efficiency (Pharmafield) – Medical affairs: Key imperatives for engaging and educating physicians in a digital world (McKinsey 2018) – Smart Pharma Consulting analyses

Digital technology has facilitated the development of a pharmaceutical marketing that is more focused on HCPs' needs and that allows to individualize the approach

Marketing digitalization: strategy

Marketing & Sales
Patient Support

Segmentation

- Digital technology, completed by specific insights generated by a closed-loop feedback process, enables to develop precise profiles of HCPs
- The profiling of each HCP is thus continuously enriched by different sources of information that are combined
- Segmentation criteria will include:
  - Prescribing potential
  - Willingness to interact with pharma companies
  - Sensitivity to marketing and sales activities

Targeting

- Leveraging big data analysis with AI[1] can help pharma companies better target HCPs through a:
  - More precise identification of their needs and field of interest
  - Dynamic segmentation based on a real-time information
- The targeting criteria along with the nature and level of interactions can be adjusted on a continuous basis
- Such a dynamic targeting is based on a dynamic segmentation that will significantly improve the impact of marketing and sales activities

Positioning

- The analysis of the multiple sources of data collected regarding HCPs prescribing behavior, needs and field of interest will be particularly helpful to design an optimal positioning of the marketed drugs
- If the attributes of the drugs cannot be changed from one HCP to another, or for the same HCP overtime…
- … however, it is possible to adjust the communication considering each individual HCP profile, experience and opinion at a given point of time

Sources: kcsitglobal.us – digitalcommerce360.com – Deloitte Centre for Health Solutions, "The future awakens" – smartdatacollective.com – annalec.com – digitalblog.exlpharma.com – Dynamic segmentation IQVIA (2021) – Smart Pharma Consulting analyses

[1] See for instance the solutions offered by Eularis (eularis.com) or Axtria (axtria.com) which integrate AI as an enabler to improve the impact of marketing and sales decisions

Digital technology has facilitated the development of pharmaceutical marketing that has become more focused on the needs of "customers" thanks to tools allowing an individualized approach

Marketing digitalization: contents & channels optimization

Marketing & Sales
Patient Support

Contents & Channels

- Deployment of digital approaches and tools such as **CLM**[1] and **CRM**[2], powered by **AI**, has enabled to adopt an individualized customer-centric marketing strategy based on big data analysis
- Data collection and analytical tools facilitate the identification of **"insights"** from which companies can:
  - Develop personalized and engaging content for HCPs
  - Define the most relevant "next-best" actions to follow
  - Measure the relevance and efficiency of the proposed actions / services
- **AI enables** pharma companies to **develop** and **deliver** more **appropriate contents** and to **optimize** the **use** of different communication **channels** to the **right audience**, such as HCPs, for an **improved engagement**
- Digitalization will facilitate the **integration**, **combination** and **interconnection** of the various **contents**:
  - Coming from **various** pharma companies' **departments** (e.g., corporate communication, medical, marketing, sales)…
  - … conveyed through **various channels** (e.g., face-to-face interactions, remote meetings, webinars, podcasts, chatbots, e-mails, social networks, etc.)…
  - … towards **various customers** (e.g.; patients, PAGs, payers, health authorities)
- If marketing interactions are becoming increasingly digital, the **human touch remains essential** to **ensure excellence in execution**

Sources: Intelligent drug launch and commercial (Deloitte 2021) – How to create a winning pharmaceutical digital marketing strategy in 2021 (Thekeenfolks.com) – Smart Pharma Consulting analyses

[1] Closed-Loop Marketing – [2] Customer Relationship Management

If digitalization of pharma sales forces contributes to increase productivity, it remains an enabler to support medical representatives who are determinant to engage physicians

Promotion digitalization: sales force effectiveness

Marketing & Sales
Patient Support

- The **access** to HCPs is becoming more and more **restricted** due to a **lack of time and interest**
- Although the digitalization of medical calls or e-detailing **complements** face-to-face interactions, it remains modest (<10% of calls) outside the crisis period linked to the Covid-19 pandemic
- Most of HCPs consider **remote calls** to be of **insufficient quality** and **impractical**
- However, practices are tending towards a **hybrid digital / physical** model that must be part of an **omnichannel** coordinated **approach**
- For several decades, pharma companies have equipped their sales representatives with **digital tablets** (e.g., iPad) to replace traditional visual aids
- These tablets are **only used** in ~25% of face-to-face calls because they are **not practical** and available **information** during calls are **limited by regulations**
- **Big data** and **AI** technologies **help med reps enhance** their **productivity** by:
  1. **Analyzing** data **interactions** to understand the **needs** and **fields of interest** of each HCP and make **recommendations on** what **content** will have the most impact during the future calls
  2. **Optimizing message** and **channel sequencing** to engage HCPs with the right content and support
  3. **Automating administrative**[1] and **operational**[2] **tasks** with **CRM systems**[3] will help **maximize** the **time medical reps** can **spend preparing interactions** with HCPs or **interacting** with them

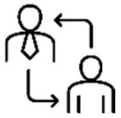
Sources: Boosting pharma sales and marketing with AI (ZS 2017) – Key Pharmaceutical Use Cases for Embracing AI (Dataiku 2021) – How Digital Will Redefine the Role of the Rep in 2021 and Beyond (PharmExec) – Smart Pharma Consulting analyses

[1] Call planning, call logging – [2] E-mailing a reprint to a physician, following a medical call – [3] Veeva, OCE Optimizer

The relationship between pharma industry and patient advocacy groups is evolving and is reinforced by the development of digital communication tools

Patient support digitalization: PAGs relationships

Marketing & Sales
Patient Support



Bristol Myers Squibb™

GRYT HEALTH

Pharma companies & PAGs

- Pharma companies often collaborate with PAGs but, historically, many of these relationships have been **transactional rather than strategic**
- Digital technology creates **new opportunities** for collaboration through **new communication channels**
- **Personalization** of **content** is an important strategic axis for communication with patients who search medical information **on blogs**, **forums** and **social networks**
- Search engine optimization is essential to gain visibility
- **Social listening[1] tools** gather real-life patient insights and strengthen their relationships

Case study: BMS platform

- **Bristol-Myers Squibb** and the digital health company **GRYT Health**[2] have partnered to develop **virtual Advocacy Exchange** to bring together patient advocacy groups, patients, HCPs and pharma companies, in the US
- The virtual platform will provide access to **educational content**, as well as the ability to **participate** in weekly **interactive live sessions**
- The objective is to **synchronize efforts**, facilitate the **sharing of resources** among stakeholders and **foster** increased **collaboration**

Sources: Digital tech and strong patient-advocacy partnerships could be a win-win-win for pharma, advocacy groups, and patients (Deloitte) – How Pharma Can Build Better Relationships With Patient Advocacy Groups – BMS launches digital Advocacy Exchange (Pharmaphorum) – Smart Pharma Consulting analyses

[1] Analysis of patients on social networks – [2] Company specialized in digital oncology

Podcasts are innovative and fast-growing medical communication formats for patients and healthcare professionals, recently used by Pfizer

Patient support digitalization: Podcasts

Marketing & Sales
Patient Support

Podcast format

- Podcasts are **100% audio format** to be listened to on demand, the consumption of which is **growing exponentially**
- The **health crisis** has particularly **raised** the profile of **podcasts** dealing **with health issues**
- Podcasts can be **created by expert patients**, **patient advocacy groups**, **healthcare professionals** or **pharma companies**
- Content focuses on **raising awareness** of a pathology or **sharing scientific content**

Pfizer: "Science will win"

- Since 2021, **Pfizer** has been offering a **series of podcasts** such as **"Science will win"**, a four-part **miniseries** exploring the **science behind gene therapy**
- Through **conversations** with scientists, experts, patient advocates and, most importantly, patients themselves…
- …each miniseries **focuses on** policy challenges and potential to transform **patients' lives by innovation**
- The podcast is **hosted by** Adam Rutherford, a **geneticist**, writer, broadcaster **from** the **University College London**

Sources: Podcasts: Expert & Patient Stories (Pfizer website) – Smart Pharma Consulting analyses

With the arising of Big Data, the communication ways of pharma companies using KOLs is shifting to the use of Digital Opinion Influencers on social media

Case study: Big Data to identify Digital Opinion Influencers (DOI)

Marketing & Sales
Patient Support

Context

- Today, pharma companies leverage the **influence of KOLs** – expert physicians and researchers – to conduct projects and increase their drug influence at all levels
- Pharma companies select KOLs based on **two metrics**:
  - Publication of articles/studies
  - Number of prescriptions for a given drug
- The main problem with KOLs is that they are typically identified according to **outdated metrics** in todays **hyper-connected** world

Big Data development

- Advancements in **data analytics** technologies allow pharma companies to **measure influence** in much more meaningful and valuable ways
- Such a detailed analysis can help to learn more about the **extent of influence** a key influencer has
- Additionally, pharma companies can dig deeper into the **quality of those relationships**

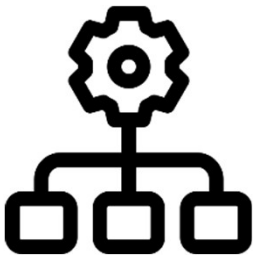
Opportunity

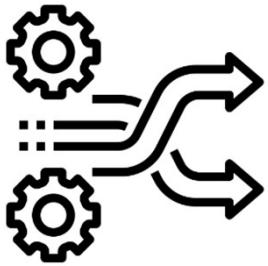
- **HCPs** and **patients** are **acquiring information** about disease and treatment in the digital world
- This creates an **opportunity** – **strategic DOI identification, outreach and management** – for brand, communications and medical teams **that is often overlooked** or **poorly addressed**
- A well-planned and supported DOI program offers the **potential to amplify** those **efforts** by **disseminating** key messages **through digital channels**

Sources: pharmexec.com – digitalblog.exlpharma.com – Smart Pharma Consulting analyses

The successful implementation of pharma companies' digital strategy requires to adapt its activities, structures, processes and change its culture

Digital transformation: landscape and organization impact





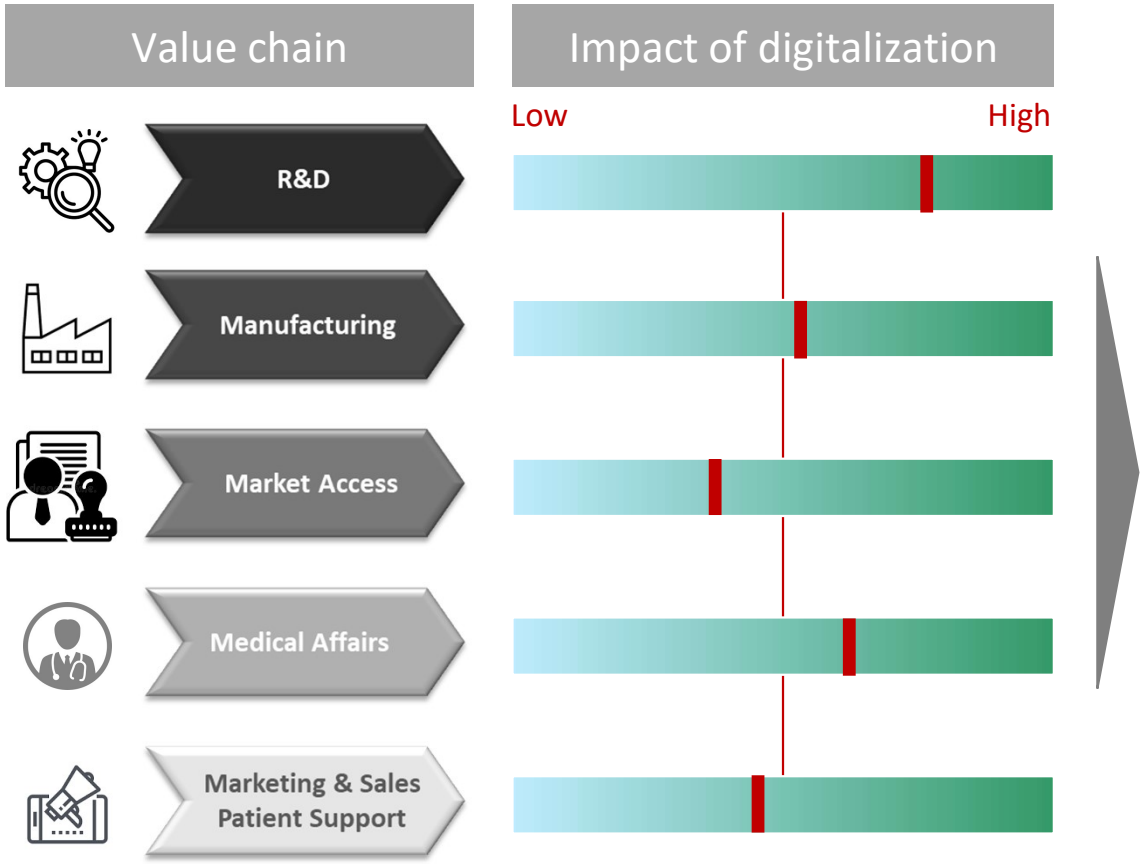
- **Pharma companies** have understood the challenge of fundamentally **changing** their **organization, talent and capabilities** to **embrace digital transformation** across the **value chain**, including the development of the Chief Digital Officer position
- **Data management** is an **important** activity to develop when implementing big data capabilities and, for so doing, it is necessary to:
  - Develop a **data governance plan**
  - Create **standards and business rules**
  - Comply with the **regulations**
- Access to big data and data management technologies (e.g., AI) are often acquired through **partnerships with GAFAM**[1] or start-ups
- Pharma companies need to put in place a **new structure** that facilitates **collaboration** and **distribution of resources** in order to avoid a **siloed organization**, an obstacle to digital development
- **Once** big data and AI **technologies** are **in place**, pharma companies must **build** a **data driven culture** that drives tangible business outcomes
- If it is important to **demonstrate** the **power of digitalization** by showing its value
- It is also essential that it **remains an enabling tool** and **not a substitute** for **decision-making**
- The **final decision** should be **in the hands of collaborators**

Sources: Google, Apple, Amazon, Microsoft: How Tech Giants Target Healthcare (Direct Industry 2021) — Multichannel Closed Loop Marketing Digitally transforming life sciences industry (Capgemini 2012) — New group to tackle data governance and guide digital transformation in pharma (2021) — Smart Pharma Consulting analyses

[1] *Google, Apple, Facebook, Amazon, Microsoft*

The question is not whether digitalization of pharma companies' value chain is essential, but how to best leverage digital technologies and innovations to boost business performance

Key takeaways



Insights

- The impact of digitalization on pharma companies' performance varies significantly from one component of the value chain to another
- The R&D has benefited the most from digitalization, impacting significantly its productivity
- For manufacturing, digitalization is less widespread and less developed, so far
- If some opportunities exist to improve market access efficiency, they are still limited
- For medical affairs, digital tools have shown to facilitate the recruitment of patients for phase IV and RWE[1] studies and to evaluate their experience
- If digital channels like Internet have played a key role to inform and educate HCPs and patients, other channels such as remote e-detailing, e-mailing, etc. have been much less popular amongst physicians

Sources: Smart Pharma Consulting analyses

[1] Real-world-evidence

Smart Pharma
CONSULTING

Digital Therapeutics

What Opportunities for Pharma Companies?

POSITION PAPER

October 2022

Digital therapeutics are evidence-based software-driven interventions addressing a wide range of conditions – independently or in combination with existing treatments

Definition

- Digital therapeutics (DTx) are **evidence-based**, **software-driven** interventions which can:
  - Prevent by improving **lifestyle management** and **nutrition**,
  - Manage by encouraging patients' **adherence** by adding **services**,
  - Treat by collecting and analyzing patients' data to **personalize** their treatments or by replacing traditional treatments (e.g., cognitive behavioral therapy)…

  … a medical disorder or a disease
- DTx are used **independently** or **combined** with drugs, medical devices, or other therapies to **optimize patient care** and **health outcomes** and…
- … can be subject to a **reimbursement**
- Digital therapeutics empower **patients, HCPs, and payers** with intelligent and accessible tools for addressing a **wide range of conditions** through **high quality, safe, and effective** data-driven interventions

Sources: Digital Therapeutics Alliance – Digital Therapeutics: How Software can treat diseases (Altexsoft 2021) – DTx ou thérapies numériques : vers une nouvelle génération de produits de santé (2019) – Smart Pharma Consulting

In the DTx ecosystem, critical stakeholders provide products and services, information and emotional value exchanges that improve clinical outcomes

DTx ecosystem: value exchanges

Received Value	Critical Stakeholders	Given Value
▪ Personalized, on-demand assistance to manage conditions, risk factors and co-morbidities ▪ Improved access to information and quality of life	**Patients / caregivers**	▪ Insights on challenges with managing therapy area and RWE dataset ▪ Improved adherence to drug/device/behavior plan
▪ Lower care management costs and resource utilization (adherence to treatment) ▪ Improved clinical outcomes, overall health & wellness	**Payers**	▪ Access to large population and disease management programs to drive awareness and adoption ▪ Inclusion on formulary and reimbursement payments
▪ More effective patient-provider communication and 360º view of patient history and trends ▪ Actionable decision support to improve outcomes	**HCPs**	▪ Identification of targeted patients for DTx platform ▪ Improved patient awareness, adoption and trust
▪ RWE, demonstrated outcomes, and insights on "patient experience" to inform solution and future product road map ▪ Direct patient engagement for clinical trial recruitment	**Pharma companies**	▪ Co-developed solutions, co-funding and investment ▪ Access to resources to build awareness and scale

Sources: Realizing the potential value of DTx (EY 2021) – Smart Pharma Consulting

DTx solutions have a multitude of uses and wide-ranging implications for both individuals and society, allowing to move closer from a model treating diseases to a model treating patients

Potential value of DTx

DTx added-value *(Provided proposed solutions are acceptable to and accepted by end-users)*	Direct beneficiaries		
	Patients	HCPs	HC[1] System
▪ Empower patients to monitor and self-manage their health	X		
▪ Improve medication management and treatment adherence	X		
▪ Provide predictive, preventive, personalized and participatory care	X		
▪ Support collection and analysis of health data		X	X
▪ Lower the burden of care		X	X
▪ Reduce health inequalities (e.g., for homeless, underserved populations)	X		X
▪ Complement other forms of therapy	X		
▪ Support collection and analysis of health data			X
▪ Reduce costs to healthcare system			X

Sources: After Graphite Digital website (Sep. 2021) – Smart Pharma Consulting

[1] *Health Care*

DTx can be used for a wide variety of applications leveraging different kinds of technologies and digital capabilities

Typical DTx applications

Patient monitoring and self-management

- Tracking and monitoring of patients' symptoms that are analyzed and sent to HCPs who can ensure the follow-up

  (e.g., Voluntis' Theraxium to monitor cancer patients' symptoms to better manage side effects)

Digital behavioral intervention

- Apps providing digital cognitive behavioral therapy (CBT) for mental health conditions or personal habits to change to prevent / delay the development of chronic diseases

  (e.g., GAIA's vorvida program – based on CBT – aimed at reducing alcohol consumption)

Artificial intelligence and machine learning

- Apps using AI and machine learning algorithms to enable real-time interventions or early diagnosis of certain diseases

  (e.g., Cognoa's Canvas Dx has been granted MA by the FDA for early diagnosis of autism in children)

Apps connected to sensors and wearables

- Apps connected to a sensor or a wearable device to monitor or track specific biomarkers

  (e.g., Propeller Health system for asthma and COPD[1] tracking when and how patients use their inhaled medications)

Gaming and virtual reality

- These DTx work by providing patients with a video game or a virtual reality-based experience

  (e.g., Akili's EndeavorRx prescribed for children with attention deficit hyperactivity disorder (ADHD) based on video gaming)

Sources: Deloitte: Digital Therapeutics Catalyzing the future of health (2021) – Smart Pharma Consulting

[1] Chronic obstructive pulmonary disease

Ultimately, as DTx aimed at changing patients' behavior to improve their health, they should be designed – with the collaboration of users – so that to influence their behaviors over time

What makes a good DTx?

PREMs[1]

- PREMs measure the experience (the whole or individual interactions) of patients when engaging with healthcare services
- Patients heal quicker when their experience is positive

PROMs[2]

- PROMs are evidence-based healthcare questionnaires which identify change in health status
- They help understanding patient's perspective and gauge their health status and should be a feature of DTx

Clinical Best Practice

- Clinical Best Practice combines:
  - Clinical pathways (management tool detailing the way to treat patients)
  - Care plans (specific instructions on how to care for a patient)

Behavioral elements

- Applying knowledge of factors that determine human behavior (e.g., COM-B[3]) ensures that…
- … DTx designers can engage users according to their motivational needs and situational contexts to alter target behaviors over time and improve health status

User-Experience (UX)

- The most appropriate methods to understand the contexts and lived experiences of users should be utilized
- Performance indicators and objectives should be set
- It is also essential to test and evaluate the solution with real users over multiple design iterations

Sources: After Graphite Digital website (Sep. 2021) – Smart Pharma Consulting

[1] Patient Recorded Experience Measures – [2] Patient Recorded Outcome Measures – [3] The COM-B model considers that for behavior change to occur three factors are requested: capability, opportunity and motivation

Attractiveness of DTx for pharma companies – at national level – is driven by local regulations, competitive intensity, opportunities to partner and position of different key customers

Market determinants driving DTx attractiveness

Health authorities

- Market access and regulatory processes should be adapted to properly evaluate DTx benefits
  (Germany which is the most advanced country may pave the road to a pan-European DTx approval and reimbursement process)

Competitors

- Limited number of players (pure players or pharma companies having signed partnerships with digital companies)
- High-quality and pro-active players contributing to shape and develop the DTx market

Customers

- Payers[1]: willingness to pay for DTx that prevent, manage or treat diseases
- HCPs: convinced by the medical value of DTx, engaged to prescribe them and to use them to monitor their patients
- Patients: accept to pay[2] for DTx and show a high degree of adherence and persistence

Partners

- Presence of digital companies inclined to partner with pharma companies which are familiar with market access requirements and have access to HCPs to promote DTx

Sources: Smart Pharma Consulting

[1] Could be public or private health insurance organizations, and patients – [2] If not reimbursed

Germany is the most advanced country re. the registration process for DTx market authorization, ahead of the USA where a specific pilot program is on-going, and of other European countries

DTx registration conditions

US regulations

- Several pathways can be used to register DTx:
  - 510(k): one must demonstrate that the DTx is as safe and effective as a legally marketed device
  - De Novo: used to evaluate novel devices of low to moderate risk, having no comparator and requiring stronger clinical evidence evaluation (e.g., Pear's reSET)
  - Premarket approval (PMA): this is the most stringent FDA process to evaluate Class III devices
  - Precertification (Pre-Cert) program: as SaMDs[1] continuously change, FDA is exploring a faster and iterative release of digital health products model
- Pre-Cert program focuses on patient safety, product quality, clinical and cybersecurity responsibility, proactive culture
- The Pre-Cert program is a pilot program which will require legislation from Congress to be fully implemented

EU regulations

- The new MDR (Medical Device Regulation) which entered into force in May 2021 applies to all medical devices – including software – to be introduced on the EU market
- However, no specific legal regulation exists on DTx
- The European Medicines Agency and the European Commission are starting exploring DTx solutions and will work on application and evidence generation processes[2]
- On national level, the new German Digital Healthcare Act (DiGA) regulates specific requirements for the use of DTx:
  - A list of requirements defines which features any DTx application must have
  - Factors such as quality, security and data protection must be proven with scientific evaluation
- Several other countries (e.g., Belgium, France, Italy, the UK) are moving forward to implement a DiGA-like process

Sources: DiGA website July 2022 – EU website on DTx – Digital Therapeutics 101: Blue matter (2021) – Smart Pharma Consulting

[1] Software as a Medical Devices – [2] Clinical validation of studies either comparing DTx to a control drug or where the submitted indication for a DTx is comparable to that of a drug

DTx can generate direct revenue and indirect non-revenue benefits, but the overall value of the latter is speculative and require to build a compelling business case

DTx monetization strategies

Revenues

- DTx with proven clinical efficacy should produce revenues
- Monetization can come from health insurance companies, consumers or even employers
- DTx companion (e.g., digital pen for insulin with its app) can boost revenues through higher rate of prescription by physicians and/or better adherence rate of diabetic patients

Data

- The patient's digital exhaust from using DTx (via ePRO[1] or utilization patterns) could provide real customer insights that can help improve the product, expand the label and/or the product design and development
- This value could be monetized directly while keeping to all necessary privacy rules and regulations
- Indirect value could also come from the intelligence alone

Competencies

- DTx can also provide indirect value through its use of cutting-edge technology and techniques
- Learnings from AI / ML[2] to data analytics to patient-centricity – which are central techniques in DTx – could disseminate across the organization as valuable skills and best practices for use in R&D, digital marketing, customer support, etc.
- These products may even provide compelling recruitment for highly coveted data and tech talent

Sources: Digital Therapeutics 101: Blue matter (2021) – Smart Pharma Consulting

[1] Electronic Patient Reported Outcomes platforms – [2] Artificial Intelligence / Machine Learning

Engagement of pharma companies in DTx should be, firstly, consistent with their corporate vision and ambition, and then, be part of their corresponding strategy and capabilities required, to do so

Pharma companies' determinants driving DTx attractiveness

Corporate vision & ambition

- DTx are seen as a "beyond-the-pill" and/or "around-the-pill" differentiator to enhance their current value proposition
- Thus, DTx are seen as an opportunity to raise de value of drugs rather than to compete against them, by:
  - Improving the appropriateness of prescribed drugs by personalizing treatments based on patients' monitoring
  - Enhancing the patient adherence and persistence with the help of special coaching programs powered by AI

Corporate strategy

- Pharma Companies should focus on TAs where they are active, and where…
- … DTx are clearly a valuable complement to drugs – addressing unmet needs, undeserved populations – and not a potential competitor[1]
- To win the "battle", in this fast-moving market, it is essential to co-develop and co-market DTx with digital companies

Corporate capabilities

- In-house capabilities:
  - Management of regulatory and Price & Reimbursement hurdles
  - Interactions with and communication to HCPs and PAGs
- External capabilities:
  - Software development including AI
  - "Start-up" culture[2]
- Ability to partner with digital companies

Sources: Smart Pharma Consulting

[1] In Central Nervous System related diseases (e.g., depression, anxiety, insomnia, pain, etc. DTx can compete directly with existing drugs) – [2] A high degree of agility and urgency is required because DTx life-cycles are much shorter than drugs

DTx represent an opportunity for pharmaceutical companies to improve their value proposition, provided they develop their skills and adapt their processes

DTx: Opportunities & Challenges for Pharma Companies

Opportunities

- Combining a digital solution with a conventional therapeutic product can improve the **value proposition** to patients / HCPs...
- ... and allow to **claim a better price level** and **reimbursement condition** (e.g., through real-word data monitoring, improved outcomes)
- DTx also have the potential to **address unmet needs** (e.g., poor adherence of patients) that conventional treatments and therapies have been unable to provide…
- … allowing companies able to address this field to gain a **significant competitive edge**

Challenges

- **Cross-industry connections** and robust **alliance** management **competencies with** digital **start-ups** and **incubators** need to be developed
- It is essential to establish **new trial designs** and **operational processes** to demonstrate **DTx value** for patients, HCPs, health authorities and payers
- **Pricing & reimbursement models** may need to differ from traditional ones
- Current authorities and payers' **methods for evaluating** these solutions, are ill-suited and…
- … **data privacy** remains a **main concern**

Sources: Deloitte: Digital therapeutics improving patient outcomes through convergence (2019) – Digital Therapeutics: How Software can treat diseases (Altexsoft 2021) – Digital Therapeutics: The future of digital health tools and virtual care (Tuck 2021) – Smart Pharma Consulting

Around-the-pill DTx contribute to enhance the value of conventional associated products, while beyond-the-pill DTx, more difficult to develop, avoid traditional costs and side effects concerns

Strategic options for Pharma Companies

Around-the-pill DTx

DTx delivering their impact in <u>combination</u> with another treatment, typically a drug (e.g., reSET-O[1] used as an adjunct to buprenorphine)

Pros

- May **boost the performance** of conventional products by a more **complete approach**
- **Real-world data collection can** improve product value by allowing a **more personalized** treatment **strategy**

Cons

- For certain patients, DTx are perceived as a **burden** on top of their existing treatments
- Being often seen by patients as an optional add-on, **acceptance**, **adherence** and **persistency** of DTx are **low**

Beyond-the-pill DTx

Standalone DTx that are designed to work <u>independently</u> of traditional drugs (e.g., Mika[2] used to reduce distress of cancer patients)

Pros

- Unlike the great majority of chemical or biological **drugs**, DTx avoid **side effects** and…
- … significantly **lower costs** for patients, payers and the healthcare system

Cons

- More **costly** and **time-consuming** to develop and market than around-the pill DTx
- Reimbursement models being still unclear, **risks related to ROI** are higher

Sources: DTx at eyeforpharma 2020: Successful pilots, but a need for new partnership models – ZS: Barriers to broad DTx adoption and ways to overcome (2022) – MIT Technology review: can DTx be as good as drugs (2017) – Smart Pharma Consulting

[1] From Pear Therapeutics – [2] From Fosanis

Metabolic Diseases, Mental health and Respiratory Diseases are the 3 most relevant therapeutics areas for DTx, especially for disease management purpose

Main therapeutic areas

Therapeutic area	Prevention	Management	Treatment	Example applications
Metabolic Diseases				▪ App to help prevent type 2 diabetes ▪ App to help manage insulin
Mental health				▪ Digital Cognitive Behavioral Therapy (CBT) ▪ Game training improving attention for ADHD[1]
Cardiovascular				▪ Digital program for acute coronary syndrome ▪ Patch to detect early symptoms of worsening heart failure
Respiratory				▪ Self-management app to relieve COPD[2] symptoms at home ▪ Recording and monitoring of inhaled medications
Oncology				▪ App for follow-up of breast and ovarian cancer patients ▪ Symptom-capturing adherence app for follow-up
Immunology				▪ Self-assessment app to monitor rheumatoid arthritis ▪ Personalized recommendations to manage side effects
Gastrointestinal				▪ Integrative approach to manage irritable bowel syndrome
Other[3]				▪ Acceptance and Commitment Therapy for chronic pain ▪ Analysis of fertility level through basal body temperature

Least pertinent — *Most pertinent (based on number of players)*

Sources: Deloitte: Digital Therapeutics Catalyzing the future of health (2021) – Smart Pharma Consulting

[1] Attention deficit / hyperactivity disorders – [2] Chronic obstructive pulmonary disease – [3] Chronic pain, women's health

Omada is a DTx developed by Omada Health to provide personalized programs to help manage chronic condition to reduce the risks of complications

Examples of DTx (1/3)

omada

Omada Health

- Since 2011, **Omada Health** has been a US-based industry leader in virtual care
- The company offers evidence-based solutions that help people manage **chronic conditions**, such as diabetes, hypertension and musculoskeletal diseases and live healthier lives
- Omada Health works with over **1,600 companies** and counts **half a million members**
- The company has partnerships with **major US employers** and **leading health plans**, such as Cigna and Kaiser

Omada for prevention

- Omada's product is geared towards employers with large populations of at-risk employees
- The program provides **personalized coaching** and **trainings** to **lose weight and** prevent users **at risk of type 2 diabetes**
- The solution leads to a **30% reduction of risks** for type 2 diabetes, **16%** for stroke and **13%** for heart disease
- Omada led to **medical cost savings** of $1,169 per member in the first year and the solution is paid only if members enroll (Success-Based Pricing model)

Sources: Capgemini Engineering: Getting Digital Therapeutics Right (2021) – Omada health website – Smart Pharma Consulting

Mika is a management DTx developed by the German company Fosanis, providing personalized support to cancer patients in their emotional condition, allowing to reduce distress and fatigue

Examples of DTx (2/3)

Mika

Fosanis	Mika
▪ **Fosanis** is a German-based digital health company founded by Dr. Finke and Dr. Raue in **2017** ▪ The company's goal is to accompany individuals with cancer through quality of life and outcomes of therapy improvement ▪ Mika has been developed in collaboration with **public actors** (e.g., University hospitals) and **industrial actors** (e.g., Amgen, BMS, Pfizer) ▪ Debiopharm Innovation Fund invested in May 2022, **€10M to broaden patient access** to the DTx Mika	▪ Mika is a personalized DTx that supports **cancer** patients in their **emotional distress** ▪ Mika consists of **AI-powered monitoring** and **coaching tools** allowing continuous tracking of patient distress and symptoms ▪ **Daily check-ups** are done through **e-PROs**[1] ▪ A **coaching section** is available with hundreds of **articles**, **videos** and **courses** to provide people with the information and emotional support they need, **completely tailored** ▪ The solution allows a **42% distress reduction** and a **23% fatigue reduction**

Sources: Mika website – Smart Pharma Consulting

[1] *Digital electronic patient-reported outcomes*

Somryst is a treatment DTx based on CBT intended to treat chronic insomnia, developed by Pear Therapeutics, a US-based company specializing in DTx development and commercialization

Examples of DTx (3/3)

Somryst

Pear Therapeutics

- **Pear Therapeutics** is a **US-based** leading company in developing and commercializing DTx
- Pear's DTx, **reSET**, for the treatment of substance use disorder, was the **first to receive marketing authorization** from the FDA to treat the disease
- The company also commercializes **reSET-O**, for opioid use disorder, and **Somryst** for chronic insomnia
- A **partnership agreement** has been signed with **Novartis' Sandoz unit** to expand sales and Marketing for the DTx reSET and reSET-O…
- …and to **develop novel prescription DTx** for schizophrenia and multiple sclerosis

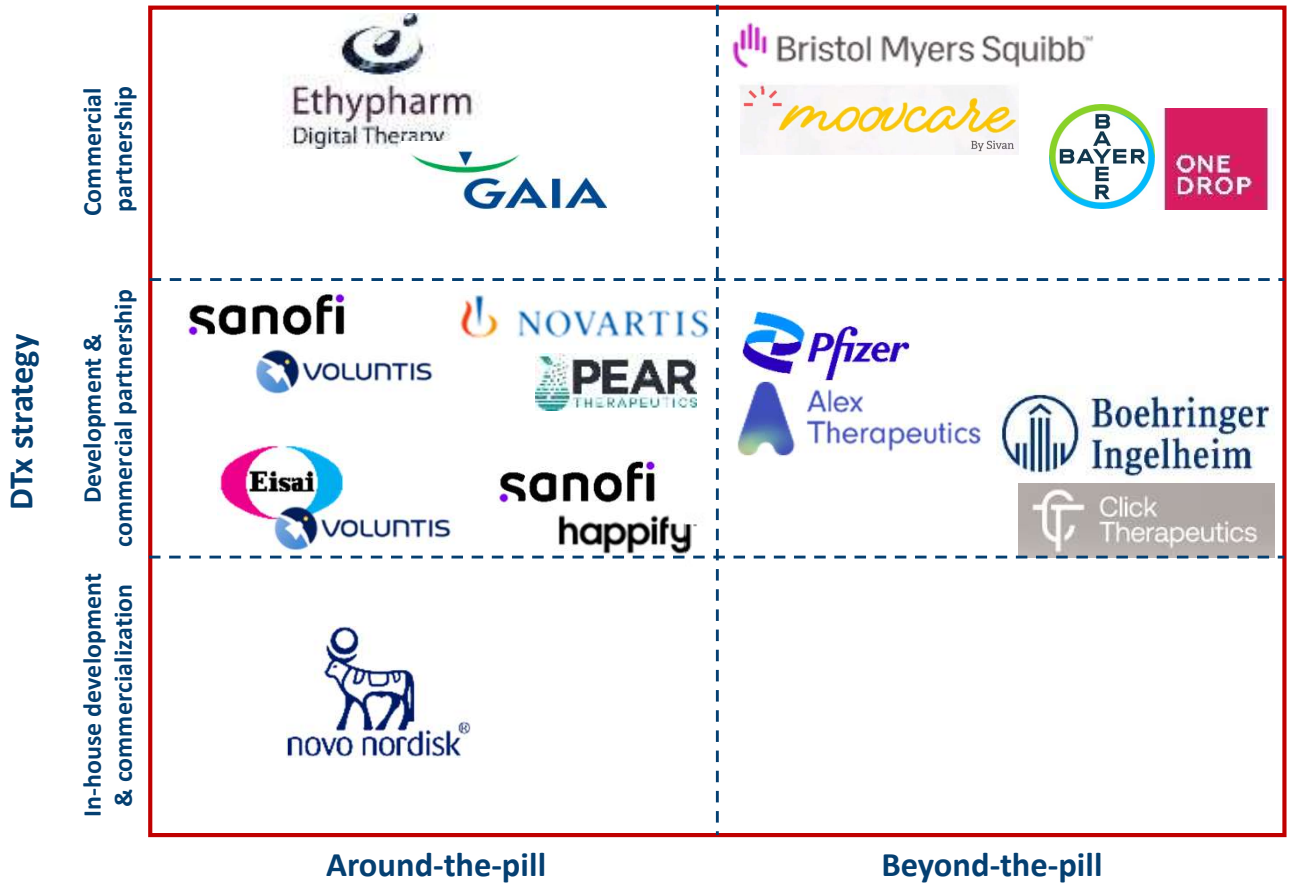
Somryst

- Somryst is a **treatment DTx**, FDA-authorized, intended for use in **chronic insomnia** and available on **digital devices**
- The 6- to 9-week program provides **digital cognitive behavioral therapy (CBT)** to improve the sleep through a 45 to 60 minutes use per week…
- … while providing clinicians with **real-time data** on patient progress through a dashboard
- The solution has proven **persistent benefits** at **6- and 12-months follow-up** and is recommended by the **American Academy of Sleep Medicine** and the **American College of Physicians**

Sources: Pear therapeutics website – Somryst website – Smart Pharma Consulting

Currently, pharma companies mainly opt for co-development of their DTx with expert players, for their around-the-pill and beyond-the-pill solutions

Pharma Companies DTx strategies



- Ethypharm, BMS and Bayer have opted for the licensing of a solution already developed by a DTx player to strengthen their value proposition
- Other pharma companies (e.g., Sanofi, Novartis) have opted for co-development of DTx with expert partners
- Development and commercial partnerships are currently the preferred entry strategy for pharma companies
- The 2 categories of DTx, "around-the-pill" and "beyond-the-pill" are of interest to pharma companies

Sources: Digital Therapeutics and Pharma: How Novartis, Sanofi and al. embrace DTx (2021) – Smart Pharma Consulting

Pfizer signed a commercial partnership with Alex Therapeutics, with an initial focus on Germany to develop a DTx for nicotine addiction

Examples of strategies implemented by Pharma Companies (1/3)

Alex Therapeutics

- **Alex Therapeutics** is a **Swedish platform** providing an operating system enabling a quick and effective development of DTx
- The company utilizes the **most well-established** and **evidence-based form of psychotherapy** to create treatments for psychiatric and somatic disorders
- Patients are supported through **exercises**, development of **coping skills**[1] and **educational content**
- Alex therapeutics develops DTx in partnership with **Pfizer** and **Vicore Pharma** in **nicotine addiction** and **depression** respectively

Pfizer partnership

- In 2022, Pfizer signed a **commercial partnership** with Alex Therapeutics, with an **initial focus on Germany**
- The joint effort consists in an AI-based platform integrating **Cognitive Behavioral Therapy** (CBT) and **Acceptance and Commitment Therapy** (ACT) to provide personalized standalone treatments
- The solution is a DTx, named Eila, treating nicotine addiction
- Pfizer is conducting a clinical trial to further validate the medical benefits of the solution and be available as a **reimbursable prescription DiGA**

Sources: Alex Therapeutics (2022 press release) – Smart Pharma Consulting

[1] *Coping skills help people tolerate, minimize, and deal with stressful situations in life*

BMS signed a partnership with Sivan, a DTx expert to deploy the Moovcare app, indicated to monitor patients with lung cancer

Examples of strategies implemented by Pharma Companies (2/3)

Sivan

- Founded in 2014, **Sivan Innovation** co-creates and develops solutions for early disease detection and improved management
- The company is a pioneer in **e-PROs** (Patient-Reported Outcomes)
- Sivan Innovation ambition is to become a leader in digital health solutions for patients with chronic diseases
- The company currently offers 2 digital applications, **Moovcare** for lung cancer and **Smokecheck**, to help smokers monitor their health and alert them to problems

Bristol-Myers Squibb partnership

- BMS, which is a leading oncology player, signed in 2020 a partnership with Sivan to **deploy the use of Moovcare amongst HCPs**
- Moovcare, which is a reimbursed **application** in France, provides a weekly questionnaire to **detect recurrences or complications** of lung cancer patients
- **Data** are **analyzed** by **the algorithm** and transmitted to HCPs in case of detected anomaly
- Improvement in **overall survival of +7.6 months** was observed (resulting from earlier detection and optimized treatment of patients) with a reduction of the care costs

Sources: Moovcare website – Smart Pharma Consulting

Ethypharm has signed a license agreement to market in four European countries a DTx indicated for depression and developed by the German DTx expert Gaia

Examples of strategies implemented by Pharma Companies (3/3)

Gaia

- Gaia is a **German company** focusing on evidence-based, safe and accessible DTx that help patients restore and maintain their mental and physical health
- Gaia focuses on neuroscience, depression, anxiety and immunology
- The company has:
  - Over **20 years** of experience
  - More than **70 products**
  - Clinically proven effectiveness in more than **19 RCTs**[1] and **2 meta-analyses**

Ethypharm partnership

- Deprexis is a DTx developed by Gaia, and **licensed to Ethypharm**, indicated for the treatment of depression
- Ethypharm commercializes Deprexis in France, Spain, Italy and the UK
- The solution offers **personalized techniques** and **exercises** based on **CBT**[2] in **addition to the usual care**
- The 90-day program is **reimbursed in Germany**[3], but not yet in France, where it is currently available at the patient's expense
- Deprexis showed to effectively reduce symptoms of depression in 13 RCTs as well as in real-life

Sources: Deprexis website – Ethypharm 2022 Deprexis press release – Smart Pharma Consulting

[1] Randomized Controlled Trials – [2] Cognitive Behavioral Therapy – [3] In Germany, the license has been granted by Gaia to the pharma company Servier

Advanced SWOT analysis (2022 – 2025)

DTx market Opportunities	Rate	DTX market Threats	Rate
Authorities		**Authorities**	
▪ Governments are willing to accelerate digitalization of the healthcare system and thus facilitate the development of DTx	3	▪ Regulatory frameworks and market access processes are not yet clearly defined in most countries, slowing down the development of the DTx market	4
Customers		**Customers**	
▪ Unmet medical needs (e.g., access to healthcare, patients' adherence, treatments' monitoring, healthcare efficiency)	4	▪ Low HCPs and patients' adoption and engagement	4
▪ Fast-growing development (e.g., AI[1], ML[2]) and access (e.g., smartphone, internet) to digital technologies	4	**Competitors / Partners**	
Competitors / Partners		▪ Most of the leading pharma companies entering in the market	4
▪ Willingness of / need for digital companies to partner	4	▪ Coexistence of free DTx solutions	3
Pharma companies Strengths	**Rate**	**Pharma companies Weaknesses**	**Rate**
Products		**Products**	
▪ Opportunities to leverage synergies between the product portfolio and DTx in certain TAs to enhance the global value	4	▪ Not all the products in all TAs may benefit equally from DTx added-value (e.g., acute treatments like anti-infectives)	2
▪ Know-how and expertise in clinical development process, regulatory environment and market access hurdles	3	**Services & Reputation**	
Services & Reputation		▪ Insufficient knowledge, expertise and culture in IT and digital technologies across the value chain	4
▪ Large access to HCPs	4	▪ Unclear vision and strategy re. the DTx opportunity	4
▪ Marketing skills to promote healthcare products	3	▪ Lack of agility and sense of urgency from pharma companies	3
▪ Culture of risk-taking through major investments	2		

Rate from 1 to 5 according to the importance of the criteria

Sources: Smart Pharma Consulting

[1] Artificial Intelligence – [2] Machine Learning

Pharma companies should evaluate opportunities to enter DTx market considering the potential synergies with their existing business and their favorable position in the healthcare ecosystem

The potential added-value of DTx for pharma companies

Context

Pharma companies, like MedTech companies, have a competitive advantage compared to technology giants or other non-traditional players because they yet operate in the healthcare ecosystem

Potential benefits

- Augmentation of the value of companion drugs
- Extension of the drug life cycle
- Access the real-time clinical data
- Access to real-world data
- Personalization of treatments
- Extension of the therapeutic offering
- Market entry into new TAs

Sources: Deloitte: Digital Therapeutics Catalyzing the future of health (2021) – Smart Pharma Consulting

If there is no doubt about the development of the DTx market, pharma companies should carefully evaluate the value of taking part in it, the most successful and least risky model to adopt

Key takeaways

DTx Market

- Despite the exponential affluence of DTx solutions developed by e-health start-ups…
- … **few** have yet **demonstrated** robust **clinical evidence** and **real-world outcomes**
- So far, DTx innovations address **mainly cardio-metabolism**, **CNS** and **oncology diseases**

Key barriers

- Current medico-economic **evaluation** processes are **not well-adapted** to DTx
- The number of **DTx reimbursed** by public and/or private health insurers is still **very limited**
- Most of **HCPs** do **not** consider DTx as **serious** therapeutic **options**
- In real-world conditions, **patients** are **not very compliant**, nor **persistent**, while using DTx

Business strategy

- Pharma companies have the choice to develop "**around-the-pill**" digital companions, to complete and improve the value of (their) existing products or…
- … "**beyond-the-pill**" solutions offering an alternative to existing treatments

Recommendations

- Pharma companies must keep in mind that **DTx is a tough market** with **no easy money**
- Thus, before deciding to enter this new business, they must **develop** a **robust business case**
- At this stage of the market maturity, **partnerships with start-ups** seem to be the **best option**

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Generative AI for Pharma Companies

What practical applications?

POSITION PAPER June 2023

The objective of this paper is to evaluate the current and future value of Generative AI, of which ChatGPT is currently the most well-known, for the pharmaceutical industry activity

Introduction

OBJECTIVE

- Evaluate what is the current and future value that can be expected from Generative AI and what are the implications for pharma companies' R&D, medico-marketing and sales functions

DEFINITIONS

Generative AI
(Generative Artificial Intelligence)

- Generative AI is a type of AI that can create a wide variety of data (e.g., images, text, videos) and produce new content by learning patterns from existing data (it is a subset of machine learning)
- This technology can produce complex and valuable content for many industries such as healthcare

GPT
(Generative Pretrained Transformer)

- Language generation model based on the Transformer architecture using deep learning to generate human-like text by leveraging large amount of existing data
- It has been launched by Open AI[1] in November 2022 and is widely used for translation and question answering

Transformer

- Transformer is a neural network architecture used in natural language processing that employs mechanisms to understand the relationships between words in a text sequence
- Transformers have been successful due to their ability to capture contextual relationships and generate high-quality outputs

Sources: Generative AI.net – Smart Pharma Consulting

[1] OpenAI is a "capped for-profit" AI-specialized company based in San Francisco

Generative AI players, who are mainly tech specialists, develop solutions that benefit different healthcare stakeholders, such as pharma companies, HCPs and patients

Generative AI ecosystem

Generative AI players

- Generative AI developers are mainly purely tech players, whether they are large companies' or specialized start-ups (e.g., Google/Alphabet, OpenAI, DeepBrain)
- Some players are, in addition to being experts in Generative AI, totally dedicated to the health domain (e.g., Insilico Medicine, BenevolentAI)

Pharma players

- Some pharma companies have established partnerships with Generative AI players…
- … to strengthen their business from R&D to marketing (e.g., Pfizer with Insilico Medicine)

HCPs

- HCPs can benefit from Generative AI to optimize their practice
- These tools can be used to assist in diagnosis (e.g., medical imaging), personalize treatments, provide an easy access to structured and relevant medical information, etc.

Patients

- Patients can use Generative AI tools to get quick access to medical advice (e.g., medical chatbots), enhance their role in the management of their care (e.g., medical information, treatment management)

Sources: Smart Pharma Consulting

The utility of Generative AI lies in its ability to generate new creative content, automate tasks, and provide innovative solutions

Key attributes of Generative AI technologies

Text generation

- Text generation involves using machine learning models to generate new text based on existing data
- It has numerous applications such as chatbot or textual content creation (e.g., ChatGPT)

Image generation

- Image generation is a process of using deep learning algorithms to create new images that are visually similar to real-world images
- It can be used to create art or generate product images (e.g., MidJourney and DALL-E)

Video generation

- Video generation involves deep learning methods to generate new videos by predicting frames based on previous frames and possibly to generate also a speech in parallel
- Video / speech generation can be used as virtual assistants or tutorials (e.g., DeepBrain)

Data generation

- Beyond the previous applications, Generative AI can be used to predict and generate new complex results based on the analysis and processing of existing knowledge (e.g., code)
- For example, in healthcare, it can be used for new drug candidate development, clinical trial design or synthetic medical data production to train machine learning models

Sources: McKinsey: Exploring opportunities in the Gen AI value chain (April 2023) – Generative AI.net – Smart Pharma Consulting

Generative AI companies — both existing enterprises that are adding generative AI to their solution stacks and new generative AI startups — are growing very quickly and strongly

Key Generative AI players

Company	Key products	Areas covered			
		Text	Image	Video	Data
OpenAI	▪ GPT (-3, -4, Plus) / DALL-E / Whisper / InstructGPT	✓	✓		
Alphabet Google	▪ Generative AI App builder / Bard / DeepMind	✓	✓		✓
Microsoft	▪ GitHub Copilot / AI Enhanced Bing and Edge / Microsoft Copilot	✓	✓	✓	✓
cohere	▪ Generate / Summarize / Classify / Embed	✓			✓
Hugging Face	▪ BLOOM / AutoTrain / Inference endpoints	✓			✓
Jasper	▪ Jasper Art / Jasper Chat	✓	✓		

- Most of the main Generative AI players are pure tech players
- Microsoft has invested € 10 billion in Open AI which is currently the figurehead of Generative AI
- Data area mainly corresponds to code generation and algorithms

Sources: eWeek: Generative AI companies: Top 12 leaders (April 2023) – Companies websites (as of May 2023) – Smart Pharma Consulting

Most Generative AI companies in healthcare focus on R&D, and mainly operate through partnerships with pharmaceutical companies

Key Generative AI healthcare & life sciences players

- Most Generative AI companies specializing in healthcare primarily focus on R&D, particularly in drug discovery…
- …while use is less common in other functions (e.g., Marketing & Sales)
- Generative AI tools include chatbots for patients, HCPs, and pharma companies' teams to gather, synthesize, and analyze medical information
- Most of these companies also form partnerships with pharma companies (e.g., AstraZeneca and BenevolentAI)

Sources: Healthark: Generative AI in healthcare and life sciences (2023) – Smart Pharma Consulting

Generative AI excels in its ability to generate creative content efficiently, but it faces challenges in potential bias of data quality, ethics, transparency and resource requirements

Assessment of Generative AI

STRENGHTS

1. Creativity and Novelty: Help businesses be more creative and generate new ideas and concepts
2. Efficiency and Speed: Can be used to automate repetitive tasks and processes, and is able to quickly generate content and solutions
3. Adaptability and Flexibility: Possibility to train the tool on large and varied databases
4. Improved decision-making: Generated data allows to make decisions based on more robust rationales

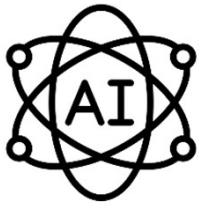
WEAKNESSES

1. Ethical concerns: Ensuring transparent and ethical use of Generative AI is a challenge
2. Bias of data: Models can inherit biases present in the training data which may lead to unfair outputs
3. Quality of data: Lack of contextual and nuances understanding which can generate incorrect or nonsensical content
4. Resource intensive: Generative AI requires specialized hardware and software, as well as trained and skilled teams

Sources: Speak AI: Advantages and disadvantages of generative AI (December 2022) – Generative AI in pharmaceutical Industry (Xenonstack 2023) – French academy of technologies – Smart Pharma Consulting

As Generative AI technology continues to develop, drug R&D efficiency should raise due to discovery of better drugs at a much lower cost as manual curation of data will be replaced by NLP[1]

Application of Generative AI to R&D



- Along with predictive AI, Generative AI is a promising tool in R&D
- Thus, Generative AI can be used to:
  - Create compounds or protein-based therapeutics, *de novo*, with higher efficacy and better safety (e.g., In 2020, researchers from the UCSF[2] used generative AI to create a new drug that is effective against a type of cancer that is resistant to traditional treatments)
  - Design new drug delivery systems, enhancing the clinical outcomes (e.g., In 2021, a team of researchers from the MIT used Generative AI to design a new drug delivery system that can improve the efficacy and safety of cancer drugs)
  - Personalize treatments for patients (e.g., In 2022, researchers from Oxford University used Generative AI to create a personalized treatment plan for a patient with cystic fibrosis)

HUMA.AI

- Huma.AI launched in March 2023 is an AI platform to accelerate the development of life-saving drugs through better usage of their data
- Its natural language processing platform connects and searches multiple, disparate, unstructured data, returning answers to questions in seconds
- It analyzes private enterprise data from multiple sources and its "expert-in-the-loop" approach leads to the high accuracy

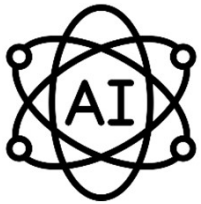
Note: Nvidia has recently introduced the BioNeMo Cloud Service[3] which offers pre-trained AI models to drug researchers. This service aims to streamline the drug discovery cycle and enhance its efficacy

Sources: PharmExec: Huma.AI launches industry's first generative AI platform for life sciences (2023) – "Future of generative AI in pharma and it's breakthrough potential" Arivukkarasan Raja (May 2023) – Smart Pharma Consulting

[1] Natural Language Processing – [2] University of California, San Francisco – [3] Currently used by Amgen and other pharma companies

Generative AI can improve medical affairs activities, from collection and analysis of medical insights to their delivery to various stakeholders

Application of Generative AI to Medical Affairs



- Medical content generation: Generative AI can assist in generating medical content, such as scientific articles, conference abstracts and sump up existing research and clinical data to provide, and help streamlining the creation of evidence-based content
- Medical data analysis: Medical data, such as RWE or PROMs[1], can be analyzed through Generative AI to identify correlations and patient pathway insights
- Medical information/education chatbots: AI-powered chatbots provide quick and accurate information to HCPs, and are also used for enhancing internal medical education and training
- KOL identification: Generative AI models can analyze vast amounts of data (e.g., publications, clinical trial participations) to identify and rank Key Opinion Leaders for potential collaborations
- Medical event planning: Generative AI analyzes historical data from medical events, such as conferences and symposiums, to generate insights on attendee preferences, topics of interest, and session formats

Sources: PharmExec: Huma.AI launches industry's first generative AI platform for life sciences (2023) – ACMA: 5 ways Artificial Intelligence will change Medical Affairs (2021) – Healthark: Generative AI (2023) – Smart Pharma Consulting

[1] Patient-Reported Outcome Measures

Medical affairs can leverage generative AI to enhance medical data research and analysis efficiency, and to optimize clinical trials design and implementation

Application of Generative AI to Medical Affairs: case studies

- Generative AI could provide MSLs with advanced search and data analysis capabilities
- This translates into:
  - Rapid synthesis of vast amounts of scientific and medical data to stay updated
  - Accurate interpretation to identify key insights and trends, and deliver the most valuable information
  - Better time management to focus on higher value tasks

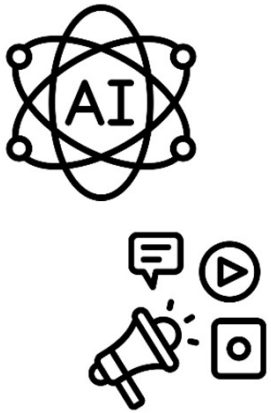
- Medical Affairs teams can leverage Generative AI to enhance design of clinical trials
- Protocol can be designed by analyzing historical ones and identify potential bottlenecks and refine end points to optimize them
- Generative AI can help Medical Affairs teams to predict patient outcomes based on different factors (e.g., treatment regimen, genetic profile)
- This use allows the optimization of clinical trials and their results

Sources: IQVIA: Why and how medical affairs team should capitalize on using NLP (2023) – PharmExec: Huma.AI launches industry's first generative AI platform for life sciences (2023) – Smart Pharma Consulting

[1] Healthcare start-up – [2] Developed by Open AI

Generative AI can be used to enhance the efficiency of the marketing department by refining the knowledge of the environment and the personalization of the communication

Application of Generative AI to Marketing



- Customer experience journey: Generative AI can analyze customer engagement data and generate customer journey maps to better understand how customers interact with the brand and identify opportunities for improvement
- Branding and messaging: Impactful branding and messaging based on customer data and insights can be generated by AI to provide content and solutions across the omnichannel approach
- Market research: Generative AI models can identify trends, patterns and insights from literature or social media conversations, and allow a deeper understanding of patients and HCPs preferences
- Material and chatbots: AI tools can generate hyper-personalized content and creative formats for promotional materials, with the most optimized support and within the regulatory constraints
- Digital marketing optimization: The model can be used on internal information to analyze customer data and generate optimization algorithms, to improve promotional campaigns, social media advertising[1]

Sources: Pharma Marketing: Leveraging Generative AI to support Commercialization activities of Pharmaceutical products (2023) – "Future of generative AI in pharma and it's breakthrough potential" Arivukkarasan Raja (May 2023) – Smart Pharma Consulting

[1] In countries and for products it is allowed

Novartis and Merck & Co have used Generative AI to improve their marketing activities, both during launch and after commercialization

Application of Generative AI to Marketing: case studies

NOVARTIS

- Novartis has used Generative AI to identify brand names for its drugs
- The company used an algorithm that analyzed thousands of potential names and selected the most relevant options based on:
  - Brand availability
  - Customer preferences
- Accenture estimated that the use of Generative AI in drug branding and launch can result in cost savings of up to 25% and improve market access

MERCK

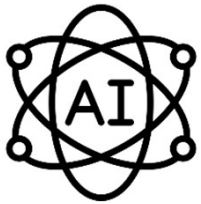
- Merck & Co implemented "Carla[1]", a chatbot designed to improve customer service for fertility drugs[2]
- Carla uses Generative AI to answer customer inquiries and provide personalized recommendations based on customer's individual needs and preferences
- Since implementing Carla, significant improvements in customer satisfaction have been achieved…
- …and a reduction in response times

Sources: Manas Das: The power of generative AI in pharmaceutical industry (2023) – Healthark: Generative AI (2023) – Smart Pharma Consulting

[1] Conversational Agent in viRtual reaLity with Analytics – [2] Since June 2021, the fertility portfolio of Merck & Co is part of Organon which has become an independent, standalone, publicly traded company

Generative AI tools can assist pharma sales reps to gain a deeper understanding of customer needs and preferences, improve sales strategies and positively differentiate from competitors

Application of Generative AI to Sales



- Sales content generation: Generative AI can be used to generate persuasive and engaging sales content such as sales speech or e-mails and provide personalized messaging tailored to different customers according to their profile
- Next-best action and call plans: The model can help sales reps by generating customized actions for each customer depending on the customer journey and proposing the most appropriate and engaging actions
- Customer segmentation and targeting: By analyzing customer data, generative AI can identify patterns and segment customers based on their behaviors and practice, and can also generate a list of relevant prescribers that were out of target
- Sales training and simulations: Generative AI tools can create sales scenarios or virtual training environments for sales teams which improves their sales techniques, objection handling skills, and product knowledge through interactive simulations
- Sales performance: Generative AI models can help analyzing sales data and provide insights on performance (e.g., script rates, script drivers, physician conversion rates) and make recommendations for performance improvement

Sources: Mayank Misra: Leveraging Generative AI to support sales activities of Pharmaceutical products (2023) – Pharma Marketing: Leveraging Generative AI to support Commercialization activities of Pharmaceutical products (2023) – Smart Pharma Consulting

Generative AI holds a huge potential in efficiently managing schedules and optimizing productivity, revolutionizing the way sales reps streamline their time and activities

Application of Generative AI to Sales: case studies

- Generative AI tools represent a valuable opportunity for sales reps to manage their time
- For example, it could generate in a couple of seconds a list of physicians that have not been contacted for 90 days to schedule meetings
- Generative AI model could also provide a time management plan according to:
  - Internal data (e.g., availability, objective)
  - External data (e.g., HCPs availability, traffic status to optimize the travel time)

sanofi merative

- Sanofi has partnered with IBM Watson Health, now Merative[1], to develop Sanofi Genie
- Sanofi Genie is an AI-powered virtual assistant for sales reps which answers sales questions…
- …and provides personalized recommendations based on sales data and activity
- The tool helps sales reps to quickly find the information they need and improve their impact in activity and performance

Sources: Harvard Business Review: Generative AI will change your business. Here's how to adapt (2023) – AI is transforming the way business approach Sales training (2023) – Smart Pharma Consulting

[1] IBM sold the Watson Health entity to Francisco Partners, which made it a separate company, Merative

In a near future, the development of Generative AI will significantly enhance the robustness, effectiveness and efficiency of the various existing tools and systems

Near future Generative AI development and impact

DEVELOPMENTS	IMPACT
▪ Research in Generative AI is focusing on more efficient and effective training methods development (e.g., self-supervised learning)	▪ Enhanced training of Generative AI models makes outputs more qualitative (e.g., ChatGPT-4 vs. ChatGPT-3)
▪ Development of more robust and flexible generative models able to produce multi-modal contents	▪ More complex and varied outputs across a wider range of tasks and domains
▪ Another area of research is focused on developing models that are better able to understand the input context	▪ Generation of more accurate content and production of more coherent responses ▪ This area of work is key for scientific use

"Generative AI has started to revolutionize the way Pharma companies operate along their value chain"

Sources: The evolution of generative AI: a journey from Eliza to deep learning (April 2023) – Mayfield: Generative AI and the future of Artificial Intelligence (March 2023) – Smart Pharma Consulting

Smart Pharma
CONSULTING

Hospital Value-based Procurement

Application to Pharmaceuticals in France

"Price is what you pay & value what you get"

Warren Buffett

POSITION PAPER January 2022

Smart Pharma Consulting explored to which extent the development of services associated with pharmaceuticals enables to win hospital tenders without been the lowest bidder

Context – Objective – Methodology

Context

- Competition on pharmaceuticals is intense, leading to drastic decrease of purchasing prices through the hospital tender process
- The performance of pharma companies on the hospital market is strongly altered, especially for their brands competing with me-too, biosimilar or generic products

Objectives

- To slow down the erosion of purchasing prices, pharma companies have proposed services directly related to their product procurement and use
- Smart Pharma Consulting wishes to explore the opportunity to apply the concept of Value-based Procurement to pharmaceuticals sold to hospitals in France

Methodology

- Literature search regarding the concept of value (e.g., economic, perceived, experiential, social, relational) and…
- … its application to medical devices and pharmaceuticals bought by hospitals
- Interviews of stakeholders operating on the French hospital market:
  - 2 pharma companies
  - 6 purchasing groups (national – regional)
  - 1 central referencing office

Sources: Smart Pharma Consulting

The Value-based Procurement (VBP) is part of the Value-based Health Care (VBHC) which put into perspective the best outcomes for patients at the best possible cost

Key definitions

Value

- The term "Value" refers to the benefit one gets for a certain cost
- It is a notion relative to efficiency

$$\text{Value} = \frac{\text{Benefits}}{\text{Costs}}$$

Value-based Health Care (VBHC)

- Value-based Health Care is about achieving the highest health gains (outcomes) for patients, against the total cost of care
- The most powerful lever for reducing cost is improving outcomes

$$\text{VBHC} = \frac{\text{Health outcomes that matter for patients}}{\text{Total costs over the full cycle of care}}$$

Value-based Procurement (VBP)

- Value-based Procurement, in line with the VBHC approach, considers the price of a product, or a service, the outcomes for patients, the reduced total cost of care, and the benefits for HCPs, hospitals, the health care system and the society

$$\text{VBP} = \frac{\text{Outcomes for patients and other stakeholders}}{\text{Total costs (incl. care delivery)}}$$

Sources: Value-based healthcare and the role of outcomes. M. Porter (2016) – Value-based pricing in pharmaceuticals. KPMG (2019) – Smart Pharma Consulting analysis

The Value-based Procurement is a purchasing approach that considers the global value of an offer, with respect to the actors of the value chain, beyond the price criterion

Value-based Procurement – Key principles (1/2)

- Health care systems continue to face escalating costs, low-value care, and huge disparities in patient outcomes
- In this context, Value-based Procurement (VBP) can have a significant impact
- VBP is defined as the attempt of procurers to use their purchasing power to stimulate competition on criteria other than price or on price in combination with other criteria
- This approach focuses not only on the price of a particular product or service but also on the overall value of the solution it can create, in terms of improved outcomes for patients, reduced total cost of care, and benefits to stakeholders (e.g., hospital workers)
- As a result, it is becoming an important lever for improving the quality of care and the financial sustainability of providers and health care systems
- In 2014, the European Parliament and Council passed a directive on public procurement that encourages contracting authorities to move away from price-focused procurement
- Therefore, many buyers are shifting from a traditional approach based on single-unit cost-saving to a more holistic approach, encompassing long-lasting performance evaluation, including the highest possible number of stakeholders and wider sets of indicators
- In France, the DGOS[1] has launched in October 2011 the program PHARE[2] to generate "intelligent savings", including the implementation of the Total Cost of Ownership[3] (TCO) approach, as described in ARMEN[4] 6 project (2019), representing a first step towards the Value-based Procurement

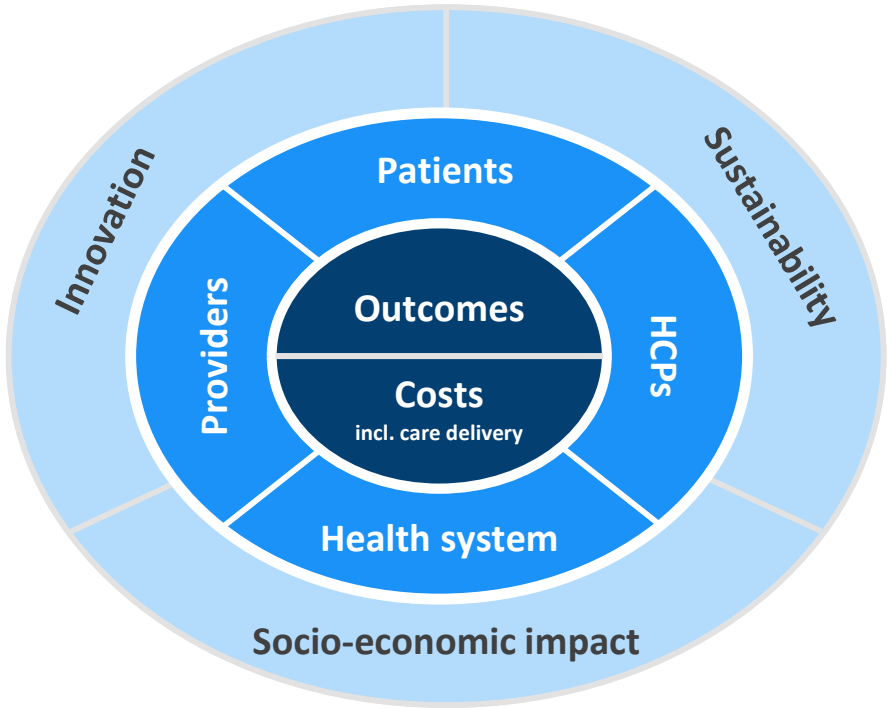
Sources: BCG: How Procurement Unlocks Value-Based Health Care 2020 – Pay less and spend more: the real value in healthcare procurement 2019 – Value-based procurement of hospital Medicines Denmark (VIVE 2018) – Smart Pharma Consulting analysis

[1] Direction Générale de l'Offre de Soin (General Directorate of Health Care Offer) – [2] Performance Hospitalière pour des Achats Responsables (Hospital Performance for Responsible Purchasing) – [3] Includes costs related to the product procurement and use – [4] Consists in identifying initiatives of savings coming from best practices

For procurers and providers, Value-based Procurement leads to improved patient outcomes, lower total costs[1] and increased benefits for other stakeholders, such as HCPs

Value-based Procurement – Key principles (2/2)

Value-based healthcare



Core value: outcomes vs. costs

Other benefits for key stakeholders

Broader impact on society

- In the EU, the costs of care delivery (e.g., HCPs time spent preparing or dispensing drugs, usage of infrastructures) account for ~70% of total health care costs
- Thus, focusing on cutting the cost of procured drugs is not the most effective strategy to contain costs
- A more holistic approach is needed, considering:
  - Costs (e.g., purchasing, ordering, storage, decommissioning, care delivery)
  - Patient outcomes (clinical efficacy and safety, quality of life)
  - Other benefits for key stakeholders:
    - Secondary patient benefits (e.g., convenience, adherence)
    - HCPs' benefits (e.g., secure usage, ease-of-use, training)
    - Providers' benefits (e.g., support on administration, storage or logistics, in improving efficiency along the patient pathway)
    - Health care system benefits (e.g., reduce rehospitalization, # of treatments, of hospital days, long-term costs of treatment)
  - Broader impact on society (e.g., development of innovations, sustainable development, corporate social responsibility, socio-economic impact, such as on absenteeism)

Sources: BCG: How Procurement Unlocks Value-Based Health Care 2020 – Smart Pharma Consulting analysis

[1] *Through reduced complications and inefficiencies*

The hospital in Bordeaux has included, in its call for tender for infliximab, 60 points out of 100 to measure the value-added services, beyond the economic and therapeutic criteria

Application to pharmaceuticals (1/3)

Context

- A tender for infliximab at the University Hospital of Bordeaux, France included both, the originator (Remicade) and a biosimilar (Remsima)
- The tender process comprised a points-based weighting system that addressed factors related to therapeutic and technical interest, economic factors and Value-added services (VAS)

Hospital of Bordeaux VBP arrangement

- Criteria for Value-added services beyond price[1] for tendering for Infliximab were:

– Adaptation of the packaging to the use	Product presentation Total score (points): 25	5
– Readability of the labeling		5
– Health traceability support		5
– Stability data		10
– Information from the prescriber on latest scientific data	Contribution to product good use Total score (points): 35	10
– Provision of information to patient re. the drug		10
– Help in clinical follow-up of treatment, including measurement kits of infliximab concentration		15

- Value-added services could play an important part in the sustainability of biosimilars, and better address patient needs where tendering predominates

Sources: Tendering and Biosimilars: What role for value-added services 2019 by S. Simoens et al – Smart Pharma Consulting

[1] *On a total of 100 points, services accounted for 60 points*

Novartis has set up a VBP arrangement, based on the efficacy results of its innovative drug product, Entresto, indicated in severe chronic heart failure by developing associated measurement tools

Application to pharmaceuticals (2/3)

Context

- Entresto (sacubitril/valsartan) is an innovative drug for treating severe chronic heart failure
- Novartis claims this is the first new drug that can demonstrably lower mortality rates when compared to other treatments

Novartis VBP arrangement

- In February 2016, Novartis signed VBP agreements with US-based health insurers, with payments depending on the reduction in proportion of patients admitted to hospital for heart failure
- Novartis developed metrics to measure "reduced hospitalization"
  - Incorporating "hospitalization" as a clinical endpoint
- Novartis developed a tracking tool to measure outcomes
  - Before the launch, they developed a remote monitoring device to overcome the lack of technology infrastructure

- Launch sales were below the forecasted sales (USD 20 M) but according to analysts, global sales will reach USD 5 B in 2025
- Getting VBP right is likely to be a crucial factor in the growth potential for this drug, which should ideally benefit all stakeholders

Sources: KPMG: Value-based pricing in pharmaceuticals (2019) – Smart Pharma Consulting

The Herlev-Gentofte hospital, in Denmark, has set up a VBP partnership, to implement patient treatment monitoring in renal carcinoma and optimize patient pathway

Application to pharmaceuticals (3/3)

Context

- Non-clear-cell renal carcinoma care led to clinical problems such as patients with relatively bad prognosis, treatment complications and side effects and treatment insufficiently patient-centric
- Economic problems also occurred with a focus on direct treatment costs only

Herlev-Gentofte VBP arrangement

- In 2018, Herlev-Gentofte hospital signed a partnership agreement with Roche, the selected vendor, and additional agreements on home-monitoring devices and monitoring software
- Outcomes: increased PFS[1] and O/S[2], reduced treatment complication, reduced hospitalizations and visits
- VBP criteria focus on total cost of care cycle: diagnosing, patient monitoring, treatment, medication, hospitalization, hospital visits

- As a result, patients benefited from a prolongation of life expectancy and an improved quality of life
- Regarding the hospital, it had access to a wider range of treatment options, improved RWE data and insights into patient home condition and medical teams can compare the holistic value of treatments, and thus select the best option

Sources: Implementing Value-Based Healthcare in Europe (EIT Health 2020) – https://www.vbpconference.eu/team-4 – Smart Pharma Consulting

[1] Progression-free survival – [2] Overall survival

Cost containment policies tend to make hospital prescribers increasingly concerned about the costs induced by their prescriptions either for in- or out-patients

Cost of hospital-prescribed drugs

Drugs dispensed at hospitals

- Since 2004, hospital expenditures are covered by the National Health Insurance Fund according to their activity level, based on a fixed fee-for-service model, called T2A[1]
- Thus, hospitals have a strong incentive to pay the lowest price, for drugs to achieve a balanced budget
- For drugs on "top of T2A" and/or on the retroceded list, hospitals are reimbursed by the National Health Insurance Fund, at the reference price set by the CEPS[2]
- However, hospitals may buy at a lower price, and in such a case, the savings will be equitably distributed between hospitals and the National Health Insurance Fund

Lower cost drugs (i.e., biosimilars, generics) may contribute to reduce hospitals costs, but in a limited proportion, knowing that drugs account for ~2% of total hospital budget[3]

Drugs dispensed at retail pharmacies

- In 2010, the Social Security Act introduced a measure to contain the cost of drugs dispensed in retail pharmacies, but prescribed by hospital physicians, as this cost was increasing faster than the primary care prescriptions costs
- This measure sets an annual maximum growth rate of drug expenditure related to hospital prescriptions that are delivered at retail pharmacies
- If exceeded, the ARS[4] may place the offending hospital under its supervision to compel it to improve prescribing practices, and may possibly demand financial penalties

Prescription of biosimilars may help better control the cost evolution of drugs prescribed by hospital physicians and delivered in retail pharmacies

Sources: sante.gouv.fr/tarification-a-l-activite.html – LFSS 2010 (article 47) – Smart Pharma Consulting

[1] Tarification à l'activité – [2] Drug pricing committee – [3] Salaries account for ~72%, food, accommodation and general expenses for ~11%, and other medical expenses for ~15% (including on-top of T2A and retroceded, drugs, that are not funded under hospital budget) – [4] Regional health agency

Tenders are generalized in public hospitals and non-for-profit private hospitals[1] when products are not in a monopolistic position, in other cases negotiations take place on a one-to-one basis

Hospital drug purchasing

Tender procedures[2]

- Invitations to tender are published in the Gazette
- Tender procedures are mandatory in the public sector[2]
- The supplier is selected in view of the best price and service offer (e.g., training, medical information, etc.)
- Tenders can be broken when there is a major change in the market (e.g., entry of generics, biosimilars, major innovation)
- 4 selection criteria are used with different weights[3]:
  1. The technical and therapeutic value of the product (therapeutic indications, safety profile, dosage forms, etc.) [~50%]
  2. The economic aspects (price, commercial conditions) [~30%]
  3. The manufacturer performance (e.g., logistic, reliability of supply) [~18%]
  4. The manufacturer CSR[4] initiatives [~2%]

The price reduction offered through invitations to tender can reach: **40% or more with the original brands; 80% for biosimilars and 99% for generics** depending on competition and original brand's alignment strategy

One-to-one negotiations

- One-to-one negotiations quasi-exclusively concern private hospitals and are usually done through central purchasing offices
- Needed volumes are sent to the company that the hospital wants to work with
- These negotiations usually happen for drugs in a monopoly, most often in the private sector
- Negotiations are based on prices and services provided to the hospital
- In the public sector, one-to-one negotiations are mandatory for orders superior or equal to € 40,000 (excl. taxes) and inferior to € 214,000 (excl. taxes)

The price cut, through one-to-one negotiations, can reach **40% with the original brands**

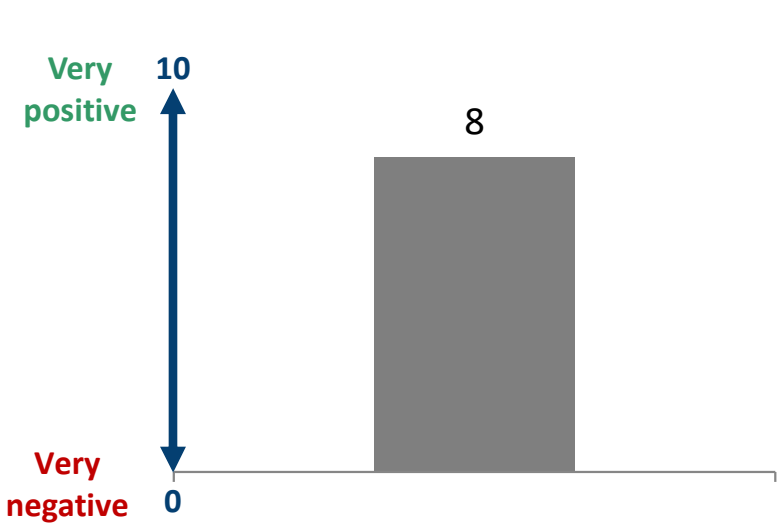
Sources: Smart Pharma Consulting analyses after interviews with hospital pharmacists (public and private sectors) and an expert of the French Hospital market in January 2020

[1] ESPIC – [2] Mandatory for orders superior or equal to € 214,000 (excl. taxes) – [3] The weight is indicated in percentage in brackets – [4] Corporate Social Responsibility

If hospital buyers are positive regarding VBP applied to hospital drugs, the number of cases on which best bidders have won over lowest bidders are not frequent

VBP & premium price for hospital drugs

What is your opinion regarding VBP applied to hospital drugs?



- *"It is yet the case for SC[1] and IV[2] forms for the same product"*
- *"I am opposed to buy a product on the sole economic criteria"*
- *"The valuation is limited to the hospital boundaries"*
- *"It is difficult to objectify and thus compare the value of services"*
- *"For biosimilars or generics we compare other criteria than molecules, which are identical"*

- *"I wish I could carry out full cost analyses, including pharmaco-economic studies, with real world data, at hospital level"*
- *"Services are used to differentiate competitors with similar prices"*
- *"The service proposed, for a higher drug price, should be useful for all or most of the hospitals subscribing to the buying group"*
- *"Legal aspects must be checked. We don't want to be sued for discriminating requirement specifications"*

Sources: Interviews of 8 hospital buyers – Smart Pharma Consulting analysis

[1] Subcutaneous – [2] Intra Venous

Services related to drug procurement are routinely assessed by hospital buyers, reconstitution aspects may differentiate certain drugs and sustainable development is becoming important

Services directly impacting hospital pharmacists

Procurement[1]

- The components of procurement are evaluated on a routine basis by buyers
- They are a prerequisite to be fulfilled to avoid disqualification
- Payment terms (e.g., cash discounts, end-year rebates, compensable drug gaps[3]) may create a difference

Reconstitution[2]

- Ready-to-use formulations vs. lyophilizates can win bids with a premium price of up to 20%, but it is not guaranteed
- Preservation at room temperature and longer stability are valued while selecting drugs
- However, amongst generics or biosimilars there is no much differences

Sustainable development

- Not yet significantly discriminatory…
- … but the pressure from politics is increasing
- Manufacturing location, quantities of cardboard, recycled materials, etc. are increasingly valued and could weigh 3 to 5 points[4]

Sources: Interviews of 8 hospital buyers – Smart Pharma Consulting analysis

[1] Ordering, delivery, storage, returns, payment terms – [2] Of drugs such as anticancer drugs – [3] Ecart Médicament Indemnisable (EMI) – [4] Out of 100

Services related to drug dispensing, time saving, and patient care optimization do not enable to differentiate similar drugs[1]; while those impacting patients are not considered to select drugs

Services directly impacting nurses – physicians – patients

Nurses

- When there are different formulations (e.g., SC and IV) for the same product in general, they are bought separately
- Time savers like unitized packaging, SC vs. IV, ready-to-use formulations are a plus to win a bid, but not necessary at a better price
- A non-proven benefit will not be considered

Physicians

- The potential benefit of a given product on patient care must be demonstrated
- Comparative studies should be carried out
- As per current public call for tender regulations, it is difficult to associate such a benefit in the evaluation of drugs

Patients

- Little importance is given to patient opinion in hospital care
- In rare cases, convenience of a drug vs. another one can be considered, but mainly for day care
- Different devices will play a possible role for drugs used in ambulatory care for chronic diseases

Sources: Interviews of 8 hospital buyers – Smart Pharma Consulting analysis

[1] *Such as certain me-too products or products facing generics or biosimilars competition*

The Value-based Procurement applied to drugs will contribute to improve the efficiency of the healthcare system, provided sellers and buyers collaborate fulfill four well-identified prerequisites

Vision & Recommendations

- It should take 5 years or more of join collaboration between health authorities, hospital buying groups and suppliers, to define the rules to extend the Value-based Procurement approach beyond procurement and use criteria

- The implementation of the Value-based Procurement approach to patient journey, hospital and healthcare systems will require to:
  1. Change the performance indicators of hospital buyers which are currently mainly based on reduction in purchasing costs
  2. Evaluate the value of purchases over a 3- or 4-year period
  3. Develop a reliable and accepted set of measurement tools to objectify the benefits created by the purchased drugs and their possible associated services
  4. Demonstrate a mutual and balanced benefit for the seller and the buyer

- The Value-based Procurement approach, unlike the cost-based approach, represents a serious option to contribute to improve the global healthcare system, in the interest of citizens

Sources: Smart Pharma Consulting analysis

Smart Pharma
CONSULTING

Patient-centric Strategy

BEST-IN-CLASS SERIES

What Patient Services Pharma Companies should propose?

POSITION PAPER

September 2016

This section proposes guidelines to define a patient-centric strategy and the corresponding initiatives to create value for all stakeholders

Key issues addressed

1. What does patient centricity mean?

2. Why is patient centricity essential?

3. How to craft a patient-centric strategy?

4. How to implement patient-centric initiatives?

"Put patients first and profits will follow" – George W. Merck[1]

[1] *Adapted from the following quote of George W. Merck, Former President & Chairman of Merck & Co: "We try never to forget that medicine is for the people. It is not for the profits. The profits follow, and if we have remembered that, they have never failed to appear. The better we have remembered it, the larger they have been"*

More and more pharma companies have been communicating over the past years that patients are at the heart of their strategy

Is it a buzzword? (1/3)

Illustrative[1]

AstraZeneca

"Our business is focused on making the most meaningful difference to patient health through great medicines"

"We are dedicated to improving the quality of human life by enabling people to do more, feel better and live longer"

gsk

janssen

"Driven by our commitment to patients, we bring innovative products, services and solutions to people throughout the world"

"We make products and services with the purpose of making a difference and having an impact in people's everyday lives"

LEO

NOVARTIS

"Our mission is to discover new ways to improve and extend people's lives"

"UCB is inspired by patients and driven by science. Patients are at the heart of everything we do"

ucb

TEVA

"Everything we do - from producing pharmaceuticals to offering numerous other relevant services - is patient-driven"

Sources: Companies websites – Smart Pharma Consulting

[1] *Selection of few pharma companies, amongst many others, putting patients at the center of their communication*

If patient-centricity is a stated priority, it has taken on different meanings and led to different types of projects of variable scope, depending on the pharma companies

Is it a buzzword? (2/3)

- The concept of patient centricity is widely used in the pharma sector and can be defined as:

"Offering solutions (products and/or services) – directly or indirectly –
to patients from which they can benefit in terms of medical results and / or quality of life"

- In practice, patient-centric strategies have been materialized in business initiatives very different in nature and importance, ranging:
  - From publishing disease-related documents
  - To involving patients in key decisions all along the life cycle of a drug
  - Via bringing a support along the patient journey with specific services

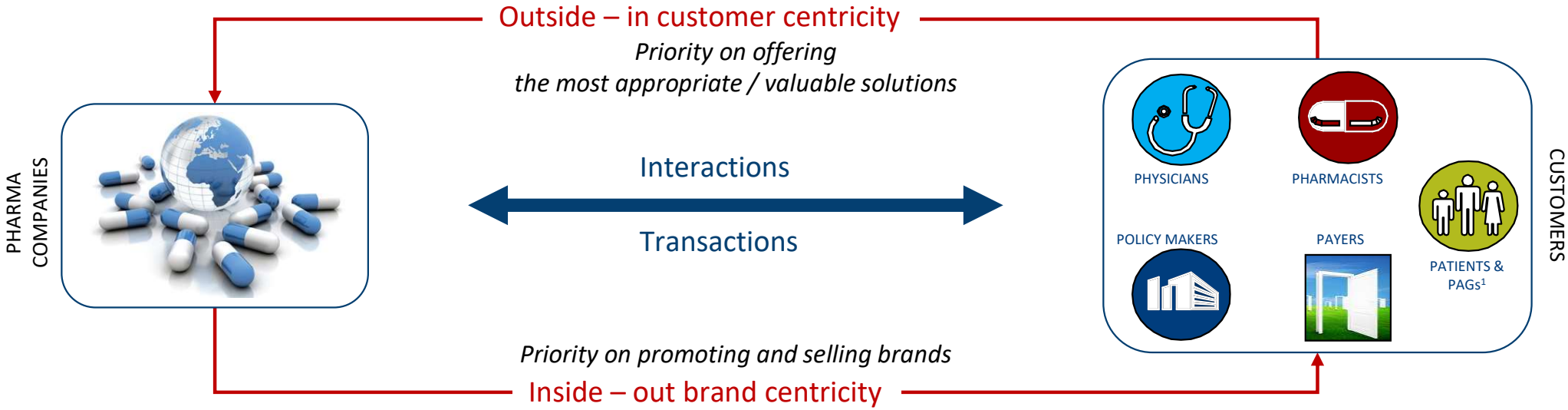
- Patient-centricity should not be just another buzzword because it is relevant for pharma companies:
  - To craft their business strategy, based on the end customers' needs and wants, i.e., the patients
  - To make sure that patients will get the best medical outcomes and quality of life, considering their disease and the treatment they have been prescribed by physicians and this, along the patient journey

Sources: Smart Pharma Consulting

Patient centricity is one component of the customer centricity strategy which consists in going that extra mile to provide entire satisfaction to customers

Is it a buzzword? (3/3)

- Patient centricity is part of the customer centricity concept which has become one of the strategic pharma companies' priorities for a decade or so
- Customer centricity is about building positive experiences with customers through the quality of interactions and/or the benefits provided by products or related services offered by the companies
- Amongst the different customers, patients occupy a particular position in the sense that they are the end customers and as such the customers of all the other stakeholders of the pharma market



Sources: Smart Pharma Consulting

[1] Patients advocacy groups

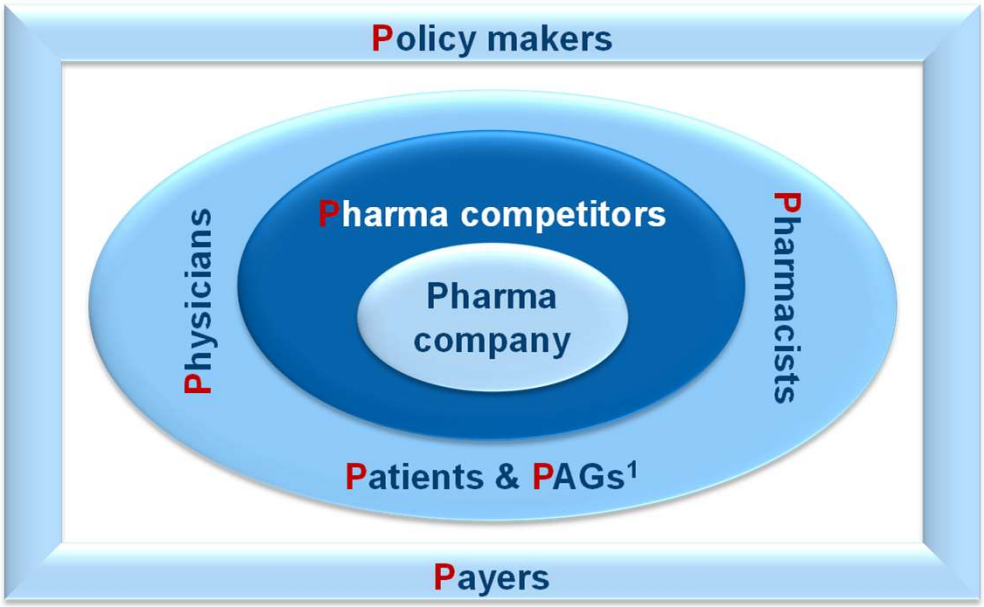
Patients and patients' advocacy groups represent two of the seven key pharma stakeholders groups whose power of influence has recently increased

Importance of patients & PAGs[1] in the pharma business model

Patients

- Patients are becoming more aware and knowledgeable (medical information is easily accessible on the Internet)
- Their power is increasing with digital technologies, social networks and the support of PAGs
- Patients are more demanding:
  - They want the most effective and best tolerated drugs…
  - … that are easy-to-use…
  - … and available at an affordable price

Key pharma stakeholder groups: The 7Ps



PAGs

- Patient organizations are also more influential
- They exert a growing power of influence and may be part of the policy-maker / payer decision-making processes
- Thus, PAGs can support pharma companies they have partnered with if they adhere to their strategy
- On the contrary, they can damage the corporate reputation of companies with which they don't have good relationships and with which they don't share the same strategic vision

"The patient voice gaining power and reach, it is going to play an increasing role on corporate reputation and will impact the products all along their life cycle"

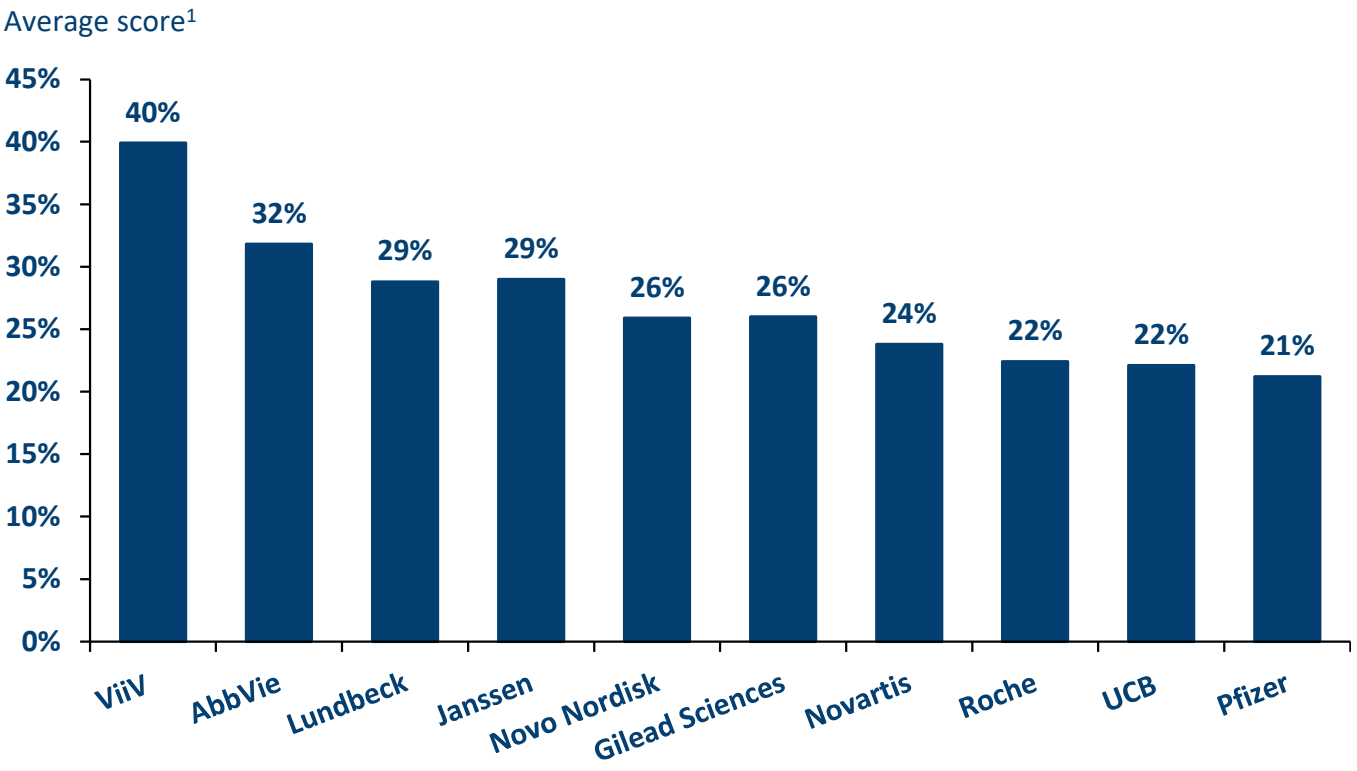
Sources: Smart Pharma Consulting

[1] Patients advocacy groups

A recent survey has shown that pharma companies having the best reputation, from the patient perspective, are very active in supporting patient-centric projects

Pharma company reputation assessment by patients

Corporate reputation – Ranking of the 10 performers



ViiV has built strong relationships with patients by funding numerous patient-centric projects to support communities affected by HIV, across the world, especially in Europe and Africa

- The corporate reputation of pharma companies from the patient perspective has been assessed through six indicators:
  1. Patient centricity
  2. Patient information
  3. Patient safety
  4. Usefulness of products
  5. Transparency
  6. Integrity
- Patient groups' opinion is mainly driven by:
  - Number and value of new drugs
  - Post-patent expiry strategy (e.g., pricing, generics defense initiatives, etc.)
  - Mergers & Acquisitions (e.g., financial / tax optimization vs. strategic rationale)
  - Drug pricing and market access
  - Corporate behaviors (e.g., transparency, ethics, etc.)

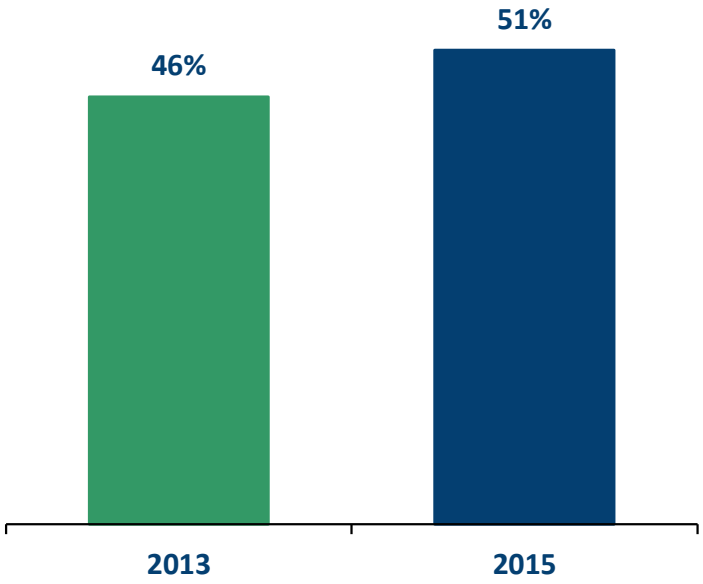
Sources: PatientView 2016 (1,075 patient groups from 72 countries have been interviewed from November 2015 to January 2016 to assess 48 pharma companies)

[1] The average score is obtained by adding and averaging the percentage scores (i.e., percentage of patient groups stating that the company is "best") attained by the companies across the six indicators of corporate reputation

According to pharma companies' executives, patient-centric capabilities are slightly improving while they offer a large variety of patient-centric services

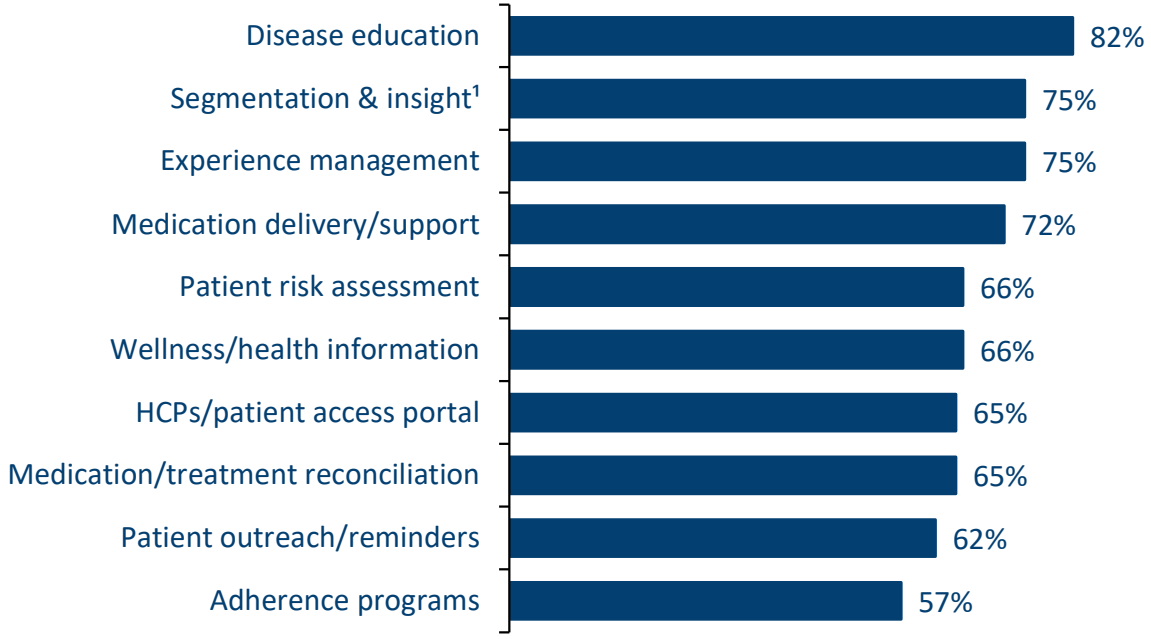
Patient-centricity viewed by pharma companies

Patient-centric capabilities with pharma companies



% of respondents rating capabilities as strong

Top 10 patient-centric services offered by pharma companies



% of respondents having cited these services amongst the top three

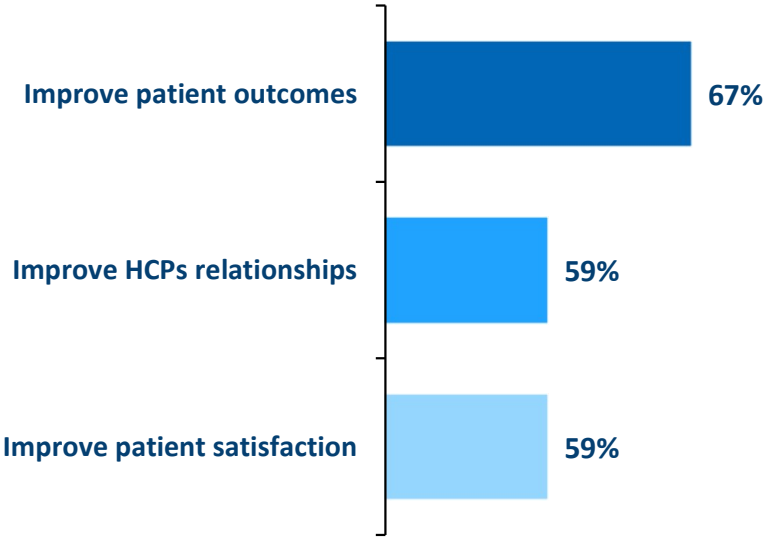
Sources: Accenture 2015 Survey regarding Patients Services delivered by pharmaceutical companies (interviews of 203 pharma executives based in the USA and Europe) – Smart Pharma Consulting analysis

[1] Refer to the segmentation of patients into groups sharing the same behavioral profile to better fulfil their individual needs

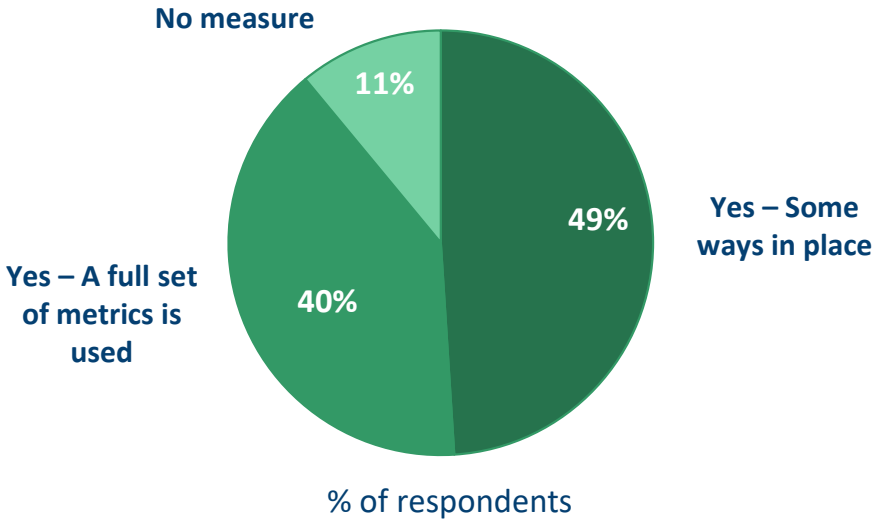
Offering patient services is a good decision, provided these services are used and they demonstrate their positive impact with the help of reliable metrics

Objectives & impact measurement as viewed by pharma companies

What are your objectives in offering patient services?[1]



Are you able to measure the impact of these services?[1]



- Offering services is a good start, but it is not sufficient
- Pharma companies must prove with tangible and reliable data that the patient services they invest in have a positive impact for the patients and create value, in return, for the company

Sources: Accenture 2015 Survey regarding Patients Services delivered by pharmaceutical companies (interviews of 203 pharma executives based in the USA and Europe) – Smart Pharma Consulting analysis

[1] Multiple responses are allowed

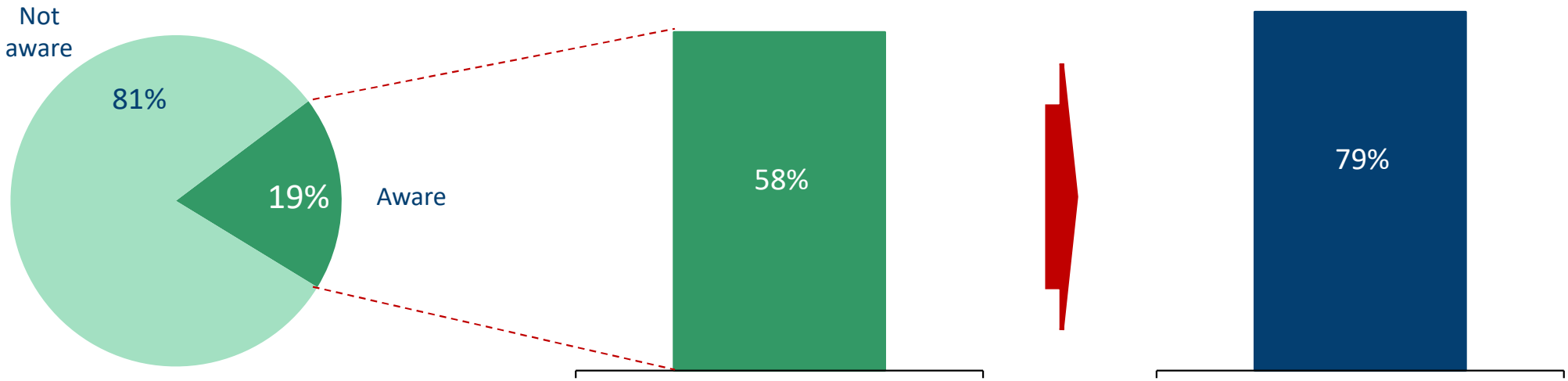
Patients' awareness regarding services available to help them is low, but when they are aware, they use them and are in general very satisfied

Awareness – Usage – Valuation of patients' services

Patients' awareness regarding services available to them

Patients aware having used services

Patients having rated the services as extremely or very valuable



% are the aggregated average across all services areas

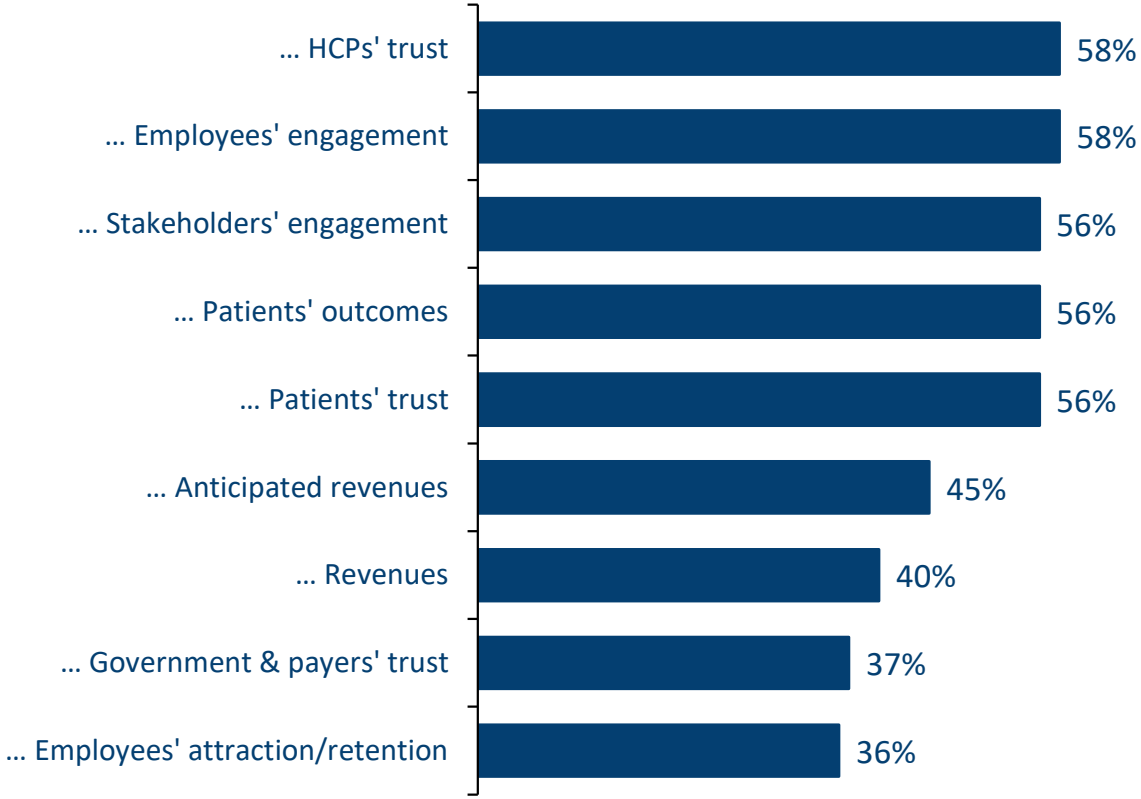
If services are associated with products marketed by pharma companies, they may expect to gain trust and respect amongst the stakeholders (e.g., policy makers, payers, HCPs, PAGs)

Sources: Accenture 2014 – 2015 online survey of 10,000 patients from the US, the UK, France, Germany and Brazil – Smart Pharma Consulting analysis

There is a growing body of empirical evidence to support the fact that patient-centric initiatives may have a positive impact on pharma companies' profitability

Impact of patient services on pharma companies' profitability

93% of the 2,346 respondents believe that patient-centric strategy improves the overall pharma companies' business outcomes by increasing…

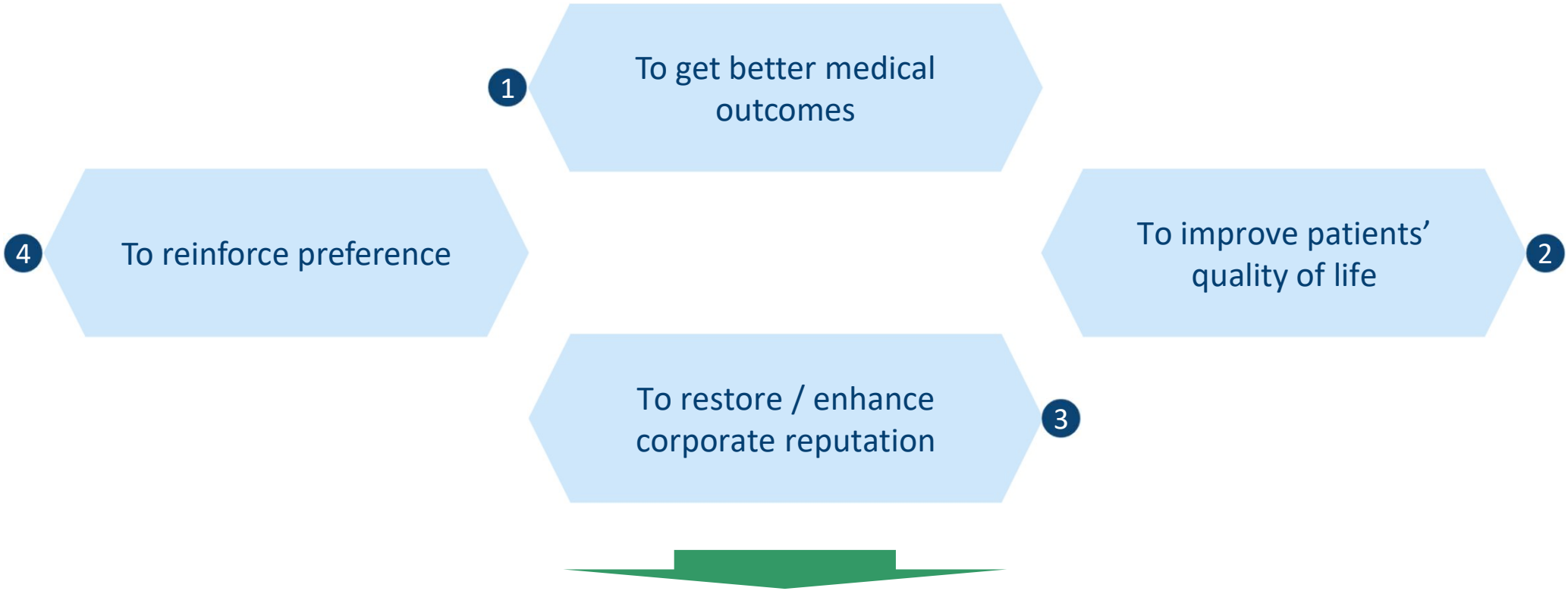


- Patient-centric strategy and the corresponding offered patient services should, in principle, fulfill:
  - Patients' ultimate needs for better health outcomes and improved quality of life
  - Pharma companies' needs for a better usage of its drugs and an increased patient satisfaction leading to an enhanced corporate reputation and a market share gain
  - HCPs' needs to prescribe the most appropriate drugs to their patients with the assurance of having a follow up along the patient journey for better results and safety conditions
- The issue for pharma companies is not anymore to wonder if they should offer patient services…
- … but to decide which services they want to offer to create the best value for patients, HCPs, policy makers, payers, and ultimately for themselves

Sources: Eyeforpharma, Aurora Project: "Pharma's Global Patient Centricity Survey & Analysis" 2015 – Insights collected from 2,346 respondents from 84 countries, including pharma companies' executives, patients and patient groups, solution providers, etc. – Smart Pharma Consulting analysis

Relevant and effective services to patients can contribute to improve the corporate reputation of pharma companies and thus increase stakeholders' preference

The four key objectives of patient services



"Why is the patient so important?
Simply because he is the final customer and, as such, has the last say!"

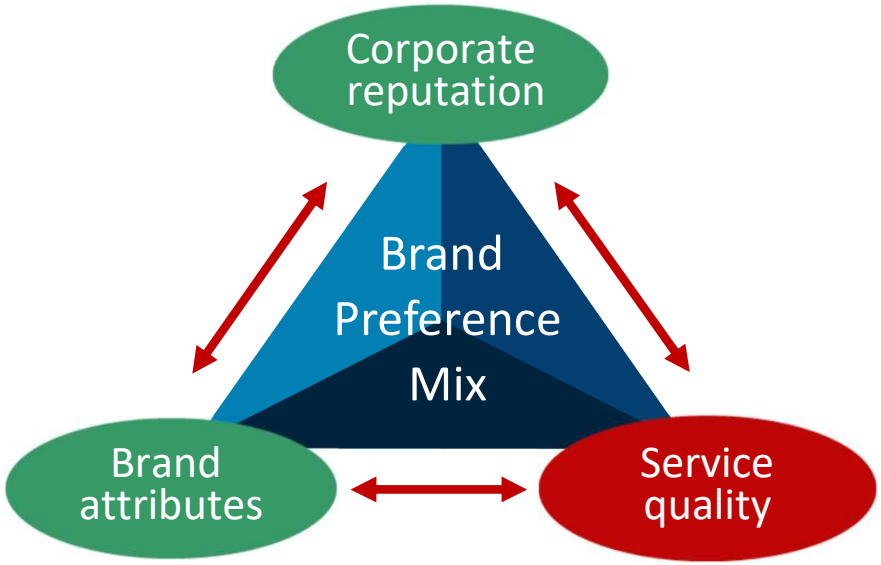
Sources: Smart Pharma Consulting

With dwindling product differentiation, patient services contribute to strengthen the brand preference of stakeholders (e.g., patients, physicians, policy makers, payers)

Contribution of patient services to brand preference strengthening

"The more robust is the brand preference the more exceptional is the brand performance"

- To strengthen the preference of customers (stakeholders) to their brands, pharma companies must, better than their competitors, optimize the three basic components of the preference mix:
  - Corporate reputation
  - Brand attributes
  - Quality of customer services (incl. patient services)
- Thus, patient services ensuring a more positive patient experience will lead to:
  - Patients' better medical outcomes and quality of life
  - Physicians' (and other HCPs[1]) increase confidence in the brand
  - Payers' better value for money
  - Policy makers' (and government) better fulfilment of their role



"Offering valuable services to customers – especially to patients – reinforces corporate reputation of pharma companies and preference to their brands"

Sources: Smart Pharma Consulting

[1] *Health care professionals such as: pharmacists, nurses, etc.*

Patient services strategy should preferably focus on "around-the-pill" services, likely to strengthen brand preference by improving medical outcomes and quality of life

"Beyond-the-pill" vs. "Around-the-pill" strategy

- While most pharma companies claim to be patient-centric and to offer patient services, they are not very clear, nor aligned on what to do in practice
- Should they provide services "beyond-the-pill" or "around-the-pill"?

Services "beyond-the-pill"

- "Beyond-the-pill" services are not linked to the drugs marketed by pharma companies and therefore have no direct impact on their value, nor on their preference
- They have been imagined as a new source of revenues to compensate the risk associated to drug patent expiries
- Example of services "beyond-the-pill":
  - Commitment of GSK to reinvest 20%[1] of its profits made in LDCs[2] and to lower drug prices[3]
  - Co-development of smart lenses[4] by Novartis and Google
  - Roche taking majority stake in Foundation Medicine, which develops solutions for genomic profiling of cancers

Services "around-the-pill"

- "Around-the-pill" services can be adjacent or directly linked to drugs marketed by pharma companies
- The purpose of these services is to optimize medical outcomes and patient quality of life while strengthening the preference of the brands marketed by the companies
- Examples of services "around-the-pill":
  - Trainings/tools to help physicians prescribe the right drug to the right patient
  - Programs/tools to improve adherence to medication
  - Devices to monitor treated patient condition

- Services "beyond-the-pill" correspond to a longer-term strategy for which the business model is not yet clearly set…
- … while services "around-the-pill" should deliver short-term results through a better usage of marketed drugs

Sources: Smart Pharma Consulting

[1]To improve healthcare access to people – [2] Least developed countries – [3] Prices of patented products are capped at no more than 25% of their UK or French price and as low as their manufacturing cost to increase patient access and then grow on a strategic segment disregarded by competitors – [4] This next-generation contact lens technology will be used for presbyopia, to monitor glucose levels via the tears of diabetics, amongst different treatment areas

Patient services, as part of pharma companies' customer-centricity strategy, should be focused on initiatives to enhance medical outcomes and quality of life

Examples of "around-the-pill" services

Disease management & progression monitoring

Biogen

patientslikeme

In 2014, Biogen partnered with PatientsLikeMe to distribute Fitbit[1] to 248 multiple sclerosis patients to collect data to help them create improved treatment protocols and prove the value of their medication to payers, physicians and other patients

Connected-device to improve adherence

In 2014, Merck launched a new device to inject Rebif, for patients with multiple sclerosis, which collects and stores data that can then be sent to a secure server. The system can prompt patients to a better adherence to treatment

Community web site for lung cancer patients

AstraZeneca

LVNG | WITH LUNG CANCER

After completing a patient research survey, AZ co-developed with >100 patients a website dedicated to build a community for lung cancer patients where they can share their emotional journeys and everyday experiences and feel better

Patient support program

novo nordisk

Cornerstones4Care® Your diabetes, your way.

Cornerstones4Care® is an online service from Novo Nordisk providing diabetic patients with personalized tools, resources and information to help them reach their diabetic management goals and improve their quality of life

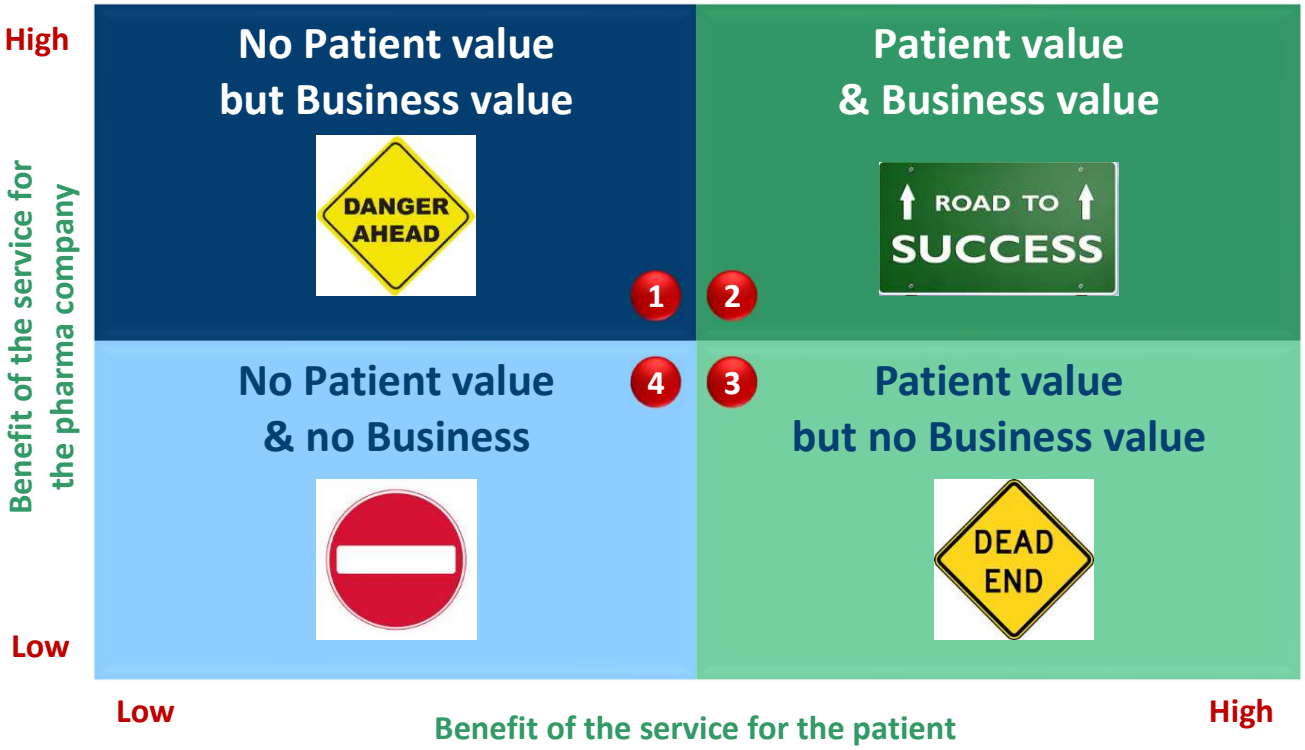
Sources: Smart Pharma Consulting

[1] *A wearable activity tracker*

While crafting their strategy, pharma companies should give the priority to services that create tangible value for patients and that contribute to boost their performance

Selection of a patient-centric strategy (1/2)

Patient service strategy matrix



"Patient-centric strategies must improve patients & companies' outcomes"

- While crafting their patient-centric strategy, pharma companies should keep in mind their ultimate objective:
  - The services which create value for the pharma company but not for the patients (quadrant #1) are not recommended because they represent a short- to mid-term reputational risk for the company
  - The services which create value for both patients and the pharma company (quadrant #2) should be favored because they represent a "win-win" option
  - The services which create value for patients but not for the pharma company (quadrant #3) should either be excluded or redefined if the problem comes from poor implementation
  - The services which do not create value for patients nor for the pharma company (quadrant #4) should be avoided because they are irrelevant

Sources: Smart Pharma Consulting

The "win-win" patient-centric strategies proposed by pharma companies should create value for all stakeholders, be perfectly carried out and deliver tangible results

Selection of a patient-centric strategy (2/2)

Features of services delivering value for patients & pharma companies

- The service should correspond to a need expressed by the great majority of patients and acknowledged by the other key customers of the pharma company (i.e., HCPs, policy makers, payers)
- Thus, the patient service must create value for:
  - Patients through better medical outcomes and improved quality of life
  - HCPs through better and easier management of their patients
  - Payers through improved cost-effectiveness results
  - Policy makers / government through improved public health outcomes and management
  - The pharma company by reinforcing its reputation and increasing the preference of stakeholders to its brands
- The service must be reasonably easy to implement[1] and the quality of execution irreproachable
- The expected results on patients must be significant and measurable

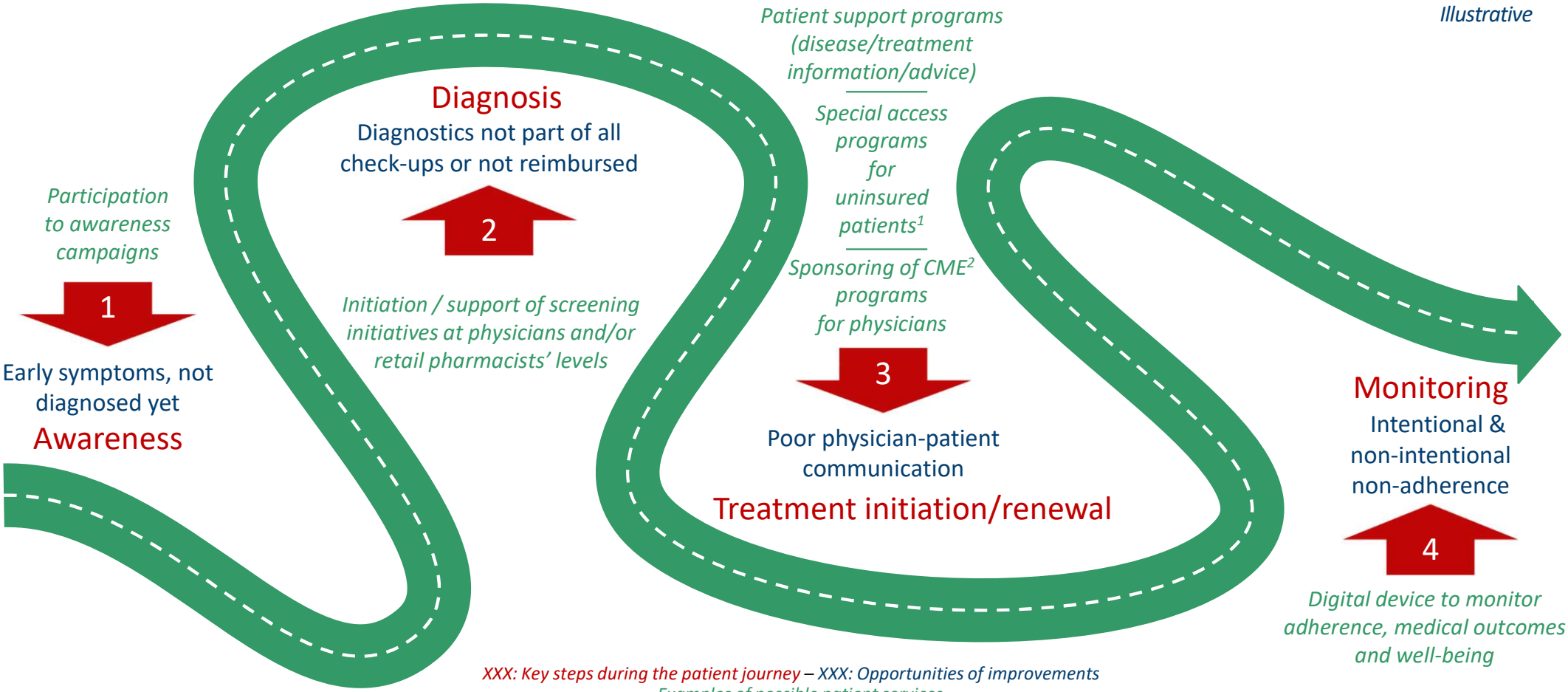
Sources: Smart Pharma Consulting

[1] Take into consideration the technical, financial and legal barriers. For instance, we should make sure that HCPs will accept to engage in the execution of the service, if their contribution is required

Services likely to be proposed to patients by pharma companies can be considered at different steps of the patient journey to address dysfunctions in patient management

Examples of possible patient services along the patient journey

Illustrative



XXX: Key steps during the patient journey – XXX: Opportunities of improvements – Examples of possible patient services

Sources: Smart Pharma Consulting

[1] In the USA, pharma companies help poorer patients finance their drugs through coupons and vouchers – [2] Continuous medical education (e.g., Improvement of physician-patient dialogue)

It is key to make sure that the service will create value for patients, other customers and the pharma company, with the help of a specific selecting tool

How to select patient services?

Patient service selecting tool

Illustrative

Targeted patients	Who?	How many?	Objective	For patients	Description of the service	
				For company		

Estimated value … for Patients			.... for HCPs			… for Payers / Policy makers		
Metrics*		Rationale	Metrics*		Rationale	Metrics*		Rationale
Interest	1 2 **3** 4 5		1 2 **3** 4 5			1 2 **3** 4 5		
Usefulness	1 2 3 **4** 5		1 2 3 **4** 5			1 2 3 **4** 5		
Convenience	1 **2** 3 4 5		1 **2** 3 4 5			1 **2** 3 4 5		
Execution	1 2 **3** 4 5		1 2 **3** 4 5			1 2 **3** 4 5		
Total	1 2 **3** 4 5		1 2 **3** 4 5			1 2 **3** 4 5		

Feasibility		Rationale	Patients KPIs[1]	Company KPIs	Decision	Rationale
Technical		• Implementation	• Biological indicators • Medical outcomes • Quality of Life • MPR[2] • Etc.	• Corporate reputation • Brand Preference Mix index • Brand market share • Etc.	**GO**	
Regulatory		• Compliance				
Economic		• Estimated cost and return			**No GO**	

** 1 & 2 below competitors – 3 as competitors – 4 & 5 above competitors*

Sources: Smart Pharma Consulting

High Medium Low

[1] Key performance indicators – [2] Medication possession ratio

The successful implementation of patient-centric initiatives requires to adjust the organization, communicate extensively and measure the impact in a rigorous way

Key challenges: Overview

The three challenges to be addressed to successfully implement patient-centric initiatives

Organization	Communication	Execution & Measurement
▪ Patient-centric initiatives are most often managed by the marketing or medical department… ▪ … which are not necessarily the optimal options to establish a cross-functional team… ▪ … which is a "must have" to ensure an effective and efficiency implementation	▪ 81% of pharma companies go through healthcare providers to make patients aware of their services… ▪ … 19% of patients are aware of patient services proposed by pharma companies ▪ Patient services may be viewed by stakeholders as a means to sell more drugs by delivering (free) services	▪ Patient services are often complex and poorly executed ▪ 60% of pharma companies do not measure the impact of their patient services on medical outcomes ▪ In the absence of reliable data and systematic measurement, the investment made will not be valued by stakeholders and… ▪ … therefore, will not be sustainable

The question is not anymore: "Should we offer patient services", but "Which ones to offer and how to execute them?"

Sources: Smart Pharma Consulting

A patient services department, managed by a senior executive, should be defined to work cross-functionally with other departments to develop high value initiatives

Key challenges: Patient-centric organization (1/2)

Cooperation

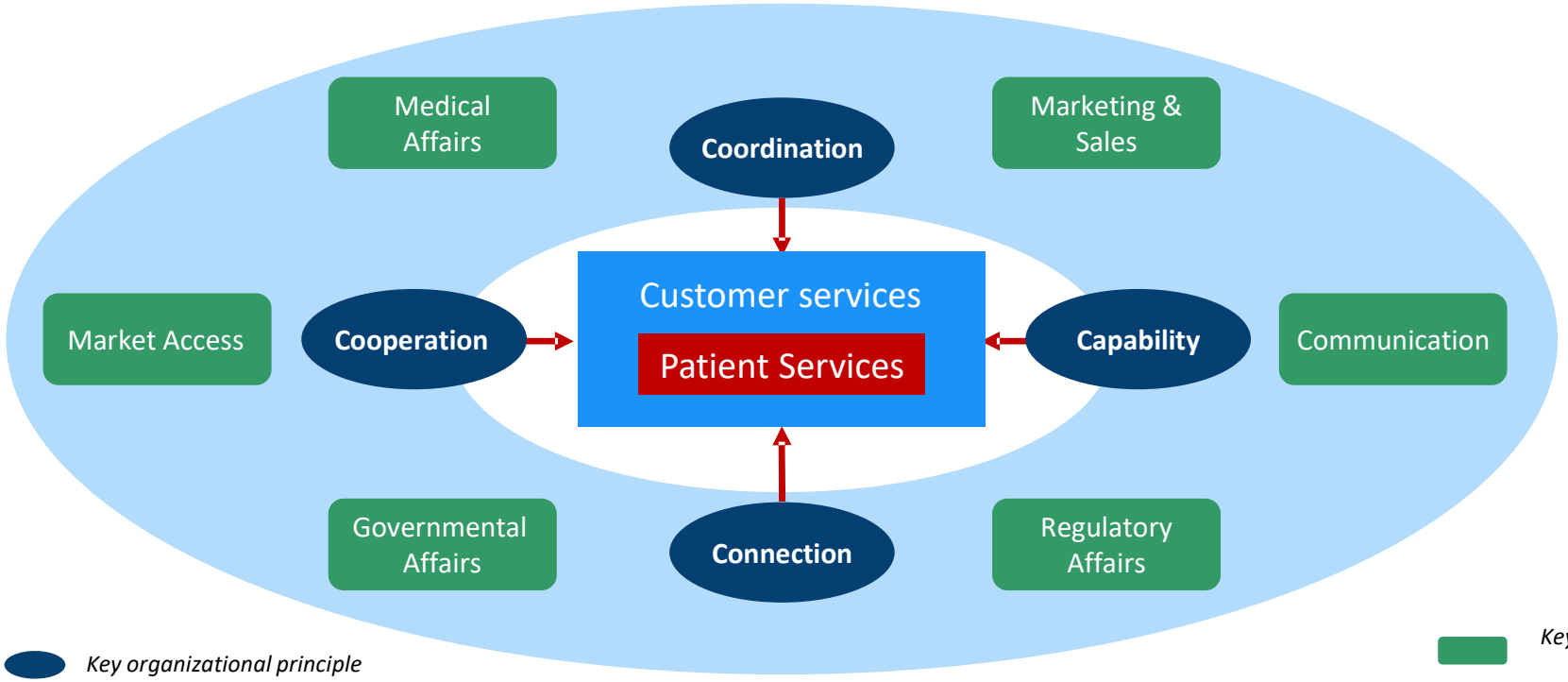
Project teams including members from various departments and centered around patient services

Coordination

- Knowledge- and experience-sharing
- Harmonization of activities

Capability

- Skills to develop and deliver highly valued patient services
- Ability to explore and discover customer insights (deep knowledge of their needs, wants, behaviors)
- Motivated and empowered collaborators



Connection

Partnership with external players to propose unique and highly valued patient services

Key organizational principle

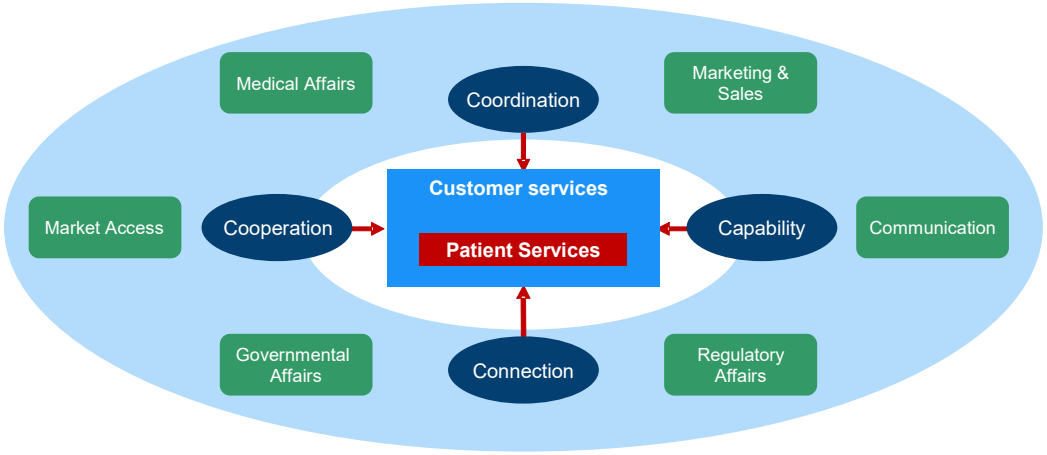
Key departments directly involved in customer services / patients' services departments

Sources: Smart Pharma Consulting – Adapted from R. Gulati (HBR 2007)

A customer-centric mindset should be pervasive at every level of the organization, from customer-facing collaborators to the management committee level

Key challenges: Patient-centric organization (2/2)

- A patient-centric organization must be **communicated without any ambiguity** – internally and externally – by the senior management as a long-term strategic priority
- To remain engaged in a patient-centric culture, **collaborators should regularly be kept informed** about the initiatives put in place and their outcomes
- The head of the customer (or patient) service department must be a member of the management committee and **work cross-functionally** with the other key departments heads of the company (e.g., medical, marketing, etc.)
- Besides, collaborators dedicated to patient services must be part of the brand teams to **ensure that the services benefit not only to patients but also to the brand**, directly, or indirectly by reinforcing the corporate reputation
- Irrespective of the department they belong to, of their activities (front vs. back office) or their experience (senior vs. junior position), all collaborators of pharma companies should be committed to deliver **high service quality to customers**, and especially to patients



"Patient services being in general delivered in partnership with other customers of the pharma companies, they require the alignment and coordinated efforts of all departments"

Key organizational principle

Key departments directly involved in customer services / patients' services departments

Sources: Smart Pharma Consulting

It is essential for pharma companies to communicate their patient-centric strategy clearly and precisely to internal and external customers, in order to get their support

Key challenges: Communication

Illustrative

- Pharma companies should define and share their vision – mission – ambition related to their customer-centric strategy with their internal (their collaborators) and external customers (their stakeholders)

Vision	▪ *Being recognized by patients and other customers (HCPs, payers, policy-makers) as the company offering the most valuable patient services*
Mission	▪ *Improve medical outcomes and quality of life of patients treated with our drugs or affected by a pathology for which we propose drugs*
Ambition	▪ *Get tangible results demonstrating the value of the patient services and, as a result, increase the preference of stakeholder for our brands*

"Communicate openly about your patient services: What are your intentions? What are the results you obtained? Don't be afraid, if you do the right things right, your reputation will be strengthened!"

Sources: Smart Pharma Consulting

Patient services being complex to execute, skillful collaborators with a robust experience in transversal and project management are required

Key challenges: Execution & Measurement (1/2)

Patient service execution

- Challenge #1: Engage HCPs, payers and policy makers, as appropriate, to execute the patient services
- Challenge #2: Make patients aware of the services offering and of the benefits they will get
- Challenge #3: Keep patients as users and other relevant customers[1], as partners (e.g., HCPs may recommend a website, enroll patients in adherence programs, track the clinical outcomes, etc.) engaged over the long run in the service
- Challenge #4: Collect reliable data, on a regular basis, to be able to objectivize the value brought by services to patients, other customers[1], and to the pharma company
- Challenge #5: Collaborate with many partners, internally (from different departments) and externally (social networks, data integrators, apps developers, HCPs, etc.) to deliver the service
- Challenge #6: Position the patient services to avoid head-to-head competition
- Challenge #7: Execute the service to create superior value than competitors, in a context of commoditization of patient services

Sources: Smart Pharma Consulting

[1] PAGs, HCPs, payers, policy makers

Rigorous measurement of relevance, quality of execution and outcomes of patient services are essential to objectivize the value created for stakeholders

Key challenges: Execution & Measurement (2/2)

Patient service measurement tool

Targeted patients	Who?	How many?	Objective	For patients / For company	Description of the service	

Customers valuation					Pharma company self-valuation	
Metrics*	Patients	HCPs	Payers / Policy makers	Rationale	Metrics*	Rationale
Interest	1 2 **3** 4 5	1 2 **3** 4 5	1 2 **3** 4 5		1 2 **3** 4 5	
Usefulness	1 2 3 **4** 5	1 2 3 **4** 5	1 2 3 **4** 5		1 2 3 **4** 5	
Convenience	1 **2** 3 4 5	1 **2** 3 4 5	1 **2** 3 4 5		1 **2** 3 4 5	
Execution	1 2 **3** 4 5	1 2 **3** 4 5	1 2 **3** 4 5		1 2 **3** 4 5	
Total	1 2 **3** 4 5	1 2 **3** 4 5	1 2 **3** 4 5		1 2 **3** 4 5	

Patients KPIs[1]			Gap analysis	Recommendations
Metrics	O[2]	A[3]		

Company KPIs[1]			Gap analysis	Recommendations
Metrics	O[2]	A[3]		

[1] *Key performance indicators – [2] Objective – [3] Achievement*

** 1 & 2 below competitors – 3 as competitors – 4 & 5 above competitors*

"If you can't measure it, you can't manage it "

– Peter Drucker –

- To objectivize the value created by patient services, for the different customers and the pharma company, it is recommended to combine qualitative and quantitative metrics to measure the quality of execution and the impact of the initiatives:
  - Interest and usefulness metrics to assess the relevance of the service
  - Convenience and execution metrics to assess the quality of implementation of the service
  - Patients' key performance indicators (KPIs) include metrics such as: medical outcomes, quality of life, adherence and persistence rates
  - Pharma key performance indicators include metrics such as: corporate reputation, Brand Preference Mix Index[1], market share dynamics
- The performance gaps (between objectives and achievement) should be carefully analyzed and lead to specific decisions (i.e., adjustment of the execution, drop-out, continuation)

Sources: Smart Pharma Consulting

[1] *See Smart Pharma Consulting publications about Brand Preference Mix and its measurement tool, the Brand Preference Mix Index on our website: www.smart-pharma.com*

Smart Pharma Consulting proposes a four-step process to define and implement a patient-centric strategy likely to create a sustainable competitive advantage

Strategic patient service process

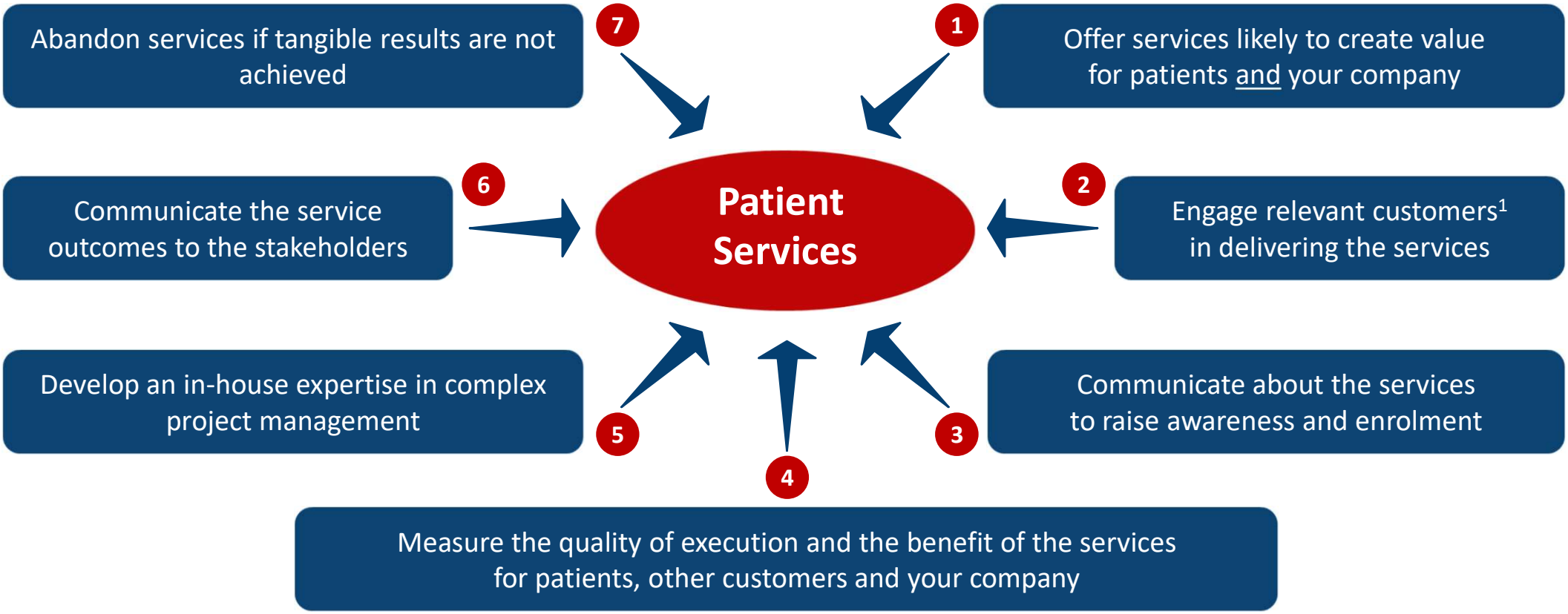
In-depth situation analysis	Strategy crafting	Service design	Implementation & Monitoring
▪ Disease-related needs ▪ Drug-related needs ▪ Patient-related needs	▪ Patient & Business value ▪ No Business but Patient value ▪ No Patient but Business value	▪ Disease-related services ▪ Drug-related services ▪ Patient-related services	▪ Quality of the implementation ▪ Measurement of the outcomes
▪ Gather insights from through research studies (interviews, social networks, wearables, websites, etc.): – Specificities of the disease – Specificities of the treatments (efficacy, safety, convenience, etc.) – Patients and other customers[1] perception of illness, needs, behaviors, beliefs, lifestyle, etc. – Competitors' offering	▪ Set the ambition / objective of the patient service strategy ▪ Craft the service strategy: – Define the strategic priority (e.g., patient & business value) – Select the types of patient services to be offered along the different steps of the patient journey, considering the perceived needs of all customers and what is proposed by competitors yet	▪ Co-create services with patients (incl. PAGs) and other customers[1] that will be valued and accepted ▪ Design services to address issues related to the: – Disease (e.g., problems of screening and diagnosis) – Drug (e.g., side effects) – Patient (e.g., limited access, low rate of adherence and persistence, poor quality of life, suboptimal outcomes)	▪ Ensure the excellence of the execution by: – Partnering with all relevant customers[2] and suppliers[3] – Allocating the right level of resources (human/financial) – Setting a rigorous process ▪ Monitor with KEIs[4] the quality of implementation ▪ Measure with KPIs[5] the impact of services on: – Patients' condition – Company's performance

Sources: Adapted and enriched by Smart Pharma Consulting from Executiveinsight

[1] HCPs, payers, policy makers – [2] PAGs, HCPs, payers, policy makers, caregivers, etc., depending on the service to be proposed – [3] IT companies, data integrators, E-health agencies, etc. – [4] Key execution indicators – [5] Key performance indicators

Patient services must deliver significant and concrete results to get stakeholders' esteem and therefore enhance their preference for the pharma company and its drugs

7 tips to create and implement a patient-centric strategy



"The right patient-centric strategy maintain a proper balance between the patient and the pharma company interests"

Sources: Smart Pharma Consulting

[1] PAGs, HCPs, payers, policy makers

Smart Pharma Consulting can help you strengthen the impact of your patient-centric strategy by stimulating your thinking process and bringing specific methods and tools

5 ways Smart Pharma Consulting can boost your patient-centric strategy

Sources: Smart Pharma Consulting

[1] Key execution indicators – [2] Key performance indicators

Smart Pharma
CONSULTING

How can Creativity Boost Performance?

Application to Pharma Companies

"The true sign of intelligence is not in knowledge but imagination"

Albert Einstein

POSITION PAPER May 2016

Pharma companies are facing a paradigm shift which forces them to reinvent in a creative way their strategy, the corresponding tactics and their organization

Context – Objective – Approach

- Pharmaceutical companies must urgently rethink creatively their business model to face the paradigm shift that is occurring:
  - Health authorities keep on raising barriers regarding drug registration and marketing conditions
  - Payers have no choice but to put more pressure on drug price, including on innovative ones
  - Healthcare professionals tend to reduce their number of interactions and to become less and less sensitive to promotion
- To help pharma companies figure out how to leverage creativity to boost their performance, Smart Pharma Consulting will attempt to answer the following questions:
  - Why is creativity so important?
  - How to craft a creative strategy?
  - How to build a creativity-driven organization?

"We are continually faced with great opportunities, brilliantly disguised as insoluble problems" – *John W. Gardner*

Sources: Smart Pharma Consulting

In the business context, creativity stimulates discoveries, inventions and innovations that could potentially result in highly valuable products, services, organizations, etc.

Role of creativity in business

- Creativity is the development of ideas about products, services, organizations, business models or theories that are novel and potentially valuable
- Creativity involves the ability to break down and restructure conventional knowledge to produce different viewpoints and insights
- Creativity can potentially lead to various discoveries, inventions and innovations

Creativity

Discovery	Invention	Innovation
▪ Discovery consists to be the first to find or observe an existing place, substance or scientific phenomenon ▪ Discovery can help explain knowledge that is acquired through previous scientific evidences ▪ Discoveries can be accidental (e.g., penicillin by Alexander Fleming) or sought after through exploration (e.g., the molecular structure of DNA) ▪ Some discoveries result in invention of objects, processes or techniques	▪ Inventing is an act of creativity that results in new products, services, organizations, business models or theories, starting from scratch ▪ Inventions could be accidental (e.g., Viagra) or intentional (e.g., Mosquirix[1]) ▪ Some inventions result from discoveries (e.g., vaccines) ▪ Inventions usually require a process where experimentation, "trial and error" and alternations are required in order to create the perfect invention	▪ Innovation is to make changes in existing products, services, organizations, business models or theories in order to improve them (e.g., long-acting vs. short-acting drugs, calendar packs, etc.) ▪ These changes may be required to increase efficacy, reduce cost, improve convenience, etc. ▪ Business innovation intends to improve products, services, organizations, etc., to create more value for stakeholders

Sources: Smart Pharma Consulting

[1] The world's first malaria vaccine having obtained a marketing authorization by the European Medicine Agency (EMA) in 2015

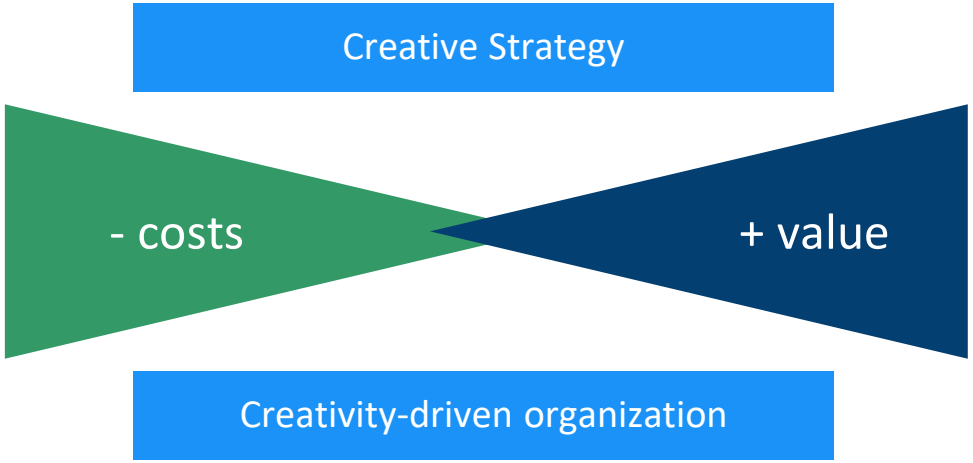
To cope with a deteriorating competitive environment, pharma companies must build a creative business model to reduce costs and/or offer better value to customers

New pharma business model

- The new business model that pharma companies must craft should simultaneously:
  - Reduce costs by eliminating less valuable features or services
  - Increase customer value (and in return company value) by offering new benefits and services
  - Rethink the organization so that functional and operational activities be fully aligned to support the associated strategy

Eliminate
- Which factors can we eliminate?

Reduce
- Which factors should we reduce?



Raise
- Which factors should be raised above industry standards?

Create
- Which factors that the industry has never offered should be created?

"New business models consist in doing things differently…
… while new business strategies consist in doing different things"

Sources: Adapted after A. Osterwalder et al., 2010 and after C. Kim et R. Mauborgne 2005

To craft a successful creative strategy, pharma companies must identify the business opportunities where they could have the strongest competitive advantage

Creative strategy crafting (1/3)

Company's business model

Vision

Mission

Values

Capabilities

Tangible resources (plant – people – financial)

R & D

Production

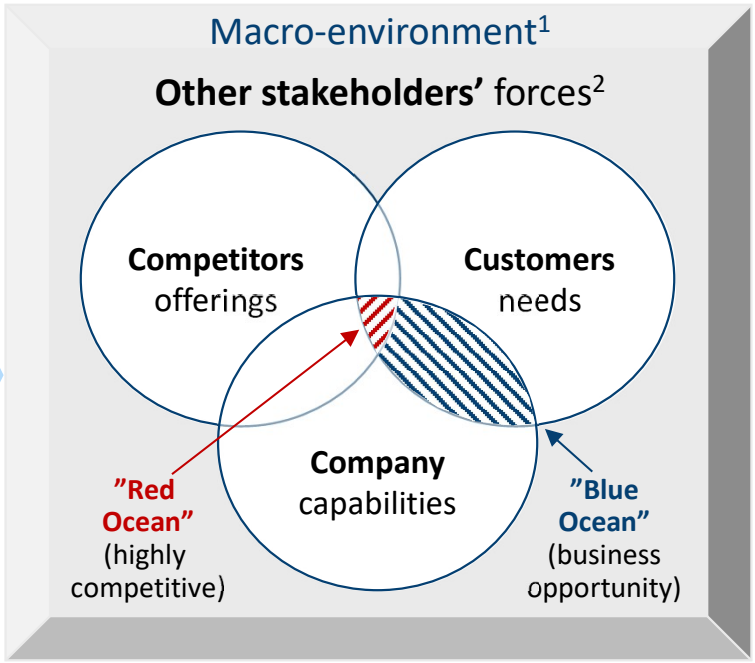
Sales

Market access

Medico-Marketing

Intangible resources (information – reputation – knowledge)

Strategic segments



Strengths & Weaknesses
(Competitive advantage)

Opportunities & Threats
(Attractiveness & Key success factors)

Ambition & Strategic priorities

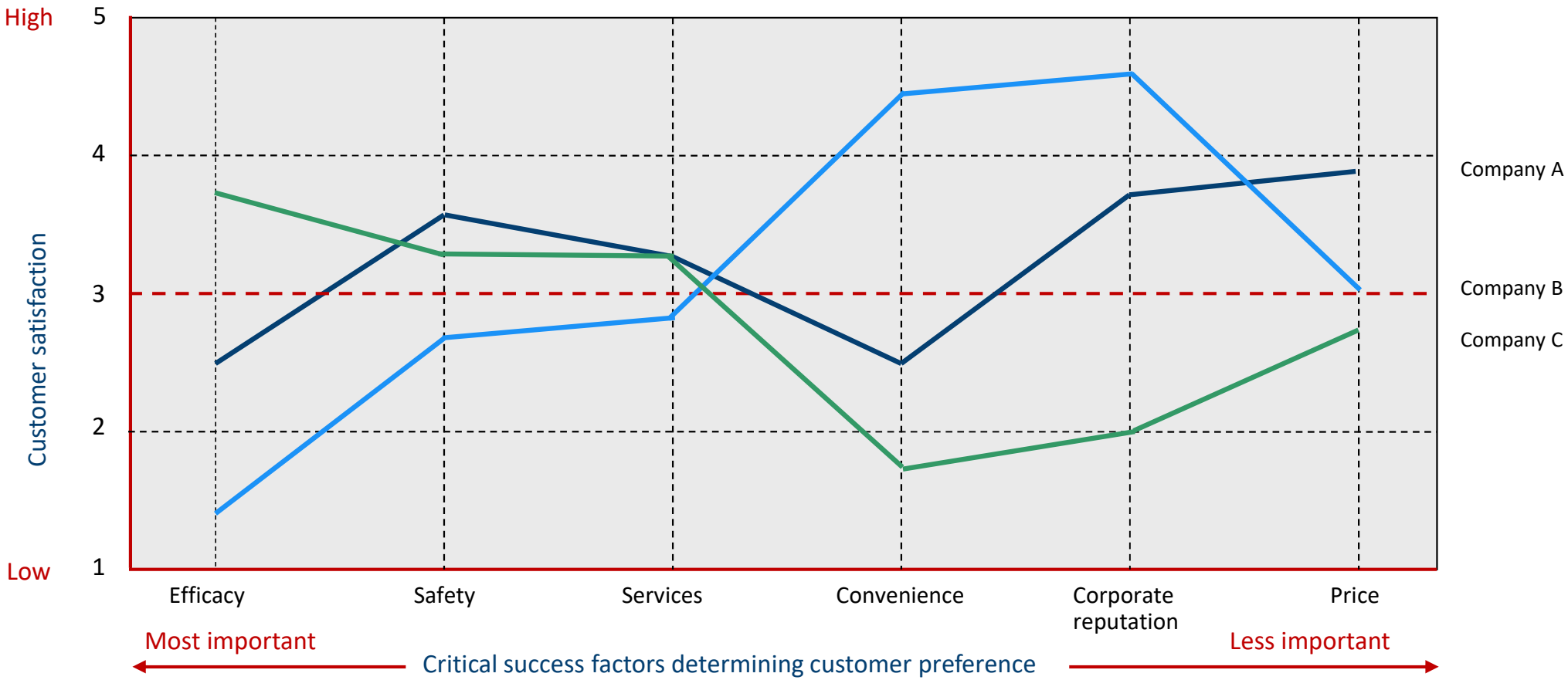
Sources: Adapted after C. Kim et R. Mauborgne 2005 - D.J. Collis, HBR April 2008, M. Porter 1985 - Smart Pharma Consulting

[1] Political / legal, economic, socio-demographic and technological factors – [2] Including suppliers, new entrants, substitutes, complements

The Strategic Canvas is both a diagnostic tool to identify gaps not fully exploited by competition and a decision-aid to select which ones to fill up, to meet customer needs

Creative strategy crafting (2/3)

Strategic Canvas (Value curves)



Sources: Adapted after C. Kim et R. Mauborgne 2005

"Blue Ocean" strategies, based on value innovation, consist in creating new market spaces, making the competition either "irrelevant" or weak

Creative strategy crafting (3/3)

New market space conception

Red Ocean Strategy	Blue Ocean Strategy
1. Compete in the existing market space	1. Create an uncontested market space
2. Beat the competition	2. Make the competition irrelevant
3. Exploit the existing demand	3. Create & capture new demand
4. Make the value-cost trade off	4. Break the value-cost trade off
5. Align the organization with its differentiation or low-cost strategy	5. Align the organization in pursuit of differentiation and low-cost strategy
Structuralist approach	Reconstructionist approach

"Develop a strategy that structures the market and not a strategy that adjusts to the market structure"

Sources: Adapted after C. Kim et R. Mauborgne HBR 2005 and 2009

To exploit new business opportunities, companies must develop new strategies consisting in doing different things that will be highly valued by customers

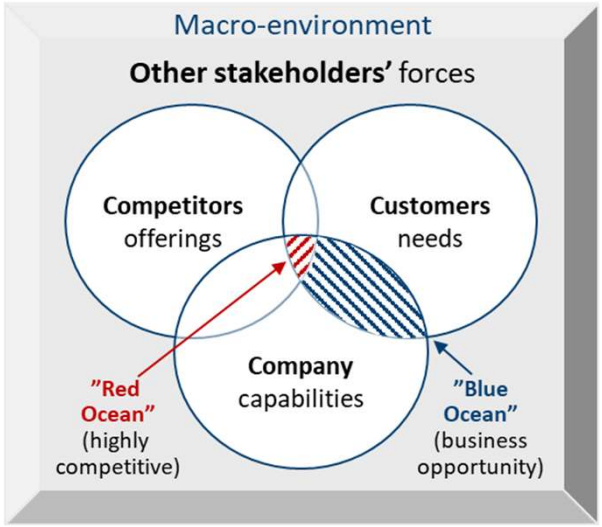
"Blue Ocean" strategic examples

Price & Performance

Since 2009, GSK is committed to reinvest 20%[1] of profits made in LDCs[2] and to heavily lower drug prices[3] to increase patient access and then grow on a strategic segment disregarded by most of big pharma companies

Around-the-pill services

In 2014, Merck launched a device to inject Rebif, for patients with MS[4], which collects and stores data that can then be sent to a secure server. The system can prompt patients to a better adherence to treatment



Functional vs. Emotional focus

Viagra was not positioned by Pfizer as a treatment of erectile dysfunction but as a solution to enhance patients' life-style, putting the emphasis on emotional appeal

Physicians vs. Patients focus

NovoPen, the first insulin pen injector, was introduced in 1985 by Novo Nordisk, to make injection more convenient and easier for patients, improving their quality of life and their adherence to treatment

Sources: Adapted after C. Kim et R. Mauborgne 2005, companies' websites

[1] Representing a total amount of € 25.4 million reinvested in training 40,000 health workers and building infrastructures, having contributed to improve healthcare access to 11 million people over the 2009-2015 period – [2] Least developed countries – [3] Prices of patented products are capped at no more than 25% of their UK or French price and as low as their manufacturing cost – [4] Multiple Sclerosis

The creative power of individuals is based on four key dimensions that vary significantly according to innate and acquired personality of individuals

Key traits of creative individuals

Originality

- They can spot underlying patterns in events
- They produce unique, novel, new, creative or innovative and unusual ideas

Flexibility

- They can shift from one approach to another when addressing issues
- They see relationships between seemingly disconnected elements
- They produce a large variety of ideas

Fluency

- They can produce many ideas
- They cope with paradoxes
- They challenge status quo
- They can mix viewpoints or perspectives

Proactivity

- They are curious
- They look beyond the first "right idea"
- They are not afraid to make mistakes
- They take risks

"Chance favors only the prepared mind" – *Louis Pasteur*

Sources: Smart Pharma Consulting

To free the creative power of individuals, these barriers must be lowered or removed, and a free-wheeling atmosphere generated in which all ideas are acceptable

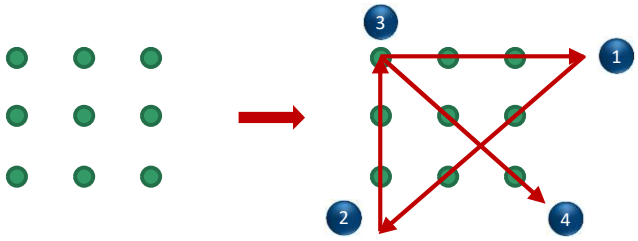
Creativity barrier removal (1/2)

Self-imposed barriers

- Self-imposed barriers are put either consciously or unconsciously
- They are difficult to recognize…
- … but easy to remove, once they have been recognized

Illustration

Join the nine dots with four straight lines without taking the pencil off the paper

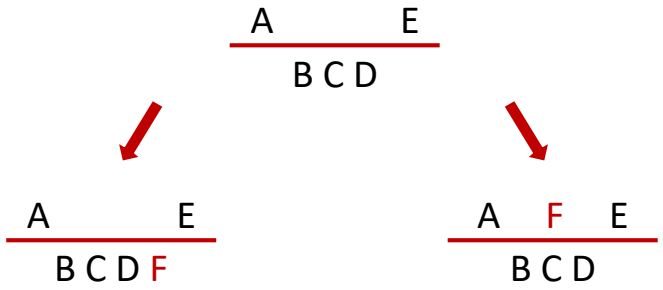


Conventional pattern

- Analytical thinking seeks to establish a conventional pattern to find one solution
- However, several patterns may exist and thus several possible solutions to address an issue

Illustration

Add F to the following letters[1]:



Absence of challenge

- Tendency to go for the obvious answer which will be accepted without any question
- However, some other, and possible better solutions, may exist

Illustration

What is the capital of South Africa[2]?

How to enter the French generic market?
(through acquisition or from scratch by adopting an innovative business model)

How to agree on drug price with payers?
(through conventional price/volume deals or path-breaking value-based models)

Sources: Adapted by Smart Pharma Consulting from J.G. Rawlinson

[1] There are several possible patterns: F may go below the line, if the pattern established is vowels and consonants. However, if the pattern depends on straight lines and curves, F must go below the line – [2] There are three capitals: Pretoria (administrative capital), Cap Town (legislative capital) and Bloemfontain (judicial capital)

To free the creative power of individuals, these barriers must be lowered or removed, and a free-wheeling atmosphere generated in which all ideas are acceptable

Creativity barrier removal (2/2)

Too quick evaluation

- This barrier is difficult to remove
- Some people tend to evaluate and reject ideas that are offbeat or new
- Thus, new or original ideas risk to be dismissed right away

Illustration

Replace the static 2-D segmentation matrix by the dynamic 3-D matrix[1]

Develop innovate ideas to create "high impact interactions" between physicians and medical representatives[2]

Adopt the Brand Preference Mix instead of the 4 Ps of the Marketing Mix[3]

Fear of looking like a fool

- People do not like going against universally accepted views by fear of being wrong and laughed at
- However, a great deal of inventors have taken the risk to challenge the mainstream thought

Illustration

With his equating mass and energy as different forms of the same phenomenon $E=mc^2$, Albert Einstein broke the rules of Newtonian physics

The Polish astronomer Nicolaus Copernicus was the first astronomer to formulate a scientifically-based heliocentric cosmology that displaced the Earth from the center of the universe

"To live a creative life, we must lose our fear of being wrong" – *Joseph C. Pierce*

Sources: Adapted by Smart Pharma Consulting from J.G. Rawlinson

[1] See BPS (behavioral prescriber segmentation) approach – [2] See H2I (High Impact Interactions) method – [3] See BPM (Brand Preference Mix) approach. These approaches and methods have been developed by Smart Pharma Consulting and are available on: www.smart-pharma.com

The mental attitude of individuals can be modified to stimulate the generation of new ideas by applying simple rules

Creativity stimulation: Practical rules (1/2)

See things in different ways

One thing may be seen in different ways as shown by this picture

Connect unrelated ideas or things

(e.g., In the 17th century, the German astronomer Johannes Kepler drew attention to the fact that tides are somehow linked to the movement of the Moon[1])

Use metaphors

The metaphor which connects two different universes of meaning through similarities helps understand one idea by another one

(e.g., Thinking of how to catch a fish in order to find new ideas to attract more customers)

Search for new applications

(e.g., A visual analogue scale designed to assess the pain of patients may as well be used to assess patients' well-being)

Cultivate a sense of humor

Both Albert Einstein and Leonardo da Vinci cultivated the humorous perspective

(e.g., How deep is the ocean?
Just a stone's throw)

"The metaphor is probably the most fertile power possessed by man" – *José Ortega y Gasset*

Sources: Adapted by Smart Pharma Consulting from R. Evans and P. Russell

[1] *In 1687, Isaac Newton explained mathematically that the Moon exerts a gravitational pull on the water of the ocean*

The mental attitude of individuals can be modified to stimulate the generation of new ideas by applying simple rules

Creativity stimulation: Practical rules (2/2)

Get rid of excuses

It takes more creativity to get rid of excuses than it does to produce new ideas

(e.g., When the Spanish conquistador Hernan Cortés, arrived at Veracruz in Mexico, he burned his ships and told his men "Now you can either fight or die". Thus, removing the possibility to give up and return to Spain)

Reverse viewpoints

By turning conventional logic upside down, we may generate new ideas, and thus open our thinking

(*e.g., Noting that milkmaids were generally immune to smallpox, Edward A. Jenner postulated that the pus in the blisters that milkmaids received from cowpox - a disease like smallpox, but much less virulent - protected them from smallpox. Then Jenner tested his hypothesis by inoculating people and proved that they were immune to smallpox). Jenner developed and generalized the vaccination technique)*

Be persistent

It is important to be persistent when attacking creatively a problem and to keep on searching even when you feel like giving up

Think ambiguously

If ambiguity causes confusion and communication problems, it can also be a powerful stimulant to imagination

Search for alternatives (Knight's move thinking)

Replace the "either/or" statement by "How to" to find additional options

(e.g., Either you drop your price or lose your customer. The question: "How to retain the customer?" can help find new options)

"Creativity is contagious. Pass it on" – *Albert Einstein*

Sources: Adapted by Smart Pharma Consulting from T. Rickards

Creativity-spurring checklists help open minds and explore new areas to find creative ideas by stimulating imagination

Creativity stimulation: Idea-generating techniques (1/4)

SCAMPER

S	Substitute	*What could be substituted to make an improvement?*
C	Combine	*What could be combined to make something more useful?*
A	Adapt	*How could the product or service be adjusted for a better output?*
M	Modify	*What could be modified, minified or magnified?*
P	Put to other uses	*Could the product or service be used in another market?*
E	Eliminate	*What would happen if a component was removed?*
R	Rearrange	*Is there something that could be reversed or done in a different order?*

Kipling's Questions

The Kipling method is one of the most basic way to explore any idea or problem consisting of a list of 6 fundamental questions

"Questions are the creative acts of intelligence" – *Francis Kingdon-Ward*

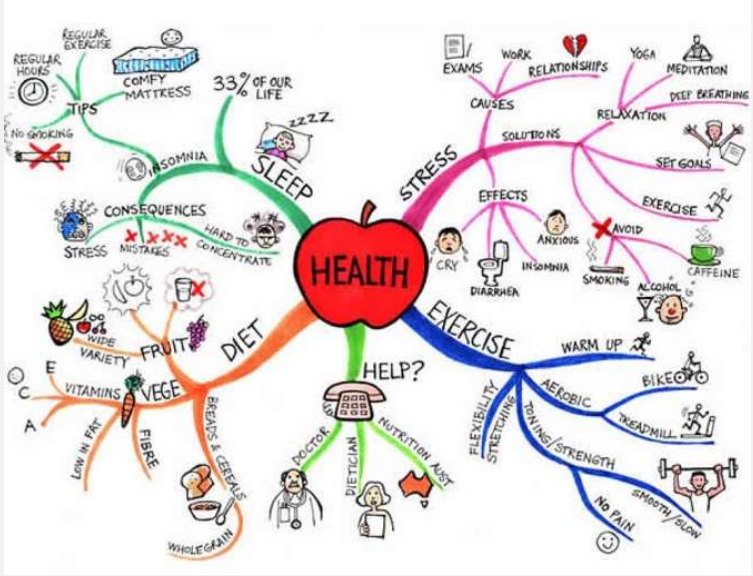
Sources: Smart Pharma Consulting

The mind mapping and the relevance tree enable to link thoughts without squeezing them into less natural listing or step-by-step sequence

Creativity stimulation: Idea-generating techniques (2/4)

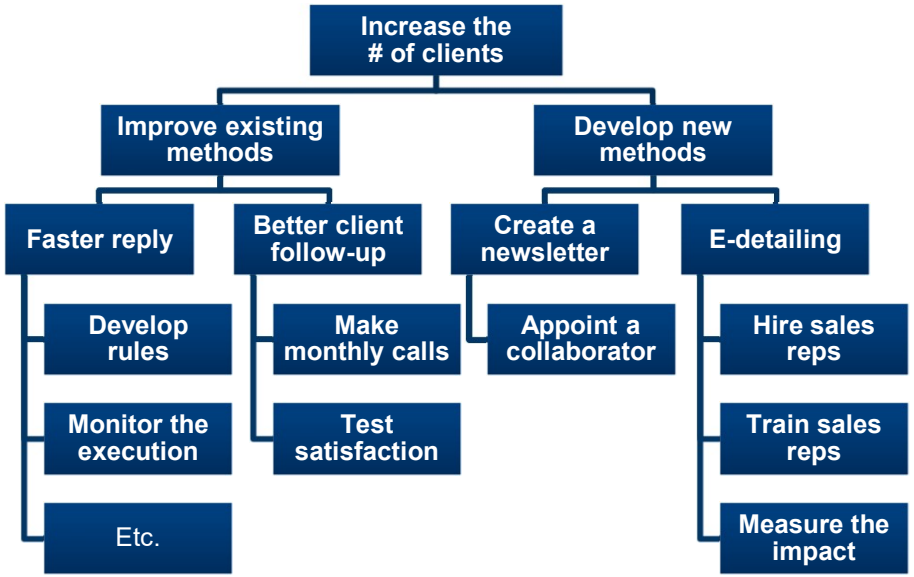
Description

A mind map is basically a diagram that connects information around a central subject



The relevance tree

The relevance tree serves as visual illustration to help understanding and to stimulate ideas



"Creativity is the power to connect the seemingly unconnected" – *William Plomer*

Sources: Adapted by Smart Pharma Consulting from Tony Buzan

The Brainstorming and the brainwriting are intuitive techniques that stimulate the generation of many creative ideas in a short period of time by a group of participants

Creativity stimulation: Idea-generating techniques (3/4)

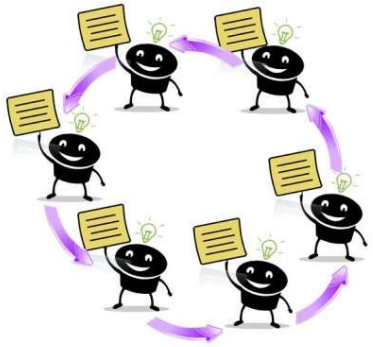
Brainstorming

1. State and restate the problem (How to do something?)
2. Brainstorm (idea generation stage)

3. Select the wildest and most foolish idea and turn it round into some more useful ideas
4. Evaluate the ideas generated, later by the brainstormers and/or a team of people deeply involved with the problem

Brainwriting

1. After the first idea has been written by one of the participants and passed on to another, everyone reacts – still through writing – to the last idea proposed until no more idea comes out



2. Then, a list of all the ideas is given out to each of the participants

"The fusion of knowledge is the most creative act of the human mind" – *Elwood Murray*

Sources: Adapted by Smart Pharma Consulting from Alex Osborn and from Bernd Rohrbach

The creativity is stimulated by "synectics" through metaphors and analogies while the "six thinking hats" approach is based on participants role playing

Creativity stimulation: Idea-generating techniques (4/4)

Synectics

"Synectics" combines elements apparently irrelevant by using metaphors and drawing analogies

The process includes 3 steps:

- Referring: Specific problem definition
- Reflecting: Imaginative manipulation of the problem, exploring alternatives, possible solutions and translations of various types
- Reconstruction: Reinventing or transforming with synectic trigger mechanisms

Add	**Transfer**	**Substitute**	**Analogize**
Subtract	**Emphasize**	**Fragment**	**Hybridize**
Repeat	**Animate**	**Isolate**	**Disguise**
Combine	**Parody**	**Distort**	**Fantasize**

Six thinking hats

Each participant (Thinking Hat) of the creative session has a specific color representing an attitude (role play) leading to parallel thinking:

- Neutral, objective (facts and figures)
- Emotional (intuitions, impressions, feelings)
- Objective, negative (critical, pessimism)
- Objective positive (optimism, exploration)
- New ideas (creativity, lateral thinking)
- Moderator (control, organization, facilitation)

The problem is introduced at the beginning of the meeting and then everyone should use all the hats

This method provides a comprehensive understanding of the issue but is time consuming

"You see things; and you say, 'Why?' But I dream things that never were; and I say, 'Why not'?" – *George Bernard Shaw*

Sources: Adapted by Smart Pharma Consulting from William Gordon, George M. Prince, Edward de Bono

While the creative thinking enables the generation of many ideas, the latter should then be evaluated and selected through an analytical thinking process

Combination of creative and analytical processes

Creative thinking

- Creative thinking (also called lateral thinking) is:
  - Imaginative
  - Divergent
  - Giving many ideas (including those that could be viewed as wild or foolish, and those that appear not to be linked with the problem)

Analytical thinking

- Analytical thinking (also called vertical thinking) is:
  - Logical
  - Convergent
  - Giving a unique or small number of ideas
- This approach requires deep and narrow probing to identify all aspects

Analytical and creative thinking processes are complement and equally important

Many ideas generated → Few solutions selected

"The creative process is any thinking process which solves a problem in an original and useful way" – *H. Herbert Fox*

Sources: Smart Pharma Consulting

The creativity at various levels of the company can be fostered by the following key recommendations

Key drivers to develop a culture of creativity

1. Provide objective

- Collaborators must have a purpose and direction for their creativity
- Guidelines and reasonable constraints will enable to ensure some control over time and cost

2. Permit more interactions

- Creative climate is stimulated if individuals take part in project and working groups
- Such interactions encourage exchange of information, flow of ideas and fresh perspectives

3. Encourage new ideas

- Throughout the company, new ideas should be encouraged
- Thus, managers should be willing to listen to suggestions, and organize whenever relevant idea generation meetings

4. Tolerate failure

- Most of new ideas will prove to be impractical or useless
- It is however important to invest in experimenting with these new ideas to identify the ones which will be effective

5. Acceptance of change

- Collaborators should ideally participate in making decisions
- Issues like job security should be carefully handled when changes are planned and implemented

6. Offer recognition

- Creative individuals are most often self-motivated
- However, a monetary and/or non-monetary reward should be granted to demonstrate that creative behavior is valued

Sources: Smart Pharma Consulting

Creative companies foresee needs that customers have not yet realized and seize opportunities that competitors have not yet seen or have overlooked

Key learnings

- Creativity is a powerful engine to discover, invent and innovate in products, services, processes, concepts, etc., that can potentially boost the performance of companies
- In a deleterious environment, in which innovation is more and more costly, competition intensifies, and payers keep on increasing their pressure on price, pharma companies should put creativity at the top of their agenda to simultaneously:
  - Reduce their costs and increase their value proposition to optimize the performance of their current business
  - Craft innovative "Blue Ocean" strategies to create and develop market spaces in which competition does not yet exist or is still weak
- For so doing, pharma companies should put in place a creativity-driven organization in which:
  - Individual creativity is encouraged and rewarded
  - Group creativity is favored through the introduction of a formal creative thinking process

"Creativity is inventing, experimenting, growing, taking risks, breaking rules, making mistakes, and having fun" – Mary Lou Cook

Sources: Smart Pharma Consulting

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3. Market Access

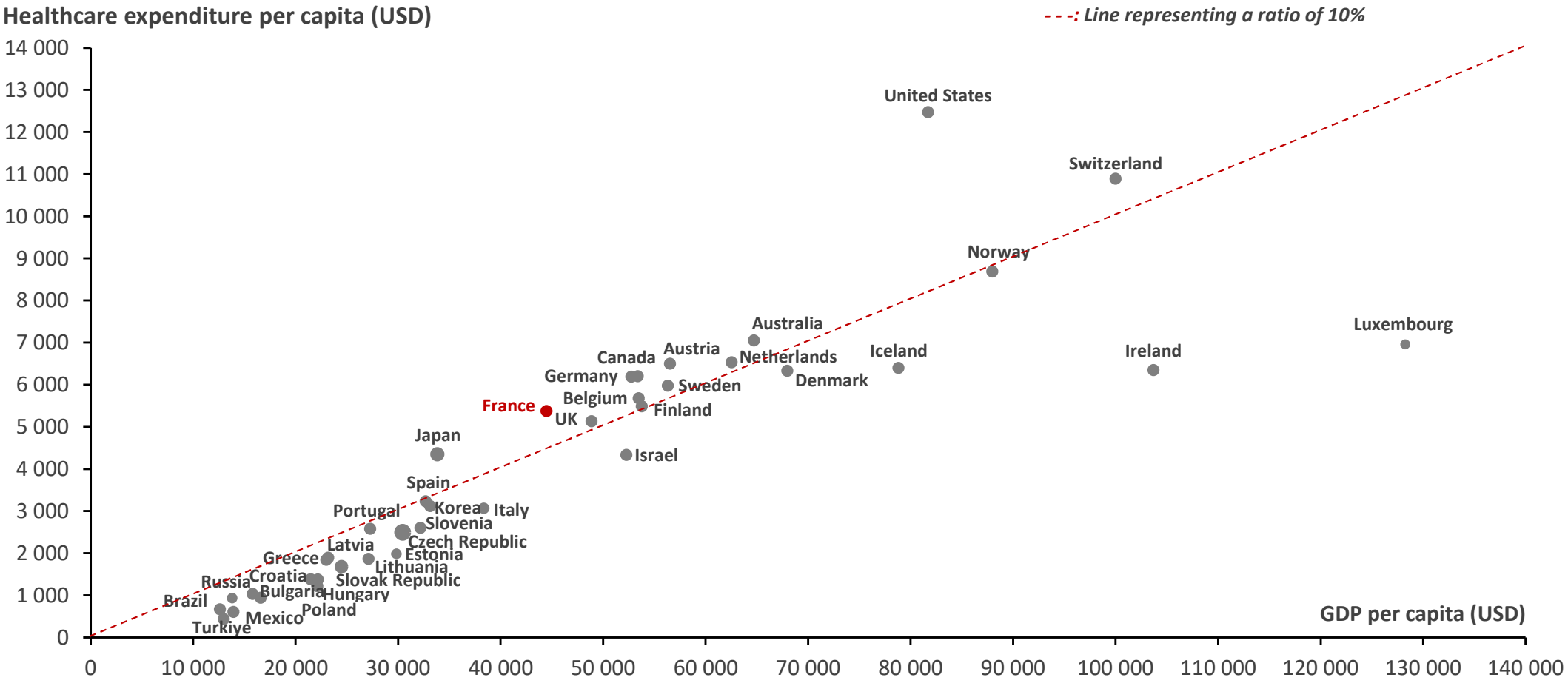
Smart Pharma
CONSULTING

Market Access
Context & Process

Application to
Pharma Companies

Healthcare expenditure to GDP[1] per capita ratio shows the different relative importances of healthcare in the four studied countries

Relation between GDP and healthcare expenditure per capita (2023[2])



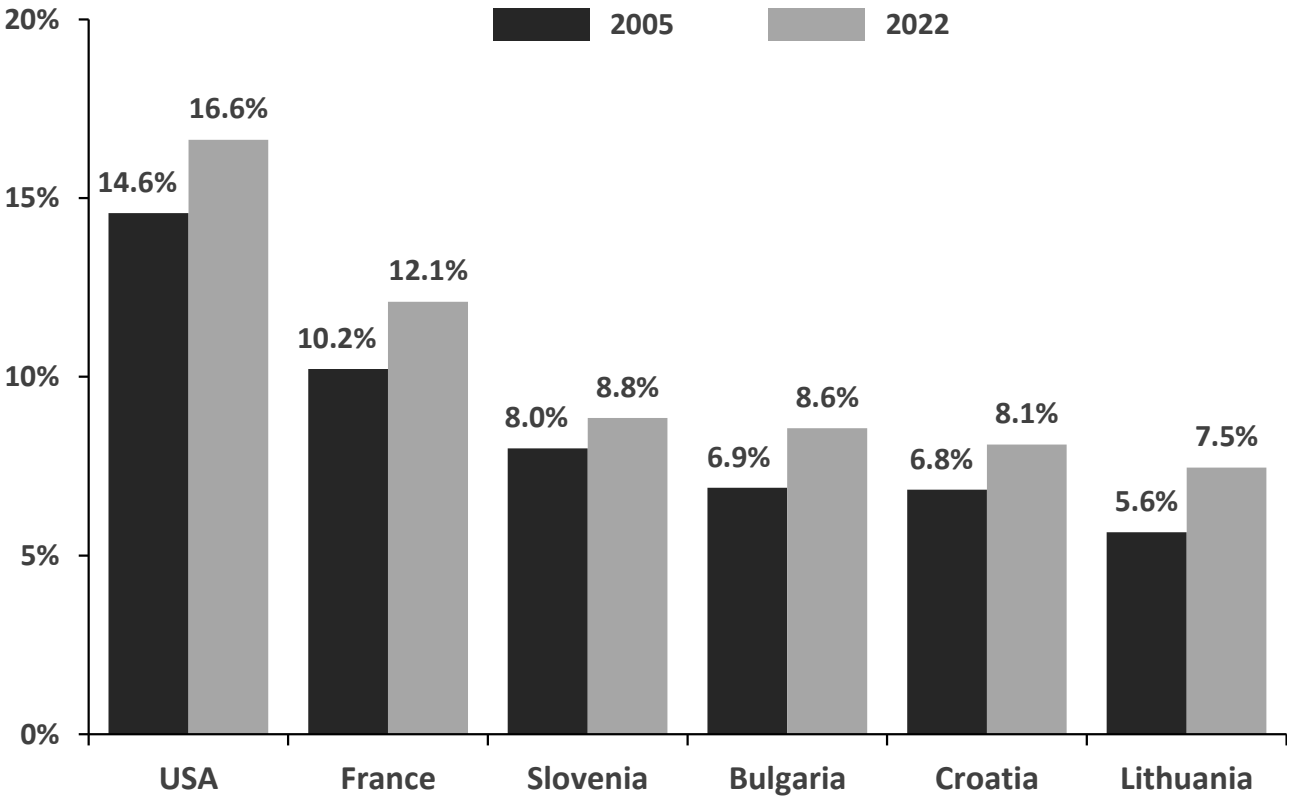
Sources: World Bank database (Nov. 2024) – Smart Pharma Consulting analyses

[1] Gross Domestic Product – [2] Or the latest healthcare expenditure data available for all countries

Healthcare expenditure should keep on growing faster than national economies due to demographic factors and willingness of citizens to have better access to healthcare

Healthcare expenditure as a percentage of GDP (2022)

Total healthcare expenditure as a % of GDP
(Local currency)

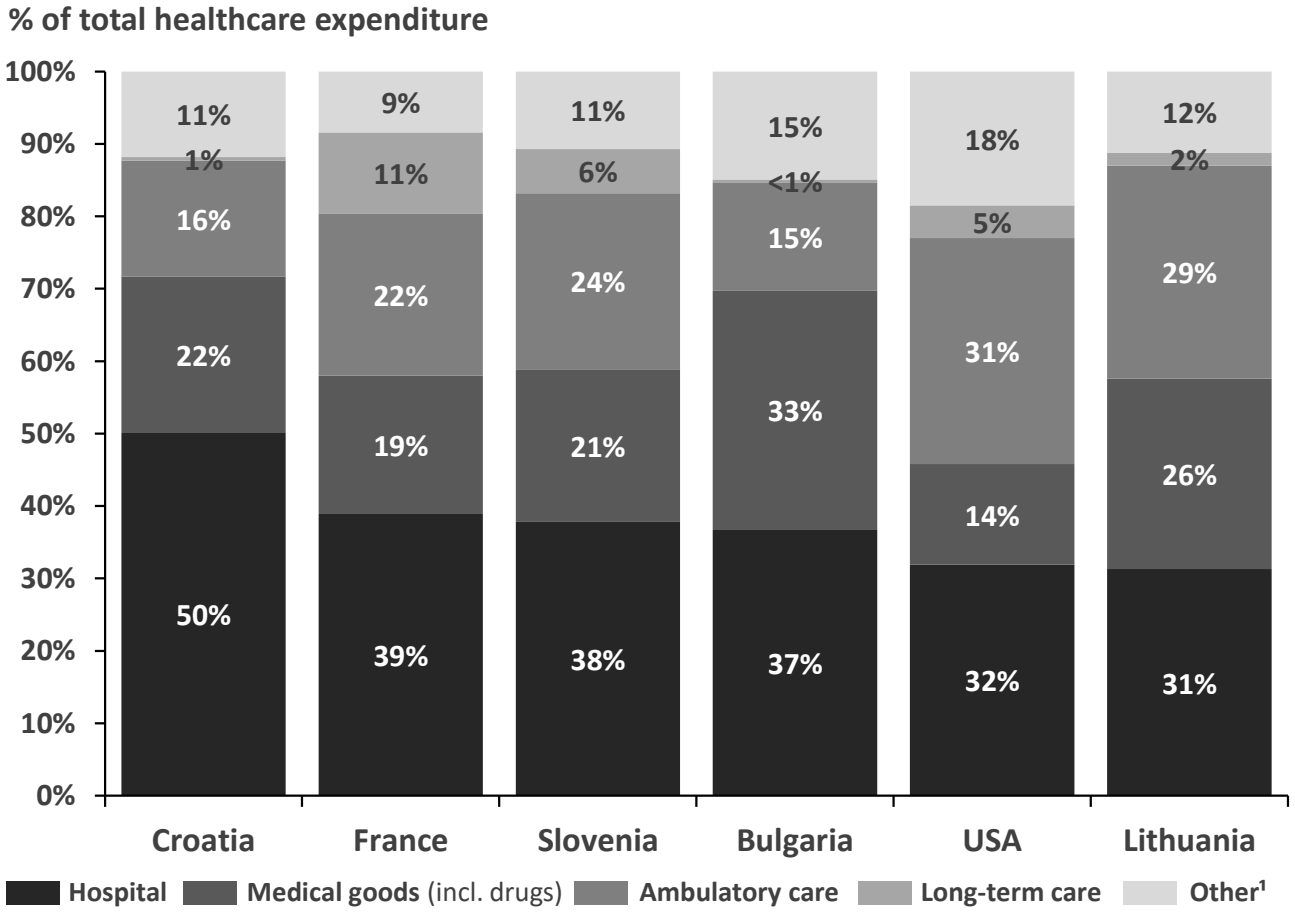


- Healthcare expenditure represents the 2nd largest public spending items in the USA and France, as it is the case in most developed countries
- At best, governments and payers will manage to slow down the rise of healthcare expenditure as a percentage of GDP but not to stop it
- There is no optimal ratio of healthcare expenditure over GDP
- This ratio primarily results from:
  - National economies
  - Public health conditions
  - Governments' investment prioritization
  - Citizens' willingness to seek for care
  - Healthcare cost

Sources: OECD database (Nov. 2024) – Smart Pharma Consulting analyses

The weight of drugs in total healthcare expenditure is higher in the EU LR countries than in the USA or in France, yet this segment is technically and politically easier to control

Breakdown of healthcare expenditure per country (2022)



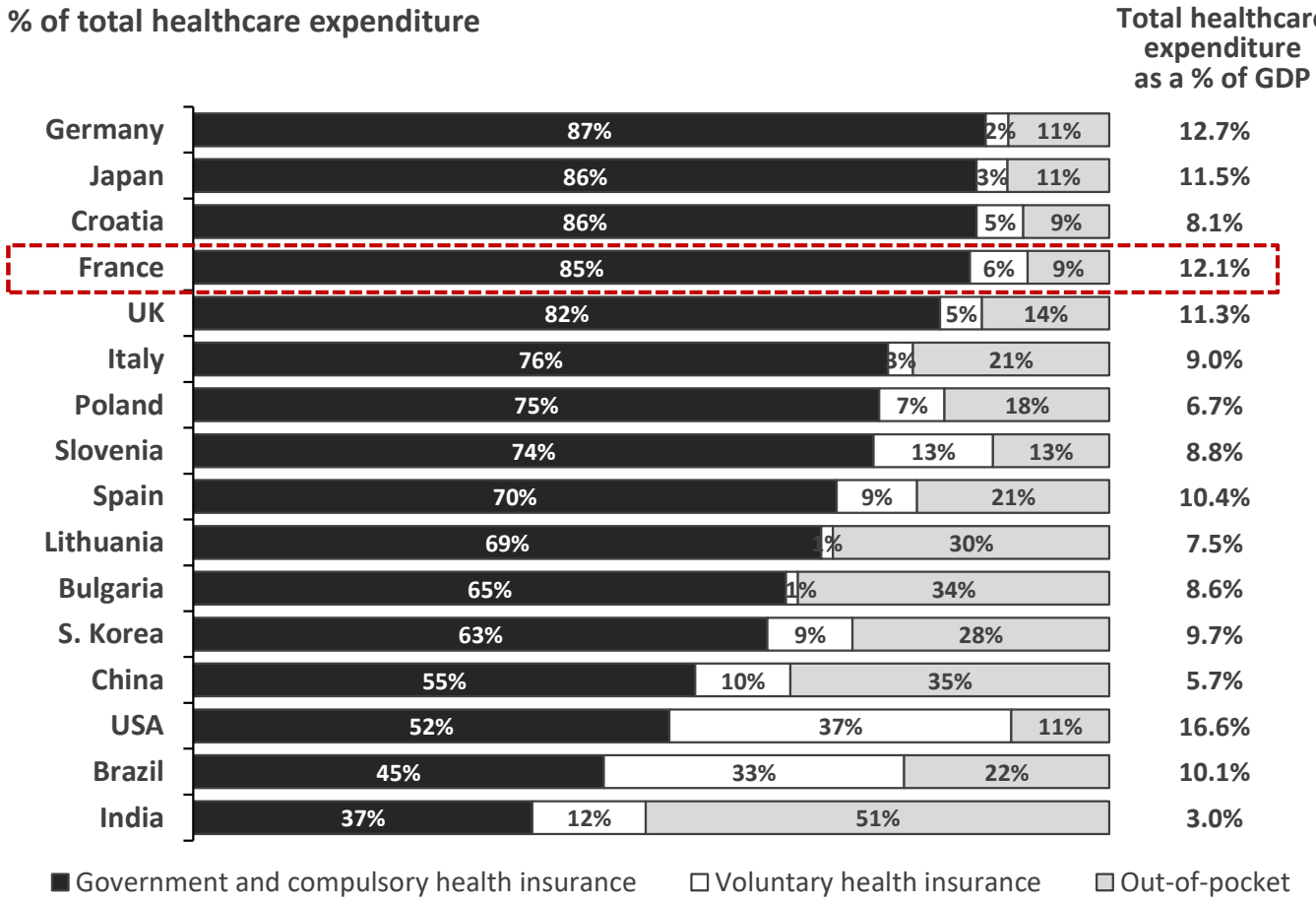
- Contrary to France and the USA, where hospitals and ambulatory care facilities represent most of the healthcare expenditure, the weight of medical goods (incl. drugs) in total healthcare expenditure is higher in BMS EU Local Representatives Markets
- Drugs are typically the easiest segment to apply cost-containment measures on, as decisions are:
  - Made by payers (either public and/or private), with a limited bargaining power of suppliers
  - Much better accepted by citizens than restriction measures on the other segments
- However, to significantly contain the raise of total healthcare costs, governments need to apply cost-optimization measures on all healthcare segments, irrespective of their relative importance

Sources: OECD database (Nov. 2024) – Smart Pharma Consulting analyses

[1] Other expenditures include ancillary services, preventive care and governance, healthcare system and financing administration

France is one of the countries where the percentage of "out-of-pocket" spending to cover the healthcare expenditure is the lowest

Share of public spending in total healthcare expenditure (2022*)



- With 12.1% of its GDP spent in healthcare, France belongs to the countries allocating the largest share of their resources
- Its level of public spending on healthcare is amongst the highest, showing a highly protective healthcare system
- All the French citizens benefit from a public health insurance and 95% of them have a complementary private healthcare insurance, which is compulsory since the 1st of January 2016, for all employees, irrespective of the size of their company
- As a result, "out-of-pocket" spending represent only 9% of total healthcare expenditure

Sources: World Bank and OECD databases (Nov. 2024) – National Health Expenditure database: Centers for Medicare & Medicaid Services (Feb. 2024) – Smart Pharma Consulting analyses

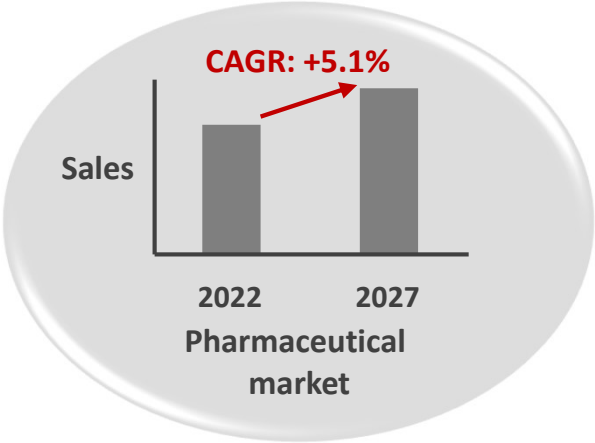
** Or latest data available*

The key drivers and limiters of the global pharmaceutical market by the end of 2027, as well as their probable impact on sales trends, are well identified

Global pharmaceutical market drivers and limiters (2022 – 2027)

DRIVERS

1. Population increase and ageing
2. Better access to medicines in emerging markets (e.g., BRICS[1], Mexico, Turkey) as a result of an increasing GDP per capita
3. Strong development of generics market (access to a larger number of people, especially in lower income countries)
4. Strong demand from patients / PAGs for more effective and better tolerated new drugs



LIMITERS

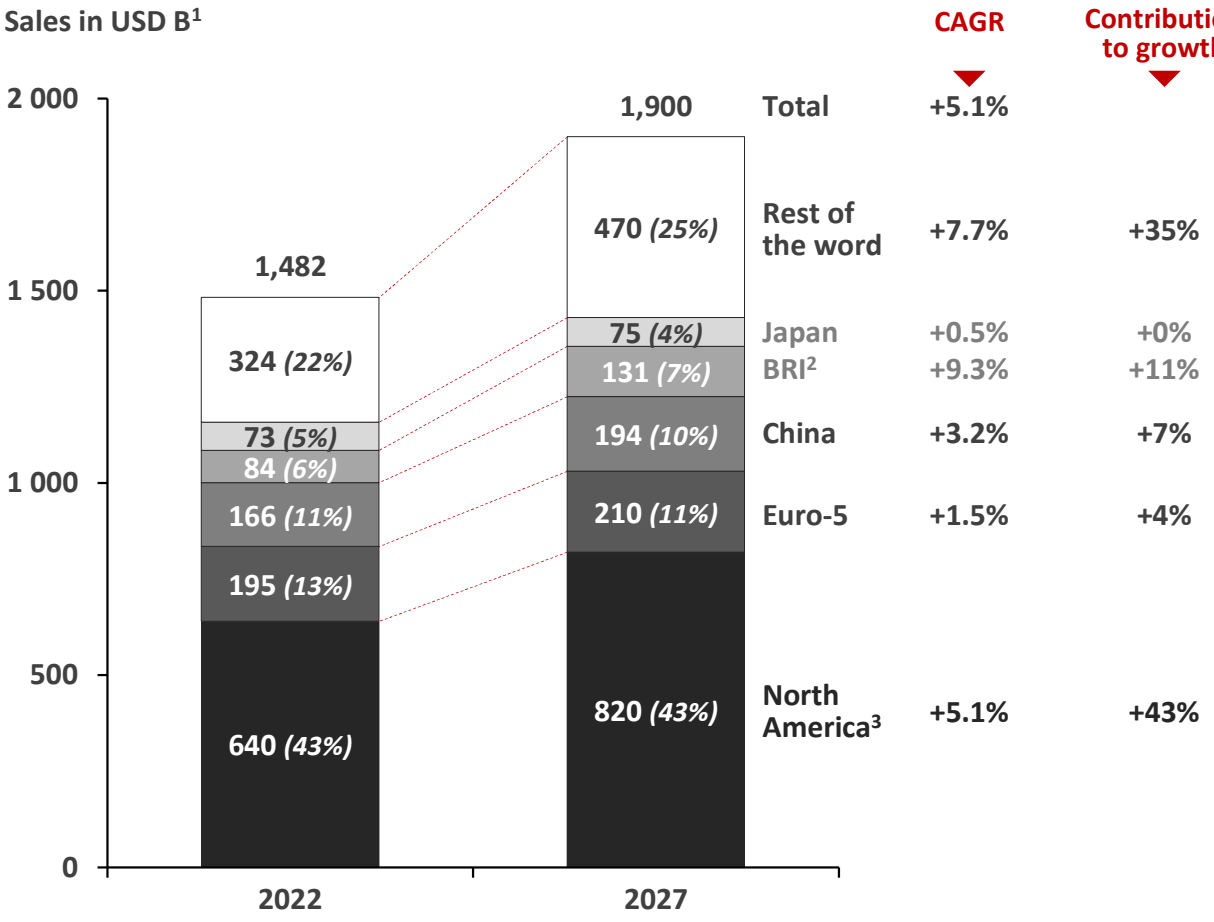
1. Decreasing R&D productivity of pharma companies re. breakthrough innovations
2. Increasing barriers to market access and stronger pressure on price from payers (e.g., governments, HMOs, patients), exacerbated by a tougher economic environment
3. Increasing price sensitivity of customers for non-reimbursed drugs
4. Intensification of competition from generic and biosimilar drugs

Sources: Smart Pharma Consulting analyses and estimates

[1] *Brazil, Russia, India, China, South Africa*

Sales of Euro-5 countries should grow slowly by 2027 due to stringent cost containment measures leading to a two-point decrease of their weight in the global pharmaceutical market

Market size and growth by geographic area (2022 – 2027)



- The global pharma market is expected to grow with a **+5.1% CAGR** by **2027** including the impact of Covid-19, that should lead to **higher pressure** on **prices** worldwide in the next 5 years
- **Euro-5 countries** account together for only **13%** of the global pharma market:
  - Germany: 4%
  - France: 3%
  - Italy: 2%
  - UK: 2%
  - Spain: 2%

  and should see their **weight drop by 2 points** by 2027, due to higher price pressure than in the average of the other countries
- **North America** should continue to weigh for **43%** of the global pharma market in value and contribute to **43%** to worldwide market growth over the 2022 – 2027 period

Sources: IQVIA Institute (January 2023) – Smart Pharma Consulting estimates

[1] Ex-factory price before rebates – [2] Brazil, Russia, India – [3] USA and Canada accounting for 41% and 2%, respectively

By 2027, the French Pharma market is expected to step back from the 5th to the 6th place at the global level and remain at the 2nd place in Europe

Global pharmaceutical market ranking in value[1] (2017 – 2022 – 2027)

Rank	2017	2022	2027	CAGR 22-27
1	USA	USA	USA	++
2	China	China	China	++
3	Japan	Japan	Germany	++
4	Germany	Germany	Japan	+
5	France	France	Brazil	++++
6	Italy	Brazil	France	+
7	UK	Italy	UK	+
8	Canada	UK	Italy	+
9	Spain	Canada	India	++++
10	Brazil	Spain	Canada	++
11	India	India	Spain	+
12	Russia	Russia	Russia	+++
13	South Korea	South Korea	South Korea	+++
14	Australia	Australia	Mexico	+++
15	Argentina	Argentina	Australia	++
16	Saudi Arabia	Mexico	Argentina	++
17	Turkey	Saudi Arabia	Turkey	++++
18	Mexico	Poland	Saudi Arabia	++
19	Poland	Indonesia	Poland	+++
20	Switzerland	Belgium	Vietnam	+++

CAGR 2022 – 2027

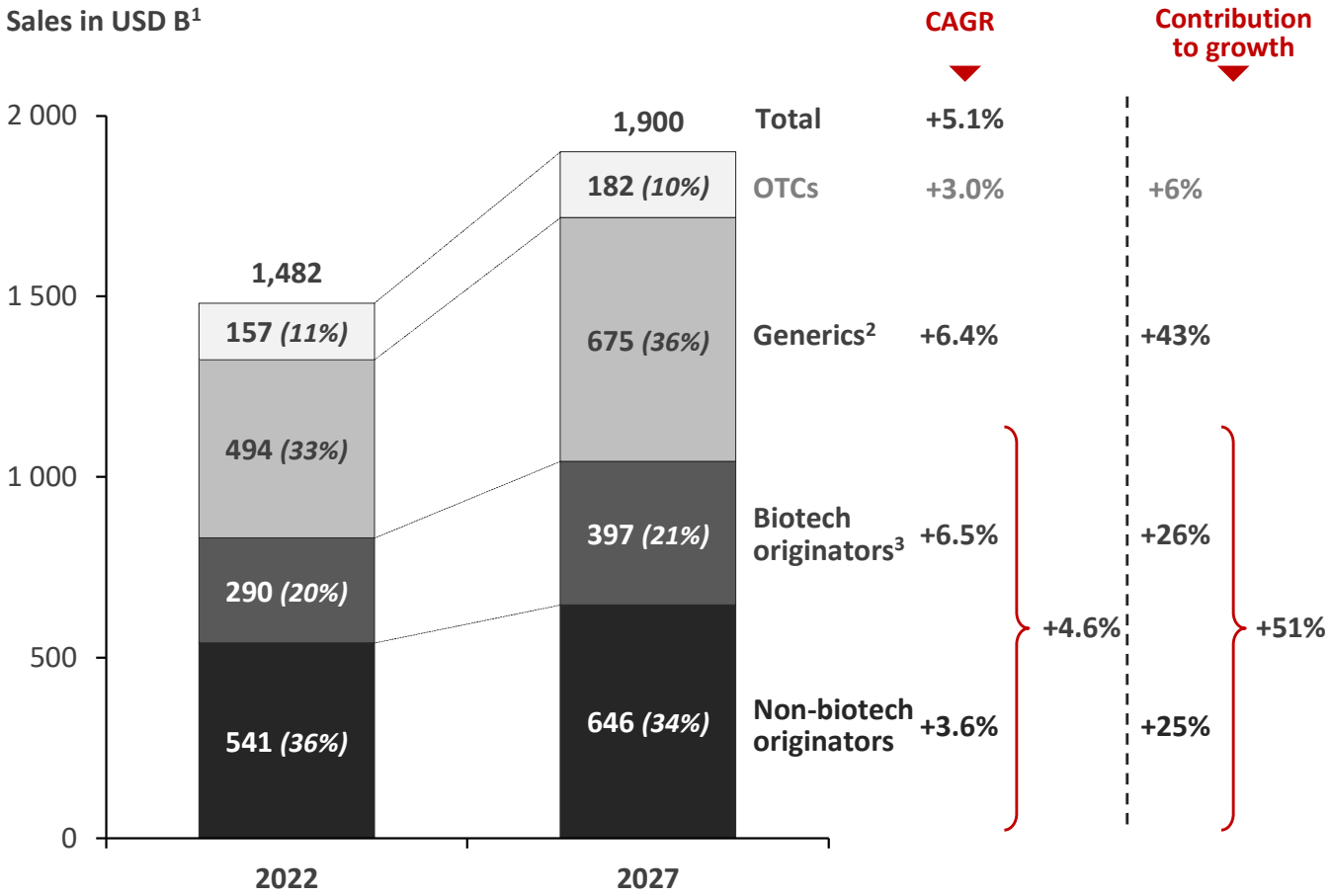
- ++++ → ≥8%
- +++ → 6 – 7.9%
- ++ → 3 – 5.9%
- + → <0 – 2.9%

Sources: IQVIA Institute (January 2023) – Smart Pharma Consulting estimates

[1] *In 2022 USD, at constant exchange rate*

All the business segments of the pharma market will be affected by the Covid-19 crisis through a strong price pressure over the 2022-2027 period

Global pharmaceutical market size and growth by strategic segment (2022 – 2027)



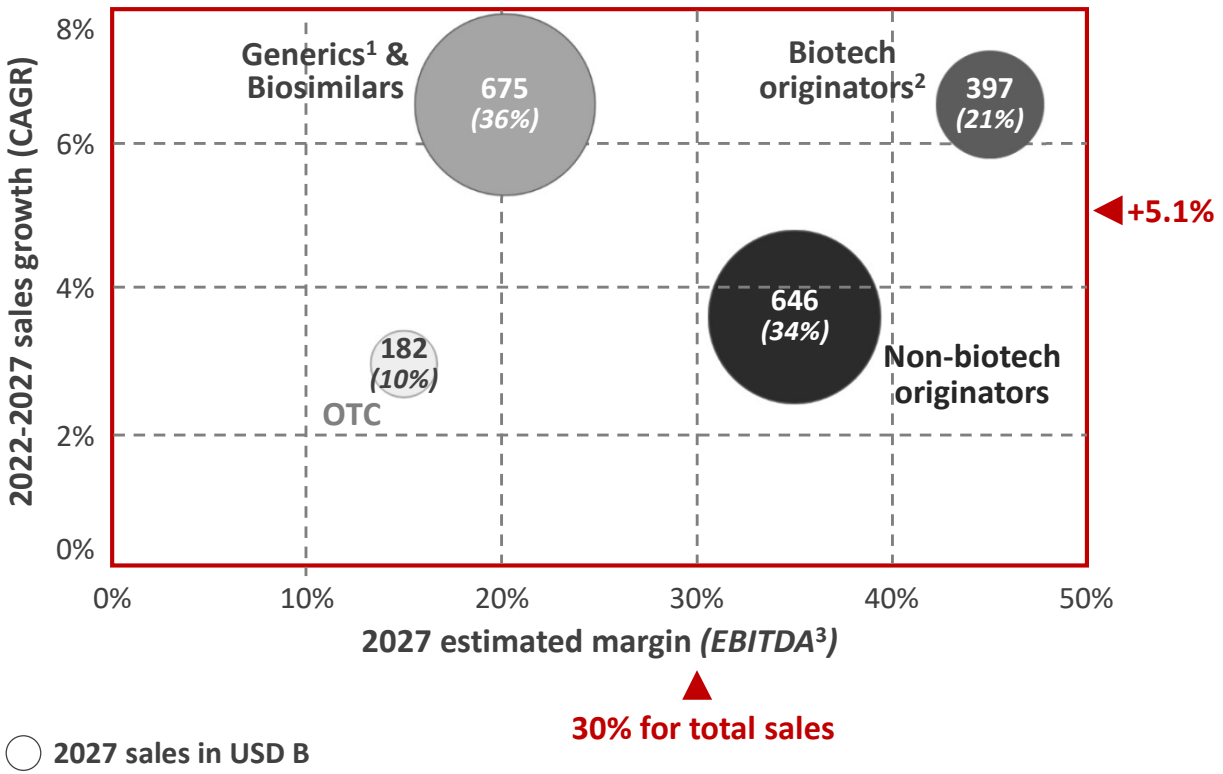
- OTCs, which should remain the smallest segment of the global pharma market, has been significantly affected by the Covid-19 crisis, especially during lockdown periods. OTCs should grow at a lower pace than the other market segments, due to their stronger sensitivity to the economic environment
- Despite an intensified price pressure on generics and biosimilars, this market segment should continue to grow in volume due to patent expiries and become the largest segment of the global pharma market by 2027
- Biotech originators should become the main driver of innovation in the next 5 years
- Non-biotech originators should be less dynamic, due to generics competition and the maturity of most of the brands

Sources: IQVIA Institute (January 2023) – Smart Pharma Consulting estimates

[1] Ex-factory price before rebates – [2] Including branded and unbranded generics and biosimilars, excluding OTC – [3] Excluding biosimilars, already included in the "Generics" segment

By 2027, the sales growth of the pharma market should be essentially driven by generics and biotech originators, but pharma companies should lose two points of profitability

Global pharmaceutical market attractiveness by strategic segment (2022 – 2027)



- By 2027, the global pharma market should reach USD 1,900 B and grow at a pace of +5.1% per year, i.e., 1.9 point of percentage above the forecasted worldwide economic growth, estimated at +3.2%
- The average EBITDA of the pharma industry should decrease from ~32% in 2022 to ~30% in 2027, mainly due to increasing price pressure
- In 2027, the average profitability of pharma companies should remain more than 2 times higher than the average of all other business sectors
- The biotech segment will remain very attractive but biosimilar competition will ramp up
- The OTC segment will remain the least attractive

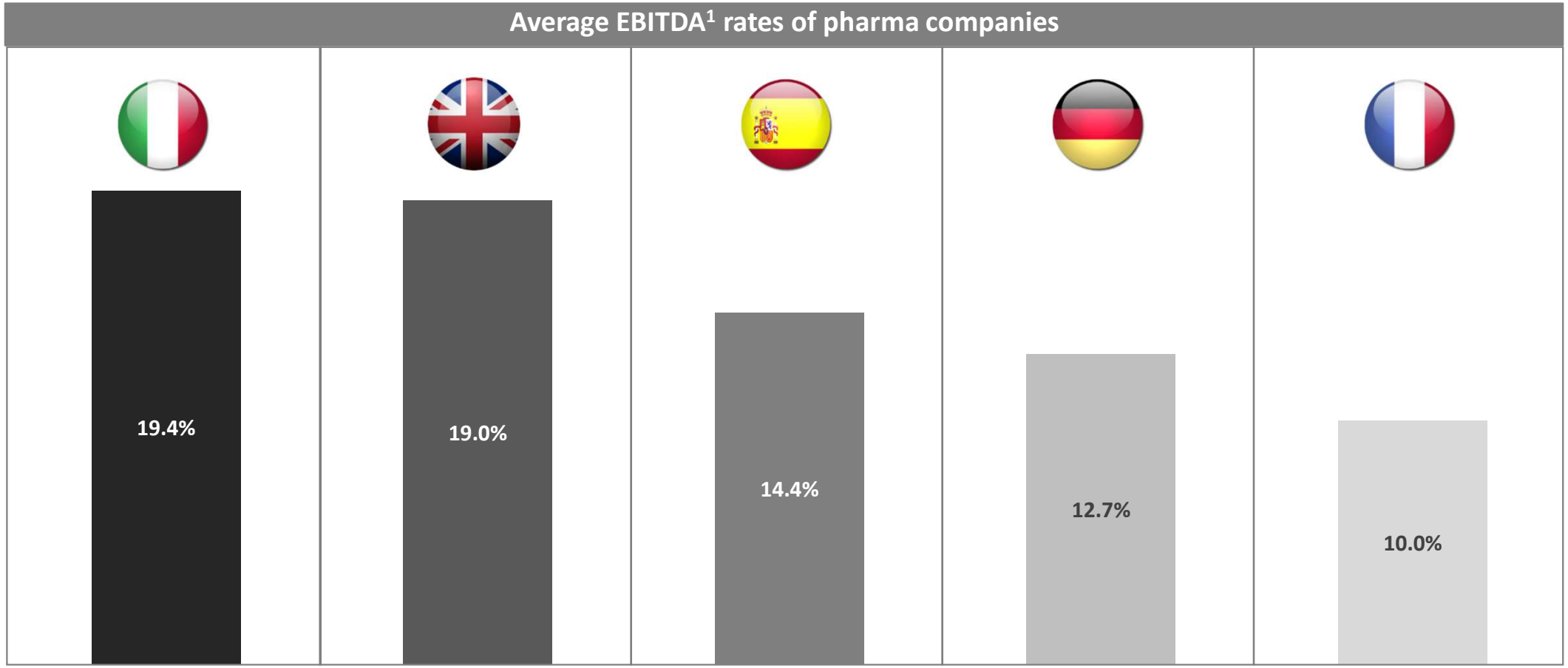
Worldwide economic growth – CAGR 2022-2027: +3.2%

Sources: IQVIA Institute (January 2023) – World economic outlook, IMF (July 2024) – Smart Pharma Consulting estimates

[1] Including branded and unbranded generics and excluding OTC – [2] Excluding biosimilars, already included in the "Generics" segment – [3] Earnings before interest, taxes, amortization and depreciation

Among the 5 main European markets, France is the least profitable for the pharmaceutical sector

Pharmaceutical industry profitability in Euro-5 (2023)

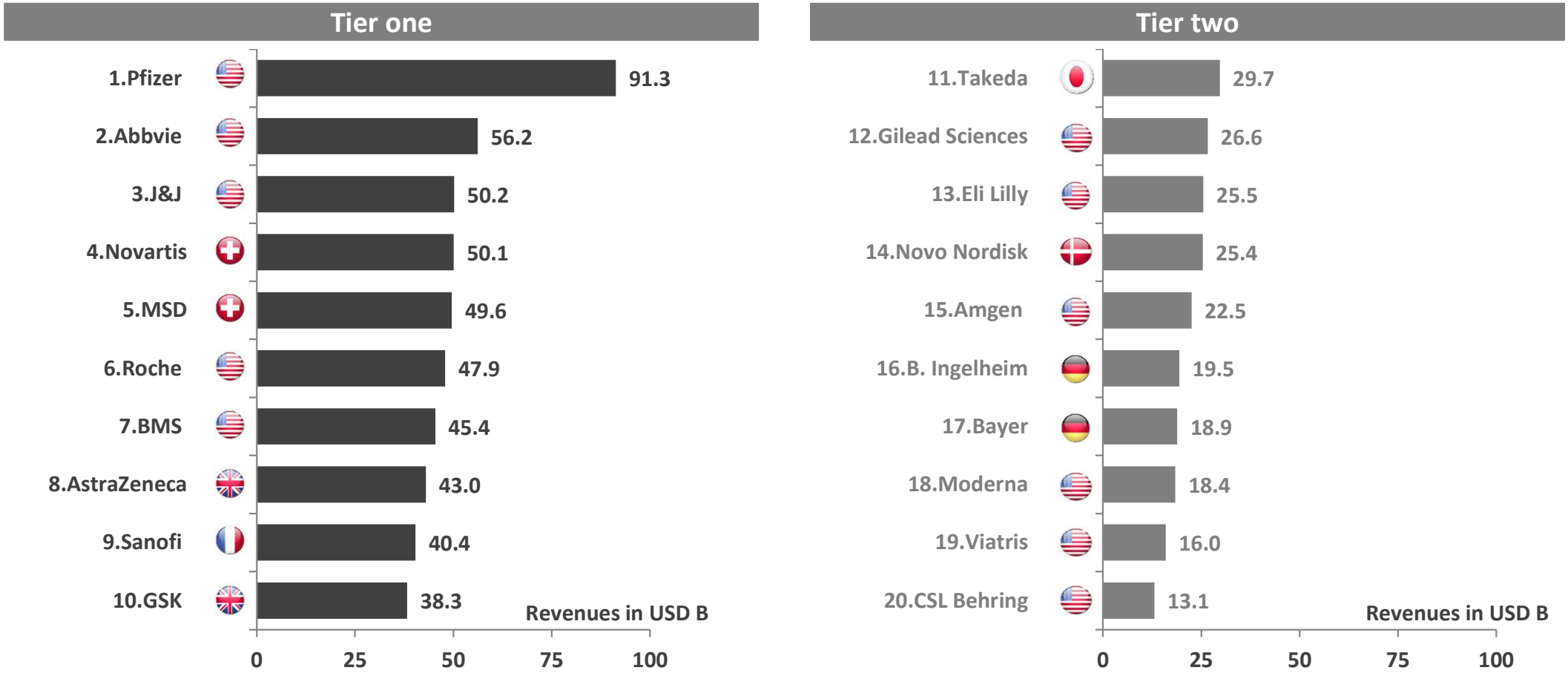


Sources: Bilan économique du Leem, édition 2023, Leem (February 2024) – Smart Pharma Consulting analyses

[1] Earning before interest, tax, depreciation and amortization

The top 20 pharma companies based on strategic drugs & vaccines segments sales count 11 companies from the USA, 8 from Europe and 1 from Japan

Top 20 pharma companies – Drugs & vaccines strategic segments (2022)



Source: PharmExec (June 2023) – Smart Pharma Consulting analyses

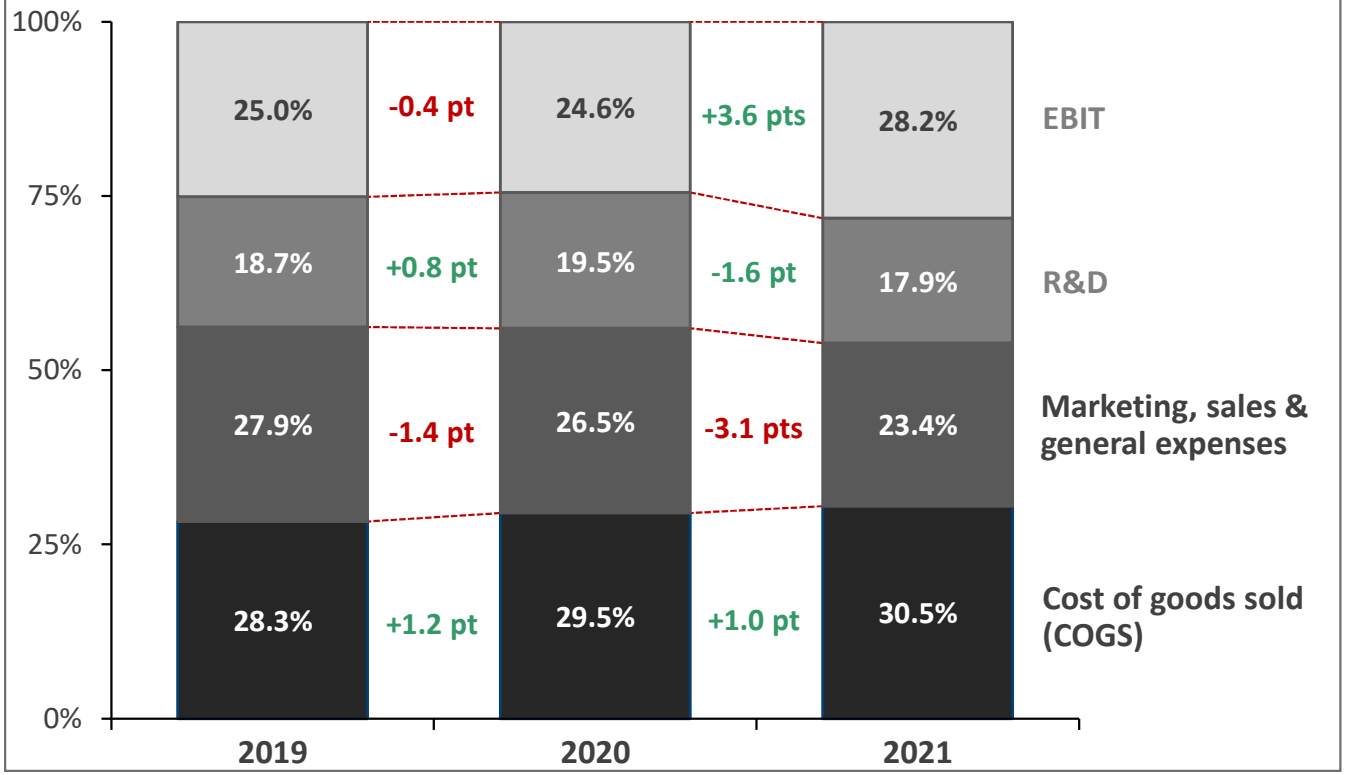
Note: panel of the 20 biggest pharma companies in terms of prescribed sales (drugs & vaccines) in human health in 2021 (excluding revenues from royalties, co-promotions, as well as sales from non-prescription pharmaceuticals)

In 2021, the weighted average operating result (EBIT) of the top 20 pharma companies reached ~28% of revenues, representing an increase by 3.2 points of percentage vs. 2019

Top 20 pharma companies – Cost structure (2019 – 2021)

Cost structure as a percentage of total revenues

Weighted average of total revenues



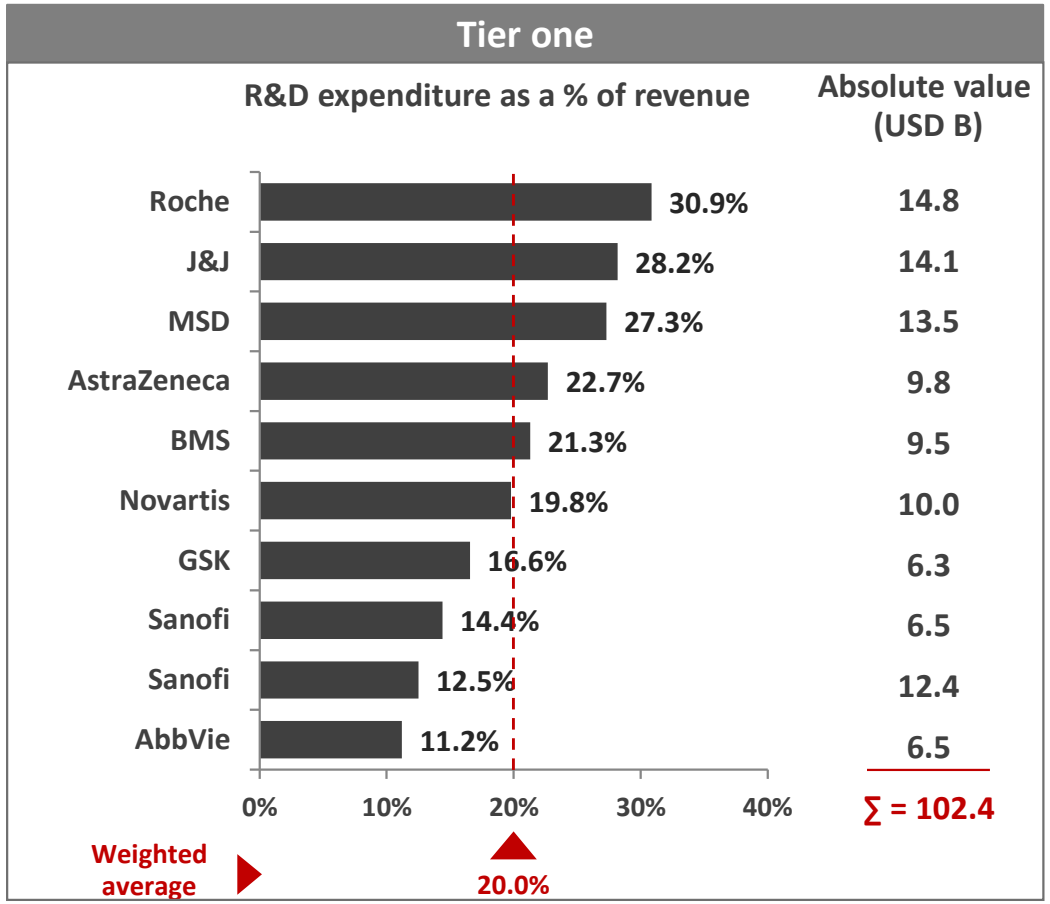
- The analysis of the **top 20 pharma companies** in the world shows that their average **profitability** has **increased** by **3.2 points of percentage** between **2019** and **2021**
- With an average operating result of **~28%** in 2021, the **level of performance** remains **high**, which is the **Achilles heel** of pharmaceutical companies when **negotiating price** and **reimbursement of their drugs with governments and payers**
- In 2021, **marketing, sales & general expenses** were **31% higher** than investment in **R&D…**
- **…but decreased from ~28%** in 2019 to **~23% of total revenues** in 2021

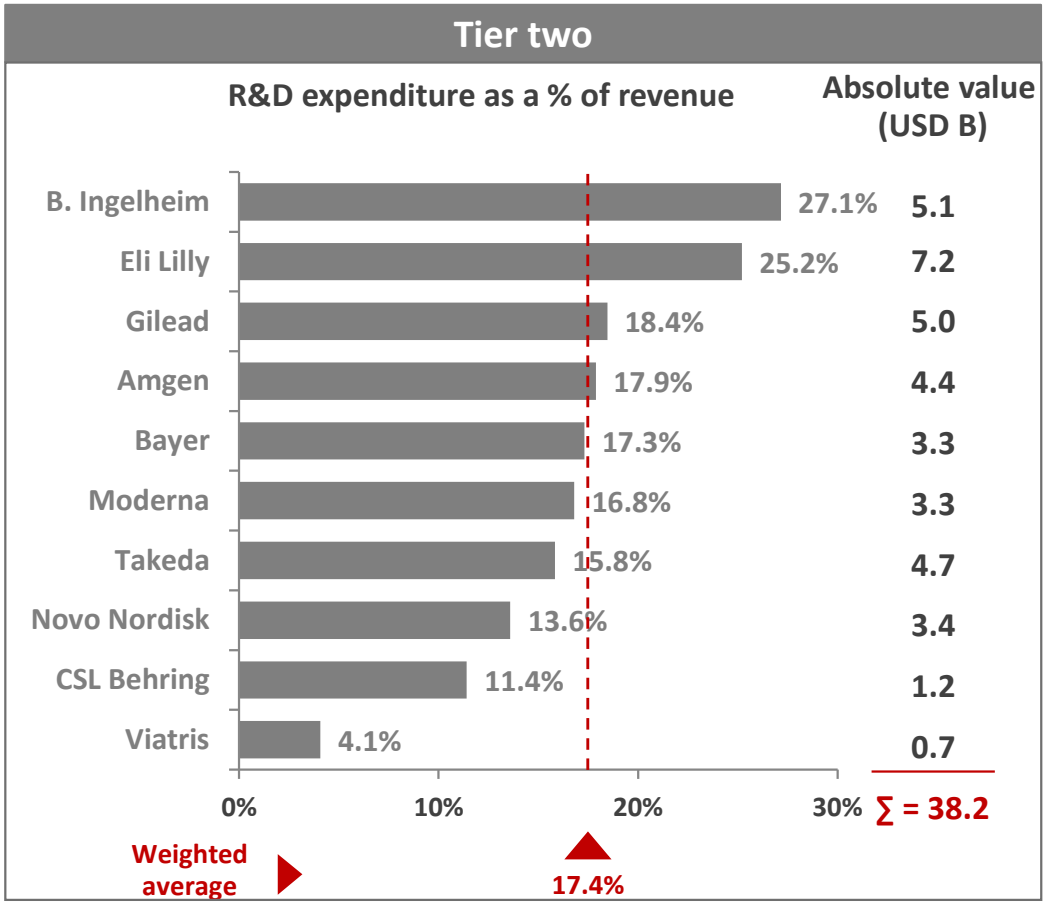
Source: Companies annual reports (2022) – Smart Pharma Consulting analyses

Note: panel of the 20 biggest pharma companies in terms of prescribed sales (drugs & vaccines) in human health in 2021 (excluding revenues from royalties, co-promotions, as well as sales from non-prescription pharmaceuticals)

Tier-one pharma companies have spent ~2.6 times more for R&D in absolute value than tier-two pharma companies and 2.6 points more as a percentage of their revenues

Top 20 pharma companies – R&D expenditures (2022)



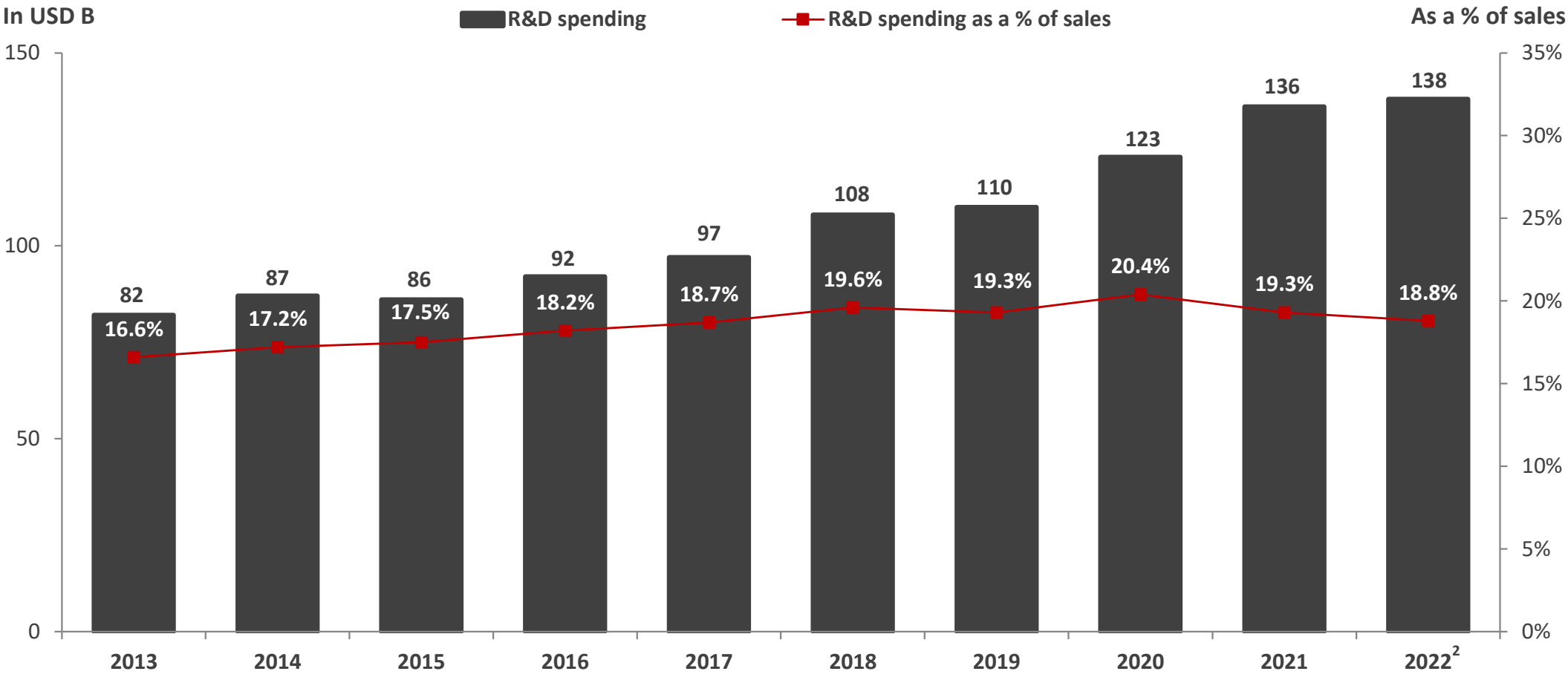


Sources: Evaluate Pharma (May 2022) – Companies annual reports (2022) – Smart Pharma Consulting analyses

Note: panel of the 20 biggest pharma companies in terms of prescribed sales (drugs & vaccines) in human health in 2021 (excluding revenues from royalties, co-promotions, as well as sales from non-prescription pharmaceuticals)

R&D expenditure by large pharma companies[1] amounted to a record value of USD 138 B in 2022, accounting for ~19% of their worldwide sales

Large pharma R&D spending and spending as a % of sales (2013-2022)



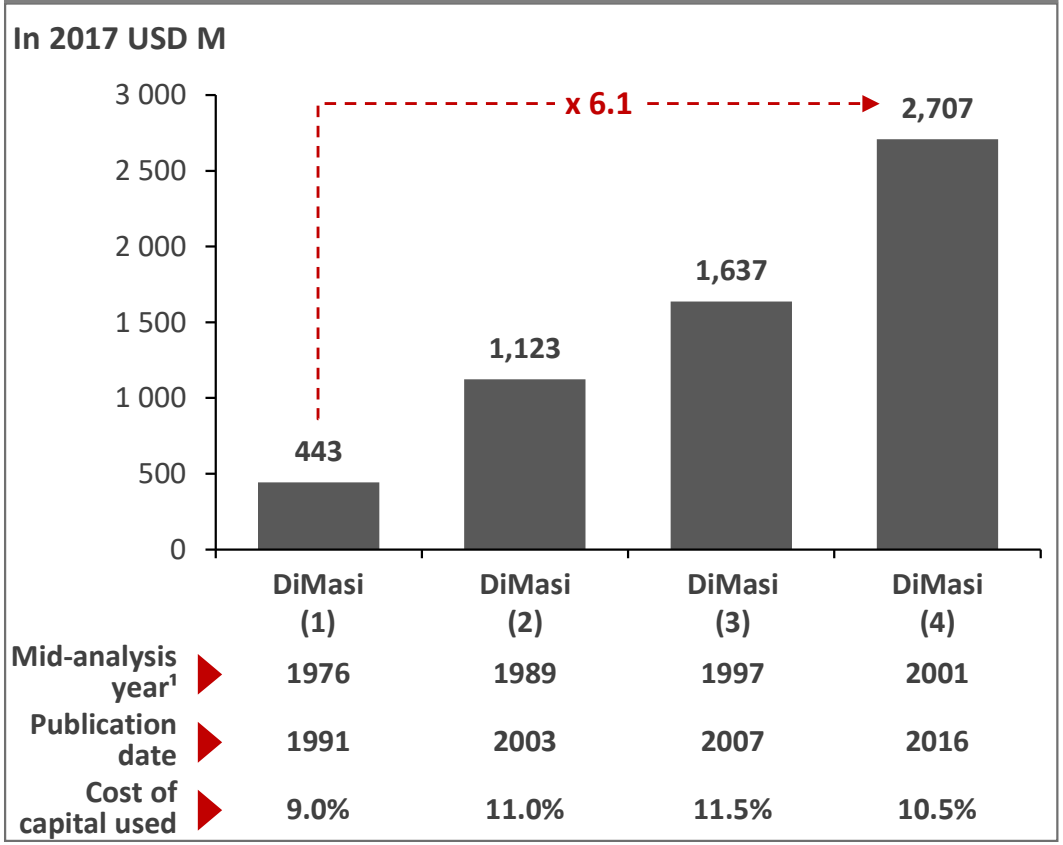
Sources: IQVIA Institute, Global trends in R&D (February 2023) – Smart Pharma Consulting analyses

[1] AbbVie, Amgen, AstraZeneca, BMS, Eli Lilly, Gilead, GSK, J&J, Merck, Novartis, Novo Nordisk, Pfizer, Roche, Sanofi and Takeda – [2] MAT (Mobile Annual Total) 09/2022

The analysis of four studies carried out with the same methodology shows that the development cost of new drugs has more than sextupled over the last three decades

Evolution of R&D costs

Estimated capitalized cost per approved new drug (pre-tax)



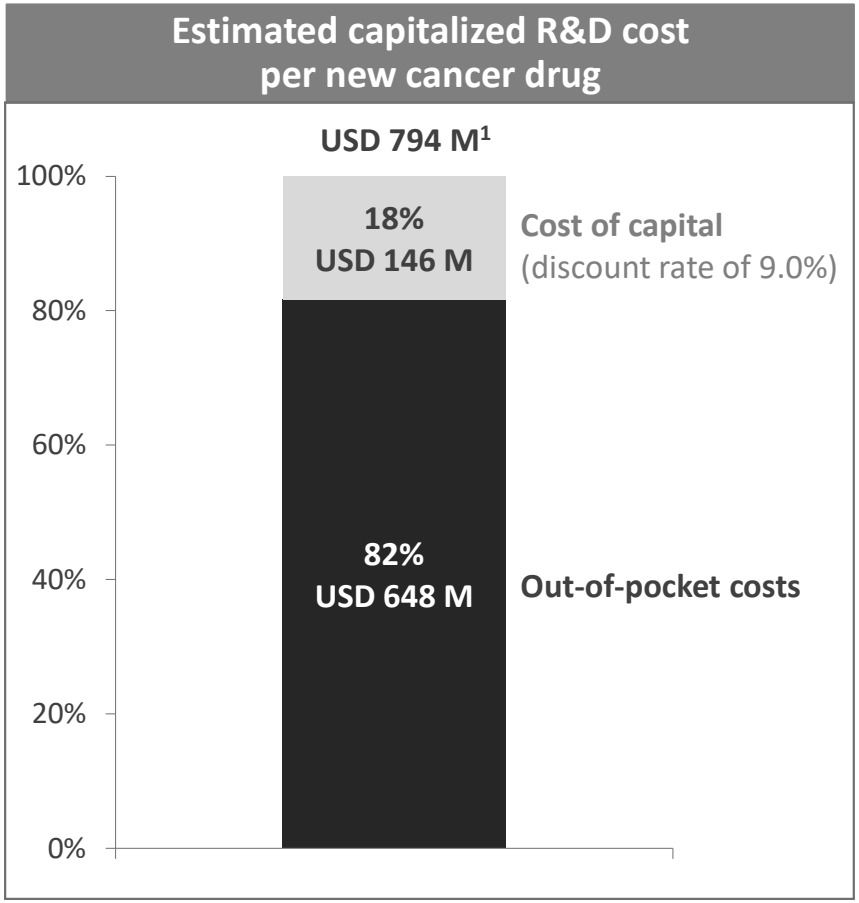
- The **evolution** of the capitalized R&D costs per approved new drug, after neutralization of the inflation, can be mainly explained by:
  - The **growth of the out-of-pocket costs**, especially the growth of clinical trials spending: x10.8 between the 1991 and the 2016 estimates (vs. preclinical spending which grew less: x3.9)
  - The **decrease of the success rates** to reach approval from phase I, ranging from 23% in the first 1991 estimates to 12% in the 2016 estimates
  - The overall **increase of the used cost of capital**, even if, in the 2016 estimates, a 10.5% cost of **capital was used,** in decrease of 1 **point of percentage from** the previous estimates. These assumptions of cost **of capital seem overestimated c**ompared with available data from NYU Stern School of Business for **biotech products** (9.2%, based on 411 firms) and for **traditional pharma** (7.7%, based on 157 firms)

Sources: DiMasi (1991) – DiMasi et al. (2003) – DiMasi, Grabowski (2007) – DiMasi (2016) – Cost of Capital, NYU Stern School of Business (January 2016) – Implicit price deflators for GDP, Bureau of Economic Analysis – Smart Pharma Consulting analyses

[1] Products with first testing in humans over the analyzed period – Note: For the sake of comparability, all values are adjusted to USD 2017 prices using data of the US GDP implicit price deflator from the US. Bureau of Economic Analysis. The GDP implicit deflator shows the rate of price change in the economy as a whole; being the ratio of GDP in current local currency to GDP in constant local currency

In the JAMA Internal Medicine study, the median cost of developing a single cancer drug was estimated at USD 794 M, including a 9% per annum cost of capital

R&D costs estimates for oncology drugs (2017)



- The study was conducted from **December 2016** to **March 2017**
- **10 companies** having received approval by the US FDA[2] for a **cancer drug** from January 1, 2006, to December 31, 2015, were included in the analysis
- Cumulative R&D spending was estimated from **initiation of drug development activity** to date of **approval**
- The 10 companies had a medium time to develop a drug of **7.3 years** (range, 5.8 to 15.2 years)
  - **5 drugs received accelerated approval from the US FDA**
  - **5 drugs received regular approval**
- The **median cost** of drug development was estimated at **USD 648 M** (range, USD 157 M to USD 1,951 M) representing:
  - **For a 7% per annum cost of capital[3], USD 757 M (range, USD 204 M to USD 2,602 M)**
  - **For a 9% per annum cost of capital[3], USD 794 M (range, USD 219 M to USD 2,827 M)**
- With a median of **4.0 years** (range, 0.8 to 8.8 year(s)) since approval, the total revenue from sales of these 10 drugs since approval was **USD 67.0 B** compared with total R&D spending of **USD 7.2 B**

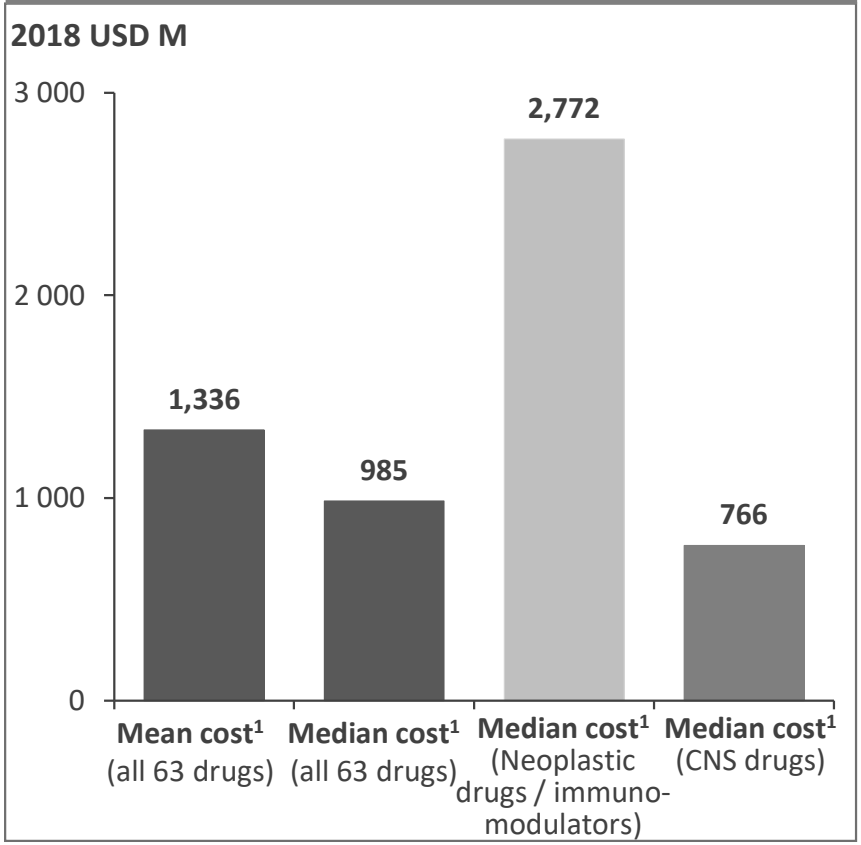
Sources: JAMA Internal Medicine (November 2017) – Smart Pharma Consulting analyses

[1] Capitalized costs in 2017 USD – [2] Food and Drug Administration – [3] Opportunity cost

This study confirms the important variability of R&D estimated costs, depending on the products analyzed, the calculation method and the underlying assumptions

R&D costs estimates for oncology drugs (2018)

Estimated capitalized R&D cost per new drug



- The study analyzed the **R&D expenditures required** to bring a new drug to market, based on publicly available data
- Data were analyzed on **63 new products** approved by the US FDA between **2009** and **2018**
- The data were mainly coming from:
  - **US SEC (Securities and Exchange Commission)**
  - **Drug@FDA database**
  - **ClinicalTrials.gov**
- R&D spending were capitalized at a real cost of capital rate of **10.5%**
- The **mean cost[1]** of R&D was estimated at **USD 1,335.9 M** (95% CI[2], USD 1,042.5 M – USD 1,637.5 M)
- The **median cost[1]** of R&D was estimated at **USD 985.3 M** (95% CI, USD 683.6 M – USD 1,228.9 M)
- The **median cost[1]** of R&D for **immunomodulating** and **antineoplastic** drugs was estimated at **USD 2,771.6 M** (95% CI, USD 2,051.8 M – USD 5,366.2 M)
- The **median cost[1]** of R&D for **CNS drugs** was estimated at **USD 765.9 M** (95% CI, USD 323.0 M – USD 1,473.5 M)

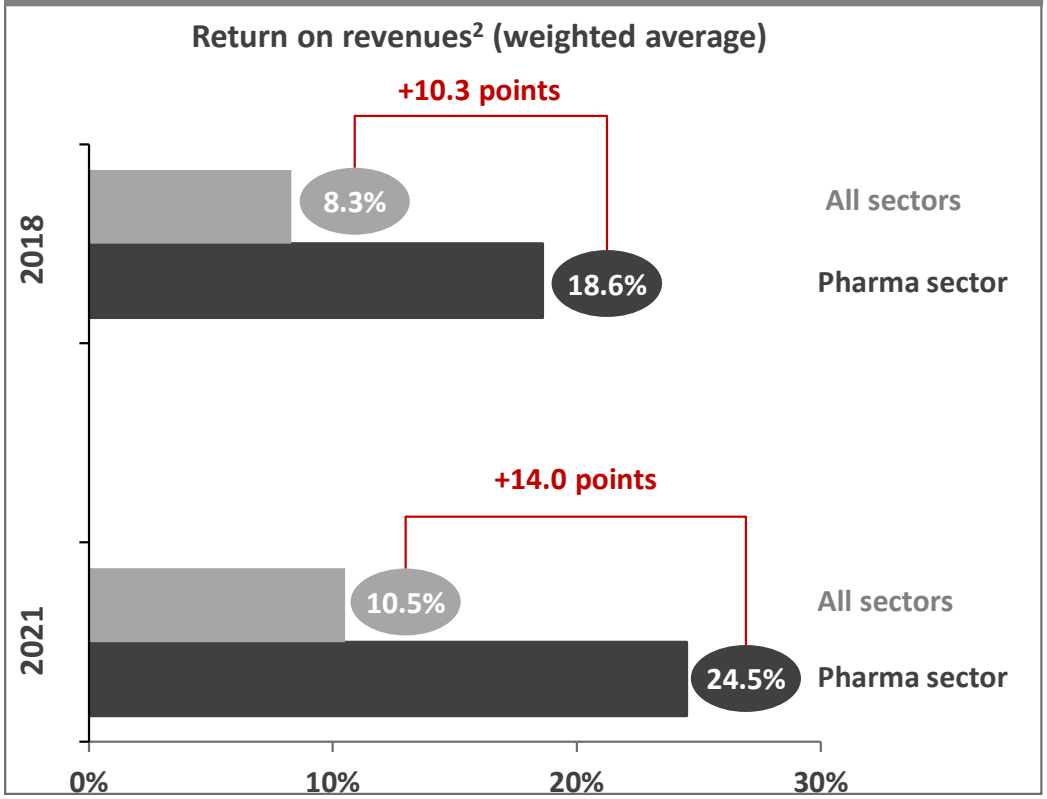
Source: O. J. Wouters et al., JAMA (March 3, 2020) – Smart Pharma Consulting analyses

[1] Including the costs of failed trials – [2] Confidence interval

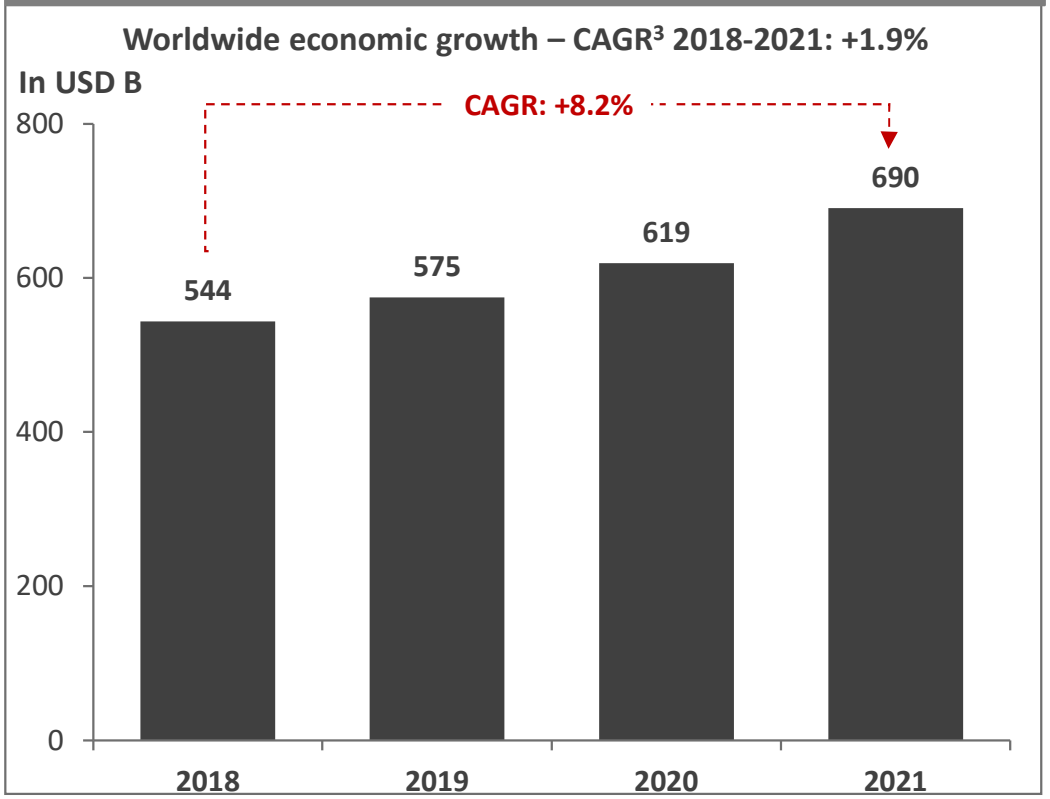
In 2021, the net profitability of the pharma sector was 2.3 times higher than the average of all other sectors, and revenues of top 20 companies grew by +8.2% p.a. between 2018 and 2021

Net profitability and sales dynamics of the pharma sector (2018 – 2021)

Net profitability in 2018 & 2021
(Of top Rx pharma companies[1] and of the global economy)



Market sales trend
(Cumulated revenues of top 20 Rx pharma companies)



Sources: Top Rx pharma companies' 2021 and 2018 annual reports (2022 and 2019) – Forbes: The Global 2000 (May 2022 and 2019) – World economic outlook, IMF (October 2022 and 2018) – Smart Pharma Consulting analyses

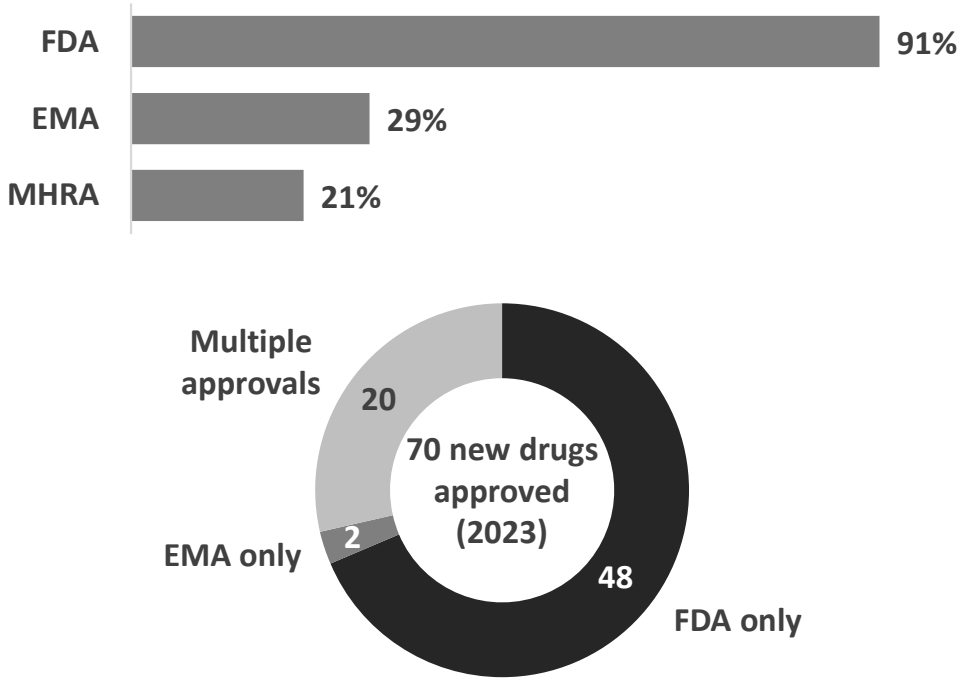
[1] Top 30 for 2018 and top 20 for 2021 – [2] Return on revenues = net profits / total revenues – [3] Compound annual growth rate

In Europe, the EMA and MHRA are usually approving new drugs the FDA already approved, and rarely approve drugs the FDA did not (2 only in 2023 by the EMA)

Market access of new drugs (2023)

New drugs approvals in the USA and Europe (2023)

% of approval among all drugs approved in Europe and/or the USA



New drugs market access

- The fact that all newly approved drugs are not introduced everywhere depends on several factors:
  - Different regulatory systems and authorities require distinct applications, with different requirements and procedures
  - Even when there is a centralized approval procedure like in the EU, the approved drug is not necessarily introduced in all countries, as local pricing and reimbursement policies can make the launch unattractive
  - Market potential and attractiveness (e.g., epidemiology, pricing policy) are key factors in the decision of introducing a drug in a new country by the pharma company
  - New drugs are usually more expensive, which makes their introduction more difficult in lower income countries, where the budget for pharmaceutical products is lower

Sources: FDA, EMA and MHRA websites – Smart Pharma Consulting analyses

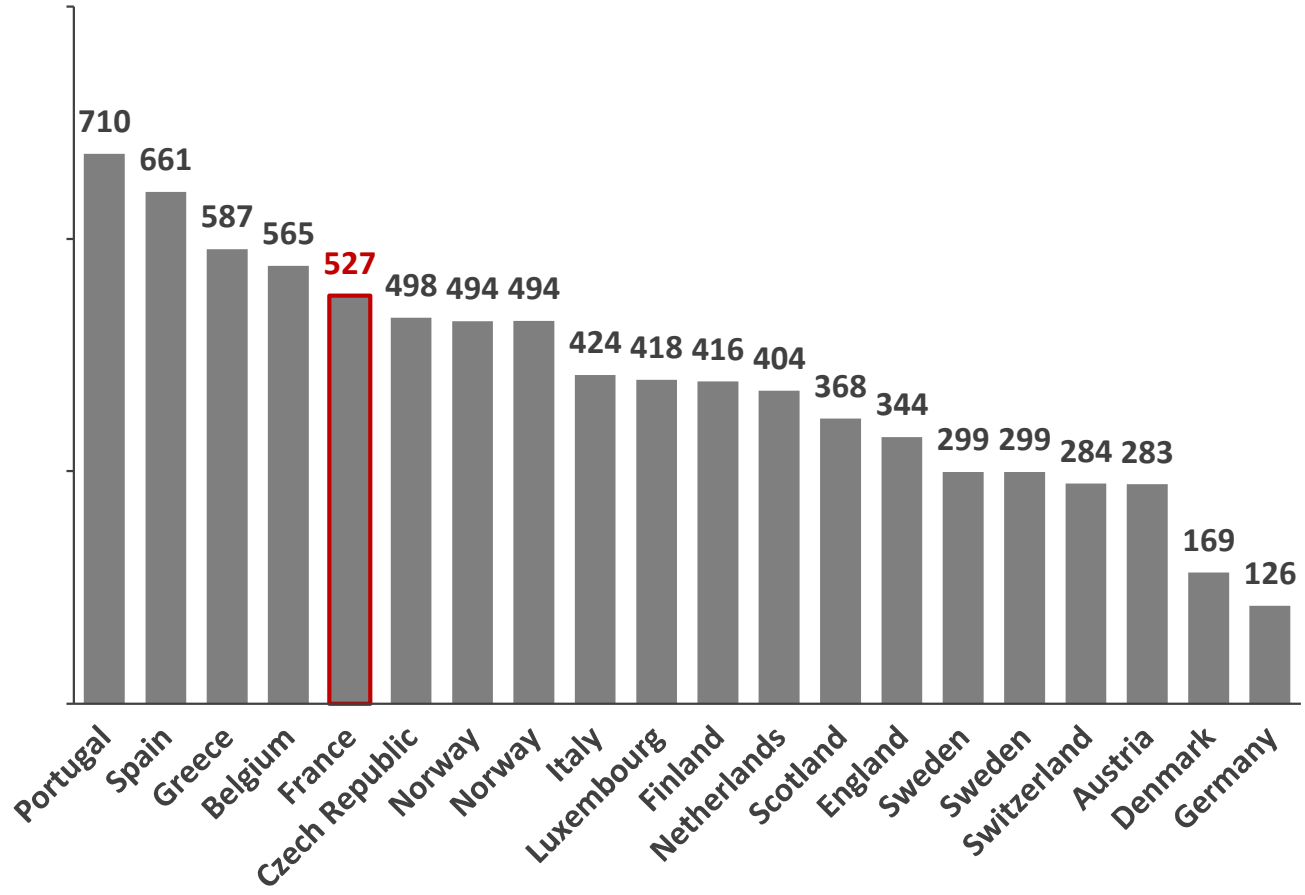
Note: The FDA (Food & Drug Administration) is the US authority regulating drugs, the EMA (European Medicines Agency) is the European agency and the MHRA (Medicines and Healthcare products Regulatory Agency) is the UK one

In France, pharma companies and patients must wait ~17 months after marketing authorization to get a new drug reimbursed and launched[1]

Average time to market access – European comparisons

Time (days)

Average time in the EU countries (**2022**)[1:] **531 days**



- Time to availability is the number of days between marketing authorization and availability to patients
- In Europe, the delay between marketing authorization of a drug and its availability on the market may vary widely, due to the time required to obtain its inclusion on reimbursement list and a price agreement
- In countries such as Italy, France or Spain, this delay exceeds the 180 days recommended by the European Commission
- An important delay may be harmful both for patients who do not have full access to innovative therapies and for companies which face a loss of revenues
- Germany has smaller delays since the price and reimbursement negotiations occur once the product has reached the market

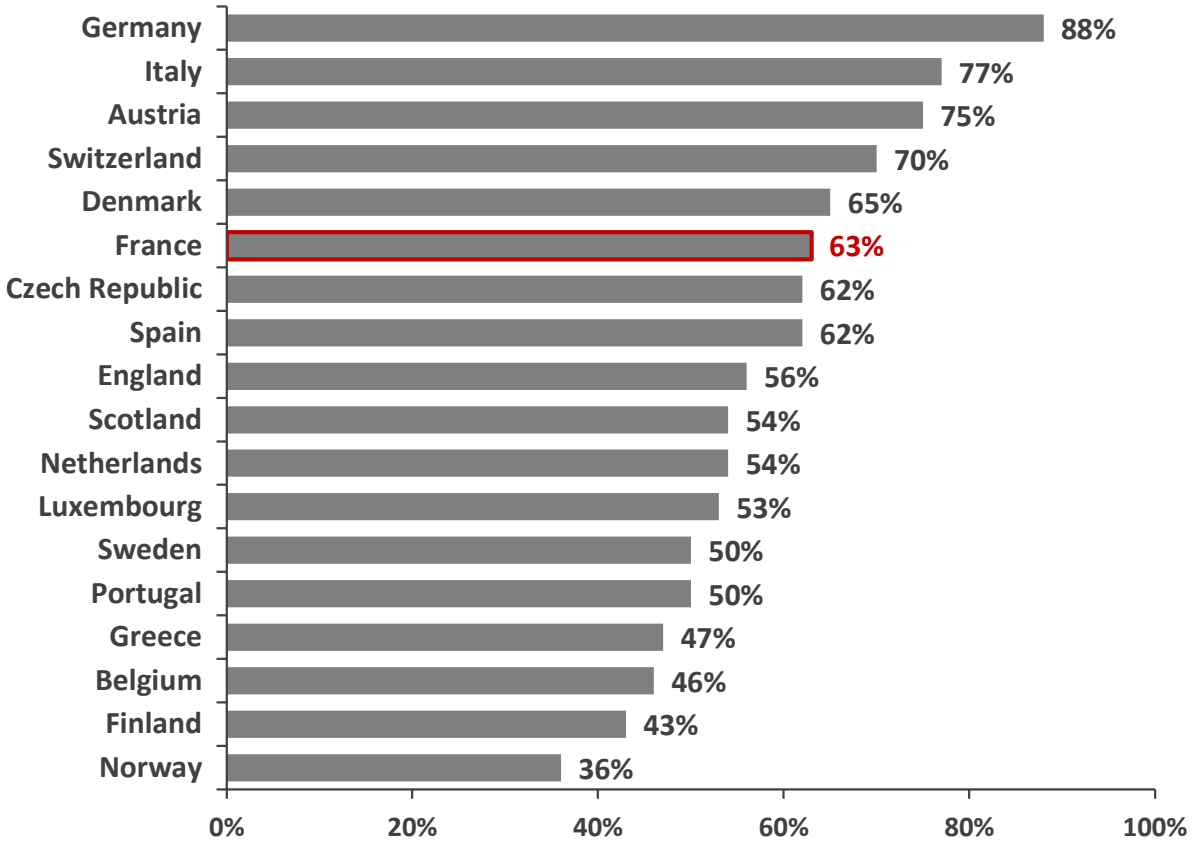
Sources: EFPI Patient WAIT Indicator Survey, IQVIA (June 2024) – Smart Pharma Consulting analyses

[1] Based on 167 medicines approved between 2019 and 2022

About a third of globally approved drugs are not launched in France mainly due to market access obstacles (non-reimbursed, low price, etc.)

Market access to new drugs – European comparisons

Average **availability rate** (% of new medicines to patients) in the EU countries (**2022**)[1]: **43%**



- The fact that all approved new molecular entities (NMEs) are not introduced everywhere depends on several factors:
  - **Different regulatory systems** and authorities (FDA, EMA, etc.) impose different market access requirements and procedures
  - Even when there is a centralized approval procedure like in the European Union, the approved drug is not necessarily introduced in all countries as **local pricing and reimbursement policies** can make the launch unattractive
  - Generally, **market potential** and **attractiveness** (e.g., epidemiology, pricing and reimbursement policies) are key factors in the decision of introducing a drug in a specific country by pharma companies
  - New drugs are usually more expensive, which makes their introduction more difficult in lower income countries, where the public budget for pharmaceuticals is lower
- In the future, the availability of new drugs might be reduced in developed countries due to **stricter cost containment measures**

Sources: EFPI Patient WAIT Indicator Survey, IQVIA (June 2024) – Smart Pharma Consulting analyses

[1] Based on 167 medicines approved between 2019 and 2022

The EMA implemented in 2016 a new early access program, PRIME, for drugs expected to cover unmet needs

EMA: Early access program

Development	Evaluation	Marketing authorization
PRIME (Priority Medicines)	*Accelerated assessment*	*Conditional marketing authorization*
Guidance for new products	**Decrease of CHMP evaluation timelines**	**Authorization based on partial evidence**
▪ **Inclusion criteria**: – Cover an unmet need ▪ **Benefits**: – Appointment of a rapporteur from the CHMP[1] or the CAT[2] – Organization of a kick-off meeting with the rapporteur and with a multidisciplinary group of experts – Advise on the scientific development plan and regulatory strategy	▪ **Inclusion criteria:** – Major public health interest – If the access to PRIME has been granted previously, it often leads to an accelerated assessment ▪ **Benefits**: – Reduction of the evaluation timeline by the CHMP to 150 days, not counting clock stops (vs. 210 days for a standard centralized procedure)	▪ **Inclusion criteria:** – To treat, prevent or diagnose a seriously debilitating or life-threatening diseases *or* – To be intended for use in emergency situations ▪ **Benefits**: – Marketing authorization granted with partial evidence, considering benefits for patients – Valid for one year and conditioned to further development

Sources: EU website – Smart Pharma Consulting analyses

[1] Committee for Medicinal Products for Human Use – [2] Committee for Advanced Therapies

Market access, as much, if not more, as marketing activities have a strong impact on revenues and profits generated by marketed drugs

Market access activities: Objective – Implications – Impact

Objective of Market Access

- Obtain the optimal price with maximum reimbursement level for the population indicated in the marketing authorization…
- … with no burden on prescription or funding procedures

Implications in terms of activities

- Necessity to build a value proposition to satisfy payers and all other relevant stakeholders

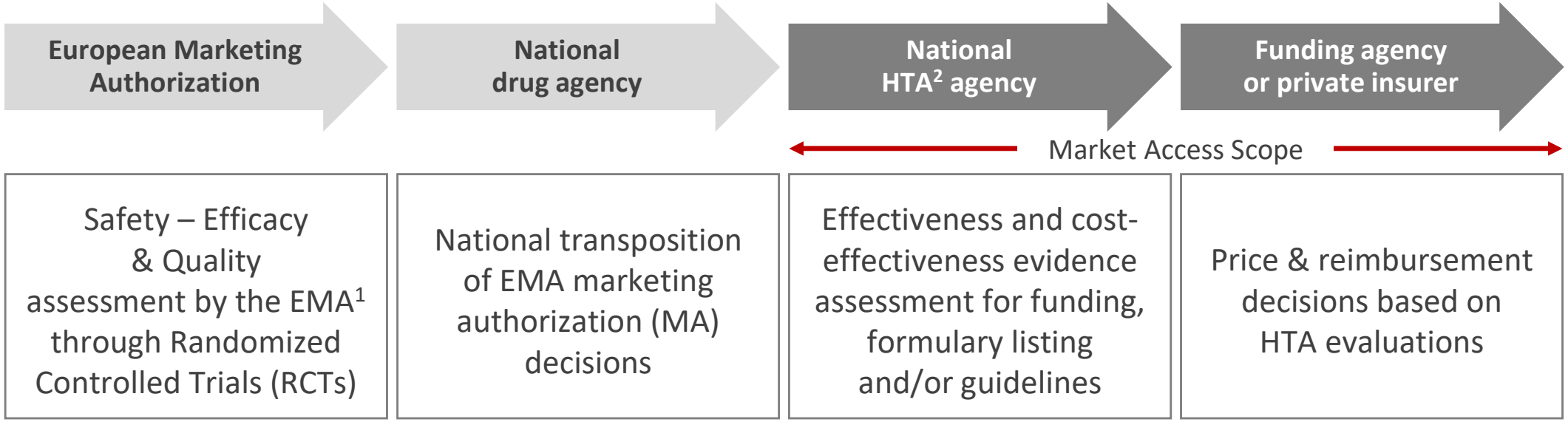
Impact on drug performance

- Market access activities and their outcomes will have a strong impact on drug performance through:
  - Prices per unit negotiated with payers
  - Sales volumes which depend on price level, reimbursement level and related target population

Sources: Adapted by Smart Pharma Consulting after M. Toumi (2017)

Market access activities will focus on generating and structuring evidence to support the value of drugs so that to obtain optimal price and reimbursement levels for the indicated population

Market access key steps (Example of Europe)



- Market Access is an evidence-based discipline that requires generating and communicating scientific evidence
- Institutionalized payers are highly price-sensitive and held accountable for their decisions
- They act under the influence of multiple stakeholders (e.g., health authorities, HCPs, PAGs, patients, pharma companies)
- If HTA agencies consider that evidence of superiority in terms of efficacy and safety are receivable, they may recommend payers to fund a drug at a superior price

Sources: Adapted by Smart Pharma Consulting after M. Toumi (2017)

[1] European Medicines Agency – [2] Health Technology Assessment

According to countries, healthcare funding is public, private or mixed, and market access decisions systems are centralized or regionalized, implying from pharma companies a customized approach

Market access and health care system structure

Funding model

Publicly funded	Mixed or privately funded
▪ Governments define the overall public health goals and corresponding funding… ▪ … usually through the parliament health budget vote ▪ Market access rules are laid out by a central agency ▪ The public health care payers represent the society interest and… ▪ … integrate the society perspective when making decisions	▪ In countries like the USA, health insurance is fragmented and… ▪ … largely private ▪ Independent negotiations are engaged by each healthcare payer with pharma companies ▪ In the USA, public payers (the Centers for Medicare and Medicaid Services [CMS] and the Children's Health Insurance Program [CHIP]) budget is about to match the private one

Decision-making level

Centralized vs. regional market access
▪ Trend towards decentralization in public health care settings ▪ In Europe, decentralized health care systems have been in place for many years in Germany, Italy, Spain, Sweden ▪ Different regional payers may use different methods to evaluate health technologies ▪ Thus, in Italy, 16 of the 21 regions use national drug formularies, whereas eight undertake local HTA ▪ In England, strategic decisions remain in the authority of the national department of health,… ▪ … but the power of execution is assigned to many Primary Care Trusts (PCTs) which are responsible for the provision and funding of health care services for their population

Sources: Adapted by Smart Pharma Consulting after M. Toumi (2017)

If there is no perfect organization of market access activities, however the chosen model should be based on the market specificities and the pharma company culture and history

Organization of market access activities in pharma companies

Dual model

- Two main departments:
  - HEOR (Health Economics and Outcomes Research) which is focused on evidence generation reports, incl. HTA, econometrics, epidemiology
  - Market Access leveraging evidence to gain access, price and reimbursement
- Good integration within these 2 departments but divergences between them

Integrated model

- All activities are within the same reporting line
- The evidence generation group and the P&R (price and reimbursement) group having the same leader…
- … they will be more inclined to join forces
- This model tends to create a vision gap with the development and marketing teams that may be difficult to manage

Fragmented model

- In this model, there are many departments, such as quantitative analysis, epidemiology, HE, OR, market access, P&R, reporting to various lines…
- … which makes the collaboration between them complex to manage
- There is a trend that the fragmented model produces more evidence and material for supporting the market access, but the outcome assumptions are often not fully consistent

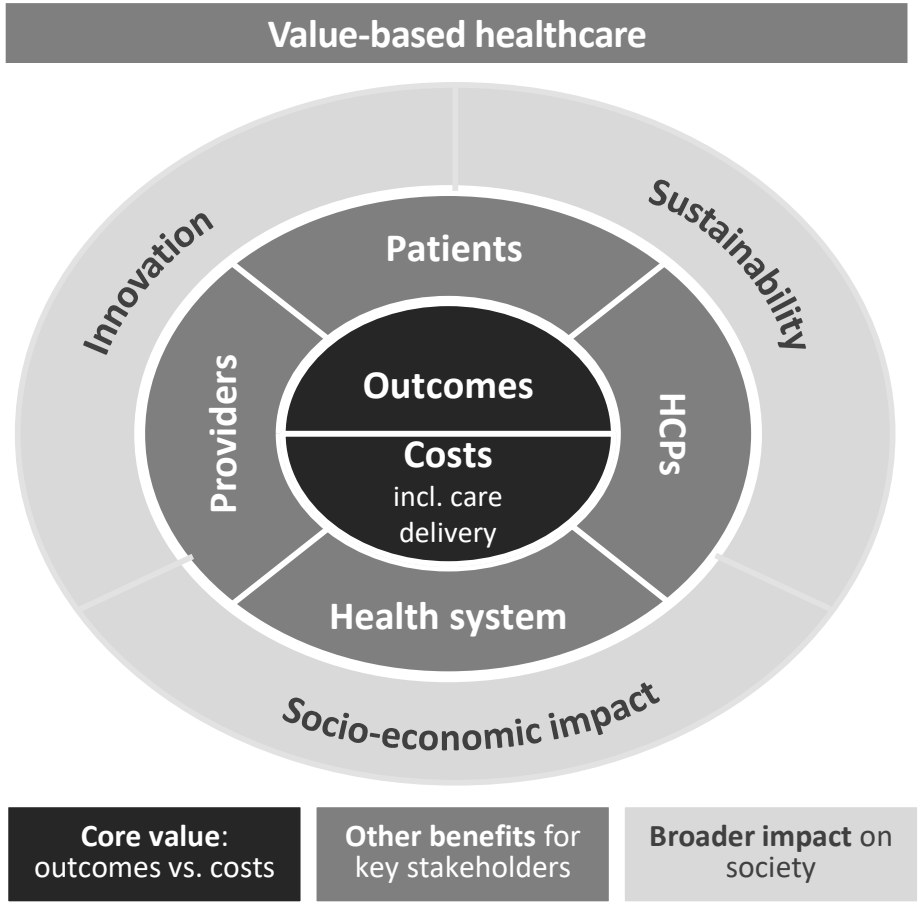
Decentralized model

- The various functions operate independently with very little coordination at the global level
- This choice is based on the belief that market access has important regional specificities
- This model enables a good management of local HTA and payers' requirements but…
- … leads to inefficiencies due to duplications between regions

Sources: Adapted by Smart Pharma Consulting after M. Toumi (2017)

The Value-based healthcare principle leads to improved patient outcomes, lower total costs[1] and increased benefits for other relevant stakeholders

Value-based healthcare – Key principles



- In the EU, the costs of care delivery (e.g., HCPs' time spent on preparing or dispensing drugs, usage of infrastructures) account for ~70% of total healthcare costs
- Thus, focusing on cutting the cost of procured drugs is not the most effective strategy to contain costs
- A more **holistic approach is needed**, considering:
  - **Costs** (e.g., purchasing, ordering, storage, care delivery)
  - **Patient outcomes** (clinical efficacy and safety, quality of life)
  - Other **benefits** for **key stakeholders**:
    - **Secondary patient benefits** (e.g., convenience, adherence)
    - **HCPs'** benefits (e.g., safe use, ease-of-use, training)
    - **Providers'** benefits (e.g., support on administration, storage or logistics, to improve the efficiency of the patient pathway)
    - **Health care system** benefits (e.g., reduction of rehospitalizations, treatments or hospital days, long-term costs of treatment)
  - **Broader impact on society** (e.g., development of innovations, sustainable development, corporate social responsibility, socio-economic impact, such as on absenteeism)

Sources: BCG: How Procurement Unlocks Value-Based Health Care 2020 – Smart Pharma Consulting analyses

[1] *Through reduced complications and inefficiencies*

The value of a drug is the ratio between the result and the costs allocated to obtain this result, which can be of different types

Drug value definition (1/2)

What is the cost?

- Acquisition
- Supply
- Storage
- Preparation
- Side effects
- Treatment failures
- Relay with the city
- Etc.

Costs incurred or avoided can be:

Direct *(e.g., consultations, operations, medication)*
Indirect *(e.g., transportation, food, lost wages)*

Variable *(e.g., changing with length of stay)*
Invariant *(e.g., fixed regardless of duration)*

Tangible *(e.g., increased preparation time)*
Intangible *(e.g., loss of patient well-being)*

What is the value?

- The **value** represents the ratio between the outcomes (profit or effect) obtained and the allocated cost → $\mathbf{Value} = \frac{\mathbf{Outcomes}}{\mathbf{Costs}}$

Outcomes can be:

Socio-economic *(e.g., duration of hospitalization and sick leave, work productivity)*
Clinical *(e.g., recovery, mortality, symptoms, risk factors, quality of life)*

The **beneficiaries** can be multiple:

Patients – Hospital staff – Hospitals – Caregivers – Health insurance – Health system

Sources: Smart Pharma Consulting analyses

The Value-based Pricing (VBP) is part of the Value-based Health Care (VBHC) which puts into perspective the best outcomes for patients at the best possible cost

Drug value definition (2/2)

Value

- The value refers to the outcomes one gets for a certain cost
- It is a notion relative to efficiency

$$\textbf{Value} = \frac{\textbf{Outcomes}}{\textbf{Costs}}$$

Value-based Health Care (VBHC)

- Value-based Health Care is about achieving the **highest health gains** (outcomes) **for patients**, against the total cost of care
- The most powerful lever for reducing cost is improving outcomes

$$\textbf{VBHC} = \frac{\textbf{Health outcomes that matter for patients}}{\textbf{Total costs over the full cycle of care}}$$

Value-based Pricing (VBP)

- Value-based Pricing, in line with the VBHC approach, considers the **price** of a product, or a service, the **outcomes for patients**, the **reduced total cost of care**, and the **benefits for HCPs, hospitals, the health care system** and the **society**

$$\textbf{VBP} = \frac{\textbf{Outcomes for patients \& other stakeholders}}{\textbf{Total costs (incl. care delivery)}}$$

Sources: Value-based healthcare and the role of outcomes. M. Porter (2016) – Value-based pricing in pharmaceuticals. KPMG (2019) – Smart Pharma Consulting analyses

No single driver determines drug value, so multiple drivers will be combined to develop a balanced pricing strategy

Key drivers of drug value

From the market perspective

- **Differentiation** versus standard of care
- **Real-world outcomes**
- Ability to **segment** the **population** most likely to benefit
- Upfront **affordability** of the drug
- **Total cost** to the healthcare system
- **Time to** achieve **cost savings**

From the company perspective

- To achieve a positive Net Present Value (**NPV**), a calculation must be used to determine the potential future profitability of the drug
- The **gross margin level** that will need to be high enough to cover R&D, production and marketing costs
- The **price** at which the **NPV** calculation **yields a positive value, greater** than a predetermined **target value** is the threshold minimum product price
- **If the possible price** from the market perspective, is likely to be **lower than** the company **floor price**, then **investment** in the product development and pre-launch should **be reconsidered**, if not **stopped**

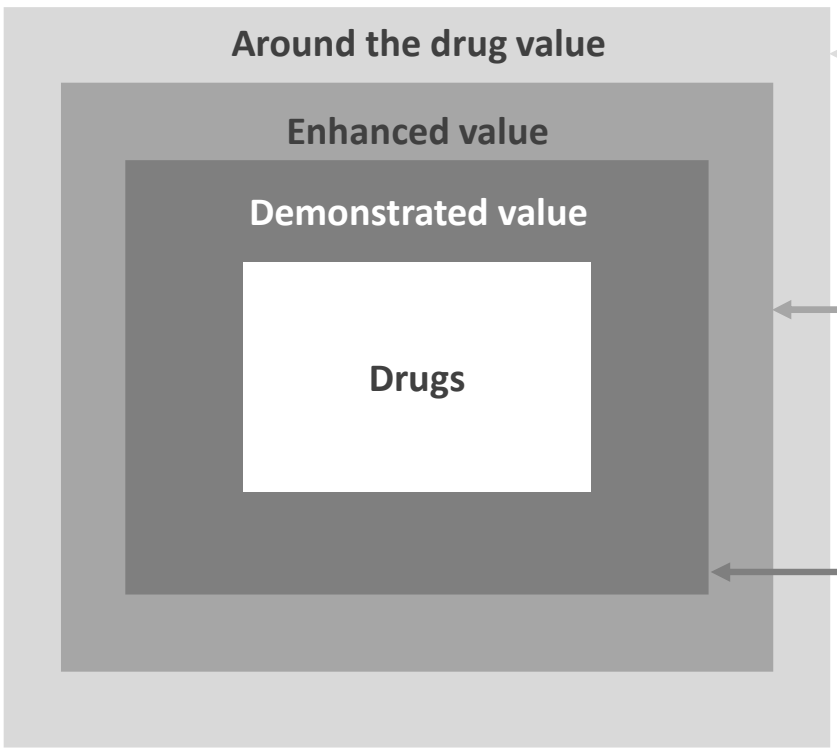
Price interdependency between countries

- Ensure that prices in certain countries do not result in **cross-border price referencing** or **parallel trade**
- Make sure you get affiliates' buy-in on the pricing strategy, especially within the market access, sales, and marketing teams

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

Drug value can / should be enhanced by reinforcing the quality of the clinical data, completed by RWE data and by adding around the drug services, whenever it makes sense

Drug value development



- Adherence and financial support programs for patients
- Nurse education on device and/or drug use
- Patient education programs

- Collection of RWE data to demonstrate / reinforce the demonstration of drug effectiveness and/or safety profile

- Provision of robust clinical data on drug efficacy and safety
- Modelling long-term clinical and economic benefits
- Management of differences between clinical and real-world data

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

Services related to drug procurement are routinely assessed by hospital buyers, reconstitution aspects may differentiate certain drugs, and sustainable development is becoming important

Around the drug value: Examples of services impacting hospital pharmacists

Procurement[1]

- The components of procurement are evaluated on a **routine basis by buyers**
- They are a **prerequisite** to be fulfilled to avoid disqualification
- **Payment terms** (e.g., cash discounts, end-year rebates, compensable drug gaps[3]) may create a **difference**

Reconstitution[2]

- **Ready-to-use formulations vs. lyophilizates** can win bids with a premium price of up to 20%, but it is not guaranteed
- **Preservation** at room temperature and **longer stability** are valued while selecting drugs
- However, there is **no much differences** amongst **generics or biosimilars**

Sustainable development

- Not yet significantly discriminatory…
- … but the **pressure** from politics is **increasing**
- **Manufacturing location, quantities of cardboard, recycled materials, etc**. are increasingly valued and could weigh 3 to 5 points[3]

Sources: Interviews of 8 hospital buyers – Smart Pharma Consulting analyses

[1] Ordering, delivery, storage, returns, payment terms – [2] Of drugs such as anticancer drugs – [3] Out of 100

Services related to drug dispensing, time saving and patient care optimization do not enable to differentiate similar drugs[1]; while those impacting patients are not considered to select drugs

Around the drug value: Examples of services for Nurses – Physicians – Patients

Nurses

- When there are **different formulations** (e.g., SC and IV) for the same product, they are most often bought separately
- **Time savers** like unitized packaging, SC vs. IV, ready-to-use formulations are **a plus** to win a bid, but not necessary at a better price
- A **non-proven benefit** will not be considered

Physicians

- The potential **benefit** of a given product on patient care must be **demonstrated**
- **Comparative studies** should be carried out
- As per current public call for tender regulations, it is difficult to associate such a benefit in the evaluation of drugs

Patients

- Little importance is given to patient opinion in hospital care
- In rare cases, **convenience** of a drug vs. another one can be considered, but mainly for day care (e.g., injection duration, pain at the injection site)
- **Different devices** will play a possible role for drugs used in ambulatory care for chronic diseases (e.g., pens vs. prefilled syringes, single- vs. multiple-use syringes)

Sources: Interviews of 8 hospital buyers – Smart Pharma Consulting analyses

[1] *Such as certain me-too products or products facing generics or biosimilars competition*

The University Hospital of Bordeaux has included, in its tender for infliximab, a part of the scale to value-added services beyond the economic and therapeutic criteria

Drug value enhancement: Hospital case study

Context

- A **tender for infliximab** at the University Hospital of Bordeaux, France included both, the originator (Remicade) and a biosimilar (Remsima)
- The tender process comprised a points-based **weighting system** that addressed factors related to **therapeutic and technical interest**, **economic factors** and **value-added services**

Hospital of Bordeaux VBP arrangement

- Criteria for **value-added services** beyond price for tendering for Infliximab were:

– Adaptation of the packaging to the use	**Product presentation** Weight: **25**/60 points	5
– Readability of the labeling		5
– Health traceability support		5
– Stability data		10
– Information from the prescriber on latest scientific data	Contribution to product's **good use** Weight: **35**/60 points	10
– Provision of information to patient re. the drug		10
– Help in clinical follow-up of treatment, including measurement kits of infliximab concentration		15

- **Value-added services** could play an important part in the **sustainability of biosimilars**, and better address patient needs where tendering predominates

Sources: Tendering and Biosimilars: What role for value-added services 2019 by S. Simoens et al – Smart Pharma Consulting analyses

According to the drug life-cycle phase, different market access activities, contributing to optimize the drug value, will be implemented

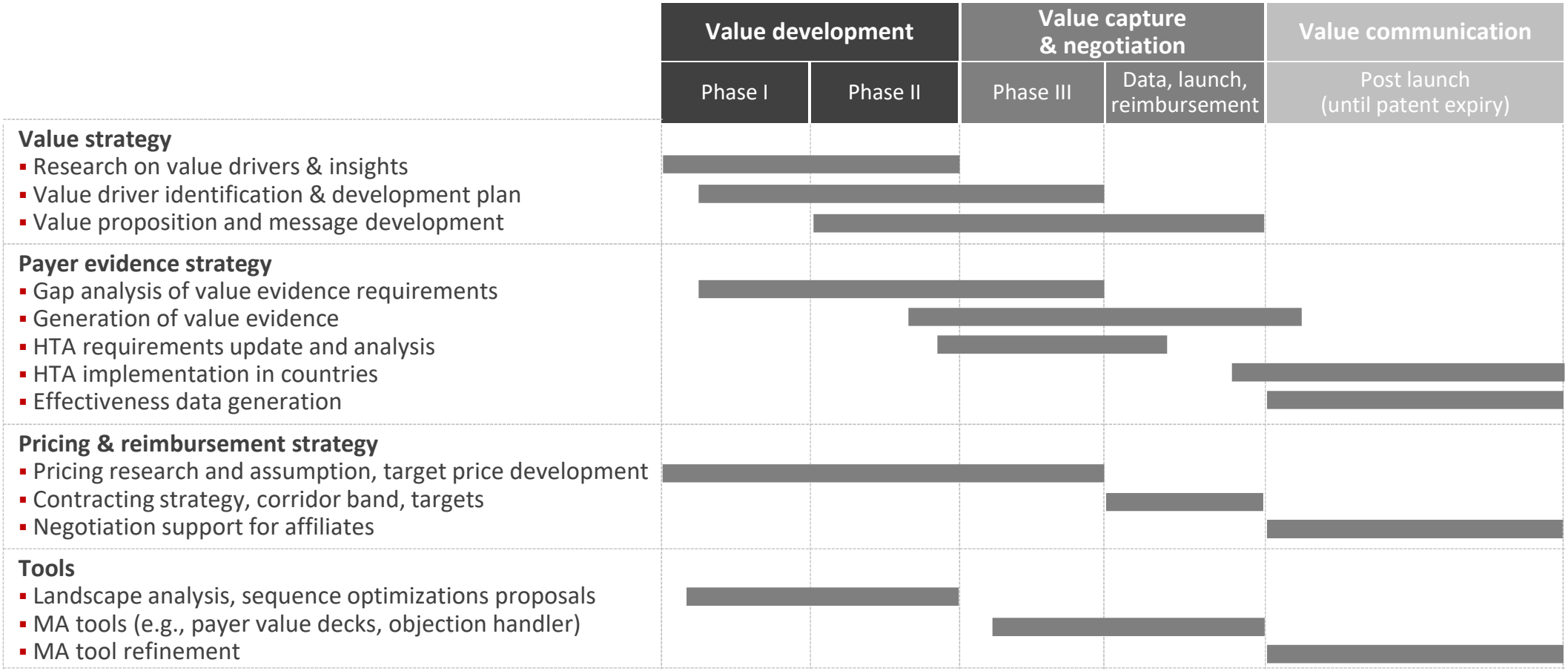
Developing a drug value strategy (1/2)

Value development	Value capture & negotiation	Value communication
Phase I to beginning of Phase III	**Launch readiness & reimbursement negotiation**	**Post-launch**
▪ Unmet medical needs identification ▪ Determining costly diseases to treat for which a more efficient alternative would be welcome ▪ Prioritizing indications with a high-price benchmark… ▪ … that should be launched first	▪ Confirmation of clinical value evidence ▪ Drug approval will determine the final label ▪ Negotiations at national, regional, and local levels need to be well prepared ▪ Payers' questions need to be anticipated and answered crafted ▪ Compilation of all evidence to support the value story	▪ Once pricing & reimbursement are secured... ▪ … there is a constant price pressure over time ▪ RWE can help demonstrate the replicability of the efficacy observed in clinical trials ▪ Demonstrate the "value for money" delivered by the drug (e.g., effectiveness data generation)

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

The drug value strategy follows the product life-cycle, starting at the beginning of Phase I with research on value drivers and pricing, and continuing until the patent expiry

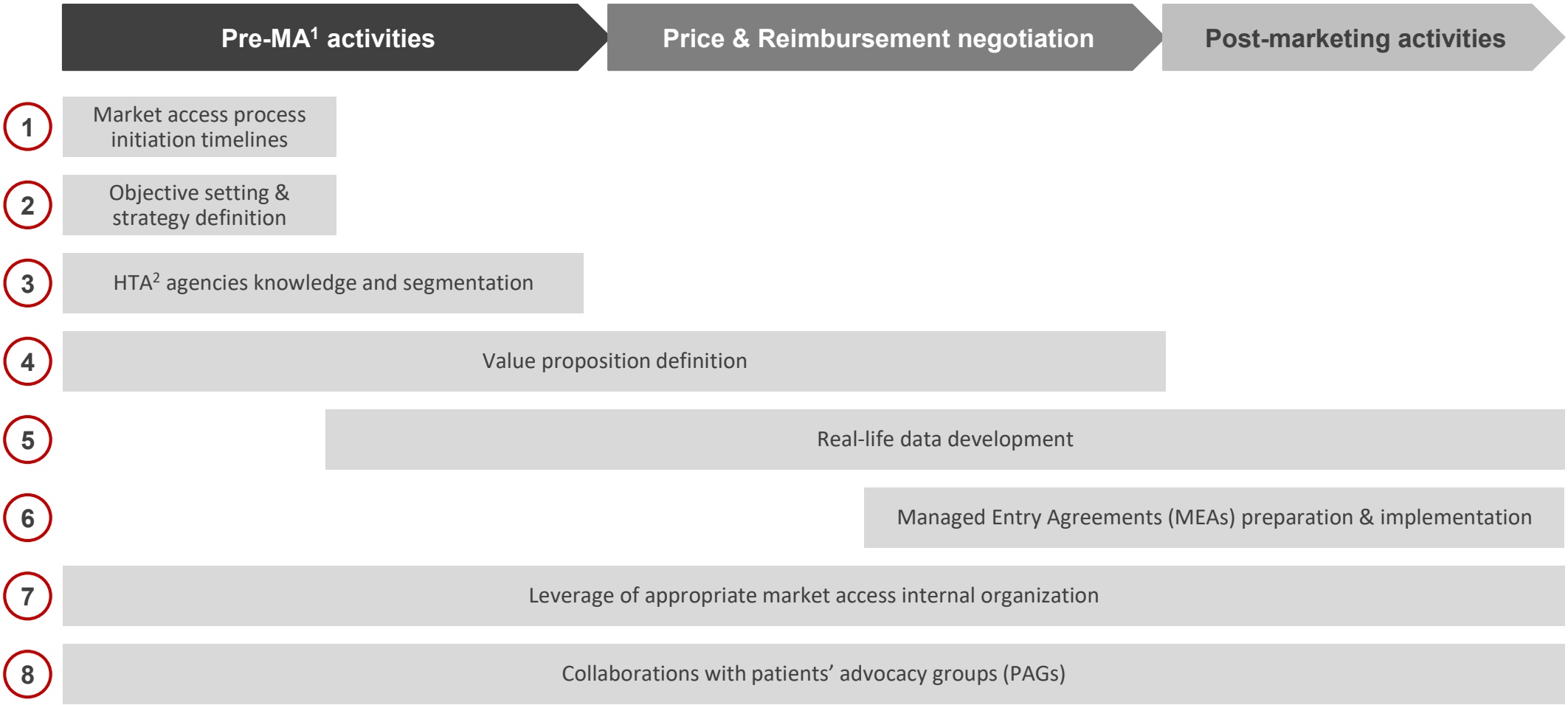
Developing a drug value strategy (2/2)



Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

The best practices related to the market access process are well identified from the pre- to the post-marketing authorization phases of products

Key components of market access best practices



Source: Smart Pharma Consulting analyses

[1] Marketing Authorization – [2] Health Technology Assessment

Pharma companies should plan their market access activities during phase II to adopt the appropriate design of development and better define their value proposition

1 Market access process initiation timelines

Phase I	Phase II	Phase III & commercialization	Post-launch
	▪ Evidence plan ▪ Outcomes and endpoints assessment ▪ Early economic modeling ▪ Early scientific advice support	▪ Pricing & market access strategy ▪ Evidence generation and synthesis ▪ Global economic mode ▪ Trial analysis ▪ Early value dossier	▪ Communication to stakeholders ▪ Ongoing evidence generation ▪ Economic model updates ▪ HTA[1] submission & updates ▪ Publications

▪ Landscape analysis & stakeholders mapping

▪ Communication to all stakeholders

▪ HEOR[2] strategy and planning

- A 2012 study showed that nearly 50% of pharma companies started planning their market access activities during Phase II
- The model in which efficacy and safety evidence is sufficient for drugs price and reimbursement evaluation is no longer valid in Western countries, as pharma companies must now demonstrate the impact of their products on patients lives and on healthcare systems
- This requires the development of longer-term outcome data, economic evaluation and additional cost-effectiveness, especially vs. current standard of care (or comparators)
- In that context, an early planning of market access activities (starting during phase II) is recommended in order to:
  - Adopt the appropriate study design for the development, during phase III trials, of evidence required by different HTA bodies (e.g.: number of hospitalizations, relevant comparator, etc.)
  - Define the value proposition of the product and identify the unmet needs it addresses. These unmet needs should be early recognized by payers/HTA bodies and should be communicated during early collaborations with these stakeholders

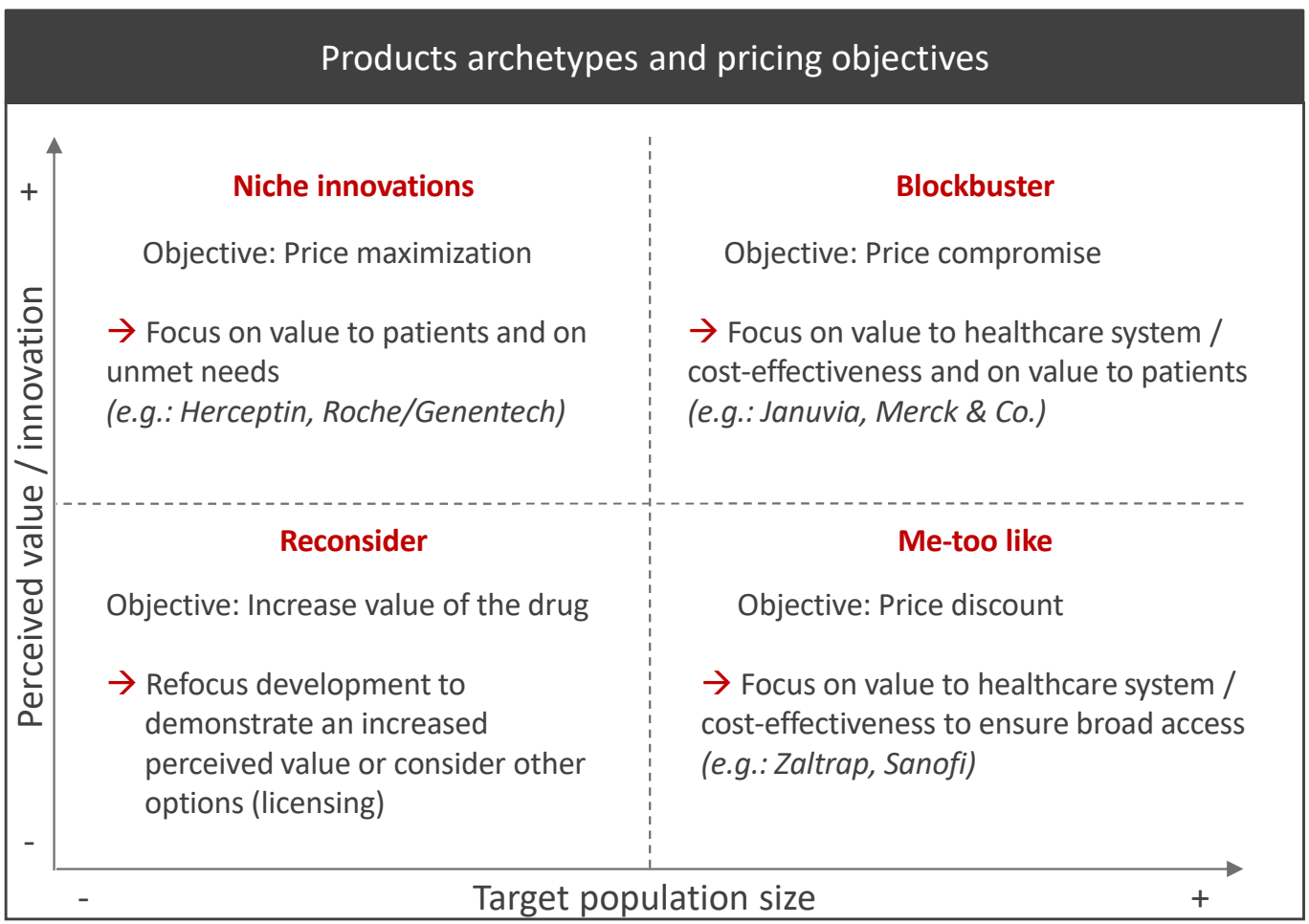
Source: "Stakeholder value, overcoming complexity in European market access", Quintiles (2012) – Smart Pharma analysis

[1] Health Technology Assessment – [2] Health Economics and Outcomes Research

Pharma companies must set clear price and reimbursement objectives for their products and define the appropriate corresponding strategy

2 Objectives setting & strategy definition

Products archetypes and pricing objectives



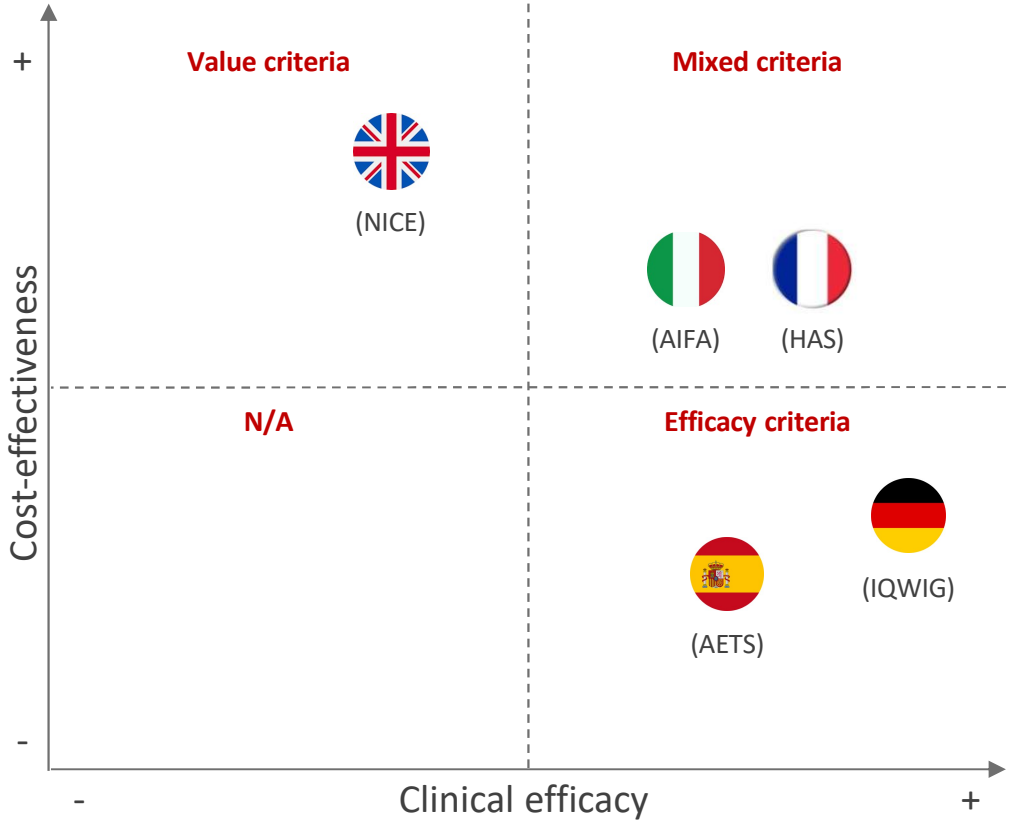
- Prior to defining the value proposition to payers, pharma companies must set clear goals for their new products according to their profiles
- Products can be clustered in segments depending on:
  - The size of their target population
  - Their potential perceived value (i.e. their level of innovation)
- This exercise could help pharma companies set appropriate objectives in terms of price and reimbursement level and define the focus of their development and argumentation

Source: "A new pharma launch paradigm: From one size fits all to a tailored product approach", Bain & Co. (2013)

Though European HTA agencies collaborate, pharma companies must understand which criteria each HTA agency value the most and develop a specific value proposition for them

3 HTA agencies knowledge and segmentation (1/2)

Segmentation of EU countries based on HTA criteria (clinical efficacy vs. cost-effectiveness)



- The first step for market access activities planning is to understand what will drive national HTA (Health Technology Assessment) agencies decisions when it comes to drug evaluation
- A good understanding of their requirements will allow to define an appropriate value proposition for each of them
- The "one fits all" strategy is not valid since each country has different requirements, even though European countries collaborate on HTA assessments (EUnetHTA policy)
- Starting January 2025, a new European regulation on HTA will be applied, with the objective to develop a coordinated assessment (Joint Clinical Assessment)
- HTA agencies can be segmented according to the importance they grant to the following criteria:
  - Clinical efficacy vs. cost-effectiveness
  - Absolute[1] vs relative[2] therapeutic value
  - Narrow view vs. holistic view of the impact of the drug (Health Related Quality-of-Life, societal impact, etc.)
  - Importance of subpopulations

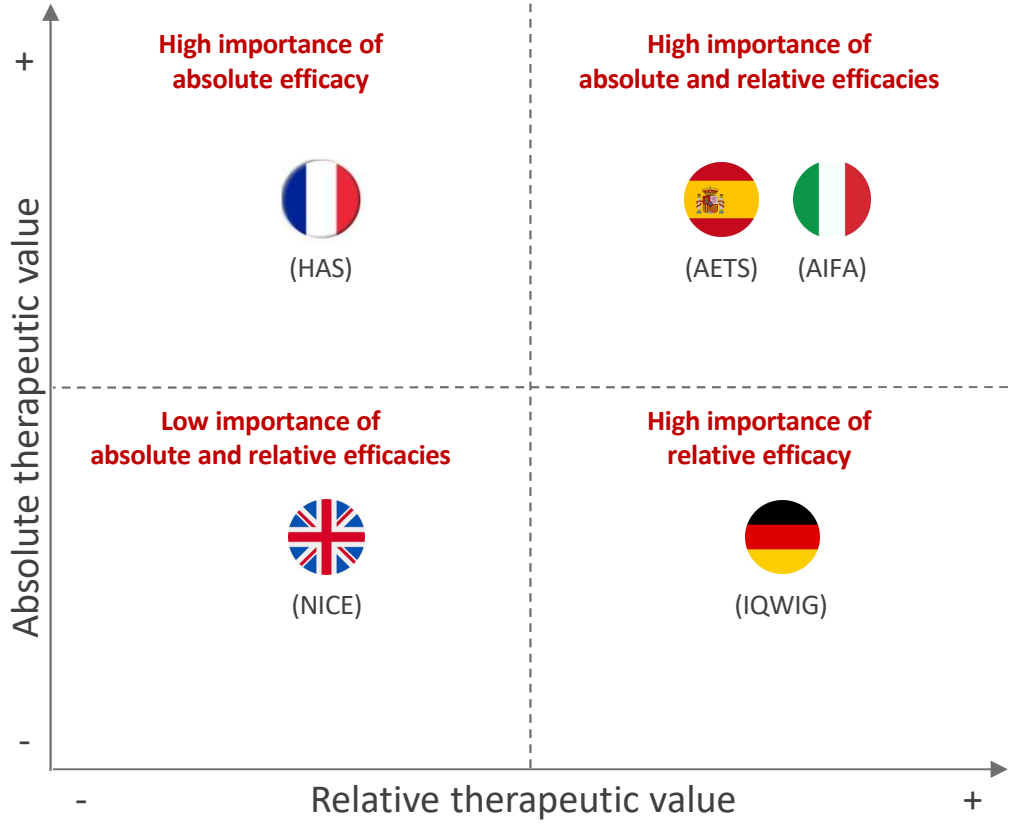
Source: European Union law (EU) 2021/2282 – "Technology appraisal guidance", NICE (Dec. 2024) – AETS and Regional HTA Agencies websites (Dec. 2024) – "Economic evaluations" AIFA (Dec. 2024) – "The quality and possible uses of health economic evaluations", IQWIG (June 2023) – Smart Pharma Consulting analyses

Note: In Spain and Italy, policies may differ from a region to another – [1] Disease severity and burden, unmet needs, efficacy/safety of the product – [2] Incremental efficacy/safety versus available comparators

Pharma companies may cluster HTA agencies according to the assessment criteria they will have to submit and build their strategy accordingly

3 HTA agencies knowledge and segmentation (2/2)

Segmentation of EU countries based on HTA criteria (Absolute[1] vs. relative therapeutic value[2])



Segmentation of EU countries based on HTA criteria (Narrow vs. holistic approach)

Narrow appraisal

Span of considered criteria (reflects the importance granted to health-related criteria such as:

- Quality-of-life
- Budget impact
- Societal impact
- Etc.

Holistic appraisal

Source: "Technology appraisal guidance", NICE (Dec. 2024) – AETS and Regional HTA Agencies websites (Dec. 2024) – "Economic evaluations" AIFA (Dec. 2024) – "The quality and possible uses of health economic evaluations", IQWIG (June 2023) – Smart Pharma Consulting analyses

Note: In Spain and Italy, policies may differ from a region to another – [1] Disease severity and burden, unmet needs, efficacy/safety of the product – [2] Incremental efficacy/safety versus available comparators

The early building of a value dossier may help pharma companies prepare negotiations with payers and raise awareness on unmet needs

4 Value proposition definition - Purpose

- The gathering of the appropriate data is a prerequisite for a successful price and reimbursement process
- Pharma companies should go further than just preparing simple presentations of the gathered data and build a story that defines:
  - The unmet needs that should be addressed
  - How the product will help cover these needs
  - What evidence will support this claim
- A good way to build the story is to prepare a "global value dossier" that will help prepare discussions with local HTA[1] agencies / payers and that will further be declined in local value dossiers
- Companies often develop evidence and then build the storyline, but it is recommended to do the opposite: to build a strong argumentation and then develop the evidence to support it accordingly

Why an early development of the value story matters: PCSK9 inhibitors case

Background

- PCSK9 inhibitors belong to a new class of drugs to treat high cholesterol levels which first received approval in 2015
- Encouraging phase III results for these drugs were presented during the annual American College of Cardiology Scientific Sessions in March 2015

Issue

- A post on Health Affairs Blog, authored by a US payer, raised the issue of the potential cost of these drugs (> $ 10K/year) just before the presentation of phase III results
- This post was repeated in public medias (FT, Forbes, NYT, etc.)
- The question of the cost eclipsed the favorable phase III results during the congress

Solution

- PCSK9 inhibitor manufacturers should have communicated earlier on the potential value of their future product
- That could have avoided to raise the cost considerations without being prepared to address it properly

Sources: Stakeholder value, overcoming complexity in European market access", Quintiles (2012) – "Pricing's Point Man", Interview with Ed Schoonveld, Pharmaceutical Executive – "Pharma Market Access Success: Shifting the Dialogue from Price to Value Through Strategic Communications", Reimbursography – "In The Debate About Cost And Efficacy, PCSK9 Inhibitors May Be The Biggest Challenge Yet", Health Affairs Blog

[1] *Health Technology Assessment*

Value dossiers should be organized in three sections that serve different purposes during early stages: disease description, value story and supporting evidence

4 Value proposition definition – The value dossier

Value dossier sections	Disease description	Value story / value proposition	Supporting evidence
Content	▪ Epidemiology and burden of illness ▪ Treatment pathways, guidelines and competitive landscape ▪ Unmet needs and position of the new product	▪ Clinical effectiveness and safety messages ▪ Economic impact / cost-effectiveness messages ▪ Wider value messages (HRQoL[1], societal impact, etc.)	▪ Technical information on study designs and results: – Comparators – Subpopulations – Endpoints – Etc.
Purpose during pre-marketing meetings	▪ To help raise the payers' awareness of unmet needs ▪ To set the grounds for the value story / value proposition	▪ To build a simple, clear and convincing argumentation to better defend the product value	▪ To align with local HTA[2] agencies / payers on endpoints and data to be collected

Sources: "Stakeholder value, overcoming complexity in European market access", Quintiles (2012) – "Pricing's Point Man", Interview with Ed Schoonveld, Pharmaceutical Executive

[1] Health Related Quality-of-Life – [2] Health Technology Assessment

Value dossiers may help to develop targeted key messages for the different stakeholders

4 Value proposition definition – The value dossier: example

Illustrative

Disease description

- Colorectal cancer is still a life-threatening disease with an average survival of 1.3 year despite available therapies
- In France, 10,000 patients are concerned by this disease each year

Value story / value proposition

Patients oriented value messages	Prescribers oriented value messages	Regulators oriented value messages	Payers oriented value messages
▪ Increases lifespan compared with normal care ▪ Mild side effects are mostly observed ▪ Improves the ability to perform normal activities	▪ Provides 15% longer progression-free survival compared with standard of care ▪ Acceptable benefit-risk profile ▪ Improves quality of life	▪ Provides statistically significant and clinically relevant longer progression-free survival compared with standard of care with an acceptable benefit-risk profile	▪ Provides cost-effective benefits based on cost per life-year gained (LYG) and quality-adjusted life-year (QALY)

Supporting evidence

Value message	Target	Source of evidence	Type of evidence	Strength of evidence	Probability of success	Comments
▪ Improves the ability to perform normal activities / quality of life	▪ Patients ▪ Physicians ▪ Payers	▪ Phase III trials (#1 & #2)	▪ Patient-reported outcome endpoint data gathered with validated questionnaires	▪ Medium	▪ Medium	▪ N/A

Source: ISPOR 14th annual meeting presentation (2011)

Under the supervision of the global lead, a broad team including global teams, external contributors and local affiliates, should be implemented to develop the value dossier

4 Value proposition definition – The value dossier: key contributors

The process to develop a first version of the value dossier takes ~ six months

Global value dossier lead

Internal global team

- Clinical affairs
- Medical
- Global market access
- Health Economics
- Regulatory
- Marketing

Local affiliates (inputs)

- Epidemiology
- Economic and quality of life burden
- Key local comparators (clinical and economics considerations)
- Input on value messages

External contributors

- Key opinion leaders (medical experts, health economists, patient advocacy groups, etc.)
- Local price and reimbursement consultants
- Distributors or agents[1] (if there is no local affiliate in key countries)

Source: ISPOR 14th annual meeting presentation (2011)

[1]Agents are local partners which are not owners of stocks while distributors buy and resell goods

Pharma companies can enhance the perception of their value proposition by providing beyond- or around-the-pill services which are likely to be valued by payers

4 Value proposition definition – Development of payer-oriented services

Patient support programs

- In the current environment where payers require more complex and meaningful data to cover innovations, the development of real-world evidence is often a must-have
- Thus, observational studies and comparative effectiveness research should be developed to gather clinical, economic and patient-reported outcomes
- In that context, patient support programs may take an important meaning by binding them to outcomes and real-life result generation

Tools to improve the management of healthcare resources

- In 2013, GSK, in collaboration with CCNC[1] (a private payer from North Carolina, USA), launched a tool to analyze patient medication challenges
- This analytical tool is based on patient information such as prescription history, hospital admissions or discharge data
- The service then provides prescribers with suggestions of interventions which are expected to facilitate a better patient engagement when facing medication challenges
- The project was based on the fact that USD 290 B spending due to poor medication adherence in the USA could be potentially avoided

Connected devices to follow up patients' adherence and generate real-life data

- In 2014, Merck KGaA launched a project to generate real-life data and improve multiple sclerosis management with two components:
  - A connected device for its multiple sclerosis treatment Rebif (interferon beta-1a). The device collects injection data and sends it wirelessly to a server
  - A web-based software for patients to engage in the management of their disease by completing short forms (Quality of Life)
- The project allows:
  - Patients to receive email or SMS reminders
  - Physicians and nurses to monitor patients' adherence
  - Merck to generate real-life adherence and quality of life data

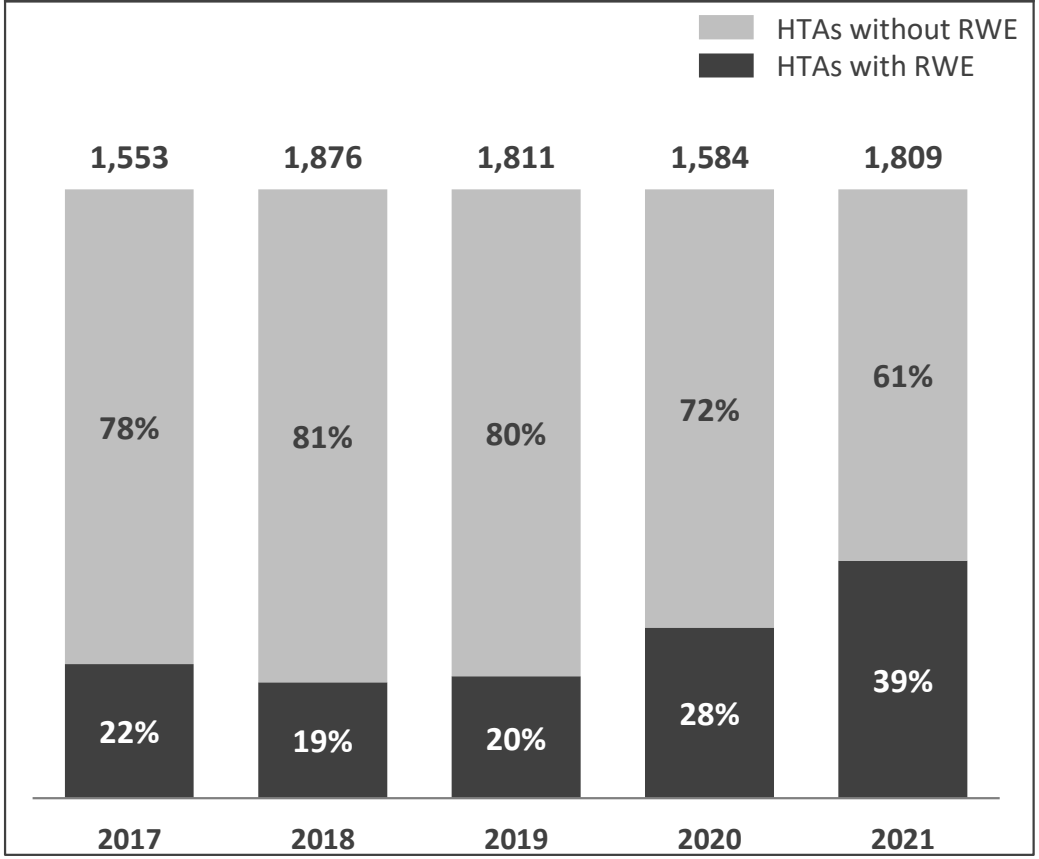
Sources: "Addressing the needs of payers", PharmaVoice – GSK – Merck KGaA

[1] Community Care of North Carolina

Pharma companies may develop pre-launch registries and patient support programs, to generate real-life data and set the ground for post-marketing activities

5 Real-life data management (1/2)

Number of HTA[1] records with and without real-world evidence
(as of % of the total[2])



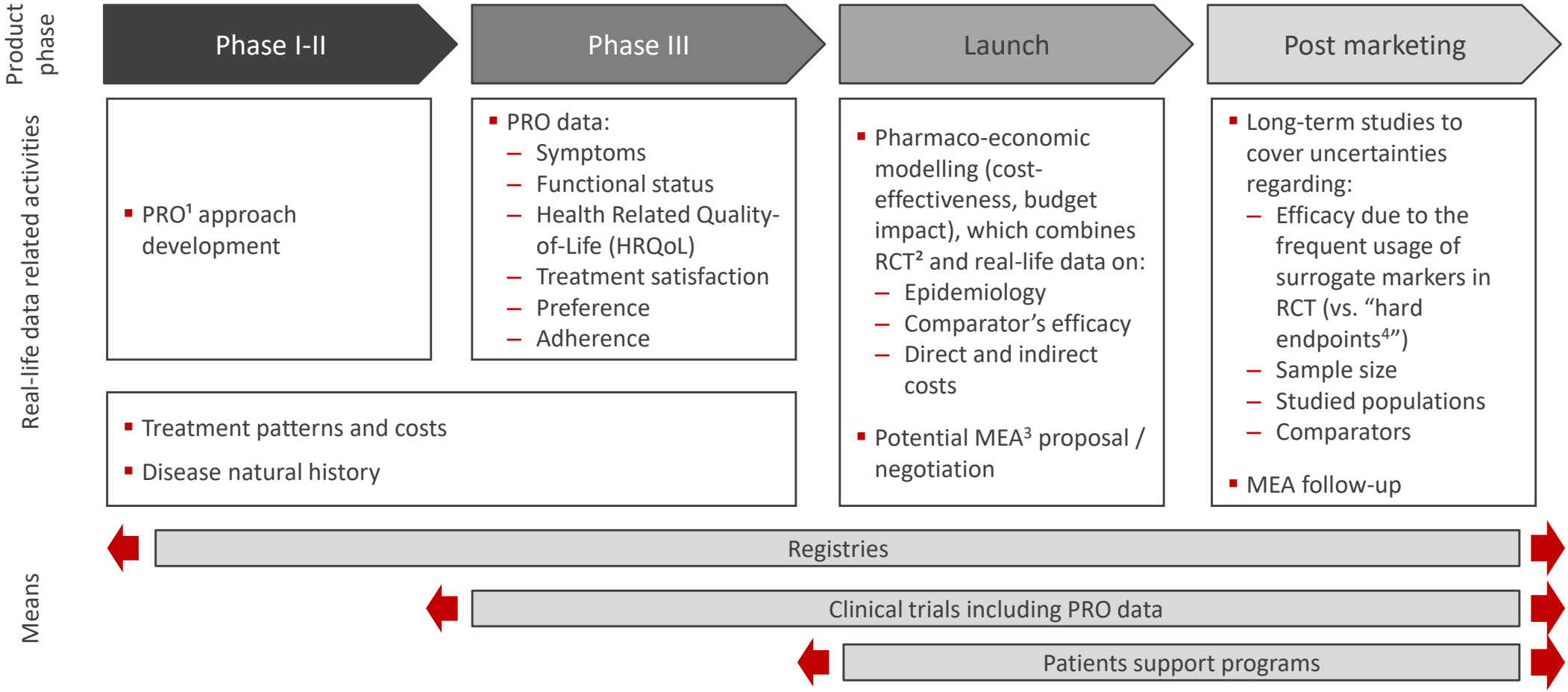
- If the idea of developing real-life long-term data pre-launch seems contradictory, a lot can be done before reaching the market and submissions to HTA bodies:
  - Developing registries / observational studies: especially when a company reaches a new geographical or enter a new therapeutic area. Along with generating real-life data, it will help to understand the disease management, patients' pathways, competitors, etc.
  - Patients support programs: an early development of patient support programs and services, if linked with the generation of real-life data, may help to generate real-life data post-marketing
- In the initial Health Technology Assessment (HTA) and re-assessment process, RWE presents four main applications:
  - Understanding the safety and effectiveness of health technologies when RCT evidence is unavailable or unfeasible
  - Confirmation of RCT[3] evidence in some situations to improve the certainty around the safety and effectiveness impact of health technologies
  - Improved understanding of the long-term impact of health technologies
  - Expanding the usage of health technologies in populations beyond those in trials

Source: IQVIA's HTA Accelerator (Dec. 2022) – Smart Pharma Consulting analyses

[1] Health Technology Assessment – [2] Based on 16,515 HTA reports across 83 HTA bodies from 33 countries – [3] Randomized Controlled Trial

Pharma companies may develop and use real-life data all along the product lifecycle, with registries, clinical trials and patients support programs, to provide evidence to payers

5 Real-life data management (2/2)



Source: "Achieving access: addressing the needs of payors and health technology assessment agencies", European Heart Journal (2015)

[1] Patients Reported Outcomes – [2] Randomized Controlled Trials – [3] Managed entry agreements – [4] Objective health-related endpoints, e.g. stroke or mortality

Before negotiating managed entry agreements with payers, pharma companies may consider six golden rules

6 Managed entry agreements – Preparation & implementation

1. Create a win-win situation: managed entry agreements should help payers limit their budgetary risk, provide pharma companies with fair reimbursement options and give patients an early access to innovations
2. Define clear goals and rules for measuring outcome criteria
3. Keep it simple: a complex process could have a negative impact on the success of the agreement or on prescriptions
4. Consider all associated costs that could have an impact on the pharma company or the payer's budget (administration, data collection, etc.)
5. Consider the overall impact for the pharma company: a managed entry agreement could also impact the pricing in other countries
6. Be as transparent as possible to partner with payers on a long-term perspective and to improve corporate reputation

Source: Smart Pharma Consulting analyses

The implementation of local teams in full collaboration with internal stakeholders is recommended to increase the chances of success of a candidate product

7 Leverage of appropriate market access internal organization

The need for local teams

- The lack of standardization across Western countries, and sometimes across regions (e.g. Italy and Spain), means that pharma companies must develop a tailored approach for each payer / HTA (Health Technology Assessment) agency
- This requires a mandatory implementation of local teams who:
  - Will be able to know the healthcare system and the local market access processes well enough to become a source of proposals to improve the company market access strategy
  - Will be able to build relationships with key stakeholders (payers, authorities, KOLs)

The importance of transversality and early internal collaboration

- Benefits from an early integration of market access department to other customer-facing teams[1]:
  - Messaging consistency: all customer-facing teams will be aligned with the same message
  - Development of the value proposition: inputs from other internal stakeholders may help to enrich the value proposition to payers
  - Post-launch facilitation: an early integration of customer-facing teams will increase their product and strategy knowledge and help them better prepare commercial/marketing activities
  - Patient advocacy groups integration into products development: patients are a key stakeholder and patient group relationships are often managed by medical or marketing teams. An early integration of market access will allow patients to better defend the access to the product

Sources: "Pharma Market Access Success: Shifting the Dialogue from Price to Value Through Strategic Communications", Reimbursography – "Stakeholder value, overcoming complexity in European market access", Quintiles (2012)

[1] Medical, Marketing, Commercial, Clinical development, etc.

Patient advocacy groups and pharma industry may improve the quality of their relations and partnerships by following simple recommendations

8 Collaborations with Patient Advocacy Groups (PAGs)

Recommendations to improve industry / patient advocacy group partnerships

Recommendations for pharma companies

1. Improve transparency and authenticity
2. Seek PAGs input in the design and execution of clinical trials
3. Involve PAGs in awareness and education campaigns for patients, healthcare providers and caregivers
4. Provide follow-up when meetings are convened to seek PAGs counsel on unmet needs
5. Use request for proposal / grant-giving process to reward collaboration among patient groups rather than competition

Recommendations for Patient Advocacy Groups

1. Be clear about the scope of partnerships they will agree to bind
2. Behave more like businesses, meeting commitments in a timely fashion
3. Stay focused on their core missions and avoid initiating programs simply to chase more funding
4. Frequently report back to funders on the impact of money raised and spent
5. Establish more patient registries that pharma can use for drug trials recruitment

Source: "The new partnership paradigm: What Patient Advocates Seek From Pharmaceutical Partners", inVentiv Health PR Group (2018)

To maximize chances to benefit from an optimum price and coverage, payers should be considered as partners with common goals and collaborations should be considered

Trust building & Development of collaborations with payers and authorities

Context

- Pharma companies, payers and other authorities operate with the same goal: improve patient outcomes
- But as of today, regulation authorities are most often perceived as a barrier to overcome rather than a partner to collaborate with
- Worse, trust issues may exist between pharma companies and payers: for example, a poll ran by Quintiles revealed that nearly 2/3 of 100 pharma companies considered that risk-sharing agreements with payers may be an issue for providing competitors with information
- To obtain the best results during negotiations, authorities should be considered as partners with common goals
- More and more, pharma companies seem to adopt this strategic approach, as illustrated by the development of risk-sharing agreements

Cooperation between pharma companies and authorities in the UK

- The UK shows a strong development of partnerships between the NHS and pharma companies:
  - GSK partnered with a local healthcare provider to develop COPD care services. The partnership showed an increase of 400% of COPD reviews and GSK to increase sales of its ICS/LABA combination by 10%
  - Roche announced 6 working projects with the NHS aiming to:
    - Improve quality throughout a patient's healthcare pathway
    - Implement alternative models of care to increase patient access to care
    - Support redesign of disease management services
    - Improve the use of data to measure healthcare outcomes and reduce inequalities
    - Enable NHS spending to translate into better healthcare outcomes
    - Share good clinical practice across the NHS
  - The ABPI (industry association) even drafted a guide for collaborative relationships
- These projects may help set the ground for positive and collaborative relationships

Sources: "Stakeholder value, overcoming complexity in European market access", Quintiles – GSK – Roche

While we observe a trend towards a regionalization of drug pricing on top of the national one in European countries, important price differences should remain

Comparison of market access processes in EU5 countries and the USA

- The difference in pricing and reimbursement policies and processes may explain the variation of drug prices from one country to another:
  - In countries with a low level of regulation and a wide spread of stakeholders such as the USA, higher prices are observed
  - In countries like Italy and Spain, there is an official national price list for drugs which may then be negotiated at regional level, leading to a significantly lower net price
  - In countries where a national regulation based on clinical benefits is implemented like in Germany, prices may be higher than…
  - … in those which consider drug cost-effectiveness at a national level such as France or the UK
- Drug pricing and evaluation processes have also an impact on access to innovation: some pharma companies might choose not to launch their product due to low price level or a poor level of recommendations for use
- As a rule, countries with initial free pricing such as the USA, the UK or Germany benefit from a better and quicker access to new products since pharma companies tend to favor these countries for early market entries

Source: Smart Pharma Consulting analyses

In Europe, requirements for drugs pricing vary from a country to another and sometimes even from a region to another like in Spain or Italy

Pricing/reimbursement submission requirements in Europe

	Therapeutic benefit	Cost-effectiveness modeling	Budget impact modeling	HRQoL[1] data	Data vs. SoC[2]	Innovation	Comments
	✓	✓	✓	✓	✓	✓	Cost-effectiveness considered since 2013 with the creation of the CEESP (Economic and Public Health Committee)
	✓		✓	✓	✓		Free pricing during the first six months on the market: i.e., before the assessment by IQWG (Institute for Quality and Efficiency in Health Care)
	✓	✓	✓	✓	✓		One of the first countries to implement a form of value-based pricing including cost-effectiveness and QoL (Quality of Life) data
	✓	✓ (national or regional requirement)	✓ (national and regional requirement)		✓	✓	Requirements may vary from a region to another
	✓	✓ (national or regional requirement)	✓ (national and regional requirement)		✓		Requirements may vary from a region to another

Sources: CEESP, HAS (Oct. 2018) – "An Introduction to European Market Access", PRMA Consulting (2013) – Smart Pharma Consulting updates

[1] Heath-Related Quality of Life – [2] Standard of Care

EU 5 countries all have early access programs at national level and France has been one of the pioneer with its ATU system[1]

Early access programs – National level

					
Availability before MA[2]	✓	✓	✓	✓	✓
Availability before price and reimbursement	✓	No	✓	✓	N/A
Nominative authorization	✓	No	✓	✓	✓
Cohort authorization	✓	✓	✓	✓	No
Pricing	Free pricing *(except if the product already has another MA)*	Free pricing	No data	Case by case negotiation	Free pricing
Reimbursement	100%	Case by case negotiation	Orphan drugs: 100% Others: compassionate use	Depends on the estimated time until commercialization	100%
Scope of products	With a MA abroad or pending registration	In final phases of development or pending registration	Pending registration	Clinical trial must have started	In final phases of development or pending registration
Validity period	1 year	1 year	6 months	Case by case negotiation	1 year

Sources: Minsitère de la Santé et de l'Accès aux Soins (Dec. 2024) – "Compassionate Use Programmes", German Federal Institute for Drugs and Medical Devices (Dec. 2023) – "Early access to medicines Scheme", NICE (Dec. 2024) – Spanish Agency of Medicines and Medical Devices (2016)

[1] Replaced in 2021 by "AAC" (autorisation d'accès compassionnel) – [2] Marketing Authorization

Market access strategy and corporate reputation play a key role to optimize drug price valuation and to take the advantage over competition…

Recommendations

- Pressure of governments and payers on drug prices will keep on increasing but the impact within the same category of drugs will significantly differ, depending on market access strategy design and execution by pharma companies

DON'Ts

- Justify the price of innovation by the level of investment in R&D which is almost half the one invested in marketing, sales and general expenses
- Invoke the high level of risk, knowing that there is no case of bankruptcy amongst pharma companies
- Invest in sophisticated and expansive health economic studies which will be most likely criticized and not taken into consideration to grant you a better price
- Propose managed entry agreements for which the uncertainty associated with outcomes is high
- Underestimate the importance of corporate reputation

DOs

- Act in good faith and put themselves in governments' and payers' shoes
- Put forward evidence that are well-documented and articulated in a convincing argument to support the asking price
- Managed entry agreements should remain as simple as possible and generate a minimum of controlled associated costs
- Each pharma company should strengthen its corporate reputation to differentiate itself positively from others and thus get preferred (vs. competitors)

… knowing that pharma companies are not considered as all equal by governments and payers in the context of drug pricing & reimbursement

Source: Smart Pharma Consulting analyses

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Health Economics & Outcome Research

Method & Tools

HTA agencies which evaluate health technologies and interventions, including new drugs, are used by policy makers and/or payers to decide about reimbursement and price levels

Health Technology Assessment (HTA)

Definition

- HTA is a **systematic** and multidisciplinary **evaluation** of properties of health technologies and interventions (incl. drugs)
- It covers **direct** (intended) and **indirect** (unintended) **consequences** of technologies and interventions
- This process aims **to determine the value** of a health technologies and to inform on **how** these **technologies can be used** in health systems
- HTA can be used by decision makers and other stakeholders to support the decision-making process in health care at the policy level by providing evidence about given technologies
- It has been described as a **bridge** that **connects** the world of **research to** that of **policy making**
- It is used to **help better allocate** limited **funds** to health technologies and interventions

Sources: Adapted by Smart Pharma Consulting after WHO (Dec. 2024)

Health Technology Assessment (HTA) by pharma companies is taking a more comprehensive and holistic approach to cover the entire product life-cycle

HTA & Product life-cycle

- A "**life-cycle approach**" is trending since the **2022 HTAi**[1] **Global Policy Forum**
- Such a holistic approach should allow **better**:
  - **Stakeholder engagement** (e.g., patient involvement, multidisciplinary collaboration)
  - **Robust evidence generation** (e.g., appropriately designed endpoints, use of big data, digital data collection)

Phase II	Phase III	Regulatory submission	HTA & Reimbursement submissions	Post-launch evidence generation
▪ Participate in early scientific advisory boards ▪ Increase precision of asset evaluations	▪ Select clinical trials and endpoints that are relevant for future analysis ▪ Align regulatory and market access strategy ▪ Generate predictive analytics	▪ Present market access implications for patient populations	▪ Build specific payer strategies (e.g., indication-specific) ▪ Position the product based on expected recommendations… ▪ … and on recent decisions in similar situations	▪ Understand international referencing to adapt collected data ▪ Build a real-world evidence strategy

Sources: "HTA 2025 and beyond […]", R. Trowman et al. (Feb. 2023) – IQVIA's HTA Accelerator – Smart Pharma Consulting analyses

[1] HTA International is a global, non-profit organization dedicated to promoting the importance of HTA

To facilitate health technology assessment for European launches, the EUnetHTA allows pharma companies to partner with each other and access collective datasets

European collaboration on HTA

- European countries **collaborate on HTA assessments** and on **methodology development**
- The European Commission designated HTA as a "political priority" in 2004: several HTA projects have been financially supported, and the **EUnetHTA** coordinates these activities since 2006
- **EUnetHTA Assessments** are HTA reports jointly produced by at least 4 EUnetHTA partners from **4 countries**, which benefits pharma companies, national HTA agencies, and indirectly, patients
- **Benefits** for pharma companies include:
  - **Faster and less intensive national assessment** on **clinical effectiveness**, as the HTA Core Model standardizes the essential content required for national procedures
    - Availability of EUnetHTA Submission Dossier: head start on national requests
    - Availability of the EUnetHTA Assessment around two weeks after publication of the European Public Assessment Report (EPAR)
  - Access to a **pool of expertise and experience** with historical international data
  - **Security on transferability of results** throughout Europe thanks to a consistent and predictable process
    - Quality assurance via standardized methodology and Standard Operating Procedures (SOP)
  - Access to a **professional guidance** before and during the assessment

Sources: European Union website (Nov. 2024) – Smart Pharma Consulting analyses

The European coordination is encouraged and should force national agencies to cooperate on common requirements, which should ease the process for pharma companies

European HTA – Evolutions (2025)

- The new **European regulation** ((UE)2021/2282) on **HTA** will be applied starting January **2025**, with the objective to develop a coordinated assessment (Joint Clinical Assessment)
- 13 national agencies have worked on this project (including France's HAS), creating the **EUnetHTA21** network
- The coordination becomes **mandatory** for all EU members: they will have to take the **Joint Clinical Assessment** into account in their national decision processes (**only on scientific and clinical** parts, the **reimbursement and pricing** processes **are still independent**)
- The objective is to create a **common methodology and standards** on **requirements** (e.g., clinical trial, relevant comparator accepted, single-arm trial)
- The regulation encourages the **communication** between **all stakeholders** (including healthcare professionals and patients) in the assessment
- It will be applied **progressively** to cover as many drugs as possible:
  - January 2025: oncology drugs, innovative therapies
  - January 2028: orphan medicines
  - 2030: all drugs and some medical devices

Sources: European Union law (EU) 2021/2282 – Smart Pharma Consulting analyses

Two new European regulations came into force in 2022, with the aim to harmonize the evaluation of drugs and clinical trials in Europe by January 1st, 2025

European harmonization of HTA

European health technology assessment (EU 2021/2282)

- On January 2022, Regulation (EU) 2021/2282 on health technology assessment (HTA) came into force
- The regulation comes from a collaboration between EU Member States and health sector stakeholders, triggered by joint actions such as EUnetHTA[1], and formalized through the European Commission
- It aims to assess new therapies at a European level, in order to:
  - Speed up access to new therapies
  - Reduce duplication of work
  - Harmonize clinical evaluation
- This process will start in January 2025, with newly approved oncology drugs or advanced therapy medicinal products…
- …before being gradually extended to all drugs with obligatory EMA approval

New clinical trial European regulation (EU 536/2014)

- The European regulation 536/2014 on clinical trials of medicinal products was adopted in May 2014 and came into force in January 2022
- This regulation aims to harmonize the processes of submission, evaluation and monitoring of trials to:
  - Facilitate patient access to treatments
  - Strengthen the attractiveness of Europe for clinical trials
  - Increase transparency and access to trial data
- A period of 3 years is foreseen for a complete transition on January 31st 2025...
- ...when it will be mandatory to use the new CTIS (Clinical Trial Information System) platform for clinical trial applications and authorizations in the EU
- Until January 31, 2023, clinical trial applications could be submitted either on the national or the European portal

Sources: ANSM website (February 2023) – The new EU-wide HTA for innovative drugs (EUCOPE April 2022) – Smart Pharma Consulting analyses

[1] European Network for Health Technology Assessment

Even though Europe focuses on collaboration on HTA guidelines and models, national specificities still lead to various results for a similar assessment

HTA variability in Europe

- The **EUnetHTA** collaboration led to **methodological guidelines** and **tools** such as the **HTA Core Model**, used to value framework **when assessing technologies** in the EU
- However, even when European countries use **the same relative effectiveness assessment model** (based on the EUnetHTA Core model), **results may vary** between countries (see below), which is due to:
  - Scope used
  - Institutional context
  - Financing & Governing systems
  - Culture & Values

Abbreviated indication	Generic or brand name	National HTA recommendations on some oncology drugs					
		Germany	Netherlands	France	England	Scotland	Poland
Breast cancer	Eribulin	Equal benefit	Added benefit	Added benefit	Negative	Negative	Negative
Gastric cancer	Tegafur/ Gimeracil/ Oteracil	*Not assessed*	Lesser benefit	Lesser benefit	*Not assessed*	Positive	Negative
Prostate cancer	Abiraterone	Added benefit	Equal benefit	Added benefit	Positive	Negative	Positive
Renal cell carcinoma	Axitinib	Added benefit	*Not assessed*	Added benefit	Positive	Negative	Positive

Sources: European Union website (Nov. 2024) – Smart Pharma Consulting analyses

HEOR focuses on measuring and valuing outcomes of treatments, the behavior of the market and the efficiency of the market access policy

Health Economics (HE) & Outcome Research (OR) – Introduction

Context

- Growing importance of **value-based care**
- Increasing preference for **personalized, precision medicine**
- **Strong innovation** in health **data collection** & **monitoring**
- **Need** for **differentiation** between **multiple drugs**

Objectives

- **Generate evidence** of the **actual value** of a drug
- **Understand** how drugs are **prescribed** (actual vs. guidance)
- **Improve patient care** based on the **real-world performance** of drugs

Methodology

- **Measure** the **link** between **treatments** and **outcomes** (e.g., clinical trial data, financial and economic data, quality of life measurements, patient-reported outcomes)
- **Collect additional evidence** from **published studies** and **patient-reported health records**
- Determine **economic projections** to build **data-based budget models** for pricing & reimbursement **negotiations**

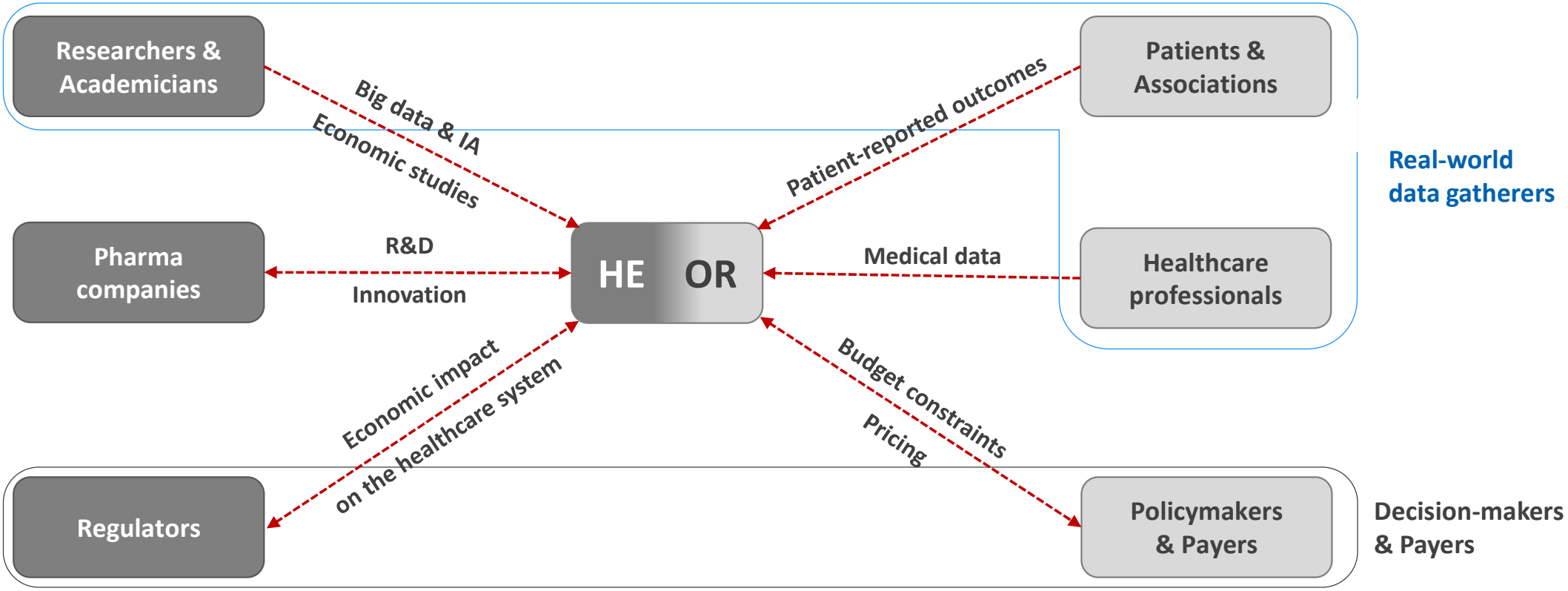
Use of HEOR data

- **Guide regulating agencies** to decide on reimbursement and access decisions
- **Aid researchers** in **closing the gap** between **clinical trials** results and **real-world outcomes**
- **Help pharma companies** communicate on the **value** of their **product to physicians**, **patients** and **payers**

Sources: ISPOR (Nov. 2024) – Smart Pharma Consulting analyses

HEOR allows decision-makers to build robust data-based decision-making processes, monitor and collect the right evidence from the right stakeholders

HEOR in the complex healthcare environment



Sources: ISPOR Whitepaper on HEOR (2020) – Smart Pharma Consulting analyses

New technologic possibilities expand HTA horizons, and allow to better focus on diversity, health equity and patient centricity

HEOR trends

Real-world evidence (RWE)	▪ The EMA released **guidance** on **RWE generation** and **use**, as well as a report of its studies using RWE ▪ In the USA, RWE was used as primary evidence of efficacy in 2021 for tacrolimus (prevention of organ rejection in lung transplants): comparison between historical controls and a treatment arm (off label use of tacrolimus)
Machine learning algorithms (AI)	▪ **Machine learning algorithms** can be used as a **writing support** and as **data analytics tool**, for instance for: – Cohort selection, samples classification – Predictive analytics of outcomes – Development of economic models
Accelerated drugs approvals	▪ Usually based on **limited clinical evidence** (e.g., shorter trials, surrogate markers) ▪ HEOR research can help **fill in the evidence gap** to ensure the **long-term value** of the drug
Diversity & Health equity	▪ **Social Determinants** of **Health** (**SDoH**) are increasingly used in HEOR ▪ They are **nonmedical** elements (e.g., workplace, economic policy, social norms, political system) ▪ As data become more available and shared around the world, SDoH may become an essential part of HEOR
Patient centricity	▪ **Patient engagement** is key to improve the value of a drug ▪ In Europe, the **EUPATI** (European Patients' Academy on Therapeutic Innovation) and **EURORDIS** (Rare Diseases Europe) seek to **improve healthcare** through **patients' engagement**

Sources: "Top 10 HEOR trends", ISPOR (Jan. 2024) – Smart Pharma Consulting analyses

Real-world evidence allows a more comprehensive knowledge of real-life stakeholders' behaviors, as well as long-term health outcomes on a wide population

Real-World Data (RWD) and Real-World Evidence (RWE)

- Real-World Data (RWD) analyses allow to **generate Real-World Evidence** (**RWE**), which complement clinical trial data and **fill in the gap** of knowledge between **theoretical guidelines** and **real-life prescription habits** and **health outcomes**
- RWD can be extracted from:
  - **Clinical records** (e.g., anonymized medical files, case notes, administrative records, billing datasets)
  - **Studies & Registries** (e.g., patients' registries, observational studies, health surveys, interviews, focus groups)
  - **Unsupervised sources** (e.g., personal devices such as wearables or biosensors, smartphones, social media)
- Contrary to clinical trial data, which is based on selected patients, RWE data can be used to better **evaluate long-term value, safety and proper use of a drug**
- The **best RWE data** is therefore the one based on **the biggest population possible**, which is why researchers try to collaborate at regional or international levels (e.g., Sweden, Norway and Denmark have a central patients' registry for certain diseases to have a more comprehensive dataset)
- However, RWE is purely **observational** and **cannot replace a clinical trial**

"Real-life studies, using increasingly robust methods, make it possible to confirm the transposability of clinical trials and are part of a continuum of demonstration of the medical benefit of our drugs." Pr. Piedbois, former SVP medical Head (BMS)

Sources: BMS website – Smart Pharma Consulting analyses

Once a drug is launched, many payers ask to see effectiveness data, which shows how the drug works in patients when it is given as part of routine clinical care

Real-world evidence data generation

Definition

- Real-world evidence is the clinical evidence re. the usage and potential benefits or risks of a medical product
- It is derived from data collected in everyday clinical practice rather than in a clinical trial setting
- Data can come from electronic health records, product and disease registries, or patient-generated data (e.g., in home-use settings)

RWE data collection can be used to:

- **Identify** the patient **population** in which the **drug is used**
- **Confirm** the **efficacy** (benefit) of the drug by **collecting data on** the clinical **effectiveness** when used **in routine** clinical **care**
- **Monitor** any **adverse events** over time and in combination with a wider range of drug combinations than in clinical trials
- **Document** the **dose used** in routine clinical care

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

Compared to clinical trials, RWE data allows a longer-term assessment of a drug's outcomes and side effects, but data robustness and quality are debatable

Real-World Evidence (RWE) vs. Randomized Controlled Trial (RCT)

	Pros	Cons
RWE	▪ Evaluation of the efficacy and safety in practice on a wide population ▪ Possibility to analyze several variables on sub-groups (e.g., patients with certain comorbidities) ▪ Evaluation of long-term side effects (especially for rare side effects)	▪ No randomization nor blind control ▪ Heterogeneous data quality (e.g., patient-reported outcomes) ▪ Lack of data robustness (less standards) ▪ Observational: no evidence of causality
RCT	▪ Gold standard for clinical research ▪ Evaluation of efficacy and safety ▪ Randomized studies ▪ Robust outcomes due to reduction of methodological biases	▪ Selected & small population ▪ Evaluation usually based on efficacy and safety only ▪ Short-term: long-term side effects are hard to detect

Sources: Smart Pharma Consulting analyses

Real-world evidence allows to answer patient-centered, personalized, specific questions regarding patients' satisfaction and the long-term outcomes of a product

Real-World Evidence (RWE) in HTA (1/2)

- In the **initial** Health Technology Assessment (HTA) and **re-assessment process**, RWE presents **four main applications**:
  - Understanding the **safety** and **effectiveness** of health technologies when RCT evidence is unavailable or unfeasible
  - **Confirmation of RCT** evidence in some situations to improve the certainty around the safety and effectiveness impact of health technologies
  - **Improved understanding** of the **long-term** impact of health technologies
  - **Expanding** the **usage** of health technologies in populations beyond those in trials

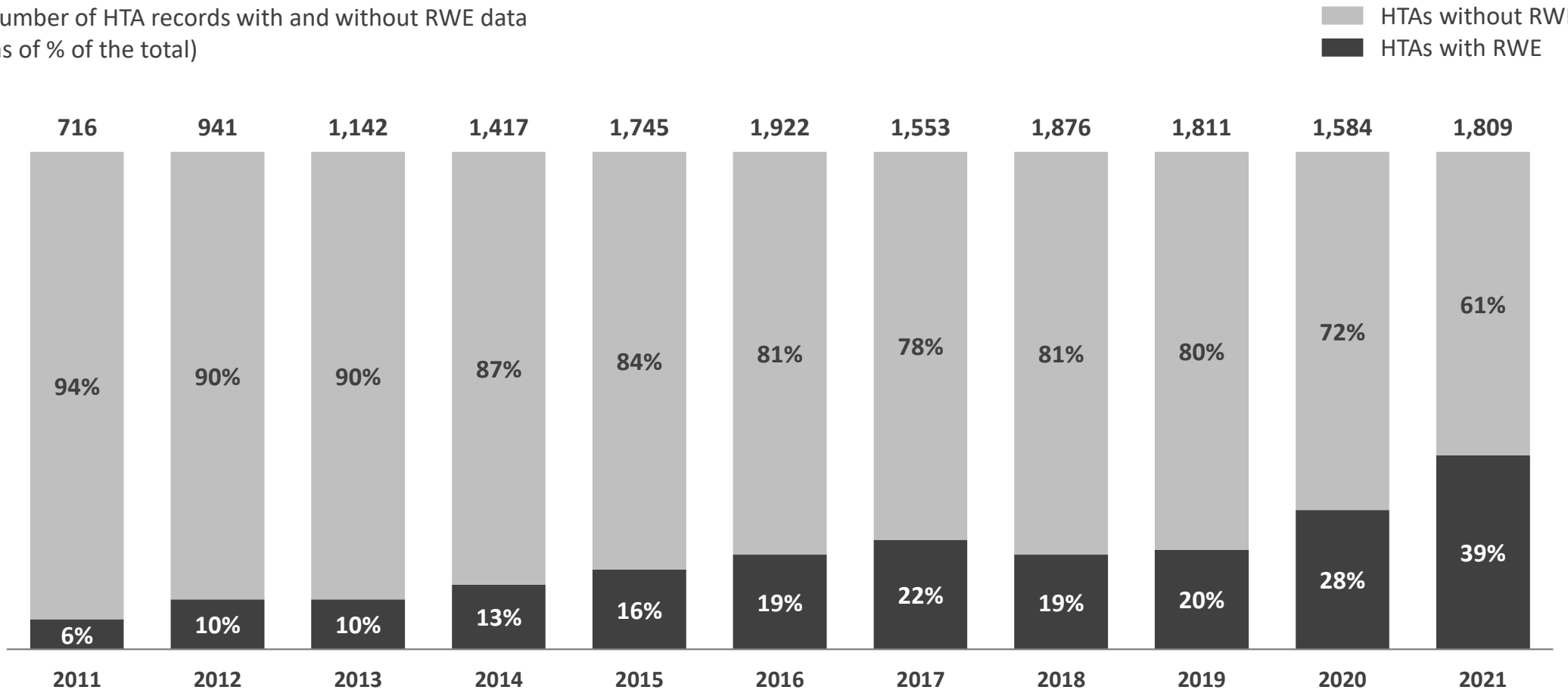
- The use of RWD makes it possible to generate RWE on various questions:
  - Efficacy & safety
  - Demographics
  - Prevalence & incidence of a health condition
  - Appropriateness of assumptions
  - Patient adherence & satisfaction
  - Patient-reported outcomes (PROs)
  - Costs & resources used

Sources: "Integrating RWE from different data sources in health technology assessment", G. Pooyeh et al. (July 2023) – Smart Pharma Consulting analyses

Following the technological progresses, real-world evidence is more and more integrated in HTA, growing more than 6 times over ten years

Real-World Evidence (RWE) in HTA (2/2)

Number of HTA records with and without RWE data
(as of % of the total)



Sources: IQVIA's HTA Accelerator (Dec. 2022) – Smart Pharma Consulting analyses

Note: this analysis is based on 16,515 HTA reports across 83 HTA bodies from 33 countries

In the case of rare diseases, the outcome research can be based on caregiver-, physician- or patient-reported outcomes to capture real-world evidence

RWE-based HEOR – Examples

	Egetis Therapeutics	Vertex Therapeutics	Bluebird Bio[2]
Context	▪ Rare disease (MCT-8 deficiency) with a prevalence of 1/1,000,000 males ▪ Cognition affected: no patient-reported outcomes possible	▪ Rare, genetic, chronic disease (Cystic Fibrosis (CF)) ▪ Lack of data on the impact of CF treatment initiation on patients ▪ Lack of longitudinal trends for patients already treated	▪ Transfusion Dependent Thalassemia (TDT) ▪ Patients rely on regular blood transfusions… ▪ … the burden of which for both the patient and the caregiver is difficult to demonstrate and quantify
Solution	▪ **Data collection from caregivers and clinicians**	▪ 5-year **observational study** to assess the impact of CF and CFTRm therapy ▪ Based on **patient-reported outcomes**	▪ Post-treatment **symptom tracking** via patients' own device ▪ Patient engagement driven by the app **gamification** ▪ **Daily demographic and patient-reported outcomes** data collected
Value	▪ Data used for **cost-effectiveness analysis** ▪ Health state utility (HSU)[1] values generated for **economic models** and **HTA submission** (MAA[1] submitted to the EMA in Oct. 2023)	▪ Data used to **complement Phase III clinical trial data**	▪ Quantification and **characterization** of the **experience** on transfusion days and proximal days ▪ Evidence of treatment burden used in **reimbursement submission**

Sources: Egetis website (Nov. 2024) – "Real-world safety and effectiveness of elexacaftor/tezacaftor/ivacaftor in people with CF […]", Bower et al. (March 2023) – Bluebird Bio website (Nov. 2024) – Smart Pharma Consulting analyses

[1] HSU is the value attributed to a particular health state which is scored 1 for perfect health and 0 for death – [1] Marketing authorization application – [3] Sold at $ 2.8 M in the USA in 2023, the treatment was withdrawn from the EU as pricing negotiations failed

Incorporating patient-reported data and metrics enables the healthcare system to provide improved, responsive and patient-centered care

Patient-reported data: PROs, PREs, PROMs, PREMs

- **Patient-Reported Outcomes** (PROs) encompass all health-related information communicated by patients (e.g., symptoms, functional status, overall wellbeing)
- **Patient-Reported Experience** (PREs) is the patients' perception of interactions with the system (e.g., care quality, accessibility, communication quality, overall satisfaction)
- **Patient-Reported Outcome Measures** (PROMs) are standardized tools used to assess patients' perspectives on the impact of healthcare intervention, allowing healthcare providers to personalize care to individual needs
- **Patient-Reported Experience Measures** (PREMs) capture the patients' experience with the healthcare system, to identify areas for improvement and implement strategies to offer more patient-centric services
- Incorporating PROs, PREs, PROMs and PREMs throughout a drug's journey allows a **better patient-centric experience**, as healthcare providers can:
  - Gain a **deeper understanding** of **patients' needs, preferences,** and **experiences**
  - **Monitor the effectiveness** of treatments and interventions from the **patient's perspective**
  - Identify areas for **quality improvement** and **enhance the delivery of care**
  - **Engage patients as partners** in decision-making and shared decision-making processes
  - **Demonstrate accountability** and **transparency** in healthcare delivery

Sources: Smart Pharma Consulting analyses

Patient-reported outcomes measures should be evolutive and responsive, to maximize the potential of personalized data

Generic vs. specific PROMs

- PROMs can be **generic** (standardized) or **specific** (i.e., for a specific population):

	Generic PROMs	Specific PROMs
Population	▪ Applicable to all populations (patients and non-patients)	▪ Applicable to specific patient groups
Dimension	▪ General dimensions ▪ Potentially non-relevant for some patient groups	▪ Specific, precise dimensions ▪ Relevant for concerned patient groups
Comparison	▪ Comparisons possible between patient groups	▪ Comparison not always possible with other patient groups or with the general population
Sensitivity	▪ Not very sensitive for specific or rare problems	▪ Sensitive for detecting and monitoring specific or rare problems

- Item banks (e.g., PROMIS[1] bank) is a catalogue of questions – usually present both generic and specific questions – with a description of:
  - Their content
  - Measurement characteristics, such as: validity, reliability and difficulty of measures
- Item banks are evolutive and adaptative thanks to IA (e.g., if a patient says that climbing stairs is “extremely difficult”, the algorithm will adapt the next questions to ask the patient about simpler activities)

Sources: “PROMs and PREMs indicators: Panorama […]”, HAS (July 2021) – Smart Pharma Consulting analyses

[1] Patient-Reported Outcomes Measurement Information System

Indirect costs in health economic evaluations are included or not, depending on the countries and certain countries like France adopt a case-by-case approach

Health economic evaluations: Costs measurement

Costs to be considered in health economic evaluations

Direct costs

- They include **all costs directly related** to a disease or a technology
- They may include costs:
  - Within the healthcare sector (e.g., materials, equipment, nurses)
  - Outside the healthcare sector (e.g., patients travel time to the hospital)
- **It is agreed** in **Europe** that all **direct costs should be included** in the analysis

Indirect costs

- They include costs **not directly related to** the disease or the technology
- They often refer to costs induced by a **disease's consequences** such as:
  - Absence of work due to illness
  - Loss of productivity due to an early death
- These costs are **estimated**, and the most frequent methods are:
  - The **human capital method** (assumes workers value is equal to their earnings)
  - The **friction cost method** (due to absenteeism from work which reduces output or working with limitations due to illness referred to as presenteeism)
- These costs may or may not be included in economic evaluations depending on the country:
  - **Included**: Denmark, Finland, the Netherlands, Norway, Portugal, Sweden
  - **Not included** (but may be presented in a separated analysis): Belgium, Croatia, Czech Republic, England, Estonia, Latvia, Germany, Ireland, Italy, Scotland, Slovakia, Slovenia, Switzerland
  - **Case-by-case**: France, Spain

Sources: EUnetHTA: Methods for health economic evaluations (May 2015) – Smart Pharma Consulting analyses

Note: Economic theories suggest that costs and outcomes that occur in the future should be discounted. The recommended level for the discount rate varies between 3% and 5% in Europe

The QALY is the most frequent indicator used to measure outcomes in health economy, notably in France, but it is controversial due to its subjectivity

Health economic evaluations: Outcomes measurement

- There is a wide range of outcomes measures that can be used in economic evaluations
- The choice of the measure is related to the chosen type of analysis and to the type of technology being analyzed
- Examples of outcomes: changes in clinical indicators, number of health-related events (e.g., deaths), life years gained, quality-adjusted life years

Quality-adjusted life years (QALYs)

- **Most widely used** form of outcome measure
- **One single** composite **indicator** with both:
  - **Quantity** of life (e.g., longevity, mortality)
  - **Quality** of life (HRQoL[1]): morbidity, psychological or social factors, etc.
- The **HRQoL** aspects can be captured with:
  - **Indirect** methods: specific pre-scored questionnaires
  - **Direct** methods: visual analog scales, standard gamble, time trade-off (e.g., the utility of a health state or an intervention is derived by asking respondents to make choices between alternative solutions or to indicate a relative value

Intermediate / surrogate outcomes measures

- A surrogate outcome measure does not represent the final goal of using an intervention but is associated with the **outcome measure** and may be used as a proxy for final outcome measure in clinical trials
- For example, a surrogate for an intervention's effect on myocardial infarction could be the effect on a patient's blood cholesterol level
- In health economic evaluations, surrogate outcomes measures may be used as the **main outcome** measure or as a **point of departure** in a model where an intervention's effect on the surrogate outcome measure is extrapolated to the effect on final endpoints, such as life years or QALYs
- Most European countries accept surrogate outcomes measures if they are **scientifically validated**, and even though final outcomes measures are always preferred

Willingness-to-pay (WTP)

- Refers to the patients' or the general public's **WTP for an outcome in a cost-benefit analysis**, or to the **threshold value** that is used to determine if an intervention is cost-effective
- Two general methods to express the benefits in monetary units:
  1. **Revealed preferences**[2] (based on existing markets)
  2. **Stated preferences**[3] (based on hypothetical markets)

Sources: EUnetHTA: Methods for health economic evaluations (May 2015) – IGAS report (December 2014) – Smart Pharma Consulting analyses

[1] Health-related quality of life – [2] Analysis of the actual behavior of consumers to understand their willingness to pay for a certain product or service – [3] includes the Contingent Valuation Method (CVM) and Choice Experiments (CE). These are survey-based methodologies using constructed or hypothetical markets, in which respondents are asked to reveal their maximum WTP for an intervention or a benefit

Each type of evaluation compares alternative treatments from different perspectives

Possible types of health economic evaluations

Six types of evaluations used by regulatory agencies

Cost Effectiveness Analysis (CEA)	Cost Utility Analysis (CUA)	Cost Benefit Analysis (CBA)	Cost Minimization Analysis (CMA)	Cost Consequences Analysis (CCA)	Budget Impact Analysis (BIA)
▪ Compares costs and effects using final or surrogate outcomes	▪ Form of CEA that uses health-state-value scores (e.g.: QALY) as the outcome measure ▪ Most frequently recommended analysis in Europe	▪ Comparative analysis of costs and money-valued benefits ▪ Not widely used for ethical reasons[1] and due to methodology biases	▪ Comparison of costs associated with products with the same effects (desired and undesired effects) ▪ Often used by purchasing groups (e.g., UNIHA)	▪ Variant of CEA (or of CBA) used when multiple consequences of a product must be weighted ▪ Only used in the UK	▪ Considers the affordability of a technology ▪ Measures how a change in the treatment strategy will impact spending

Informs on the most economically efficient way to use healthcare resources, considering health consequences

Informs on financial and organizational consequences, irrespective of health consequences

Sources: EUnetHTA: Methods for health economic evaluations (May 2015) – Smart Pharma Consulting analyses

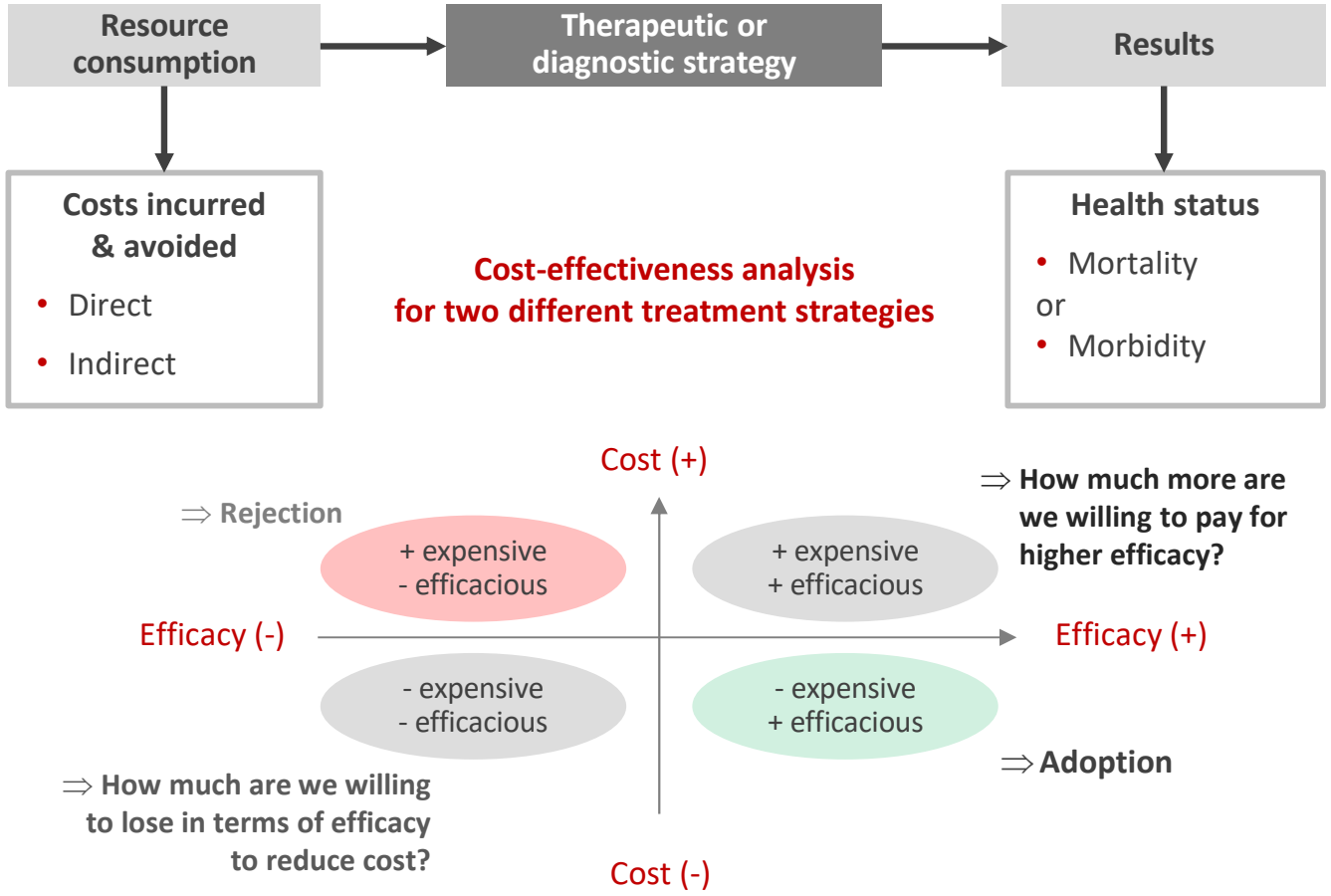
[1] *What is the price of a human life?*

The cost-effectiveness analysis compares two treatment strategies based on their respective cost per unit of health (e.g., mortality, morbidity)

Health economic evaluations: Cost-effectiveness analysis (CEA)

Definition

- The cost-effectiveness analysis links the **cost of medical strategies to their consequences** expressed in **physical units**:
  - Costs are expressed in monetary units (e.g., Euros)
  - Consequences are expressed in physical units such as:
    - Number of years of life gained
    - Number of cured patients
    - Decrease in blood pressure
    - Etc.
- Results are expressed in cost per unit (e.g., €/year gained)



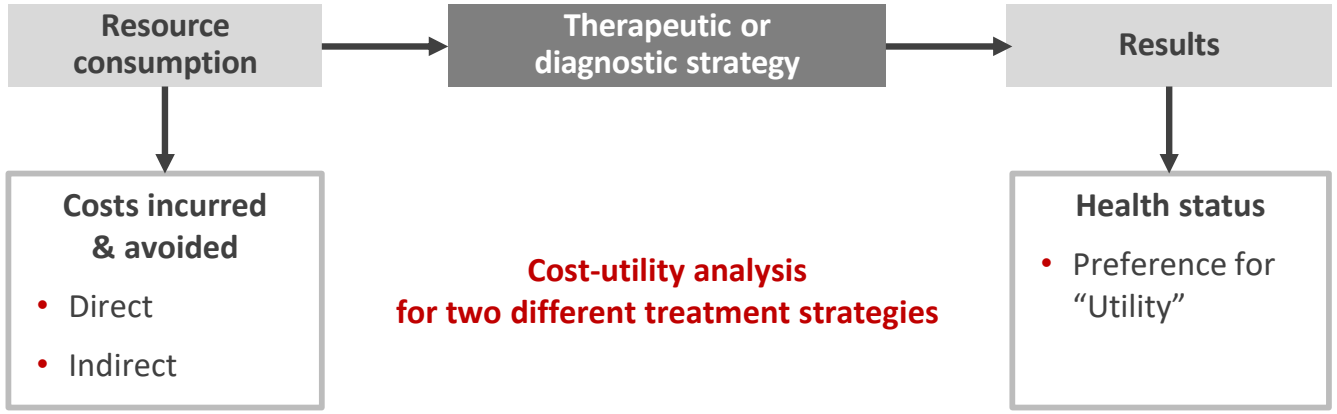
Sources: Marie-Christine Woronoff-Lemsi, Georges Weil 2011 – HAS (February 2021) – EUnetHTA (February 2021) – Smart Pharma Consulting analyses

The cost-utility analysis compares two treatment strategies based on their cost and their impact on a quality criterion aggregated with an efficacy criterion called QALY

Health economic evaluations: Cost-utility analysis (CUA)

Definition

- The cost-utility analysis compares the **costs associated with a medical strategy and its utility**, which is a criterion combining the efficacy and the quality
- Saving a life is important but not enough, the **quality of life** should also be considered
- This analysis is a particular form of cost-effectiveness analysis for which results are measured by the number of years of life gained, adjusted with the quality of life, so called "**quality-adjusted life year**" (QALY)



- "Utilities" of health states are generally expressed on a numerical scale ranging from 0 to 1 (0 represents the "utility" of the state "Dead" and 1 the utility of a state lived in "perfect health")
- A year of healthy life accounts for 1 year of life and a year of lower health state accounts for a fraction of a year (<1). Some health states may be considered worse than death and have negative scores
- QALYs are used to compare therapeutic protocols where the impact on quality of life is engaged
- This is the case for anticancer drugs comparisons which can improve response and/or survival time, and particularly living comfort; the results are then expressed using QALYs

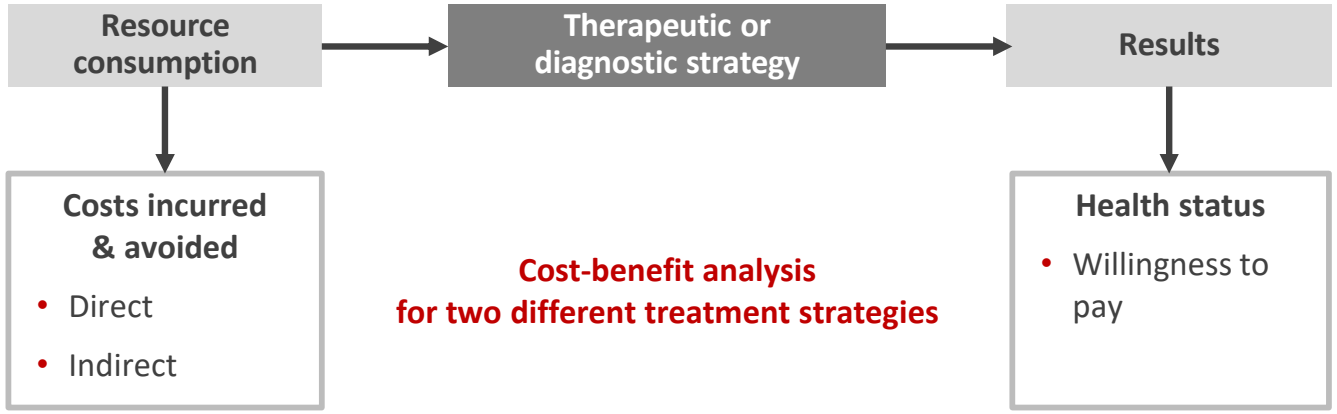
Sources: Marie-Christine Woronoff-Lemsi, Georges Weil 2011 – HAS (February 2021) – EUnetHTA (February 2021) – Smart Pharma Consulting analyses

The cost-benefit analysis compares two treatment strategies based on their respective cost and monetized efficacy or quality criteria (profit or loss)

Health economic evaluations: Cost-benefit analysis (CBA)

Definition

- In a cost-benefit analysis, the results are expressed in **the same unit,** in **monetary terms**
- The **cost-effectiveness analysis** leads to the **most efficient option**, while the **cost-benefit analysis** leads to choosing **the most profitable** (e.g., screening for hypertension (premature death avoided) vs. vaccination against rubella (number of cases avoided))
- Nevertheless, it is often **difficult to value** the welfare, the physical pain, etc., in monetary units



- The cost-benefit analysis may be useful:
  - When the effectiveness of the compared programs is not measured in the same way (e.g., different pathologies)
  - When efficiency criteria are very different for the same program (e.g., years of life gained, avoided complications, quality of life)
  - To define the optimal size of a program budget, to make it worthwhile

Sources: Marie-Christine Woronoff-Lemsi, Georges Weil 2011 – HAS (February 2021) – EUnetHTA (February 2021) – Smart Pharma Consulting analyses

The cost-minimization analysis compares the cost of two therapeutic strategies with comparable medical efficacy and safety

Health economic evaluations: Cost-minimization analysis (CMA)

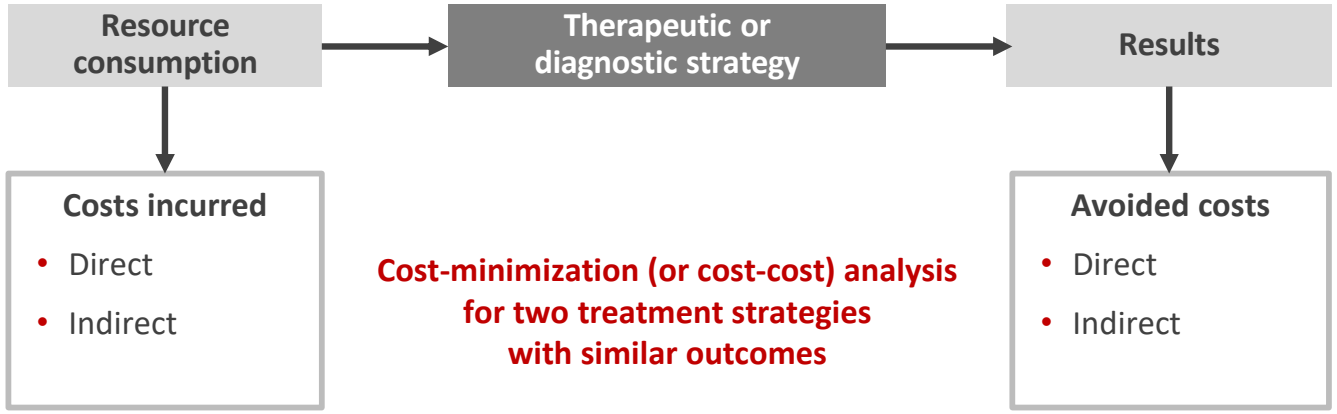
Definition

- Those studies, also called "Cost-Cost", answer the question:

  "What is the cheapest strategy?"

- The analysis is carried out only when the compared strategies are similar (efficacy and safety are considered identical) but they are likely to be different in terms of costs

- For example, comparison of different low molecular weight heparins for the prevention of venous thromboembolism in surgery and determination of the cheapest one



- Identify incurred and avoided costs (e.g., lower nursing time)
- The direct costs are attributable to the disease and/or its management; they could be medical (e.g., medications, transfusions, examinations, consultations) or non-medical (e.g., transportation, home care)
- The indirect costs are negative consequences (e.g., loss of productivity due to medical leaves, impact on the environment)
- Indirect costs are very difficult to value economically

Sources: Marie-Christine Woronoff-Lemsi, Georges Weil 2011 – HAS (February 2021) – EUnetHTA (February 2021) – Smart Pharma Consulting analyses

The cost-consequences analysis allows to compare two therapeutic strategies with multiple health outcomes without combining consequences into a single measure

Health economic evaluations: Cost-consequences analysis (CCA)

Definition

- Cost-consequences analysis examines costs and consequences:
  - Without the necessity of focusing on a single consequence

  and
  - Without combining disparate consequences into a single, commensurable measure
- It is classified both as a variant of CEA and as a balance sheet approach to CBA
- This approach may be preferable to CEA or CUA when multiple consequences are to be weighed together simultaneously

- A CCA does not try to put all costs and benefits into the same units. It accepts that there are different types of benefits that cannot be measured in the same units (this distinguishes it from cost-effectiveness analysis)
- CCA is often referred to as a disaggregated approach, because the benefits and costs are not combined into a single indicator such as net benefit or a cost-effectiveness ratio
- In making decisions based on a CCA, different decision makers will place their own weights on the different benefits and on costs
- CCA is of particular interest in public health, for instance, the National Institute for Health and Clinical Excellence (NICE) in England permits the use of CCA for public health interventions

Sources: Marie-Christine Woronoff-Lemsi, Georges Weil 2011 – HAS (February 2021) – EUnetHTA (February 2021) – Smart Pharma Consulting analyses

Regulatory bodies, like in France, increasingly ask for budgetary impact analysis to estimate the affordability of a new treatment strategy for healthcare systems

Health economic evaluations: Budget impact analysis (BIA)

Definition

- In addition to information about the efficiency of a new technology, regulatory agencies in an increasing number of countries (including France) now require data about its budgetary impact at national, regional or local level
- A budget impact analysis evaluates the affordability of a technology
- Specifically, budget impact analysis explores how a change in the current mix of treatment strategies by the introduction of a new technology will impact spending on a disease[1]
- Budget impact analyses, in combination with economic evaluations, play a crucial role in the comprehensive assessment of a technology and may influence reimbursement decisions

- A budget impact analysis starts with providing all relevant epidemiological, clinical and economic information on the disease
- The current mix of treatment strategies is then described
- The introduction of the technology may lead to substitution and market expansion. Therefore, a budget impact analysis considers all patients who might be treated with the new technology, including previously untreated patients who may now seek treatment
- Finally, the analysis considers the budgetary impact of various scenarios of how the current mix of treatment strategies changes when the new technology becomes available

Sources: "Health Economic Assessment: A Methodological Primer", Steven Simoens – Smart Pharma Consulting analyses

[1] French authorities have experienced this situation with Sovaldi from Gilead for the treatment of HCV (Hepatitis C Virus). The budget impact associated with this breakthrough innovation was estimated at € 1 B, which had not been anticipated

The QALY is a measure of disease burden, including both the quality and the quantity of life lived that is used in economic evaluation to assess the value of medical interventions

Health economic evaluations: Zoom on QALYs (1/2)

Definition

- The concept of Quality-Adjusted Life Years (QALYs) is an important tool for evaluating the cost-effectiveness of a medical intervention
- QALYs can be used in the cost-effectiveness analysis (CEA) of medical interventions or drugs
- This tool is widely used by HTA agencies such as the NICE in the UK to support the allocation of scarce financial resources

Formula

QUALY = **Years of Life** x **Utility Value**

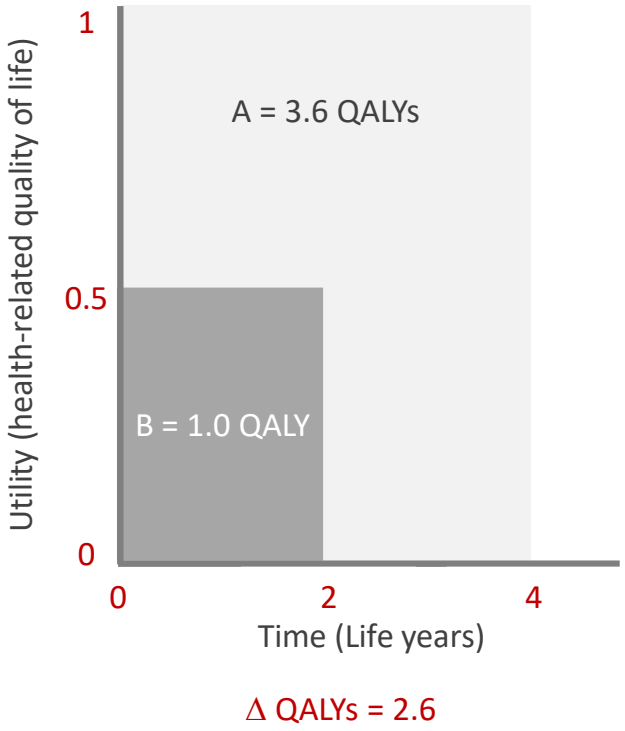
- Since health is a function of length of life and quality of Life, the QALY was developed to combine the value of these attributes into a single index number
- The number of QALYs gained is obtained by the change of **utility value** multiplied by the **duration** due to the treatment
- QALYs can be incorporate with medical costs to arrive at a common denominator of Cost/QALY…
- … which enables to compare the cost-effectiveness of any treatment

Sources: Mapi (2024) – L. Prieto et al. (2003) – Smart Pharma Consulting analyses

QALY which enables to carry out Cost-Utility Analysis (CUA), measures and compares the incremental improvement in health in very different disease areas

Health economic evaluations: Zoom on QALYs (2/2)

Application



Δ QALYs = 2.6

Treatments	Cost	Outcomes
A	€ 1.500	3.6 QALYs
B	€ 1,000	1.0 QALY
Increment of A over B	€ 500	2.6 QALYs
Incremental cost / incremental outcome	€ 192.31 / QALY gained	

- The utility values can be estimated using a series of techniques such as:
  - Time trade-off (TTO): Respondents choose between remaining in a state of ill health for a period, or being restored to perfect health but having a shorter life expectancy
  - Standard gamble (DG): Respondents choose between remaining in a state of ill health for a period, or choosing a medical intervention which has a chance of either restoring them to perfect health or killing them
  - Visual Analogue Scale (VAS): Respondents rate a state of ill health on a scale from 0 to 100, with 0 representing being dead, and 100 representing perfect health. This method has the advantage of being the easiest to ask, but is the most subjective
- It is also possible to use standard descriptive systems such as the EuroQol Group's EQ-5D questionnaire: categorization of health states according to 5 dimensions: mobility, self-care, usual activities (work, study, homework, leisure), pain / discomfort and anxiety / depression
- Despite many critics arguing that QALYs oversimplify how actual patients would assess risks and outcomes, they have not been replaced by more satisfactory measurement tools

Sources: Mapi (2024) – L. Prieto et al. (2003) – Smart Pharma Consulting analyses

ICER is a cost-effectiveness decision tool widely used by the NICE to evaluate new drugs vs. treatments that are currently in use

Health economic evaluations: Zoom on ICER (1/4)

Definition

- The incremental cost-effectiveness ratio (ICER) is used in cost-effectiveness analysis of a health care intervention
- It is defined by the difference in cost between two possible interventions, divided by the difference in their effect
- It is the average incremental cost associated with 1 additional unit of the measure of effect
- The ICER is routinely used in the UK by the NICE to evaluate healthcare intervention and make recommendations to the NHS

Formula

$$ICER = \frac{C_1 - C_0}{E_1 - E_0} = \frac{\Delta C}{\Delta E}$$

C_1 and E_1 are the cost and effect in the intervention group and C_0 and E_0 are the cost and effect in the control group

- Costs are usually described in monetary units and effects in terms of health status
- ICER can be used in cost-utility analysis and in this case, it is synonymous with cost / QUALY gained
- NICE will consider a product is cost effective for the NHS if the maximum cost is GBP 20,000 per QALY, with some products accepted up to GBP 30,000 or more[1] when considering factors such as certainty of the ICER, innovation, non-heath aspects

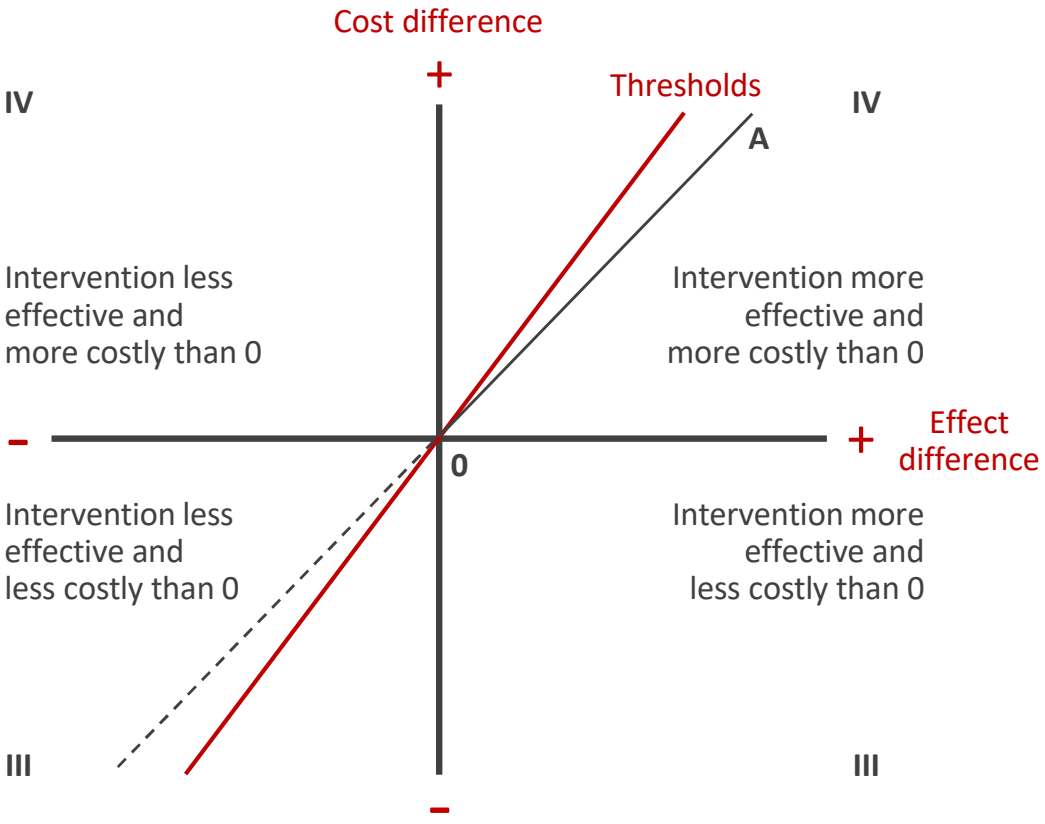
Sources: ICER Value assessment framework (2020) – Smart Pharma Consulting analyses

[1] Cost-per-QALY threshold has been set at GBP 50,000 for end-of-life care and at GBP 100,000 for rare diseases treatments

The ICER can be used to compare different treatment options and to establish a threshold above which it will be deemed too expansive, not cost-effective and thus should not be funded

Health economic evaluations: Zoom on ICER (2/4)

Cost-effectiveness plane



- The y-axis is the numerator of ICER and the x-axis the denominator
- The ICER is the slope of the line connecting O with A
- If we use a threshold to determine cost-effectiveness, the threshold is the red line
- The cost-effectiveness plane is a useful tool when multiple alternatives come up

Treatments	Cost	Effect (years)	ICER
1	€ 350	20	-
2	€ 1,500	27	€164
3	€ 3,500	35	€250

$$ICER_{2,1} = \frac{(1{,}500 - 3\ )}{(27-20)} = €164 \qquad ICER_{3,2} = \frac{(3{,}500 - 1{,}500)}{(35-2\ )} = €250$$

- Which one should be chosen? => it depends on how much the decision maker is willing to pay per year of life gained

Basing health care interventions on cost-effectiveness is considered by many people as a type of health care rationing

Sources: ICER Value assessment framework (2020) – University of Colorado (2020) – Smart Pharma Consulting analyses

In this example, it is interesting to note that $ICER_{C,B}$ (€ 50) is higher than $ICER_{D,C}$ (€ 33)

Health economic evaluations: Zoom on ICER (3/4)

Example (1/2)

Treatments	Cost	Effect (years)
0 (Do nothing)	€ 0	0
A	€ 100	10
B	€ 200	14
C	€ 300	16
D	€ 400	19
E	€ 500	20

Treatments	Δ Cost (C)	Δ Effect (E)	Δ C / Δ E
0 (Do nothing)	€ 0	0	-
A	€ 100	10	10
B	€ 100	4	25
C	€ 100	2	50
D	€ 100	3	33
E	€ 100	1	100

- To treat a given pathology, five treatment alternatives are compared
- There is a "do-nothing" alternative (called 0) with € 0 cost and 0 effect
- Organize interventions from least to most costly and in increasing order of effectiveness

$$ICER_{A,0} = \frac{(100-0)}{(10-0)} = €10 \qquad ICER_{B,A} = \frac{(20-100)}{(14-10)} = €25$$

$$ICER_{C,B} = \frac{(300-200)}{(16-14)} = €50 \qquad ICER_{D,C} = \frac{(400-300)}{(19-16)} = €33$$

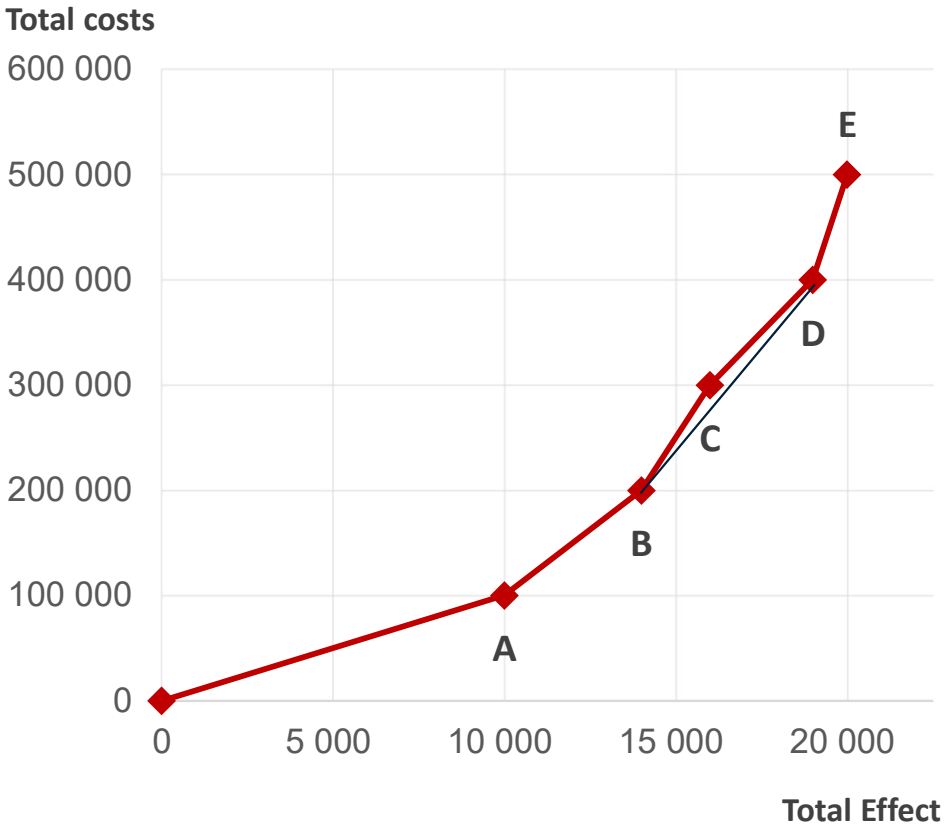
$$ICER_{E,D} = \frac{(500-400)}{(20-19)} = €100$$

Sources: University of Colorado (2020) – Smart Pharma Consulting analyses

It is not common to have multiple alternatives, but in such situations, "extended dominance" can come up and the cost-effectiveness plane can be a useful tool

Health economic evaluations: Zoom on ICER (4/4)

Example (2/2)



- This graph shows the results of different treatment alternatives for 1,000 patients
- ICER is the slope of the line
- The ICER is the slope of the line connecting 0 with A
- C is peculiar: we could draw a line from B to D that passes below point C
- $ICER_{D,B}$ = (400 – 200) / 19-14) = 40
- In other words, we could eliminate C from consideration because it is (extended) dominated (ICER higher than D)
- "Extended dominance" rules out any intervention that has an incremental cost-effectiveness ratio that is greater than that of a more effective intervention
- The decision maker would prefer the more effective intervention with a lower incremental cost-effectiveness ratio

Sources: University of Colorado (2020) – Smart Pharma Consulting analyses

The BIA is an essential part of a comprehensive economic assessment of a healthcare intervention and increasingly required by authorities as part of a listing or reimbursement submission

Health economic evaluations: Zoom on BIA (1/3)

Definition

- A Budget Impact Analysis (BIA) is an economic assessment that estimates the financial consequences of adopting a new intervention to evaluate whether it is affordable
- A BIA takes the true "unit" cost of an intervention and multiplies it by the number of people affected by the intervention to estimate the total budget required to fund the intervention
- BIA takes a payer's perspective and uses a short-term time horizon (often 1 to 5 years) without using discounting

Formula

BIA (Budget required) = **True Unit Cost of an intervention** x **Number of people affected by the intervention**

As with any modeling exercise, sensitivity analyses should be conducted to evaluate the impact of varying these assumption

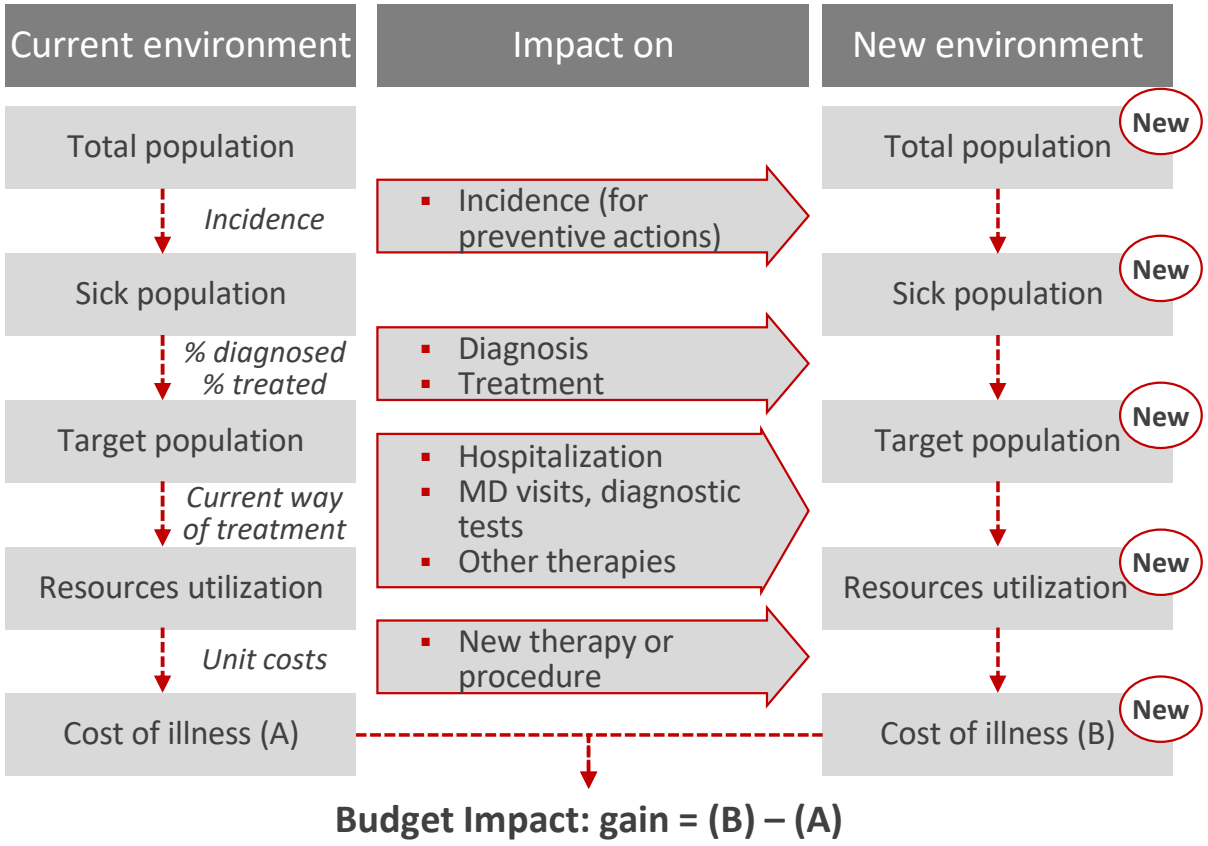
- A BIA is usually performed in addition to a Cost-Effectiveness Analysis (CEA)
- CEA which indicates that Drug A is a good value relative to Drug B because it has an ICER of USD 40,000 per QALY means one needs to spent USD 40,000 additional dollars per person, to provide each patient with Drug A
- If 50,000 patients need this drug, the impact on the healthcare system budget will represent an additional USD 2 B

Sources: University of Colorado (2020) – US Department of Veterans Affairs (2024) – Smart Pharma Consulting analyses

The budget impact analysis allows to quantify the financial impact of interventions on the environment or the treatment journey, given resources constraints

Health economic evaluations: Zoom on BIA (2/3)

BIA schematic



Aspects to be considered to design a BIA

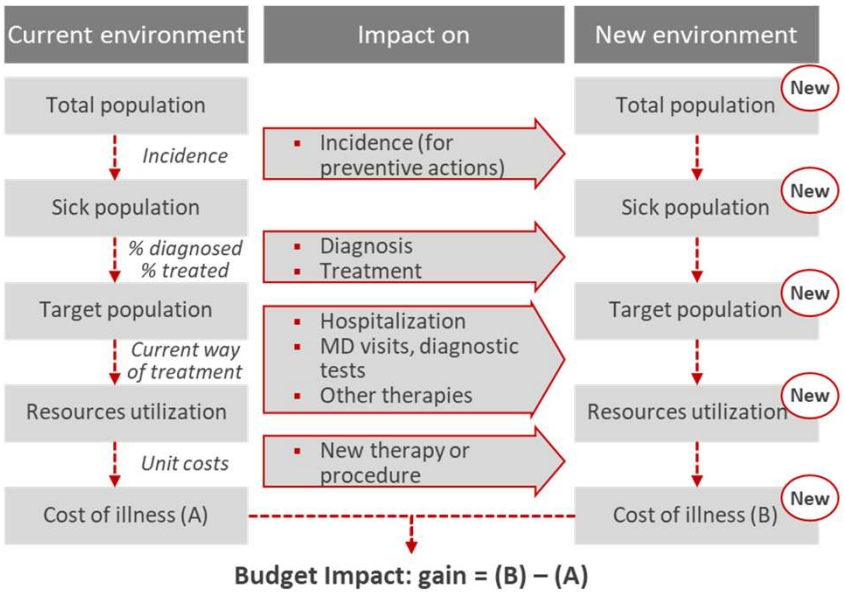
- Features of the healthcare system
- Perspective
- Use and cost of current and new interventions
  - Eligible population
  - Current interventions
  - Uptake of new intervention and market effects
  - Off-label uses of the new intervention
  - Cost of the current or new intervention mix
- Impact on other costs
  - Condition-related costs
  - Indirect costs
- Time horizon
- Time dependencies and discounting
- Choice of computing framework
- Uncertainty and scenario analysis
- Validation

Sources: S. D. Sullivan et al Value in Health (2014) – US Department of Veterans Affairs (2024) – Smart Pharma Consulting analyses

The computing frameworks and the quality of input data used for BIA must be sufficiently valid to credibly inform the budget holder's decision

Health economic evaluations: Zoom on BIA (3/3)

Aspects to be considered to design a BIA



- Features of the healthcare system: features influencing the budget (e.g., access restrictions)
- Perspective: depends on the budget holder (e.g., a hospital pharmacist or a payer covering the entire health care system)
- Use and cost of current and new interventions
  - Eligible population: all patients likely to benefit from the intervention, given any access restrictions
  - Current interventions: scenarios defined by sets of interventions (i.e., none, off-label, new interventions)
  - Uptake of new intervention and market effects: substitution, combination, expansion
  - Off-label uses of the new intervention: inclusion is not recommended
  - Cost of the current or new intervention mix: price for each intervention multiplied by the eligible population using it
- Impact on other costs:
  - Condition-related costs
  - Indirect costs: on productivity, social services, etc. (in general, they are note included)
- Time horizon: 1 to 5 years is common
- Time dependencies and discounting: inflation / deflation, changes in prices, etc. Discounting of financial flows to a net present value is not recommended[1]
- Choice of computing framework: can be a simple cost calculator programmed in a spreadsheet
- Uncertainty and scenario analysis
- Validation: of the computing framework and input data used

Sources: S. D. Sullivan et al Value in Health (2014) – US Department of Veterans Affairs (2024) – Smart Pharma Consulting analyses

[1] Because the budget holder's interest is in what impact is expected at each point of time. The BIA should present the financial streams at each budget period as undiscounted costs

The purpose of this case study is to illustrate the use of Budget Impact Analysis (BIA) to demonstrate the impact of an innovative treatment from a payer perspective

Health economic evaluations: BIA – Case study (1/3)

Context

- Prostate cancer accounted for about ¼ of all new cancer diagnoses among American men in 2015
- The cost of prostate cancer care should increase from USD 11.9 B in 2010 to USD 15.1 B in 2020
- Given the high burden of prostate cancer, health care payers are interested in quantifying the potential budget impact of new therapies

Objective

- To estimate the budget impact of enzalutamide for the treatment of chemotherapy-naïve metastatic castration-resistant prostate cancer (mCRPC) from a U.S. payer perspective

Method

- A model was developed to assess the budget impact of enzalutamide for treatment of chemotherapy-naïve mCRPC patients in a hypothetical 1-million-member U.S. health plan over a 1-year time horizon
- Comparators included abiraterone acetate, sipuleucel-T, radium Ra 223 dichloride, and docetaxel
- Epidemiologic data, incl. National Cancer Institute Surveillance, Epidemiology and End Results incidence rates used to estimate the number of chemotherapy-naïve mCRPC patients
- Dosing, administration, duration of therapy and adverse event rates based on package inserts and pivotal studies
- Drug costs obtained from RED BOOK and CMS average sales price, costs of administration and monitoring from the CMS physician fee schedule, and adverse events from the Agency for Healthcare Research and Quality Healthcare Cost and Utilization Project and published literature
- Market shares were estimated for each comparator before and after adoption of enzalutamide.
- The incremental aggregate budget impact was calculated per patient per year (PPPY), per patient per month (PPPM) and per member per month (PMPM)
- One way sensitivity analyses were performed

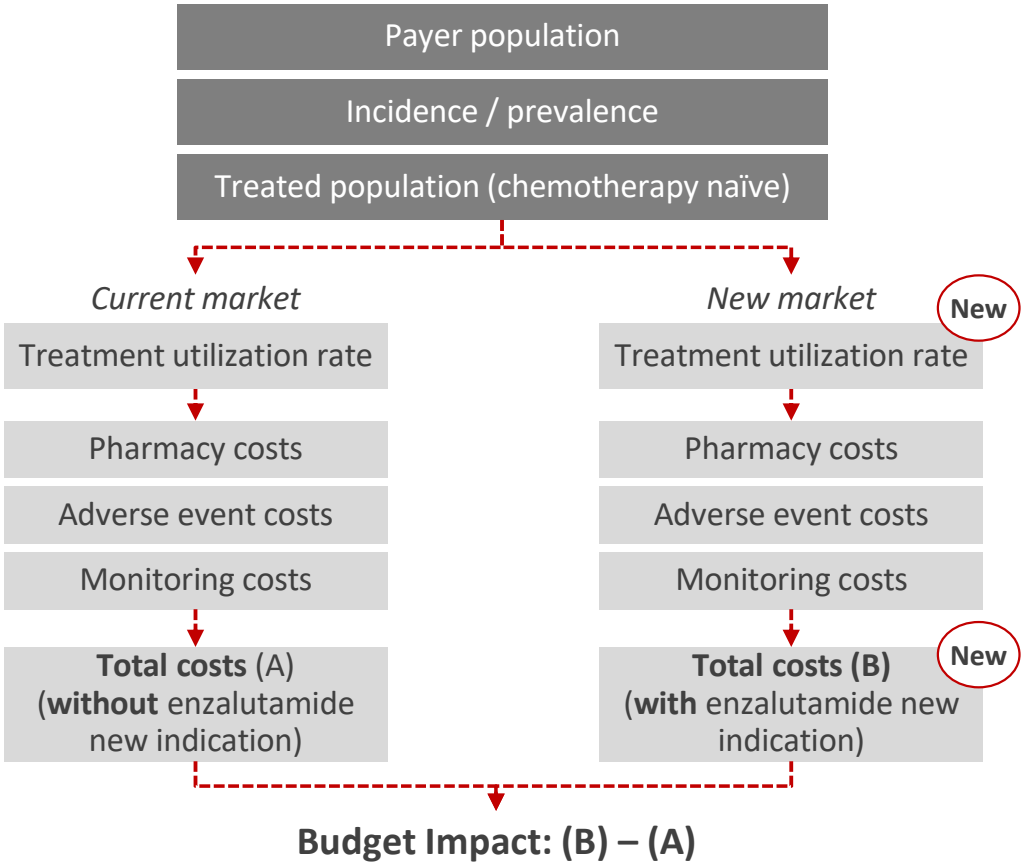
Sources: Cat N. Bui et al. (2016) – Smart Pharma Consulting analyses

[1] Centers for Medicare & Medicaid Services

The model intends to represent the treatment journey, patient monitoring and adverse events costs that would be incurred by the payer

Health economic evaluations: BIA – Case study (2/3)

Model structure



Model key assumptions

Population:

- **80%** of the population **younger than 65** years old
- Average body weight: **88 kg**
- Average body surface area: **2.1m²**

Costs assumptions:

- Wastage included for patients receiving sipuleucel-T or radium Ra 223 dichloride (full single-use vials)
- No wastage included for patients receiving docetaxel
- Inclusion of pretreatment and concomitant medication[1]
- Inclusion of monitoring requirements[1]

Adverse events:

- Inclusion of **grade 3** and **4** events (based on the National Cancer Institute Common Terminology for Adverse Events)

Market behavior:

- **9% enzalutamide market adoption** among the chemotherapy naïve US population
- Competitors' market share **reduced proportionally** to their current market share[2]

Sources: Cat N. Bui et al. (2016) – Smart Pharma Consulting analyses

[1] Based on the prescribing information for each therapy – [2] Based on manufacturer internal market research

The target patient population are chemotherapy-naïve adult patients diagnosed with metastatic CRPC[1], who have been estimated by using several sources

Health economic evaluations: BIA – Case study (3/3)

Budget impact over a 1-year time horizon

Parameter		Age < 65 years old	Age > 65 years old	Source
Plan population		**80.0%**	**20.0%**	Assumption
Male		**49.2%**	**49.2%**	Howden and Meyer 2011 (2010 US Census)
Incidence of prostate cancer	**Total incidence**	**0.057%**	**0.713%**	Howlander et al. 2014 (SEER[2])
	With CRPC	**17.8%**	**17.8%**	Kirby et al. 2011
	With metastatic disease (chemotherapy-naïve)	**70.0%**	**70.0%**	Nakabayashi et al. 2013

Sensitivity analysis

- To test the sensitivity of the model to variation in the model parameters, univariate sensitivity analyses were conducted for all key model parameters, with individual parameters being varied over a range from low to high, based on increasing and decreasing values by 10%
- The output for the 1-way sensitivity analysis was the budget impact with enzalutamide versus without enzalutamide(

Sources: Cat N. Bui et al. (2016) – Smart Pharma Consulting analyses

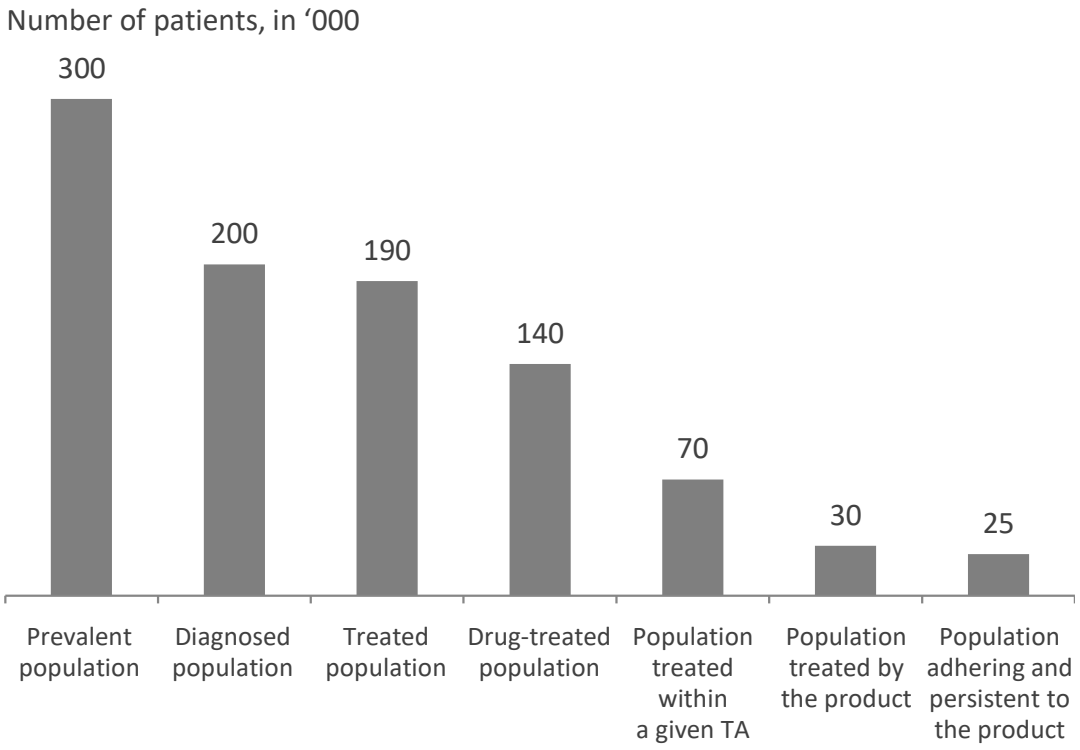
[1] Castration-resistant prostate cancer – [2] Surveillance, Epidemiology and End Results

The patient-based approach makes it possible to estimate the product sales in volume, based on epidemiology, diagnosis & treatment rates and the average consumption by treated patient

Health economic evaluations: BIA – Sensitivity analysis (1/5)

Target market sizing

Patient cascade



Key points

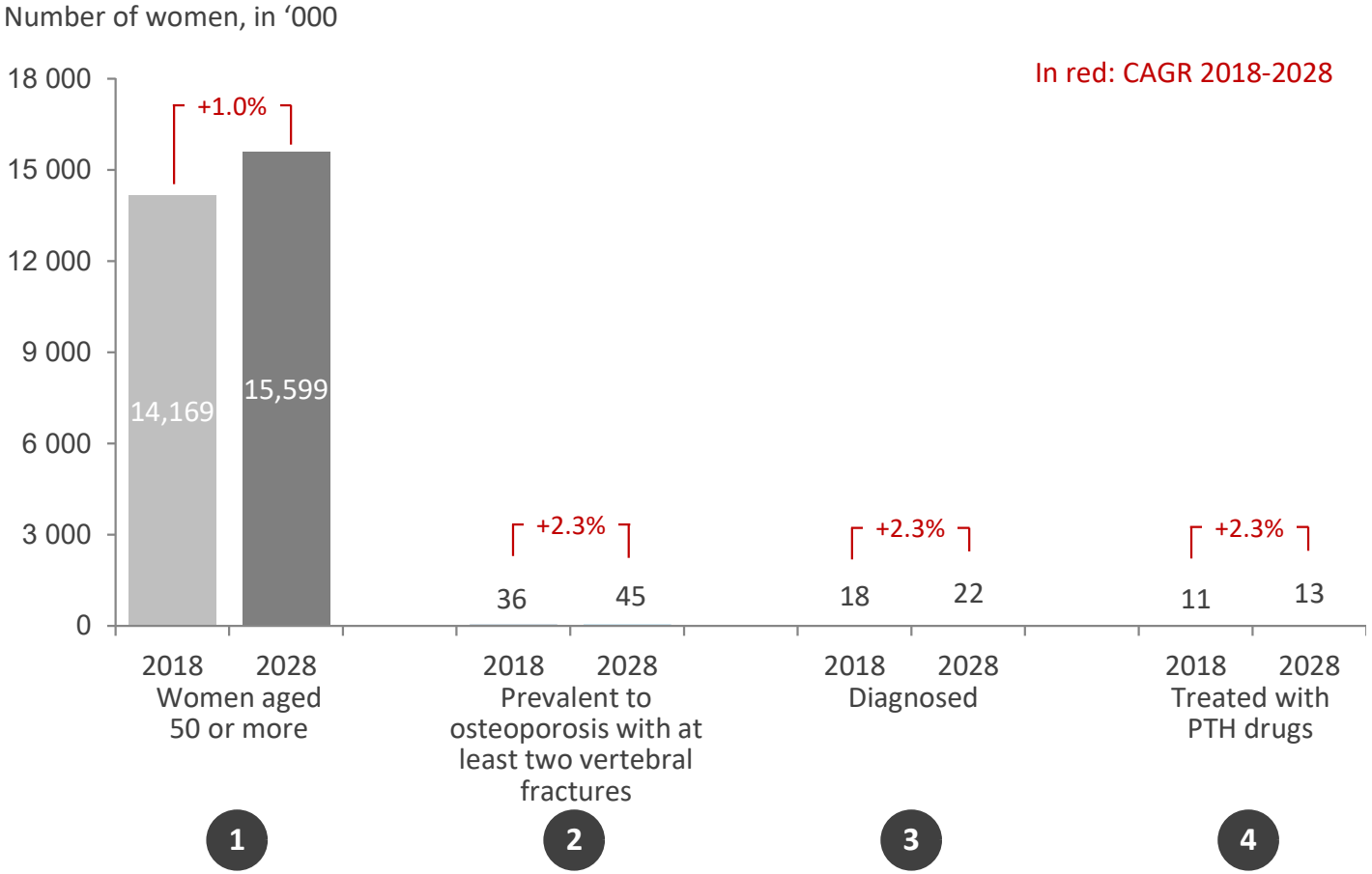
- **Epidemiology** gives information re. patient trends over time:
  - **Prevalence** and **incidence**
  - **Diagnosed** and **treated** population
  - Population treated by the **studied product** and its **competitors**
  - Population treated **adhering** and **persistent** to treatment
- Epidemiological data are **not very precise** (low update frequency, heterogenicity from one study to another)
- Sales forecasting based on epidemiological data indicates the **magnitude** of **market** and **product potential** over the **long-term**
- For **innovative products**, **new classes** or **new indications**, projections can be carried out as follows:
  - **Potential definition** in market share based on ad hoc studies (prescribing intentions)
  - "**Preference share**" or "**peak share**" estimate based on market and product scenarios
  - "**Time to peak share**" estimate based on ambition, medico-marketing resources budgeted and the maturity of the market
  - Elaboration of the **annual kinetic of sales** based on analog markets and products and on "time to peak share" (market data are required at this step)

Sources: Smart Pharma Consulting analyses

A patient approach based on epidemiological data, diagnosis and treatment rates can be applied to estimate the evolution of a market size and of a brand market share

Health economic evaluations: BIA – Sensitivity analysis (2/5)

Osteoporosis market



Comments

- Prevalence (+2.3% on average per year) increases faster than the total population of women aged 50 or more (+1.0% p.a.) because of a mixed effect :
  - Ageing effect (baby boomers): women aged 75 and more will represent ~31% of the women aged 50 and more in 2028, vs. ~27% in 2018
  - In addition, the prevalence rate within women aged 75 and more (~0.85%) is much higher than the prevalence of women aged between 50 and 74 years (~0.04%)
- Diagnosis and treatment rates have been maintained at a stable rate over the period, in accordance with interviewed KOLs feedback:
  - Diagnosis rate: 50% of prevalent women
  - Treatment rate: 60% of diagnosed women

Sources: Smart Pharma Consulting analyses

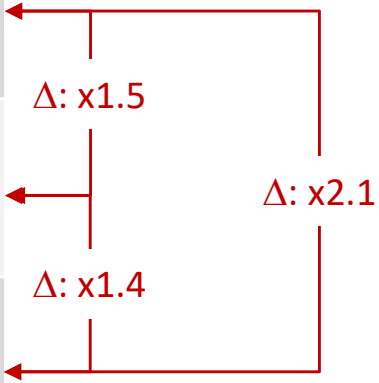
These examples illustrate the risk and importance of errors while determining the number of patients likely to be prescribed a product

Health economic evaluations: BIA – Sensitivity analysis (3/5)

Illustrative

Model key assumptions – Risk of errors

Variables	Population	Eligible population	Prevalent population	Diagnosed population	Prescribed population	# of patients receiving a Rx
Reliability	High	High	Medium/ Low	Medium	Medium	?
Case #1	67 millions	30 millions	10%	50%	80%	1.2 million
Case #2	67 millions	30 millions	12%	60%	85%	1.8 million
Case #3	67 millions	30 millions	14%	65%	90%	2.5 millions



Sources: Smart Pharma Consulting analyses

If you increase in 2025 and 2026 each variable in RED by the following values, which one will have the most impact on sales forecasts?

Health economic evaluations: BIA – Sensitivity analysis (4/5)

Exercise (1/2)

	2024	2025	2026		2025	2026
Market size in number of treated patients (‘000)	100	102	104			
Market growth		2.0%	2.0%	x 2	4.0%	4.0%
Market share	20.0%	22.0%	24.0%	+ 5 pts	27.0%	29.0%
Market share in number of patients (‘000)	20.0	22.4	25.0			
Average treatment duration in months	6.0	6.0	6.0	+1 mth	7.0	7.0
Product sales in treatment months (‘000)	120.0	134.6	149.8			

Sources: Smart Pharma Consulting analyses

It is essential before modifying the value of a variable to estimate its impact on the sales forecasting

Health economic evaluations: BIA – Sensitivity analysis (5/5)

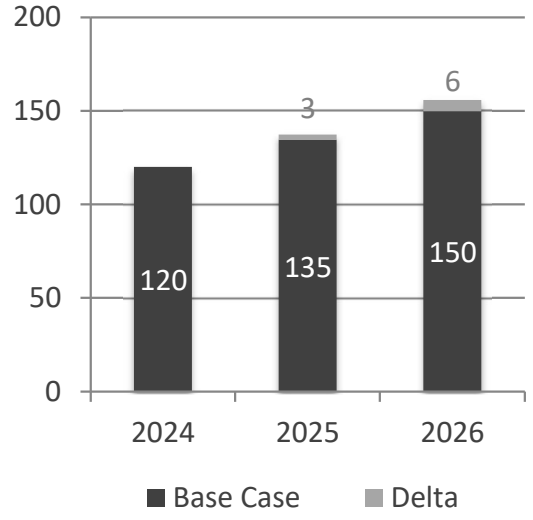
Exercise (2/2)

Market growth

	2025	2026
Base case	2%	2%
Alternative scenario	4%	4%

x 2

Sales in '000 treatment months

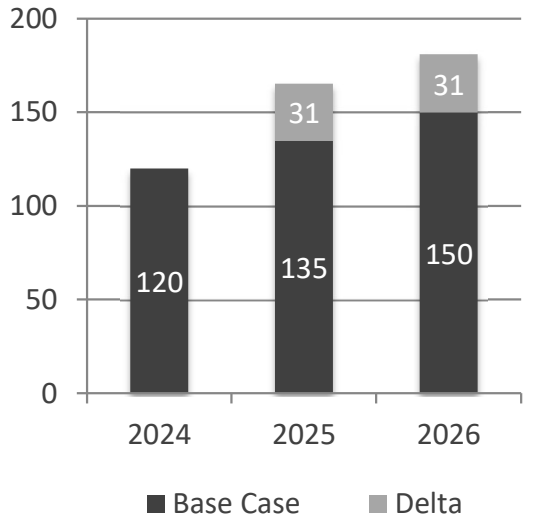


Market share

	2025	2026
Base case	22%	24%
Alternative scenario	27%	29%

+5 pts

Sales in '000 treatment months

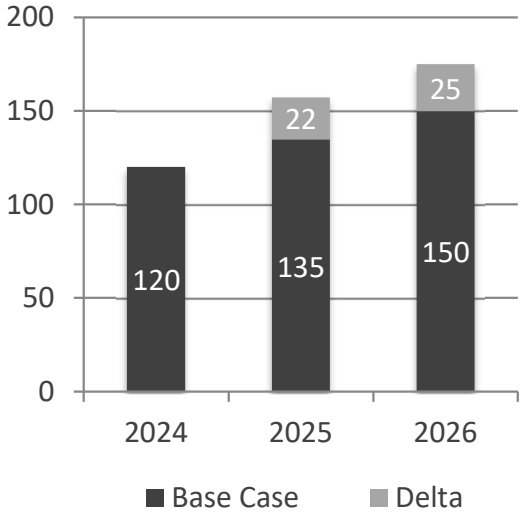


Treatment duration

	2019	2020
Base case	6	6
Alternative scenario	7	7

+1 mth

Sales in '000 treatment months



Sources: Smart Pharma Consulting analyses

CEA evaluates the costs and outcomes of technologies to estimate their economic efficiency, and BIA estimates the financial impact of their uptake and diffusion to assess their affordability

Health economic evaluations: BIA vs. CEA

Treatments	BIA	CEA
Perspective	Payer	Societal
Time Horizon	Short-term	Long-term / Lifetime
Size of Population	Includes	Ignores
Model Inputs	Payer-specific	Population-average
Model Output	Cost	Cost and Health Outcomes
Uses Discounting	No	Yes
Includes Overhead Costs	No	Yes

- The focus of a Budget Impact Analysis (BIA) is the direct costs of specific resources needed to put the intervention into effect, such as supplies, equipment and staff
- Because the BIA uses a short-term time horizon, and overhead costs are fixed in the short term, they are ordinarily excluded
- This distinguishes BIA from Cost-Effectiveness Analysis (CEA), which includes overhead costs
- This difference can be important, as overhead can account for a substantial part of the cost of operating a hospital or health care system
- When setting up a BIA, one should consider whether the intervention:
  - Replaces the existing standard of care (substitution)
  - Is added to the existing standard of care (combination)
  - Is being used only in situations where there has been no existing care[1]
- If substitution, cost offsets should be included in the model
- Changes in health care utilization[2] should be included

Sources: US Department of Veterans Affairs (May 2023) – Smart Pharma Consulting analyses

[1] Due to patient intolerance of standard care – [2] Due to changes in outcomes, symptoms, and/or adverse events

Results of health economic evaluations are mostly presented as Incremental cost-effectiveness ratio and possibly in Cost-effectiveness planes or Cost-effectiveness acceptability curve

Health economic evaluations: Results presentation

How to present the results of an economic evaluation is associated with the type of economic evaluation used

Incremental cost-effectiveness ratio (ICER)

- An ICER represents the estimated **difference in costs between the intervention and the comparator** divided by the estimated difference in effect between the intervention and the comparator

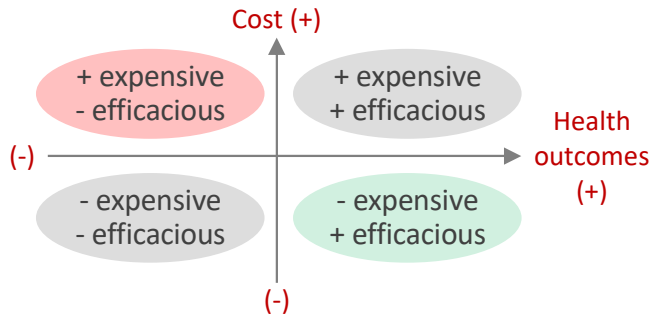
$$\text{ICER} = \frac{(\text{costs of A} - \text{costs of B})}{(\text{outcomes of A} - \text{outcomes of B})}$$

With:

- A: intervention being evaluated
- B: appropriate comparator / standard of care
- Outcomes: life-years gained, quality-adjusted life years (QALYs), etc.

Cost-effectiveness plane (CE plane)

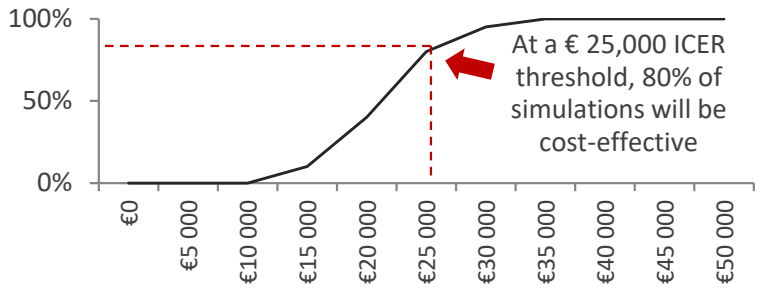
- The CE plane is a **four-quadrant diagram** in which, by convention, the vertical axis represents the difference in cost between two interventions and the horizontal axis represents the difference in effect



- The decision is easy for the high-left and bottom-right quadrants, but the other two quadrants allow several choices, depending on the relative importance given to each criteria

Cost-effectiveness acceptability curve (CEAC)

- The CEAC is used as a method for **summarizing information on uncertainty in cost-effectiveness**
- A CEAC shows the **probability** that an intervention is cost-effective compared to its comparator or comparators at different cost-effectiveness thresholds
- The vertical axis represents the probability that the intervention is cost-effective, and the horizontal axis represents different CE thresholds
- The curve shows the percentage of the simulated ICERs in the CE plane that are lower than any specific threshold



Sources: Marie-Christine Woronoff-Lemsi, Georges Weil 2011 – HAS (February 2021) – EUnetHTA (February 2021) – Smart Pharma Consulting analyses

In Europe, requirements for drugs pricing vary from a country to another and sometimes even from a region to another like in Spain or Italy

Pricing/reimbursement submission requirements in Europe

	Therapeutic benefit	Cost-effectiveness modeling	Budget impact modeling	HRQoL[1] data	Data vs. SoC[2]	Innovation	Comments
	✓	✓	✓	✓	✓	✓	Cost-effectiveness considered since 2013 with the creation of the CEESP (Economic and Public Health Committee)
	✓		✓	✓	✓		Free pricing during the first six months on the market: i.e. before the assessment by IQWG (Institute for Quality and Efficiency in Health Care)
	✓	✓	✓	✓	✓		One of the first countries to implement a form of value-based pricing including cost-effectiveness and QoL (Quality of Life) data
	✓	✓ (national or regional requirement)	✓ (national and regional requirement)		✓	✓	Requirements may vary from a region to another
	✓	✓ (national or regional requirement)	✓ (national and regional requirement)		✓		Requirements may vary from a region to another

Sources: CEESP, HAS (Oct. 2018) – "An Introduction to European Market Access", PRMA Consulting (2013) – Smart Pharma Consulting updates

[1] Heath-Related Quality of Life – [2] Standard of Care

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Drug Pricing & Reimbursement

Value Story & Strategy

Payers are a heterogeneous audience with different priorities and/or perceptions of drug value in the same country, requiring customized messages and arguments for the target payer

Who are the payers?

- In health care, payers are generally entities that finance / reimburse the cost of products and services
- A broader definition would include price-sensitive audience having an influence on the purchasing decision
- In Europe, the main payer is the national public health insurance or fund, completed in certain countries by regional payers (e.g., Germany, Italy, Spain)

Various types of payers & influencers

Entities	Country examples
Members of the national pricing committees	France, Italy, Spain
Members of national HTA committees	Germany, UK
Members of regional HTA committees	Italy, Spain, Sweden
GPs (income linked to their cost-containing prescriptions)	Germany, UK
Chief pharmacists	UK
Hospital managers / staff with whom payers interact	Various countries

Sources: Adapted by Smart Pharma Consulting after M. Toumi (2017)

Payers must value drugs, in a context of budget constraints and, for so doing, they can adopt the following four-step approach

How is drug value assessed by payers?

- Payers assess the value of drugs to contain the associated cost and invest in those creating the best health outcomes
- Thus, they need to evaluate the uncertainty about the drug's potential benefit and cost to fund it

A four-step approach

1. Efficacy comparison	2. Effectiveness comparison	3. Cost-effectiveness	4. Budget impact
▪ The drug efficacy is compared to reference product or placebo in clinical trials ▪ Its design, duration, inclusion / exclusion criteria, etc. will impact the payers' perception	▪ Comparative effectiveness will be generated by real-life data… ▪ … which in certain cases can show added benefits ▪ However, transferability from a clinical trial to real life is a major challenge	▪ Effectiveness benefit is compared against cost (e.g., cost per life year saved, per QALY, per treatment success, per relapse avoided) ▪ Opportunity cost should be measured when a drug is replaced with the ICER[1] for which a threshold is set	▪ Determination if the drug is affordable in the budget ▪ Four pricing models are currently used: – Value-based pricing – Cost plus pricing – Willingness to pay pricing – Price benchmarking

Sources: Adapted by Smart Pharma Consulting after M. Toumi (2017)

[1] Incremental Cost-Effectiveness Ratio

HTA by agencies may have a strong negative impact on the future performance of drugs due to the strong influence they have on price, reimbursement and restriction decisions made by payers

How HTA translates into Price & Reimbursement?

Possible impact of negative HTA recommendations

Price

- Direct reduction of the price by the payer vs. comparators
- Price-volume agreements
- Copayment (Germany)

Reimbursement

- Lower level of reimbursement…
- … or even no reimbursement (France)
- Reimbursement of certain indications only

Restriction

- Limitation of the target population…
- … and/or of the indication as compared to the marketing authorization
- Exclusion from guidelines or formularies (Canada, UK)
- Pre-authorization of prescription by the payer

Sources: Adapted by Smart Pharma Consulting after M. Toumi (2017)

Several types of payers will decide to reimburse at a given price depending on the value of the drug which is determined based on three possible determinants

Determinants of drug value from payers' perspective

Drivers of drug value

Morbidity

What is the impact on the disease, the symptoms of the disease and the patient quality of life?

Mortality

What is the impact on patients' life span?

Cost offsets

Does it reduce the cost of the disease compared to existing standard of care?

The outcomes of a drug on these 3 drivers can be combined to assess its value

Payers' archetypes

- The **cost-conscious payer** seeks reimbursement levels consistent with a fixed budget (e.g., Brazil, Italy, Spain)
- The **cost-effective payer** adopts a rational approach to guide reimbursement decisions (e.g., Canada, UK)
- The **comparative efficacy payer** compares the added clinical benefit of new drugs to existing ones (e.g., France, Germany)
- The **patient as payer** exists in markets with limited reimbursement and where patients influence drug purchases (e.g., China, Brazil, USA)
- The **free-market payer** allows healthcare management organizations (HMOs) maximize profits while delivering healthcare benefits for its members (China, USA)

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

The development of an outstanding drug value strategy will require an in-depth assessment of the competitive environment structured under the form of a SWOT analysis

Competitive landscape assessment

- Identify key stakeholders' opinion and behavior, including:
  - HCPs – PAGs
  - Payers – Policy makers
  - Group purchasing organizations (GPOs)

- Identify market trends and its key drivers such as:
  - Current diagnostic, treatment guidelines
  - Anticipated changes in therapeutic guideline, technology and policy

- Identify prices of comparators
- Estimate total market value
- Determine patent expiry dates of currently used drugs

- Analyze the current market size, expressed in ex-factory price
- Evaluate the burden of illness…
- … the current cost of treatment

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

The value story must provide a compelling case for payers to consider the treatment based on 4 key drivers articulated in a logical flow, highlighted in a clear, precise and concise form

Drug value story for optimal pricing

Burden of disease	Current treatments	Unmet medical needs	Solution
▪ What is the burden of the disease on: – Patients? – Caregivers? – Families? – Society?	▪ What are the risks and benefits associated with the existing therapeutic options?	▪ For which patients existing treatments are not or no longer an option? ▪ What are the treatment failure implications for patients?	▪ What are the benefits a new drug could offer? ▪ What are the associated risks? ▪ How would the new treatment impact the life of patients, caregivers, family and society?

Sources: Adapted by Smart Pharma Consulting after PJ Rankin et al.

Evidence gap analysis will help identify missing clinical data, suboptimal comparators, target outcomes and disease messages that need to be better understood and communicated

Evidence generation to support drug value story

Collate evidence	Design TPP	Analyze gaps	Fill evidence gaps
▪ Collate all available data to create a current landscape and evidence overview	▪ Design Target Product Profile (TPP) which contains data and data thresholds needed to successfully launch the drug	▪ Compare current available data with the messages you would like to communicate and identify gaps in the data	▪ Create an evidence-generation plan to fill gaps, looking at clinical trials or other evidence sources

Checklist of gaps to be analyzed[1]

- Clinical guidelines
- Previously assessed outcomes (clinical, economic, PROs[2], endpoints)
- Prior HTA and payer coverage decision
- Biomarkers and diagnostics
- Patient and caregiver burden
- Health economic impact
- Competitor evidence

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

[1] Non-exhaustive list – [2] Patient Reported Outcomes

The pricing strategy should be based on market research, considering risks of parallel trade, health outcomes analyses and evaluation of regulatory constraints to anticipate challenges

Pricing & reimbursement strategy

Segmentation

- Identify patients, payers, physicians, policy makers
- Determine key decision makers and their price sensitivity
- Determine prescribing preference

Demand analysis

- Determine negotiating objectives of national, regional and/or local payers
- Identify drivers of therapy uptake
- Estimate market share, revenue and profits

Parallel trade

- Estimate impact: which countries and what volumes at stake
- Devise parallel trade strategy
- Quantify expected value

Health outcomes

- Identify country-specific endpoints of interest
- Develop audience-specific models
- Leverage cost-effective benefits

Sources: Adapted by Smart Pharma Consulting after PJ Rankin et al.

The following checklist highlights six key points to be considered for developing a pricing strategy

Developing an optimal pricing strategy: Checklist

1. Have a clear vision of the drug position in the therapy (e.g., 2nd line, add-on, instead of)
2. Define a global target price with a price corridor, that allows key markets to capture the value via the price
3. Agree on processes to review and approve country price request outside the approved corridor
4. Get affiliates' buy-in
5. Devise a contracting strategy for each payer segment (national, regional local, public vs. private)
6. Assess whether the product profile will support the use of innovative contracting models (e.g., value-based or outcomes-based contracts)

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

Reimbursement strategies describe for which patients, under which conditions and, in some cases, for how long pharma companies would like payers to reimburse the drug

Reimbursement strategy

- A matching reimbursement strategy must be developed for each label scenario
- If the clinical evidence or the overall value for money is deemed too weak…
- … payers will restrict or limit reimbursement

Common approaches used by payers to restrict or limit reimbursement

- Restricting reimbursement to a subpopulation of patients
- Mandating a certain level of clinical benefit before agreeing to reimburse the drug over a longer period
- Mandating the prior use of other drugs (called “step-through”) before the new one can be prescribed
- Using all or parts of the clinical trial inclusion criteria to define reimbursement for eligible patients
- Using tiered copayments to ensure some drugs are used first

Suboptimal reimbursement strategy example: Benlysta® (belimumab) which is a therapy for systemic lupus erythematosus developed by GSK and Human Genome Sciences, was anticipated to reach USD 2-3 B worldwide sales within 4-5 years. However, sales reached USD 1.7 in 2023 (i.e., 12 years after 1st launch), as it did not achieve reimbursement in many markets

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

The following checklist highlights eight key points to be considered for developing a reimbursement strategy

Developing an optimal reimbursement strategy: Checklist

1. What is the target patient population?
2. What is the payer mix (i.e., public and private health insurance companies, government, hospitals, patients)?
3. Is there a single definition of standard of care shared by physicians, payers and countries?
4. Is there a clear understanding of the different levels of evidence required during the reimbursement or HTA process?
5. Are there existing coverage decisions for the drug or its competitors?
6. Are published data available for the drug and its competitors?
7. What is the price of the drug compared with the competition?
8. Is there a well-defined reimbursement strategy?

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

Governments develop policies for drugs pricing and reimbursement with the aim to give a fair return on investments to innovative products while controlling budgets

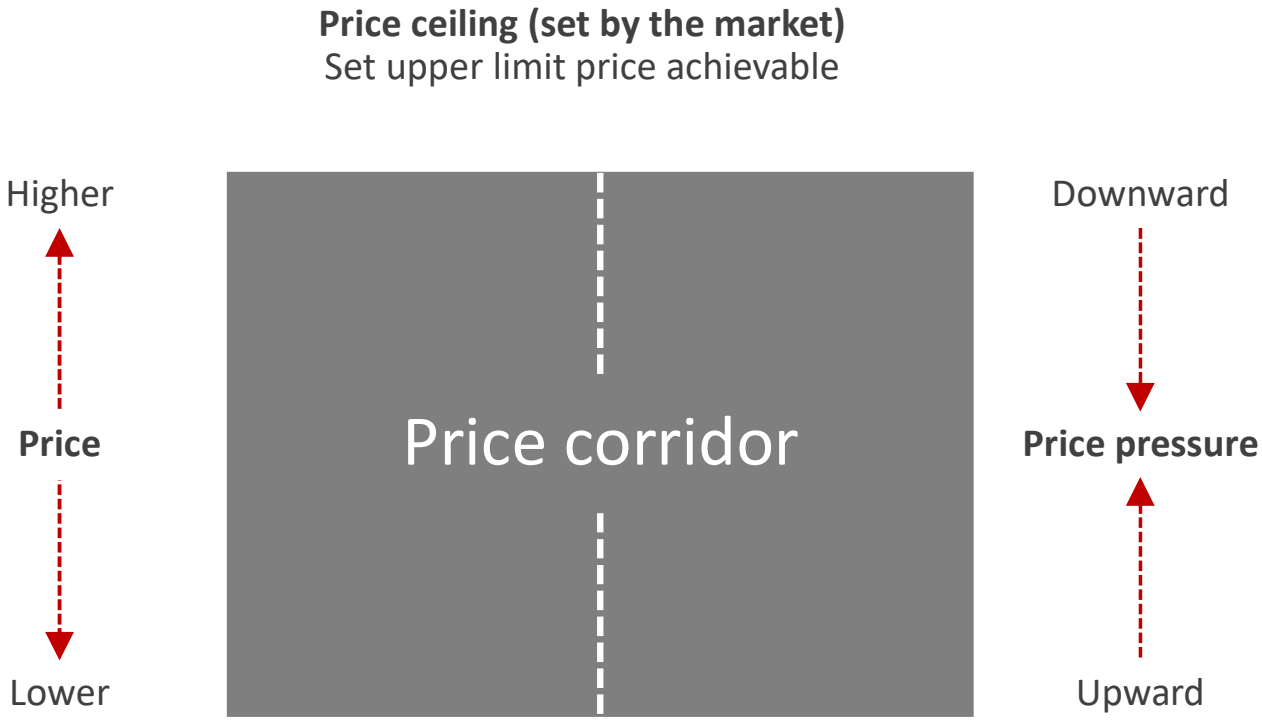
Drug price setting – Introduction

- Innovative pharma companies must face **important development costs** and therefore ask for **higher prices** for their new products
- In the meantime, **governments** try to find a **compromise** between:
  - The necessary **reward** of innovation
  - The **right level** of reward for a given product
  - The control of their **healthcare budgets**
- With this objective in mind, each country has developed its method to **assess drugs value**
- As of 2024, the price and reimbursement regulation in Western countries is **not unified**, even if some initiatives aim to a better collaboration between assessment agencies
- Nevertheless, a clear **trend** can be **identified**: drugs are more and more **valued** with the consideration of their **impact** on the **whole healthcare system** (and sometimes considering a broader scope: their impact on the society as a whole)

Sources: Smart Pharma Consulting analyses

The price corridor approach balances pharma companies' global consistency in pricing with flexibility to adapt to local market conditions, regulations and economic realities

Drug price setting – Price corridor



- A price corridor for drugs refers to a strategic pricing approach that sets a minimum and maximum price range
- This approach balances pharma companies' need for profitability with payers' constraints in terms of budget for healthcare expenditure, ensuring a sustainable access to drugs
- A well-implemented pricing corridor strategy requires:
  - Early engagement in drug development process
  - Careful planning
  - Advanced analytics

  … to align with market-specific price and reimbursement conditions

Sources: Adapted by Smart Pharma Consulting after Gregson et al. (2005)

Once all analyses are compiled and evidence generated, advisory boards would enable to test the quality of evidence package and assess the anticipated pricing and reimbursement strategy

Payer evidence strategy

- The work on the payer evidence starts when pivotal clinical trial data are available
- HEOR and biostatistics colleagues re-analyze the data to meet the needs of payers
- A separate statistical analysis plan can be executed to generate evidence for:
  - Budget impact and cost-effectiveness models
  - Inputs into indirect comparisons
  - Subgroup analyses
  - Healthcare resource utilization analyses

In parallel, generation of evidence outside of clinical trails such as…

- Cost or burden of the disease
- Current treatment of patients
- Impact of the disease on patients or caregivers
- Prevalence and incidence

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

The global value dossier presents evidence-based messages that demonstrate the value of the new drug and its positioning relative to other products in the therapeutic area

Global value dossier structure

- Executive summary
- Disease burden
- Clear description of the disease and how it is currently treated
- Prevalence and incidence data
- Remaining unmet medical needs
- Proposed place of the drug in disease therapy (which patients should be eligible)
- Clinical data on the added benefit (if any) and risk of the new intervention
- Results of the long-term modeling of the clinical and economic impact (value)
- High-level summary of the budget impact of the drug for each healthcare system

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

Communication needs to be specific for each stakeholder because value is defined differently by payers, healthcare professionals and patients

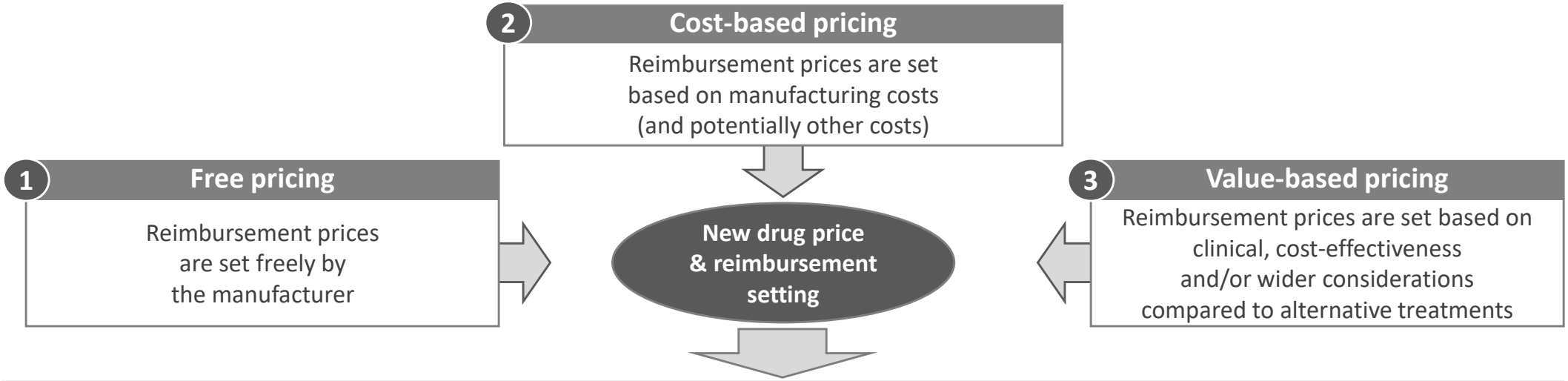
Communicating value to maintain initial negotiated price & reimbursement

	External stakeholders		
	Payers	**HCPs**	**Patients / PAGs**
Goals	▪ Pricing & reimbursement formulary listing	▪ Drug utilization for appropriate patients	▪ Disease awareness and patient information
Internal stakeholders	▪ Market access ▪ HEOR ▪ Medical affairs	▪ Marketing ▪ Medical affairs ▪ Market access (for HCPs involved in coverage decisions)	▪ Patient support programs ▪ Customer support ▪ Patient advocacy ▪ Marketing (in some countries)
Possible communication channels (proactive & reactive)	▪ Reimbursement dossiers ▪ Abstracts and presentations at meetings ▪ Publications in peer-reviewed journals ▪ Disease education (pre-launch) ▪ Product presentation (post-launch)	▪ Print & digital disease education materials ▪ Abstracts ▪ Congress presentations ▪ Publications	▪ Print & digital disease education materials for patients and caregivers (e.g., brochures, websites)

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

The price and reimbursement of drugs are set according to three basic principles and implemented through different mechanisms during all their life-cycle

What are the main Drug price setting approaches? (1/2)



Price & reimbursement setting mechanisms during the drugs life-cycle

Internal price referencing	International price referencing[1]	Managed entry agreements	Price cuts	Paybacks	Tenders	Compulsory licensing	Voluntary licensing	Tiered pricing
Reimbursement prices are set compared to prices of drugs of the same class	Reimbursement prices are set compared to prices in other countries	Price / volume agreements, risk-sharing agreements, etc.	Post-marketing reimbursement prices reevaluations	*A posteriori* rebates to healthcare system (e.g., PPRS[2], safeguard clause)	Competition between similar products	Licensing imposed by a government to a third-party w/o the consent of the patent holder	Out-licensing by a patent holder to a third party to produce and/or market an invention	Differential pricing reflecting the willingness to pay across countries

Sources: "Access to new medicines in Europe: technical review of policy initiatives and opportunities for collaboration and research", OECD – "Value-based pricing for pharmaceuticals: Implications of the shift from volume to value", Deloitte – Smart Pharma Consulting analyses

[1] Also called External price referencing – [2] In 2019 the PPRS has been replaced by the VPASS the VPAG (Voluntary Scheme for Branded Medicines Pricing and Access) and in 2024 by the VPAG (Voluntary Scheme for Branded Medicines Pricing, Access and Growth

Each pricing method is adapted to a type of drug (e.g., generics, me-too, breakthrough innovation), which is why most countries combine several of them

What are the main Drug price setting approaches? (2/2)

Pricing method	Market targets	Pitfalls
At manufacturing cost (or "cost +")	Generics: ▪ Old molecules ▪ Crowded markets ▪ High substitution rates	▪ Cost-efficiency directly dependent on volumes sold ▪ International outsourcing may impact the price ▪ Variation of suppliers provokes uncertainties ▪ Robust, up-to-date information may be hard to access
Internal referencing	Generics, biosimilars: ▪ "Me-too" drugs	▪ Reference group criteria may be hard to determine (e.g., active substance, pharmacological class, maturity)
International referencing	▪ Costly innovative products without equivalent in the country	▪ May limit the access to some drugs, as the reference basket does not include specific variations[1] ▪ Robust, up-to-date information may be hard to access
Value-based	▪ Costly innovative products without equivalent in the country	▪ Need for the payers and the company to agree on the drug's value, so on the analysis' robustness
Managed entry agreements	▪ Costly innovative products without equivalent in the country, or with high uncertainties ▪ One-shot disease modifier (e.g., gene therapy) ▪ Lifelong costly preventive treatment	▪ Pre-defined protocols must be agreed upon by payers and the company ▪ Uncertainties can be hard to identify ▪ Data may be hard to collect
Free pricing with out-of-pocket paying system	▪ Countries with partial or without statutory health insurance	▪ Access to health is directly dependent to patients' income

Sources: "Fundamentals of market access for Pharmaceuticals", E. Bouteiller, A. Chicoye (2024) – Smart Pharma Consulting analyses

[1] Disease burden, specific regulatory requirements

Free pricing often leads to high drugs prices, like in the USA or in Germany before 2011, but cost-containment measures may be applied and limit the benefits for companies

1 Free pricing – Approach and examples

Approach

- Free pricing means that pharmaceutical companies are **free to price** their products with **little or no intervention** from regulatory bodies
- **Post-marketing price regulations** are often implemented to control the budget impact of drugs such as:
  - **Post-marketing evaluations** (e.g., Germany): assessment of the drugs benefits and possibility to enter a reference-pricing system one year after its marketing authorization
  - **Rate-of-return regulations** (e.g., UK): rate-of-return regulation is an indirect price control mechanism where the manufacturer's contribution to drug development and the economy is considered when determining drug prices. The objective is to **reward innovation** and to ensure that pharmaceutical firms do not make **excessive profits**

Examples

- Until 2011, **Germany** was one of the few countries in the EU where companies were largely free to set prices. Until the cost-containment regulation reform "Act on the Reform of the Market for Medicinal Products" was introduced in 2010 (and implemented in January 2011), Germany had the highest drug prices among OECD countries
- Although subject to **indirect regulation** through the Pharmaceutical Price Regulation Scheme (PPRS)[1], the **United Kingdom** is often perceived as operating based on relatively free pricing for innovative drugs
- Free pricing is also practiced in the **USA**, leading to high drugs prices that are then decreased through negotiations with payers (public and privates)

Sources: "Access to new medicines in Europe: technical review of policy initiatives and opportunities for collaboration and research", OECD – ISPOR HTA Roadmaps – Smart Pharma Consulting analyses

[1] In 2019 the PPRS has been replaced by the VPASS the VPAG (Voluntary Scheme for Branded Medicines Pricing and Access) and in 2024 by the VPAG (Voluntary Scheme for Branded Medicines Pricing, Access and Growth

In free pricing systems, pharma companies can benefit from higher prices and early market access, but it does not prevent payers from negotiating to lower these prices

1 Free pricing – Pros and Cons for pharma companies

Pros

- **Low to no delay** of **market access** post marketing authorization
- **Higher prices** are often observed in countries where such a pricing policy is permitted (e.g. USA, Germany)
- Often used as a **reference price** for countries using external price referencing (since there is no delay in market access)

Cons

- Procedure that should be **less often used** in Western countries
- Development of post-marketing **cost-containment measures** that will impact the initial price
- If price lists are freely determined by the drug manufacturers, the **actual price** at which the product is sold **can be much lower** as it is observed **in markets** in which drugs are purchased through competitive bidding (e.g., public hospital market)

Sources: "Access to new medicines in Europe: technical review of policy initiatives and opportunities for collaboration and research", OECD – ISPOR HTA Roadmaps – Smart Pharma Consulting analyses

Cost-based pricing is a pricing method by which a fixed sum or a percentage of the total incurred cost is added to the cost of the product to reach its selling price

2 Cost-based pricing – Approach

Cost-based pricing

Cost-based pricing relates to the decision to determine the price of a product based on its **manufacturing cost** and sometimes on other **operating costs** (e.g., R&D, marketing, distribution and overheads costs)

Cost-plus pricing

- The cost-plus pricing is a price determination method which sets the price at the **production cost**, including both cost of goods and fixed costs at the projected volume, plus a certain profit margin
- This profit margin is usually expressed as a percentage of the cost

Full cost pricing

- Also called "**absorption cost pricing**"
- The total cost is computed by adding the variable and fixed costs incurred in the product R&D, manufacturing, administration, selling, promotion, etc.
- A **profit margin** is added to this total cost

Target profit pricing

- Also called "**rate of return pricing**"
- As for the full cost pricing strategy, the total cost is computed in the same manner and a profit margin is added, but the **margin** is defined based on the **return on investment** criteria rather than arbitrarily as in the full cost pricing

Marginal cost pricing

- Marginal cost pricing is the process of setting a product price at the same level as the **extra expense** involved in producing another one[1]
- Marginal cost pricing helps keep sales **price down** to encourage sales during slow periods or to gain market shares

Sources: "What are pricing techniques", Hari, 2011 – "Cost Plus price setting", Amanullah Saif, WHO – "Four models for calculating your pricing", Allen – "Methods to price your product", AG Strategies, 1999 – Smart Pharma Consulting analyses

[1] Based on its variable cost, the fixed costs being considered as already covered

In the cases of India and China, a cost-plus pricing method is applied for drugs that are subject to price control but following more or less standardized approaches

2 Cost-based pricing – Examples

India

- In 2022, **388 drugs** (923 formulations) are on the National List of Essential Medicines, for which a ceiling price has been fixed by the national pricing authority (NPPA)
- Price of bulk drugs is fixed by **specifying** a **maximum rate of return** for bulk drug manufacturers. The maximum retail prices are fixed using cost-plus methods and are determined by using data submitted by companies and by comparing elements of cost of each company. The formula is:

  $$RP = (MC+CC+PM+PC) \times (1+MAPE/100) + ED$$

  With: RP = retail price; MC = material cost; CC = conversion cost; PM = cost of packing material; PC = packing charges; MAPE = maximum allowable post-manufacturing expenses; ED=excise duty
- Between 1996 and 2006, the rise in prices was +39.93% for all medicines and +0.02% for price-controlled medicines
- The prices of medicines in the **private** sector are **3 to 5 times higher** than in the public sector

China

- **Maximum retail prices** are set by the National Development and Reform Commission (NDRC)
- Since 2013, prices are set based on **declared costs** submitted by manufacturers and are calculated as **factory prices** with duty/taxes and incorporating retail distribution profits
- To **counterbalance** the price reduction achieved by the NDRC price setting, the **National Healthcare Security Administration** launched a **program in 2024** to **support high prices** for drugs with **high innovative value** by adding **premium** to their cost-based price…
- … and **local programs** are implemented to support innovative drugs (e.g., in **Shanghai** started a "Measures to diversify payment mechanisms" program in 2024)…
- The use of cost-plus methodology in China should consider:
  - The **low availability** of medicines
  - Public sector patient prices are 21-75% higher than public sector procurement
  - Prices of originator brands are 1.85 times higher than prices of generics (2016)

Sources: NPPA Annual Report 2023-24 (Sept. 2024) – "The 14th five-year plan", NDRC (Dec. 2024) – Pacific Bridge Medical (April 2024) – Zhang et al., "Study on Price Ratios of Generics and Originators and Their Management Strategies" (2016) – Smart Pharma Consulting analyses

Cost-based pricing is supposed to be the easiest method of determining a price, it consists in selling a product for more than what was spent to make it

2 Cost-based pricing – Pros and Cons for pharma companies

Pros

- **Minimal information** requirements and **data** relatively easy to obtain based on internal data from cost calculations, no additional market research required from the pharmaceutical company
- Relative **easiness of calculation and administration**: businesses are aware of cost of production by adding up different invoices, labor costs, etc.
- **Full coverage of cost and a consistent rate of return**: the full production cost of the product is covered, allowing the mark-up to ensure a positive rate of return
- **Perception of fairness** and **transparence**: should insure sellers against unpredictable or unexpected later costs, it is often seen as fair by customers
- **Stabilization** of markets: as this strategy is insulated from demand variations and competitive factors, it tends to stabilize markets

Cons

- **Exclusion of marketplace reality**: does not consider the competitive intensity, the negotiating power of customers and the law of supply and demand
- **Suboptimal pricing**: being based on historical accounting costs instead of on the replacement value, it does not include opportunity costs and many additional costs (e.g., should the price of the plant be included?) which results in **reduced margins** (cost + pricing)
  Conversely, when all costs are effectively included, the defined price is often **too high** and thus discourage sales (full cost pricing)
- **Difficulty** to **design** & **implement** a robust methodology: information system and specific resources are required to collect and verify information supplied by manufacturers to the public or private payers
  Accuracy of data is difficult to control

Sources: "Access to new medicines in Europe: technical review of policy initiatives and opportunities for collaboration and research", OECD – ISPOR HTA Roadmaps– Smart Pharma Consulting analyses

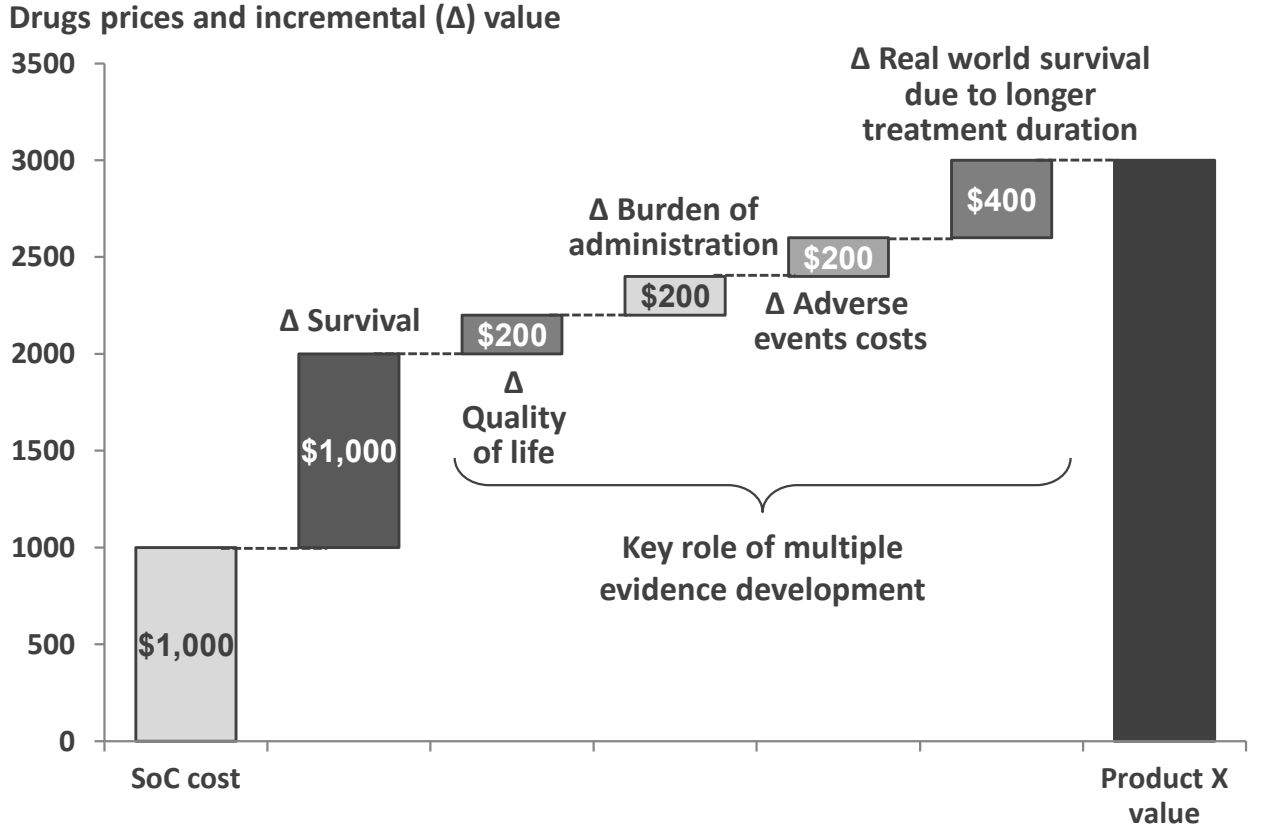
Value-based pricing aims to set drug prices based on multiple criteria to assess their general impact on the healthcare system or even on the society, as a whole

3 Value-based pricing – Approach

Definition & analysis

- Value-based pricing (VBP) sets prices based on a **value assessment** that considers several criteria such as **clinical efficacy**, **cost-effectiveness**, or a wider range of criteria including the burden and severity of the disease and the long-term benefits of the treatment
- VBP consists in **negotiating prices** for new pharmaceuticals based on their value for the society as assessed through Health Technology Assessments (HTA)
- By **ensuring access** to cost-effective drugs today and **incentivizing manufacturers** to invest in cost-effective products for the future, VBP seeks to provide a **sustainable solution** to pharmaceutical price regulation.
- While it aims to reward innovation, establishing a clear relationship between the level of innovation and the price is not straightforward

Product X value vs. standard of care (SoC)



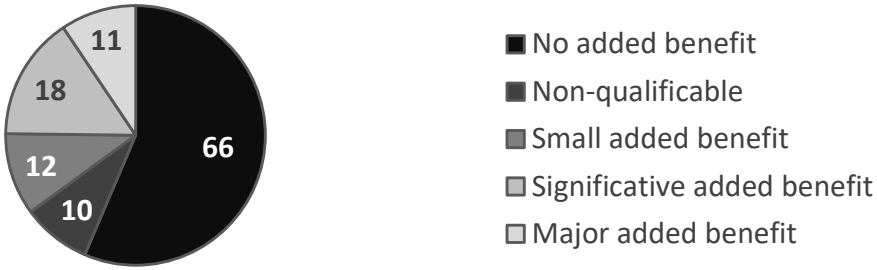
Sources: "Future strategies for pricing and market access in oncology", Analysis Group, Oct. 2014 – "Access to new medicines in Europe: technical review of policy initiatives and opportunities for collaboration and research", OECD – Smart Pharma Consulting analyses

The German case shows that most new drugs being assessed for their additional therapeutic benefit present no improvement vs. the standard of care

3 Value-based pricing – Germany & France

Germany

- The "Act on the Reform of the Market for Medicinal Products" in Germany means that companies must demonstrate the **additional therapeutic benefit** of their drug in a structured dossier to be assessed by the Institute of Quality and Efficiency in Health Care (IQWiG)
- In July 2024, a new "**Medical Research Act**" intertwines pricing and reimbursement levels with **clinical research** expectations, and allows confidential prices[1]
- **Price negotiations** between the Federal Association of Statutory Health Insurance Funds (GKV-Spitzenverband) and the pharma company are based on the drug perceived level of additional benefits. Drugs that fail to demonstrate additional benefits are assigned to a **reference** price group
- Out of the 117 dossiers (excluding orphan drugs) assessed by the Institute between 2011 and 2015, results have been the following:



France

- French health authorities consider the degree of innovation in five ASMR[2] tiers, which are used by the CEPS[3] (drug pricing committee) to set the price of drugs
- Recent developments in France have introduced economic evaluation to the pricing and reimbursement process
- Under the 2012 Law for the Funding of Social Security, the French Haute Autorité de Santé (National Authority for Health) was mandated to consider cost-effectiveness in its drug evaluations from October 2013
- The changes require mandatory submission of economic analysis by companies applying for reimbursement in ASMR tiers 1-3, but the analysis is not used to make decisions on reimbursement and only features as complementary information for the CEPS, although this may affect drug prices

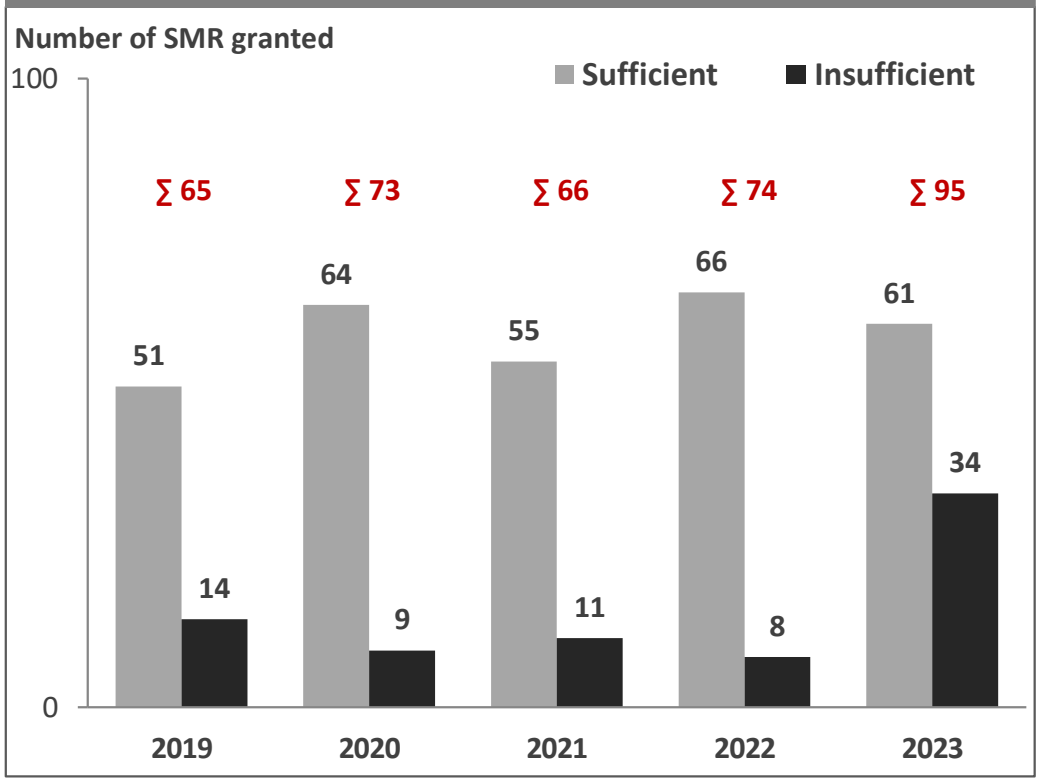
Sources: Bundesministerium für Gesundheit (July 2024) – French Health Ministry (Sept. 2024) – Smart Pharma Consulting analyses

[1] There will be a public price on the drug package, and a confidential "real reimbursement price" – [2] Amélioration du Service Médical Rendu (Improvement in medical benefit vs existing therapeutic alternatives or Standard of Care) – [3] Comité Economique des Produits de Santé (Economic Committee on Healthcare Products)

The transparency committee (CT) of the National Authority for Health (HAS) classifies the great majority of new drugs as offering no improvement in medical benefits

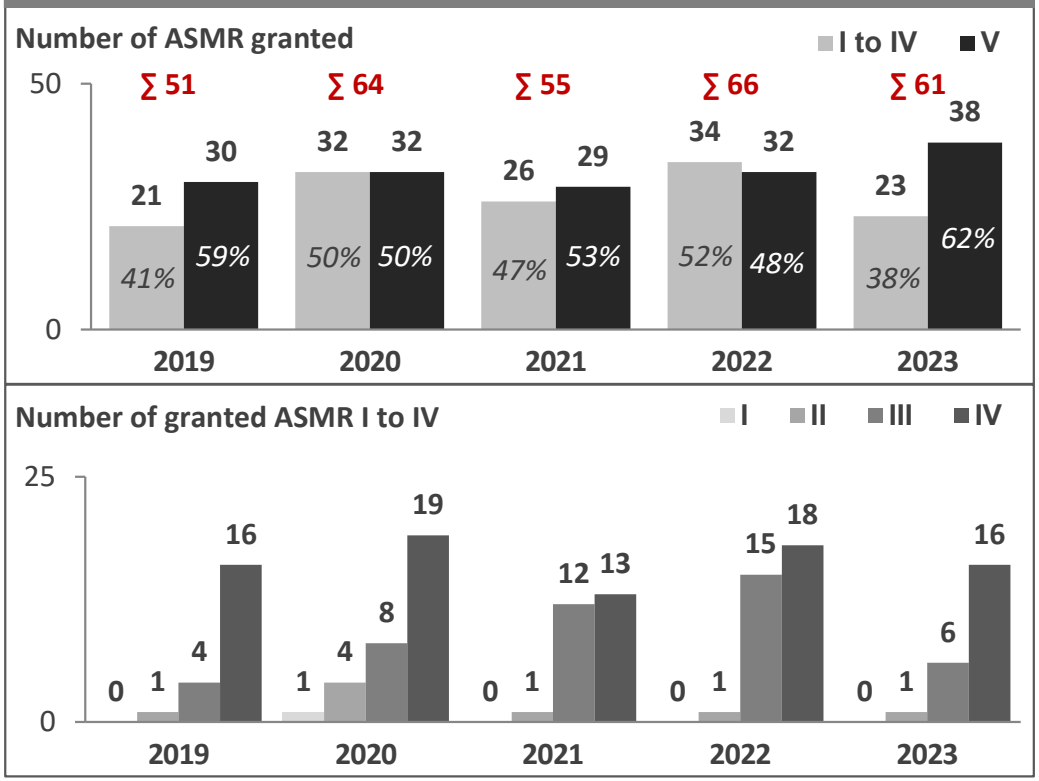
3 Value-based pricing – France (1/3)

Distribution of granted SMR levels[1] for new drugs



***SMR** (Service médical rendu): Medical benefit*

Distribution of granted ASMR levels[1] for new drugs



***ASMR** (Amélioration du service médical rendu): Improvement in medical benefit*
Levels of improvement: I=radical, II=significant, III=moderate, IV=minor, V=none

Sources: HAS Annual Activity Reports (2019-2023) – Smart Pharma Consulting analyses

[1] Applications for first registration only, all procedures combined. An application may result in several different SMR / ASMR, depending on the considered indications

The medico-economic evaluation is systematized for drugs with a radical, significant or moderate ASMR[1], and a major impact on health care spending

3 Value-based pricing – France (2/3)

Health economic evaluation committee (CEESP) (1/2)

Purpose

- **Implementation of the medico-economic evaluation** relevant for the assessment of health products and technologies applying for registration or registration renewal on the reimbursement lists

Concerned products and technologies>

- **A medico-economic evaluation is required if two conditions are met:**
  1. Application for recognition or confirmation of a **radical**, **significant** or **moderate** **improvement in clinical benefit (ASMR[1] I, II, III)**
  2. Product or technology that has or may have a **significant impact on healthcare spending**, given:
     - Its impact on the organization and conditions of care, as well as professional practices
     - Its expected sales during the second year of commercialization (if > € 20 M at public price)

New process since 2013

- Applied since **October 4th, 2013** (i.e., one year after the publication in the Official Gazette)
- **The medico-economic evaluation is done at the time of filing an application for registration on the reimbursement lists or at the time of its renewal**
- **The evaluation is carried out by a commission in charge of economic assessment in public health, the CEESP[2] within the HAS[3]**, based on data provided by the company (when applying for registration or re-registration, companies are required to submit to the CEESP as well as to the CEPS[4], any available study and health economic data, which are considered as necessary for the evaluation)
- The CEESP issues an opinion based on the **comparative analysis** between the various medically relevant therapeutic options, the **relationship between the costs and the medical benefit**, as well as the **quality of life** of affected people
- The opinion of the CEESP is **public**, subject to **adversarial proceedings** and sent to the CEPS

Sources: Decree n°2012-1116 of 2 Oct. 2012, published in the JORF (Official Gazette) of Oct. 4th 2012

[1] Amélioration du Service Médical Rendu (Improvement in medical benefit) – [2] Commission Évaluation Économique et Santé Publique (Economic and Public Health Committee) – [3] Haute Autorité de Santé (National Authority for Health) – [4] Comité Economique des Produits de Santé (Economic Committee on Healthcare Products)

In France, health economic evaluations are required for healthcare technologies or treatment strategies, to streamline the use of public resources

3 Value-based pricing – France (3/3)

Health economic evaluation committee (CEESP) (2/2)	
Definition	▪ The medico-economic (or pharmaco-economic) evaluation is the **comparison** between the **medical interest** of an act, a practice, a drug, an innovative organization, a screening program, etc., **and the costs** they generate ▪ Thus, it provides information on the **economic consequences** of diagnostic / therapeutic practices / screening programs ▪ The assessment means to judge an intervention or its components to take decisions regarding medical practice and/or health policies
When to evaluate	▪ Every time there is a **choice** between **different strategies**: – New drug or device – New medical strategy: prevention, screening, diagnosis, treatment – New organization for patients' management, such as ambulatory care ▪ But also, for **existing activities** that could be stopped as: – Resources are limited – It is unethical to waste resources rather than to use them for the greatest number and because the patients' management system needs to be sustained

Sources: Georges Weil 2011, HAS 2014 – Smart Pharma Consulting analyses

Sweden is one of the only countries considering social perspectives (e.g., caregivers' involvement) in its value-based pricing approach

3 Value-based pricing – Sweden

- The Dental and Pharmaceutical Benefits Agency (TLV) is the Swedish health technology assessment (HTA) body
- For any new outpatient medicine to be eligible for reimbursement in Sweden, the manufacturer must receive approval from the TLV
- The three primary criteria the TLV applies in making decisions are equity, need-and-solidarity, and cost-effectiveness. The first two criteria are considered as fundamental objectives; cost-effectiveness is seen as an aid in decision-making rather than as an objective
- Three core principles underpin the Swedish VBP approach:

Taking a societal perspective in decisions	Applying a threshold value…	Decreasing marginal utility of treatment
▪ Aim to consider the economic effects beyond the health sector ▪ Assessments include potential consumption, costs of medicine, related treatments, out-patient and in-patient care costs and social services (e.g., home care) ▪ The value of caregivers is included in social costs. This is calculated by assigning a value to the leisure time and work that the caregiver foregoes to care for the patient ▪ A human capital approach is used to calculate production losses due to absence / early retirement because of illness ▪ When treatment extends life, the costs or benefits for life-years gained are considered (equal to total consumption less total production during those additional years)	▪ … focusing on individuals' maximum willingness-to-pay for a QALY gained ▪ Rather than using QALYs (Quality-Adjusted Life Year) to control the health care budget (i.e.: no pre-determined QALY threshold) ▪ The threshold value is an estimation of individuals willingness to pay for a health gain ▪ Sweden does not use an "official" threshold value, and that value may vary depending on the disease or condition	▪ Recognizing that different indications for the same product may provide different health gains ▪ In practice: – The manufacturer sets a price and submits its cost-effectiveness calculation using that price – Depending on this price, the treatment will be cost-effective for some patient subgroups – The manufacturer may claim a price for which the treatment for the overall population is on average cost-effective, otherwise reimbursed indications are restricted

Sources: Smart Pharma Consulting analyses

NICE[1] proposal to include the wider societal benefits and burden of illness in the assessment of drugs raised concerns about discrimination and methodologic bias

3 Value-based pricing – UK

Background

- In 2010, the British government proposed moving towards a broader value-based system for assessing & pricing branded drugs
- This approach aimed to ensure that the price the National Health System (NHS) pays for a medicine better reflects its benefits
- After several consultations, no agreement has been reached on how to widen current assessment methods to take better account of a drug benefits
- The Cancer Drugs Fund (CDF) was set up to allow patients to access to cancer drugs otherwise unavailable on the NHS. It was intended until a wider value-based appraisal system was in place

NICE consultation for value-based pricing (VBP) and criticism (2010-2015)

- In March 2013, the British government announced that NICE would take a central role in the changes in the assessment of the value of new medicines, through an amended version of existing NICE methods of VBP
- The Department of Health provided NICE with terms of reference for the development of what was referred to as Value Based Assessment (VBA) stating that NICE should include:

The same benefit perspective	A system for taking account of Wider Societal Benefits (WSB)	A system of weighting for Burden of Illness (BOL)
▪ For all drugs within the scope of VBP	▪ Assessed by calculating **absolute shortfall** ▪ This is the **difference** between the total **expected QALYs[2]** due to a condition and the one for people with the same age and gender without the condition ▪ **Varies** with **age**: the younger the patient the greater the loss of QALYs	▪ Assessed by calculating **proportional shortfall** ▪ The absolute QALY shortfall calculated for WSB is divided by the number of future QALYs expected with the same age and gender w/o the condition during treatment ▪ This is less sensitive to age

- A 2015 consultation on these proposals raised two concerns that led to the freezing of the VPA in the UK:
  - **Discrimination**: in favor of treatments that provide the highest value to society. For example, measures that count the cumulative BOL reflect the fact that younger people have a greater potential health loss (they experience a condition for longer, or death is more premature). Conditions that predominantly effect older people have lower BOL, so involving BOL may discriminate against older people because they discount the duration of QALY loss
  - **Weighting** and **thresholds**: NICE proposed a threshold of GBP 50 K/QALY gained including WSB and BOL measure which led to concerns about the arbitrary nature of this proposed weighting

Sources: "Value Based Assessment of Drugs postnote", Parliamentary Office of Science and Technology (2015) – Smart Pharma Consulting analyses

[1] National Institute for Health and Care Excellence – [2] Quality-Adjusted Life Year

Value-based pricing policies require time- and money-consuming evidence development but could lead to higher prices and a better perception of products

3 Value-based pricing – Pros and Cons for pharma companies

Pros

- When the added value is demonstrated, value-based pricing tends to **improve profitability** due to the **higher prices**, irrespective of the operating costs, without impacting greatly on sales volumes
- Might be perceived as a "**fair**" **policy** to set prices
- The important **level of evidence** required allows a better **knowledge of the impact** of the product…
- … that might lead to a **better image** of the product among stakeholders

Cons

- The implementation of value-based pricing involves **additional costs** to generate the **required data** (e.g., economic, clinical, quality of life, generation of real-world evidence)
- **Disparity of procedures** at European level, each one requiring a specific set of data and applying different methodologies
- Slow procedures that might **delay the access** to the market (e.g.: French price and reimbursement system)
- Few drugs reach a significant level of additional benefits and most of them **fail to reach premium prices**

Sources: "Access to new medicines in Europe: technical review of policy initiatives and opportunities for collaboration and research", OECD – ISPOR HTA Roadmaps – Smart Pharma Consulting analyses

International Price Referencing (IPR) is a widely used pricing policy in Europe, but is less implemented in low-income countries

International price referencing – Approach

Definition

- International Price Referencing (IPR), also known as **External Reference Pricing** (EPR), is a price control mechanism whereby a government considers the price of a medicine **in other countries** to inform or establish the price in its own country
- IPR is often used in **small countries** with **limited bargaining power** or health technology assessment capabilities to ensure that they do not pay more for medicines than other countries
- IPR is also commonly used in one or another form (EU and European Free Trade Association (EFTA) countries except Germany, Sweden and UK; Brazil, Jordan, South Africa, Japan, Canada, Australia, etc.)
- International price referencing may be used **formally or informally** to set **reimbursement prices**; at launch or on a regular basis; as the primary criterion for price setting or as one of the many inputs used to inform the pricing decision
- Reference prices are often **applied at market entry** and followed up with later revisions

Analysis

- Prices in different markets may not be **comparable** due to countries' differences (e.g., burden of disease, indications, market structures)
- IPR may induce **lower** product **availability**, **launch delays**
- IPR does not necessarily consider the **value** of the product to patients' health and society
- The following principles could help **address** these issues:
  - Use IPR as an indicator in a broader pricing and reimbursement methodology
  - Define clusters of countries with comparable GDP per capita, health care funding systems, etc.
  - Off-patent medicines should not be included in the IPR systems
  - Reference ex-manufacturer prices should be fixed for the same presentation
  - Only official list prices should be considered for rebates
  - IPR calculation should be based on average or median price and not the lowest price in the basket
  - The IPR should be ideally limited for the launch of a product
  - Calculation should reflect currency fluctuations/ exchange rates and inflationary adjustments in a symmetrical way and/or within a tolerance band
  - Data sources should be valid, reliable, public and controlled by stakeholders

Sources: "Access to new medicines in Europe: technical review of policy initiatives and opportunities for collaboration and research", OECD – ISPOR HTA Roadmaps – Smart Pharma Consulting analyses

The purpose of managed entry agreements is to ensure faster access to innovation for patients, maximize value for money and better control budgets for payers

Managed entry agreements – Introduction

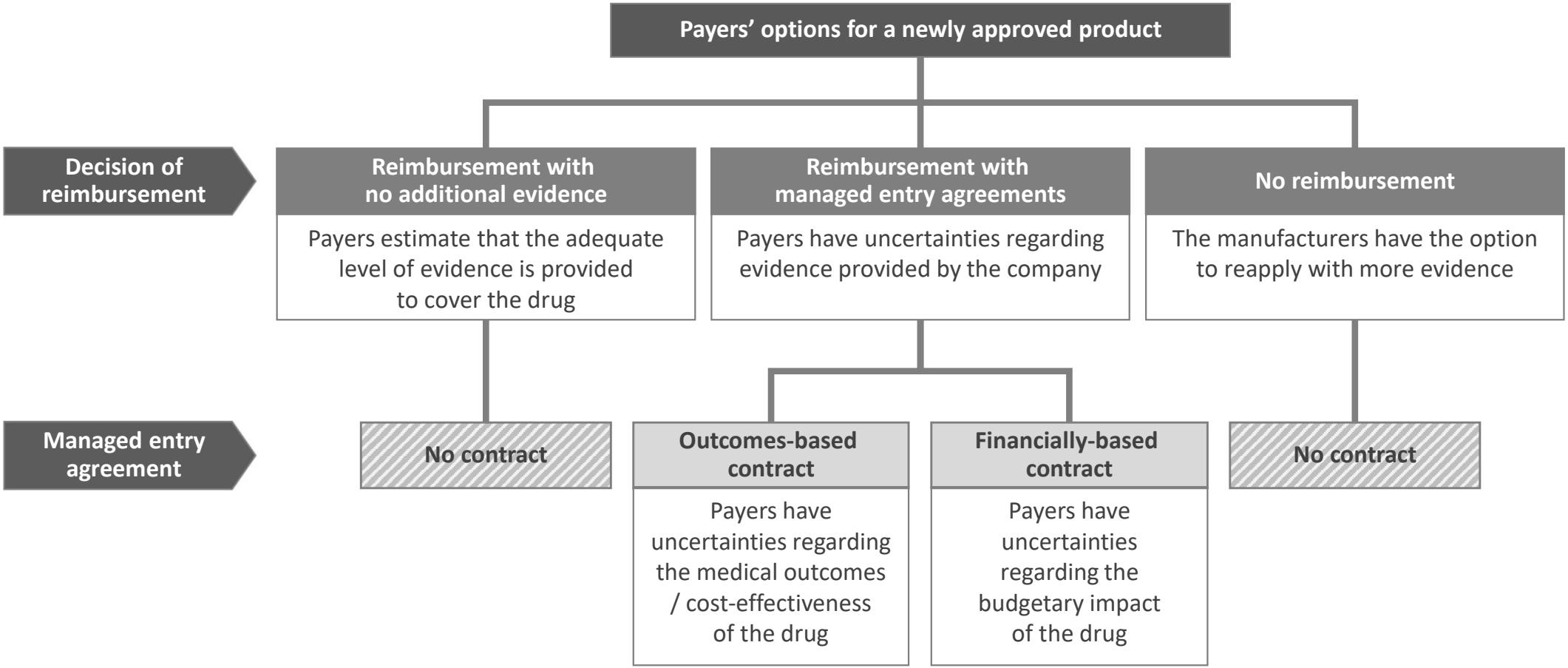
- In an increasing number of situations, health authorities might not recommend new products due to their **low level of incremental benefit** or their **poor cost-effectiveness** compared to existing solutions
- In such a situation, pharma companies tend to **negotiate managed entry agreements** to be able to reach the market in more favorable conditions
- A wide range of agreements may be considered by authorities, which fall in two categories:
  - Outcomes based contracts: which help payers better manage the uncertainties regarding medical outcomes or cost-effectiveness
  - Financially based contracts: which help payers better manage the budgetary impact of the product

	Outcomes-based contracts	Financially-based contracts
Objective	▪ Mitigate the risk for the payer to pay a "premium price" for medicines that in real life are less effective than they were supposed to be during the negotiation (based on clinical trials data)	▪ Mitigate the risk for the payer to be faced with a claim for reimbursement exceeding the one that had been made at the time when the medicine was included on the list of the reimbursable drugs
Implementation	▪ Further to an early agreement on the price with the authorities, the pharma company makes the commitment to reimburse partially or totally the value that had been negotiated when the treatment outcomes are not up to the initial expectations	▪ When the total cost of the treatment exceeds the amount of the originally expected expenditures, the difference between the expenditure ceiling on which the pharma company was initially committed and the amount of recognized expenses must be reimbursed partially or totally

Sources: "Innovation et prix du médicament contrats d'accès au marché des médicaments remboursables: choix des schémas d'étude et des critères de jugement", Réseau d'Evaluation en Economie de la Santé, January 2014 – Smart Pharma Consulting analyses

Managed entry agreements may be considered by payers when the level of medical evidence is too low and/or the financial impact is too high

Managed entry agreements – Payers' options for a newly approved product



Sources: "Can't Get No Satisfaction? Will Pay for Performance Help? Toward an Economic Framework for Understanding Performance-Based Risk-Sharing Agreements for Innovative Medical Products", Adrian Towse and Louis P. Garrison Jr, 2010 – Smart Pharma Consulting analyses

Managed entry agreements are expanding to reduce the risk for the payer (e.g., efficacy, safety) and/or to enable pharma companies to negotiate better prices

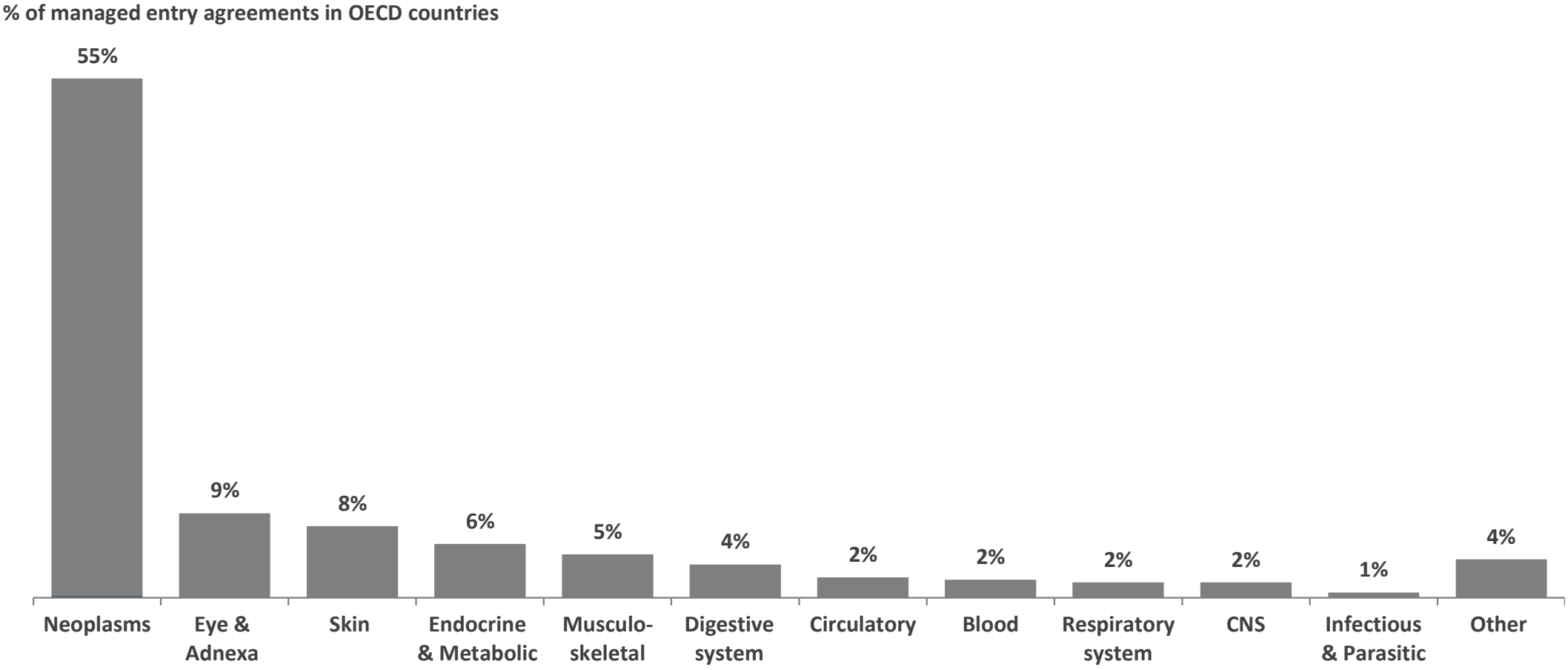
Classification of the managed entry agreements

	Outcomes-based contracts		Financially-based contracts
	▪ Reimbursement consistent with the public interest, based on the results provided by the pharma company		▪ Limit the economical consequences of the negotiated price
Patient level	**1 Biomarker-linked payment** ▪ Reimbursement based on the results of biomarker tests *E.g.: Herceptin, USA (Roche) Erbitux, USA (Merck), Enbrel, Australia (Pfizer)*	**2 Pay-for-performance** ▪ Reimbursement based on clinical endpoints (e.g., morbidity-mortality, clinical efficacy, better adherence) *E.g.: Velcade, UK (Janssen), Imnovid, FR (BMS) Aclasta, DE (Novartis), Janumet/Januvia, USA (MSD)*	**4 Per patient cost capitation deals** ▪ Maximum cost set per patient (e.g., number of doses, daily cost of treatment, total cost of treatment) *E.g.: Lucentis, UK (Novartis)*
Population level	**3 Coverage with evidence development (CED)** ▪ Funding granted if efficacy proven through real life studies ▪ Evidence needed to decide whether to maintain funding *E.g.: Risperdal Consta, FR (Janssen), many high-cost drugs in Italy*		**5 Overall sales capping** ▪ Annual sales volume agreement as part of the initial price negotiation ▪ Annual value capping with rebates for exceeding sales *E.g.: most high-cost drugs in France, Enbrel (etanercept) in Australia*

Sources: "Innovation et prix du médicament contrats d'accès au marché des médicaments remboursables […], Réseau d'Evaluation en Economie de la Santé, Jan. 2014 – "Unpacking Risk Sharing and Alternative Pricing Schemes"; Pharmaceutical Commerce, Feb. 2010 – "Mechanism Of Coordinated Access (MOCA) and transparent value framework, managed entry agreements", AIFA

In OECD countries, managed entry agreements are mainly used for therapies in oncology and various rare diseases

Therapeutic areas covered by managed entry agreements (2016)



Sources: "Performance-based managed entry agreements for new medicines in OECD countries and EU member states", OECD Health Working Papers N. 115 (February 2020) – Smart Pharma Consulting analyses

Most products for which the medical coverage is driven by companion test results are oncology drugs

1 Examples of products with biomarkers linked payments in the USA

Product	Company	Indication	Biomarker
Gleevec	Novartis	Aggressive Systemic Mastocytosis	KIT D816V mutation
		Myelodysplastic Syndrome / Myeloproliferative Disease	PDGFRB
		Gastrointestinal stromal tumors	c-kit protein
Tagrisso	AstraZeneca	Non-small cell lung cancer	EGFR mutation
Tarceva	Roche / Genentech	Non-small cell lung cancer	EGFR mutation
Keytruda	MSD	Non-small cell lung cancer	PD-L1
Iressa	AstraZeneca	Non-small cell lung cancer	EGFR mutation
Gilotrif	Boehringer Ingelheim	Non-small cell lung cancer	EGFR mutation
Xalkori	Pfizer	Non-small cell lung cancer	ALK protein
Erbitux	Lilly	Colorectal cancer	KRAS mutation
			EGFR expression
Vectibix	Amgen	Colorectal cancer	KRAS mutation
			EGFR expression
Exjade	Novartis	Thalassemia	Liver iron concentration
Lynparza	AstraZeneca	Ovarian cancer	BRCA1 and BRCA2
Herceptin	Roche / Genentech	Breast & gastric cancer	HER2
Perjeta	Roche / Genentech	Breast cancer	HER2
Kadcyla	Roche / Genentech	Breast cancer	HER2
Mekinist / Tafinlar	Novartis	Melanoma	BRAF mutation
Zelboraf	Roche / Genentech	Melanoma	BRAF mutation

Sources: "Innovation et prix du médicament contrats d'accès au marché des médicaments remboursables […], Réseau d'Evaluation en Economie de la Santé, Jan. 2014 – "Unpacking Risk Sharing and Alternative Pricing Schemes"; Pharmaceutical Commerce, Feb. 2010 – "Mechanism Of Coordinated Access (MOCA) and transparent value framework, managed entry agreements", AIFA – Smart Pharma Consulting analyses

Velcade first cost-effectiveness assessment prevented its coverage by the NHS and required an ad-hoc reimbursement scheme for patients to access this drug

2 Case study: Velcade patient access scheme in the UK (2007) (1/2)

janssen

Background		Implications
Concerned indication	▪ Velcade is indicated as a second line therapy, in **monotherapy**, in the treatment of **multiple myeloma**	▪ In October 2007, Janssen agreed on implementing an **interim[2] reimbursement scheme** as a condition of positive NICE guidance
Cost-effectiveness	▪ A first assessment determined that Velcade ICER (incremental cost-effectiveness ratio) had a **cost per QALY[1]** of **GBP 33.5 K** in monotherapy ▪ This figure placed Velcade **above the threshold** for a positive NICE guidance (GBP 30 K) ▪ Therefore, Velcade could **not be covered** by UK's **NHS**	▪ This scheme would further **improve** the **cost-effectiveness** of Velcade **monotherapy**
Janssen's assumption	▪ **Janssen** believed that Velcade is **cost-effective** when other relevant factors are considered: – The **survival gain** is the **single most important outcome** for people with relapsed multiple myeloma – There is a **lack of robust utility data to compute QALYs** for people with relapsed multiple myeloma – The **method** used to **assess the quality of life** is **not sensitive** in multiple myeloma	▪ **During that time**, the company will **collect more cost-effectiveness data**, ahead of **another appraisal** by NICE ▪ This was the **first patient access scheme** to be implemented in the UK

Sources: "Summary of VELCADE Response Scheme", NICE – NICE website – "Risk Sharing Schemes (RSS) and Patient Access Schemes (PAS)", Northern, Eastern and Western Devon Clinical Commissioning Group – Velcade SmPC, EMA – Smart Pharma Consulting analyses

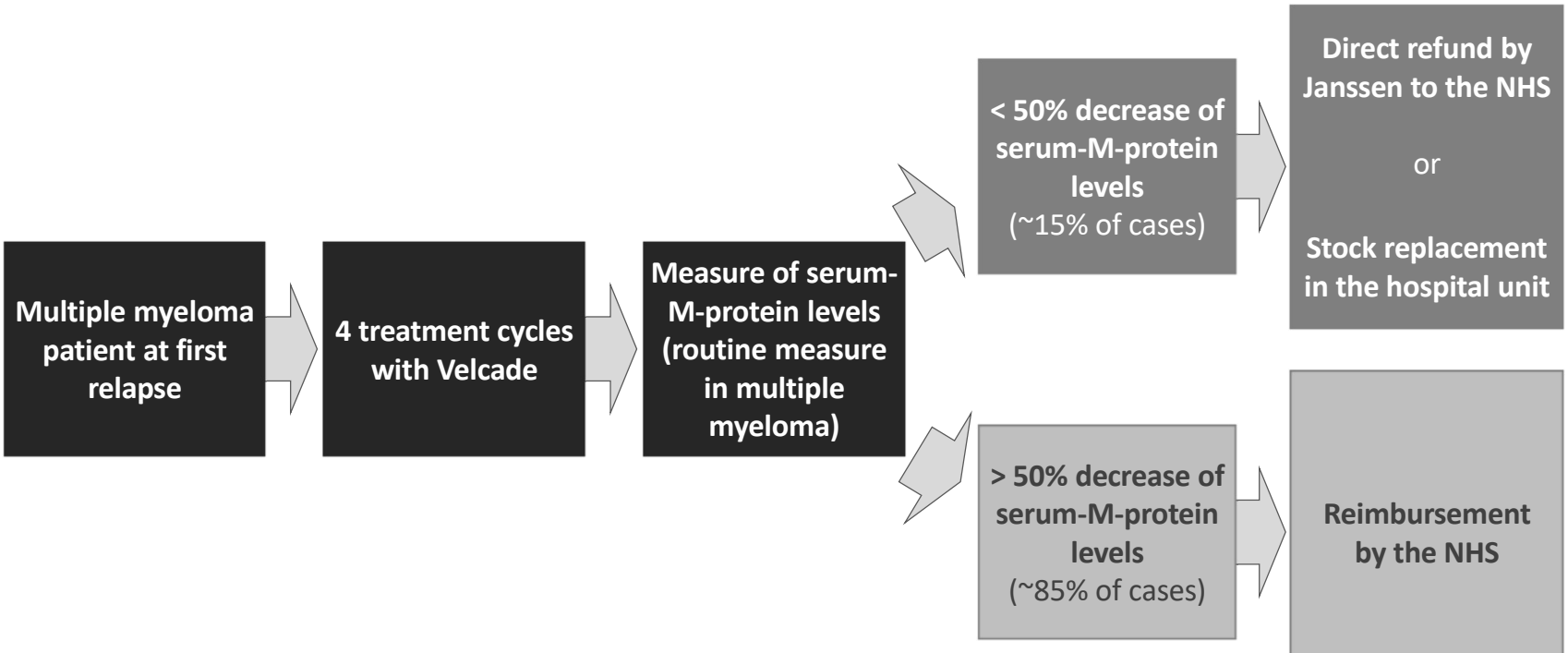
[1] The quality-adjusted life year is a generic measure of disease burden, including both the quality and the quantity of life lived. It is used in economic evaluation to assess the value for money of medical interventions – [2] As of November 2024, the patient access scheme was still in place in the UK

The patient access scheme for Velcade is linked to its efficacy, measured by a biomarker used in routine in multiple myeloma

2 Case study: Velcade patient access scheme in the UK (2007) (2/2)

janssen

The patient access scheme



- Under this scheme, Velcade was estimated to be **cost-effective** by the NICE
- This led to a **positive guidance** by the **NICE allowing the prescription** of the product
- This patient access scheme for Velcade in monotherapy has been **in place since 2007**

Sources: Summary of VELCADE Response Scheme", NICE – NICE website – "Risk Sharing Schemes (RSS) and Patient Access Schemes (PAS)", Northern, Eastern and Western Devon Clinical Commissioning Group – "Risk sharing: mitigate uncertainty", PMLiveA/ – Smart Pharma Consulting analyses

Novartis signed risk sharing agreements with health insurance funds in Germany to speed up reimbursement negotiations for its bisphosphonate Aclasta

2 Case study: Aclasta pay-for-performance scheme in Germany (2007)

NOVARTIS

Background	
Context	▪ When faced with the challenge of launching its bisphosphonate Aclasta as a **once-yearly therapy for osteoporosis**… ▪ … Novartis had to overcome the **very high upfront cost** to payers **compared** with the more traditional weekly oral therapies
Novartis' solution	▪ Novartis developed **innovative risk-sharing deals** that would essentially **ensure the payers** against drug failure ▪ This was the **first experiment of risk-sharing agreements** in Germany

Pay-for-performance scheme

- In 2007, **Novartis** signed **risk-sharing agreements** with **the two statutory health insurance funds**: the German Employee Funds (DAK) and the Barmer Funds (BEK)
- According to the terms of the contracts, Novartis must **refund** treatment costs to the health insurance funds if, **within twelve** months of treatment for osteoporosis with Aclasta, the patient **experiences a bone fracture**
- As highlighted in the Novartis Annual Report for the year 2007, the money-back guarantee had an added benefit for Novartis, **speeding up reimbursement negotiations** for Aclasta with German authorities

- A similar scheme was implemented in the USA with Actonel (Sanofi/Procter&Gamble) in the treatment of osteoporosis with Health Alliance Medical Plans. In that scheme, the companies did not agree to pay for the treatment in the case of a bone fracture but rather to pay for any medical costs of a non-vertebral bone fracture. This scheme allowed the drug to resist both branded competition and generics

Sources: APM health Europe – Smart Pharma Consulting analyses

MSD agreed to give higher rebates to CIGNA when Januvia and Janumet reached better clinical outcomes, in exchange for lower copayment and better formulary placement

2 Case study: Janumet / Januvia pay-for-performance scheme in the USA (2009)

MSD

Background

Concerned indication

- Januvia and Janumet are two **type 2 diabetes drugs** launched by MSD in the USA in 2006 and 2007, respectively

MSD's objective

- MSD wanted to **increase its volume** of Januvia and Janumet
- MSD contracted a partnership agreement with CIGNA, one of the **largest private insurer** in the USA

Pay-for-performance scheme

- MSD contracted an "**unusual**" pay-for-performance **agreement** with CIGNA
- Rather than getting paid more for **good results**, MSD **gave higher discounts** on Januvia and Janumet
- The **outcomes** which were considered and measured by CIGNA were:
  - The **blood sugar levels** (HbA1c lab. values): for patients on any oral antidiabetic medications. If the HbA1c values, in aggregate, improve by the end of the agreement period, the discounts will increase by a pre-agreed amount
  - The **patients' adherence**: CIGNA uses claims data to determine if patients are taking Januvia and Janumet as prescribed. In that case, MSD will further increase the discounts
- In exchange, the agreement **provided MSD** with:
  - A **better placement** on CIGNA's **formulary**
  - A **lower copayment** versus other branded drugs
  - **Higher sales** level in case of **a better adherence rate**

Results

- In 2010, CIGNA announced **positive outcomes** from the diabetes support program:
  - **Patients' blood sugar levels were reduced** by more than 5%
  - Individuals who participated were **more likely to control their blood sugar** than those who did not participate in the program
  - **87**% of patients who took Januvia or Janumet **took their medications correctly**

Sources: BioPharma Dive (Oct. 2016) – Fierce Pharma (Oct. 2016) – Smart Pharma Consulting analyses

To maintain its price, UCB agreed to implement a pay-for-performance scheme for Cimzia, based on the Assurance Maladie (National Health Insurance fund) data

2 Case study: Cimzia pay-for-performance scheme in France (2013)

Background	
Concerned indication	▪ Cimzia is indicated, in **combination** with methotrexate, for the treatment of **moderate** to **severe rheumatoid arthritis**
Competitive environment	▪ Cimzia is an anti-TNF with **several competitors** for the treatment of rheumatoid arthritis (e.g., Humira, Simponi, Enbrel) ▪ Cimzia was launched in 2010 and was granted an **ASMR V** (**no improvement** vs. standard of care) ▪ **Humira** and **Enbrel** both experienced a **~10% price decrease** during the first semester of **2013**

Pay-for-performance scheme

- To **maintain its price** while its competitors experienced a price decrease, UCB **agreed to cover treatment failures** of Cimzia
- Since rheumatoid arthritis therapies are in a very competitive environment, it was **not considered to implement an ad-hoc registry** (due to the administrative charge it represents for health care professionals)
- In that context, UCB agreed to **use the Assurance Maladie[1] data** to **evaluate** the response to the treatment
- If a **patient stops the treatment** before a given deadline (exact delay undisclosed), UCB must **reimburse** the cost of the treatment to the Assurance Maladie

Sources: European Union press release (2019) – Smart Pharma Consulting analyses

[1] National Health Insurance Fund

Celgene (now BMS) agreed to implement a pay-for-performance scheme based on an ad-hoc registry for Imnovid in France

2 Case study: Imnovid pay-for-performance scheme in France (2015)

Background

Concerned indication

- Imnovid is indicated as a 3rd line therapy (second relapse after Revlimid and Velcade treatment) in the treatment of multiple myeloma

Cost-effectiveness

- The "Commission de la Transparence" (CT) gave Imnovid an **ASMR III** (**moderate** improvement of the medical benefit)
- Imnovid was granted an **initial price** of € 8,900 per cycle of treatment of 21 days each, with 5 to 6 cycles per patient
- The target population was estimated at ~ 2,000 patients

Celgene's solution

- Celgene[1] initially implemented a **patients' registry** for Imnovid with the aim of:
  - Measuring the efficacy of **the risk minimization** and **pregnancy prevention** plans
  - Controlling the **proper use** of Imnovid

Implications

- Considering this initial price and the size of the **targeted population**, Celgene agreed to implement a **pay-for-performance scheme**
- The exact terms of the scheme are not **disclosed** so that physicians should not be influenced in their prescriptions (but terms were determined jointly with the HAS[2] and the CEPS[3], based on the International Myeloma Working Group (IMWG) recommendations)
- The scheme uses Imnovid **registry** to collect **efficacy data**, which is **shared with the CEPS** on an **annual basis** to **calculate rebates** due by Celgene to the National Health Insurance Fund (through its financial arm, the Acoss[4])

Sources: "Médicaments : quand les laboratoires sont rémunérés à la performance", Les Echos – "Celgene a conclu un accord "efficace ou remboursé" avec le CEPS pour Imnovid"; APMnews – Smart Pharma Consulting analyses

[1] Acquired by BMS in 2019 – [2] Haute Autorité de Santé (National Authority for Health) – [3] Comité Economique des Produits de Santé (Economic Committee on Healthcare Products) – [4] Agence Centrale des Organismes de Sécurité Sociale (Central Office for Social Security Organizations)

In Italy, pay-for-performance schemes (which can be combined) are pushed by health authorities for most oncology drugs

2 Case study: Pay-for-performance schemes in Italy

Cost sharing procedure

Eligible patient (indications)

Discount applied to the **initial cycles** of therapy for all patients

Clinical **efficacy evaluation**

Responders → Treatment is **continued**

Non responders → Treatment is **stopped**

Examples:
- Avastin (Roche)
- Sutent (Pfizer)
- Nexavar (Bayer)

Risk sharing procedure

Eligible patient (indications)

Clinical **efficacy evaluation**

Responders → Treatment is **continued** → Treatment is **reimbursed**

Non responders → Treatment is **stopped** → **Fixed discount rate** applied to patient's **cost of treatment** → **Pay-back** by pharma company **to the hospital**

Examples:
- Erbitux (Merck)
- Vectibix (Amgen)

Payment by results procedure

Eligible patient (indications)

Clinical **efficacy evaluation**

Responders → Treatment is **continued** → Treatment is **reimbursed**

Non responders → Treatment is **stopped** → The **overall** patient **cost of treatment is discounted** → **Pay-back** by pharma company **to the hospital**

Examples:
- Afinitor (Novartis)
- Sprycel (BMS)
- Tasigna (Novartis)

Sources: "Mechanism Of Coordinated Access (MOCA) and transparent value framework, managed entry agreements", AIFA – "New drugs, how much are they worth? The Italian registries: a model to evaluate appropriateness and effectiveness", European Journal of Hospital Pharmacy, 2012 – Smart Pharma Consulting analyses

Faced with the opposition of patients, professional organizations and pharma companies, the DoH agreed to maintain β-Interferon / glatiramer coverage with a CED[1] scheme

3 Case study: β-Interferon / glatiramer in multiple sclerosis in the UK

Background	CED scheme	Results of the scheme	Discussion
▪ A **NICE appraisal** regarding the use of three **beta-interferon products** and **glatiramer acetate** for **multiple sclerosis**, published in January 2002, concluded that they should not be funded through the NHS, as the **cost per QALY was too high** ▪ Facing considerable **opposition** from **patient**, **professional organizations** and **pharma companies**… ▪ … NICE recommended that the Department of Health (DoH) and the four pharmaceutical companies involved **should find a way to make them available** on the NHS in a **cost-effective** manner	▪ This situation led to a **risk sharing scheme** in which the drugs were **funded provided that their effect** on disease progression was **monitored** in a cohort of patients for **ten years** ▪ Depending on the **results observed**, potential **price adjustment** of the drugs would be made at fixed intervals to **achieve an agreed cost per QALY** of no more than GBP 36,000 ▪ Companies also agreed on **offering drugs** to **relapsing**, **remitting** MS sufferers or patients with a **secondary progressive form** of MS with relapses	▪ A cohort of ~ 6,000 MS patients was recruited before 2006, and their disease progression was monitored annually… ▪ … and ~ 3,000 were still monitored ten years later ▪ The 10-year study results were published in **2019**, and showed a **beneficial effect** on **long-term disability** with MS: – Disability score was reduced by 28% (on the EDSS[2]) – Utility worsening reduced by 24% in total (up to 31% in relapsing-remitting MS patients) – Delay of 4 years in reaching disability endpoints	▪ This scheme may be considered as a failure for multiple reasons: – **Expensive** for the NHS: estimated to have costed 25% more than the funding of the drugs alone – **Too long**: seven years with no price adjustment between the implementation decision and the first preliminary results. – **Poor design**: the interim results' accuracy was questioned by researchers, even from some participating in the scheme (e.g., Pr. Nicholl, Sheffield University) ▪ Even if the scheme failures benefited the pharma companies, it had a **negative impact on their public image**

Sources: "Assessing the long-term effectiveness of interferon-beta and glatiramer acetate in MS […]", Journal of Neurology, Neurosurgery & Psychiatry (2019) – "Costly failure of a risk sharing scheme", BMJ, June 2010 – "Effectiveness and cost-effectiveness of interferon beta and glatiramer acetate in the UK […]", The Lancet, April 2015 – Smart Pharma Consulting analyses

[1] Coverage with Evidence Development – [2] Expanded Disability Status Scale

To obtain a premium price, Janssen negotiated a "Coverage with Evidence Development" agreement with the CEPS for its antipsychotic Risperdal Consta

3 Case study: Risperdal Consta scheme in France (2015)

janssen

Background	
Initial issue	▪ Schizophrenic patients treated with antipsychotics by oral route of administration usually have **adherence issues** leading to **new hospitalizations** for **relapses**
Janssen solution	▪ **Risperdal Consta** is an **atypical antipsychotic** in **injectable form** ▪ Before launching the product, Janssen considered that this treatment might help to **reduce the adherence issues** related to the *per os* form and thus to **reduce the rate of hospitalizations**

CED[1] scheme

- To obtain a better price, Janssen negotiated a **CED[1] agreement** with the **CEPS**
- A **post-marketing study** would **evidence** the **reduction in the rate of hospitalizations** for patients treated with this drug as **compared** with other antipsychotics
- While the drug would be granted a premium list price, the company would **receive payment based on the price of cheaper comparators**
- **Difference would be deposited** on a public fund (Caisse des Dépôts et Consignations) **until results** from the study are **available**
- Shall the results evidence reduction in hospitalization rate, money would be transferred to the company

Sources: "Market access agreements for pharmaceuticals in Europe: diversity of approaches and underlying concepts", Szymon Jarosławski and Mondher Toumi (October 2011) – Smart Pharma Consulting analyses

[1] Coverage with Evidence Development

Takeda could not demonstrate the superiority of its product in real life and thus, had to face price rebates and price cuts

3 Case study: Actos scheme in France (2004)

Background		CED[1] scheme
Initial issue	▪ The **potential therapeutic added value** of a new diabetes drug can **hardly** be shown at the time of registration though **clinical studies**, which only give information about **surrogate endpoints**	▪ The risk-sharing agreement was concluded to **develop evidence** that would support or be opposed to manufacturer's claim of a **superior real-life efficacy** ▪ The results were **unsuccessful** ▪ As a consequence, the French drug pricing committee decided to: – **Cut** the drug **price** by **30**% – Request **rebates** for the quantity of drug which had already been purchased
Takeda solution	▪ For a new class of diabetes drugs, **glitazones**, which specifically targets insulin resistance, the French drug pricing committee (CEPS) and the French HTA agency (Commission de Transparence) requested a **real-life study…** ▪ … which was carried out at the **European level** by Takeda	

Sources: "Market access agreements for pharmaceuticals in Europe: diversity of approaches and underlying concepts", Szymon Jarosławski and Mondher Toumi (October 2011) – Smart Pharma Consulting analyses

[1] Coverage with Evidence Development

In the UK, since Lucentis was not considered to be cost-effective beyond its 14th injection, Novartis is in charge of covering exceeding doses

4 Case study: Lucentis dose-capping scheme in the UK (2008)

NOVARTIS

Background

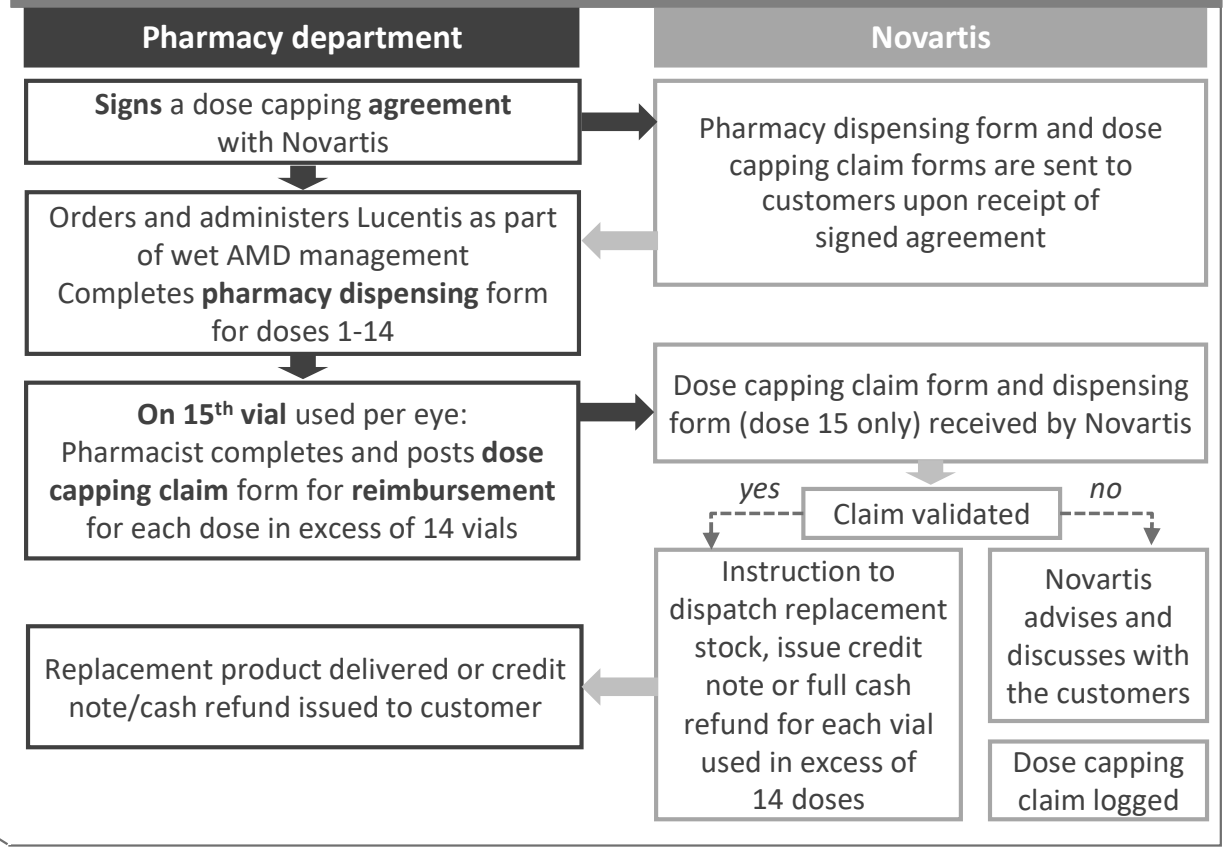
Initial issue

- **Lucentis** is a treatment of wet age-related macular degeneration (AMD)
- It was estimated **not** to be **cost-effective** if the number of administered **doses exceeded 14**

Dose capping scheme

- The NICE and Novartis agreed on a **dose-capping scheme** for Lucentis in which the NHS would cover only the **first 14 doses** and Novartis the following doses if they are required

Dose capping scheme diagram



Sources: "Unpacking Risk Sharing and Alternative Pricing Schemes"; Pharmaceutical Commerce, Feb. 2010 – NICE – Smart Pharma Consulting analyses

In Australia, Enbrel is reimbursed for patients responding to the rheumatoid factor, but Pfizer would have to cover all costs above A$ 100 M p.a. at national level

1 2 5 Case study: Enbrel access scheme in Australia (2003)

Pfizer

Background

Concerned indication

- **Enbrel** is a disease modifying anti-rheumatic drug (DMARD) indicated in the treatment of **rheumatoid arthritis**

Cost-effectiveness

- At launch in **2003**, Enbrel (along with other DMARDs such as Remicade or Humira) was **not considered to be cost-effective** by Australian authorities due to:
  - Its **relatively high cost** per patient
  - **Uncertainties** over **longer-term safety**

Agreement with the authorities

- An **agreement** was set with authorities to make Enbrel more cost-effective through **targeting patients most likely to benefit from the treatment**

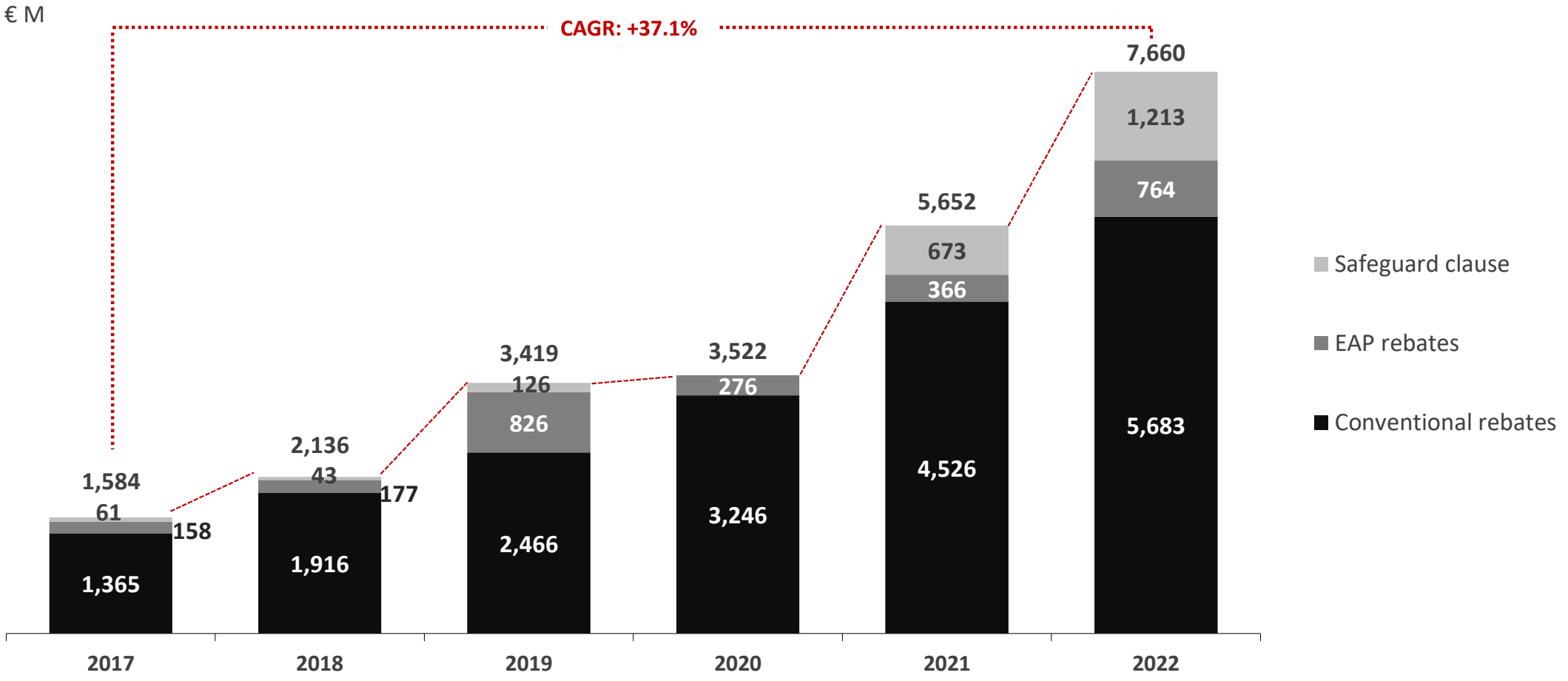
The access scheme

- **Prior to the treatment**, patients must **show a clinical need**, i.e., a positive **rheumatoid factor**
- To **continue** to receive the treatment, patients must demonstrate a predetermined **clinical response every three months**, based on the **rheumatoid factor**, which they are required to consent to beforehand
- The **government** had **calculated** that the cost of the scheme would total around **A$ 140 M a year** while **Pfizer** believed that it would not go over **A$ 100 M annually**
- To **obtain an agreement**, Pfizer agreed to **cover any spending above** A$ 100 M, with this figure **adjusted annually** to consider actual and expected consumption and expenditure
- Evidence since the agreement suggested that the expected amount of annual consumption, as estimated by the government, has never been reached

Sources: "Sharing the burden. Could risk-sharing change the way we pay for healthcare?", Stockholm Network, 2010 – Smart Pharma Consulting analyses

In 2022, the rebates due by pharma companies to the CEPS reached € 7,660 M, representing a + 37.1% CAGR between 2017 and 2022

1 2 5 Case study – Rebates due by pharma companies to the CEPS (France) (1/2)



Sources: CEPS annual report (December 2023) – Smart Pharma Consulting analyses

In 2022, the total gross rebates due by pharma companies to the CEPS reached € 7,660 M (incl. € 1,213 M safeguard clause rebates)

1 2 5 Case study – Rebates due by pharma companies to the CEPS (France) (2/2)

3 types of rebates due by pharma companies to the CEPS

	Conventional rebates specific to certain products	Early Access Program (EAP) rebates	Clawback (also called "Safeguard clause" or "M contribution")
Description	**Clauses agreed between CEPS and pharma companies for 349 specific products** ▪ "First-pack" clawbacks ▪ Volume clauses ▪ Capping clauses ▪ Daily dosage clauses ▪ Performance clauses	**Rebates due when the reference price decided by the CEPS is lower than the price invoiced during its EAP period** ▪ Until July 2021, the maximum price per patient per year was € 10,000 for annual sales above € 30 M ▪ Since then, the cap has been removed but specific rebates have been established based notably on product annual sales	▪ **Rebates depending on whether an amount of drugs expenses (the "M amount") is exceeded at year-end** ▪ The M amount was set as follows: – € 24.0 B in 2021 (+1.2% vs. 2020) – € 24.5 B in 2022 (+2.1% vs. 2021) – € 24.9 B in 2023 (+1.6% vs. 2022) – € 26.4 B in 2024 (+6.0% vs. 2023)
Rebates in 2022	**€ 5,683 (gross amount)**	**€ 764 M (gross amount)**	**€ 1,213 M**

Σ = € 7,660 M (gross amount)

Sources: CEPS annual report (December 2022) – LFSS 2023 (December 2022) – Smart Pharma Consulting analyses

Roche France has been developing, since 2011, a pilot study to validate the technical and legal feasibility of personalized reimbursement models based on real world data

Roche: Personalized reimbursement models initiative (1/3)

Roche

Background

Context

- **Oncology medicines** reimbursed in France have a **fixed price** whereas the **benefits vary across patient groups**
- Pricing models aligned to the clinical benefit open an innovative concept, but need to be supported by **reliable and standardized metrics** aligned with health authorities' expectations

Roche's initiative

- The **Personalized Reimbursement Model (PRM) approach** implemented by Roche aims to establish an **infrastructure to collect routinely existing data** to be used as **input** for **pricing models**
- Different **pricing models** based on the **value for patients** can be considered (e.g., differentiated price based on indication, line of treatment, duration of treatment, treatment combinations)

Project implementation by Roche

- **Pilot phase** (2011 – 2014)
  - All metastatic breast cancer (mBC) patients treated in 14 pilot centers were recorded in the Electronic Pharmacy Record (EPR) system
  - Data related to demographics, disease description, drug usage and clinical outcomes were collected and controlled through Santeos[1]
  - Data flow and patients' data protection have been validated by the CNIL[2]
- **Scale-up phase** (2015 – 2018)
  - Analysis of ~21 K patients in 120 hospitals

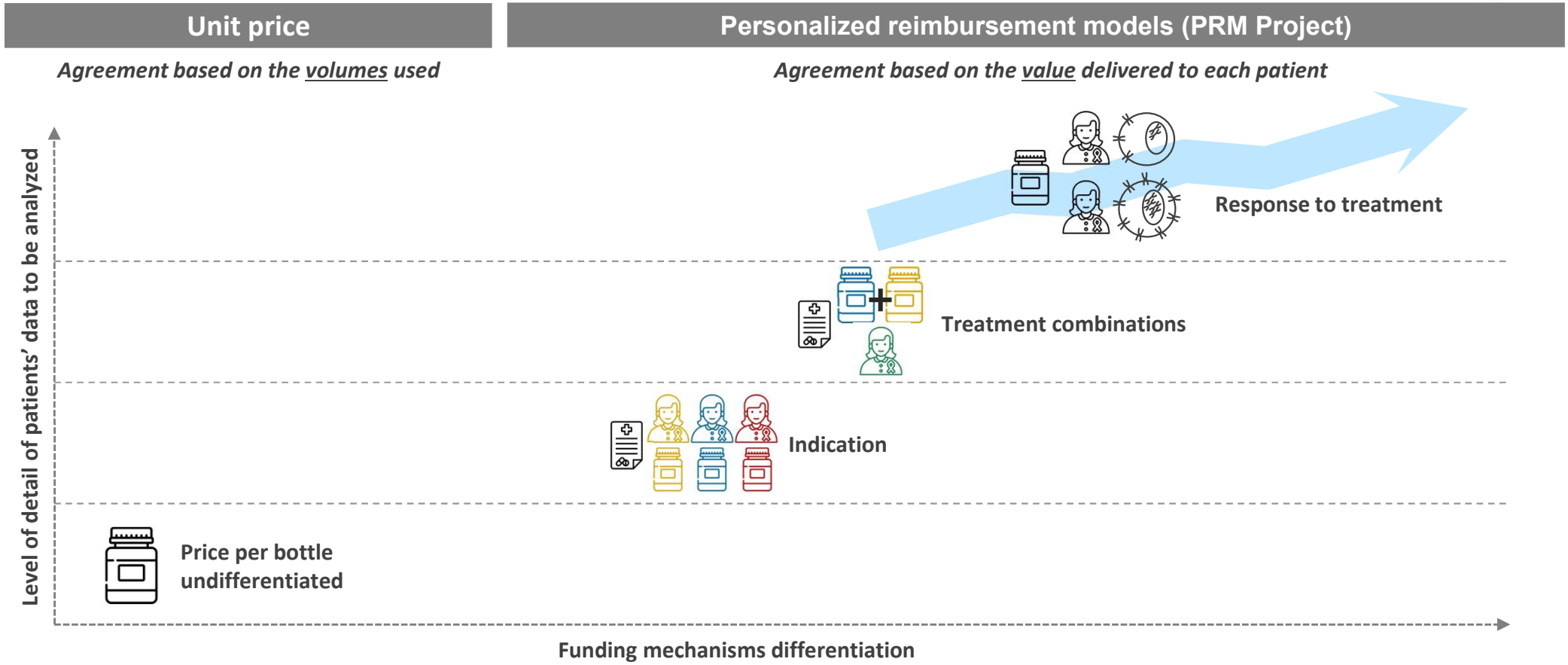
→ Over time, through this automatic data collection, PRM delivered **robust** and standardized real-world evidence that were used to implement models supporting more **flexible pricing strategies** and helping ensure **patient access** to **innovative treatments**

Sources: Roche website – "Evolution in the real-world therapeutic strategies in more than 20 K women with breast cancer […]", European Journal of Cancer N. 141 (2021) – Smart Pharma Consulting analyses

[1] Hosting provider accredited by the French Health Ministry – [2] CNIL: French National Data Privacy Committee

The Roche's PRM project allows to differentiate the price of drugs according to the indication, the population treated and/or the drug regimen

Roche: Personalized reimbursement models initiative (2/3)



Sources: Roche website – Smart Pharma Consulting analyses

The PRM[1] project should facilitate the implementation of more flexible pricing strategies (e.g., cost-sharing, pay-for-performance) by pharma companies

Roche: Personalized reimbursement models initiative (3/3)

Model type	Examples	Data to be collected
Indication	▪ Price per indication or per stage of the disease ▪ Price per treatment line ▪ Price per type of patients, depending on the molecular biology results	Indication, stage of the disease, treatment line, molecular biology and anatomopathological tests
Cost sharing	▪ X first treatment cycles free ▪ X% discount for the Y first months	Total number of treatment cycles
Capping	▪ Treatment cost limited to X€ / patient ▪ Cost limited to X g / patient ▪ Cost limited to X cycles / patient ▪ Cost limited to X months of treatment / patient	Number of cycles administered and administration dates, doses administered
Combination	▪ X% reimbursed when the product is used in combination with another one	Products used in combination
Pay-for-performance	▪ Non-response at X weeks → reimbursement of the product by Roche ▪ Interruption of the treatment because of the progression of the disease before X weeks → Y% discount	Response assessment (complete or partial response, progression or stabilization of the disease), reasons for stopping the treatment

Sources: Roche website – Smart Pharma Consulting analyses

[1] Personalized Reimbursement Model

Pharmaceutical companies must answer several key questions before proposing / implementing risk-sharing agreements to ensure their relevance and feasibility

Key issues to be addressed before implementing a managed entry agreement

Identification

- **Risk**:
  - What is the risk?
  - Who bears the risk?
  - Who is sharing the risk?
- **Competitive advantage**:
  - Does the agreement provide a competitive advantage?
- **Long term impact**:
  - What is the long-term strategic impact on pharma companies' business?

Assessment

- **How**:
  - How can the success be measured?
- **Who**:
  - Who will do the analysis and assessment?

Management

- **Management**:
  - Who will manage the program?
- **Additional costs**:
  - What costs are associated with the scheme?
- **Funding**:
  - Who pays for the management of the program?

Sources: "Risk sharing: mitigate uncertainty", PMLive – Smart Pharma Consulting analyses

Managed entry agreements enable an early access of patients to innovation while facilitating reimbursement negotiations and limiting the budgetary risk for payers

Managed entry agreements opportunity analysis

	Opportunities	Relative importance[1]
Payers	▪ Potential to re-evaluate the effectiveness of the drugs at a later stage and re-negotiate the price based on real-world evidence and thus to move towards a value-based pricing system	5
	▪ Help address post-licensing uncertainty by offering flexibility in dealing with new and often expensive treatments	5
	▪ Improve the cost-effectiveness through a discount or a payback agreement for non-responders	4
	▪ Potential to create synergies with existing initiatives on registries in Europe: pulling evidence from different countries could allow to generate a large pool of data and increase the statistical significance of the results	3
	▪ Enable different types of schemes addressing different needs, both financial and non-financial	3
Manufacturers	▪ Speed up reimbursement negotiations for drugs which are likely to be rejected by drug reimbursement agencies	5
	▪ Potential to benefit from a better corporate reputation because of the willingness to take responsibility for the use of the drug in real-life	4
	▪ Potential to reinforce the long-term collaboration between payers, health authorities and pharmaceutical companies	4
	▪ Enable discounts without impacting list prices	4
Patients	▪ Ability to gain faster access to innovative medicines	5

Sources: Managed entry agreements for pharmaceuticals: the European experience", Alessandra Ferrario and Panos Kanavos, April 2013 – Smart Pharma Consulting analyses

[1] Rating from 5 = very important to 1 = limited importance

The implementation of managed entry agreements are most often time-consuming and costly for payers and/or pharma companies, outweighing partially their benefits

Managed entry agreements threat analysis

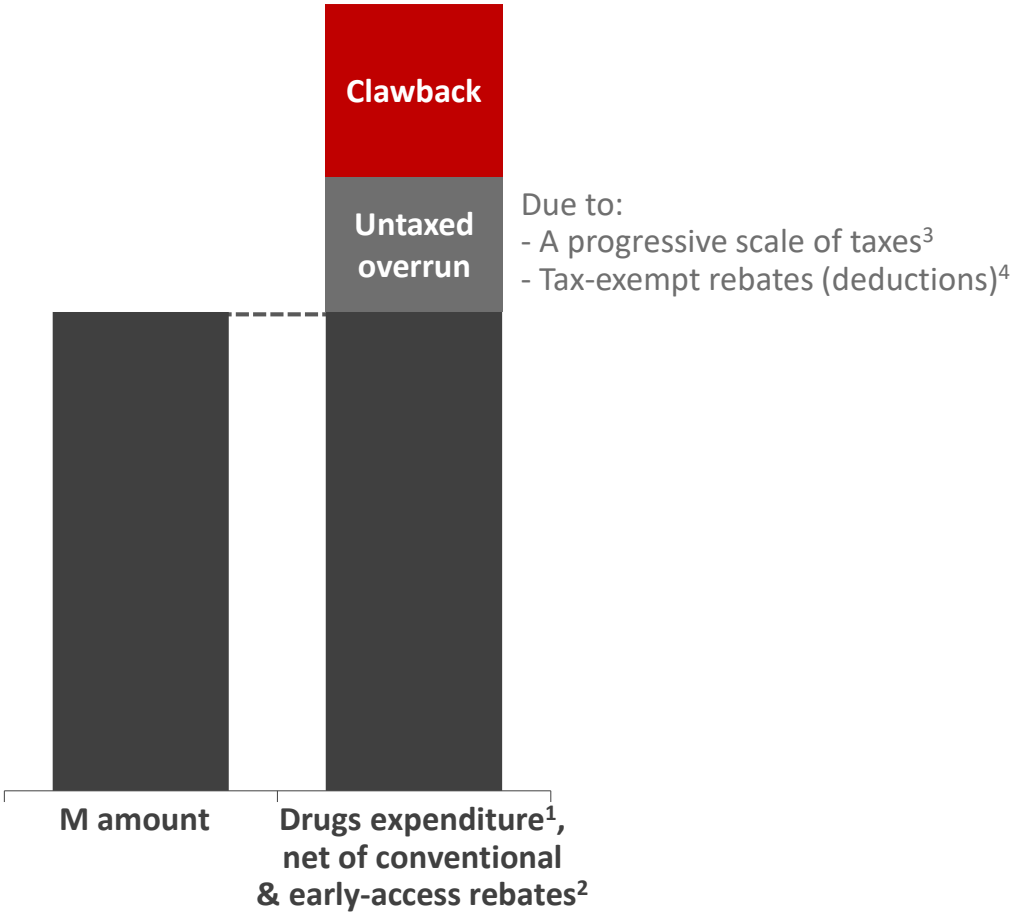
	Threats	Relative importance[1]
Payers	▪ If managed entry agreements proliferate without integrating with other activities and initiatives, the burden is likely to become too high	5
	▪ Additional efforts required to make a new drug available to patients (.g., negotiation time, monitoring of patient response, data gathering, development of registries)	4
	▪ Threat that manufacturers could start proposing higher entry prices in the expectancy of having to engage managed entry agreements	4
	▪ Limited capacity to implement and assess evidence, notably if implementation takes place at regional/hospital level	3
Manufacturers	▪ Costs can partially, and in some cases totally, outweigh benefits	4
	▪ Concessions required (e.g., refunds for non-respondent patients, discounts, gathering of additional data)	4
	▪ Voluntary versus no voluntary nature of such contracts leading to a variability in stakeholders' perception across countries	3
Patients	▪ Frequent lack of transparency on the agreements implemented, limiting the ability of patient groups to be aware of such contracts[2]	4
	▪ Legal issues regarding individual patient data collection and transfer	4

Sources: Managed entry agreements for pharmaceuticals: the European experience", Alessandra Ferrario and Panos Kanavos, April 2013 – Smart Pharma Consulting analyses

[1] Rating from 5 = very important to 1 = limited importance –
[2] Except in the UK where the NICE has made available a list of all the approved patient access schemes

The clawback is a provision created in France in 1999 aiming to regulate the health expenditure related to drugs by taxing the pharmaceutical companies

Case study: The safeguard clause (France) (1/2)



- The clawback (also known as "**safeguard clause**" or "**M contribution**") has been created by the 1999 LFSS (Social Security Financing Act)
- It is a financial regulation of the **drugs** market
- The objective is to **limit National Health Insurance Fund expenditure** by imposing a greater financial burden on the market players **who contribute most** to **this expenditure** and to its **growth**
- This mechanism is **triggered** when **drugs expenditure** exceeds a **threshold** (the "**M amount**")
- The value of the **"M amount"** is set each year in relation to the national health insurance expenditure target (ONDAM), by the parliament and voted under the LFSS
- The clawback is **regularly criticized** and has **evolved considerably** through the successive LFSS
- For **2024**, the "M amount" was set at € 26.4 B (+6.0% vs. 2023)

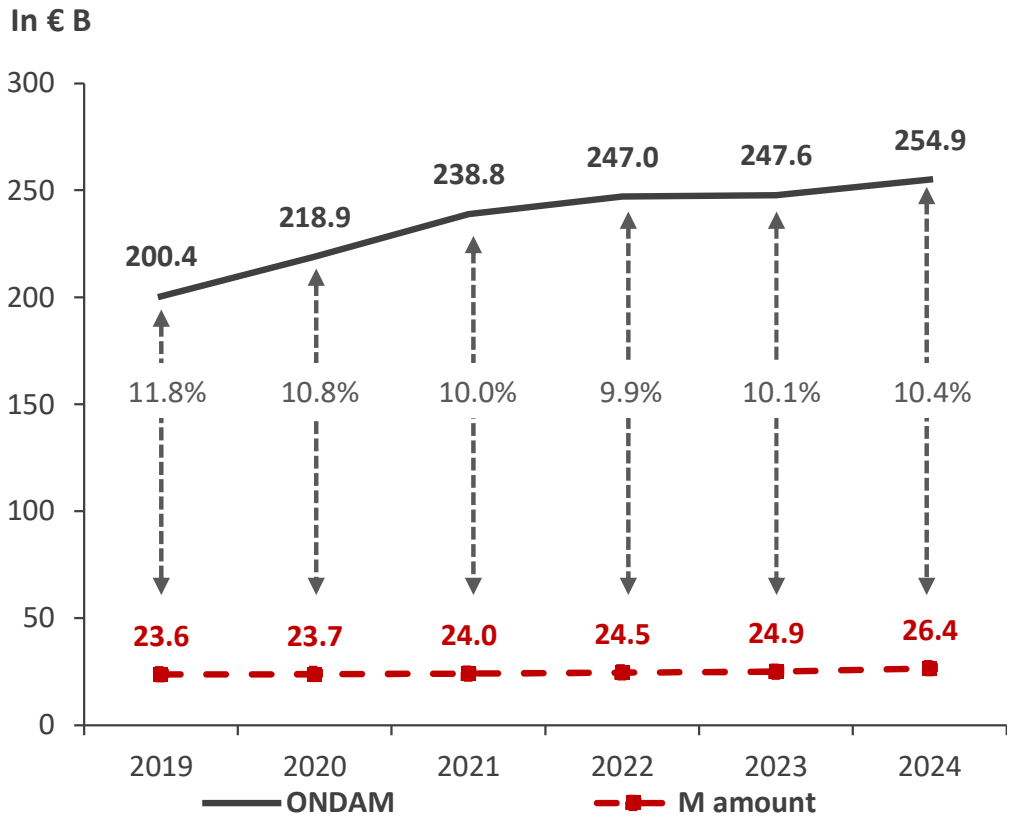
Sources: LFSS 2024 – Smart Pharma Consulting analyses

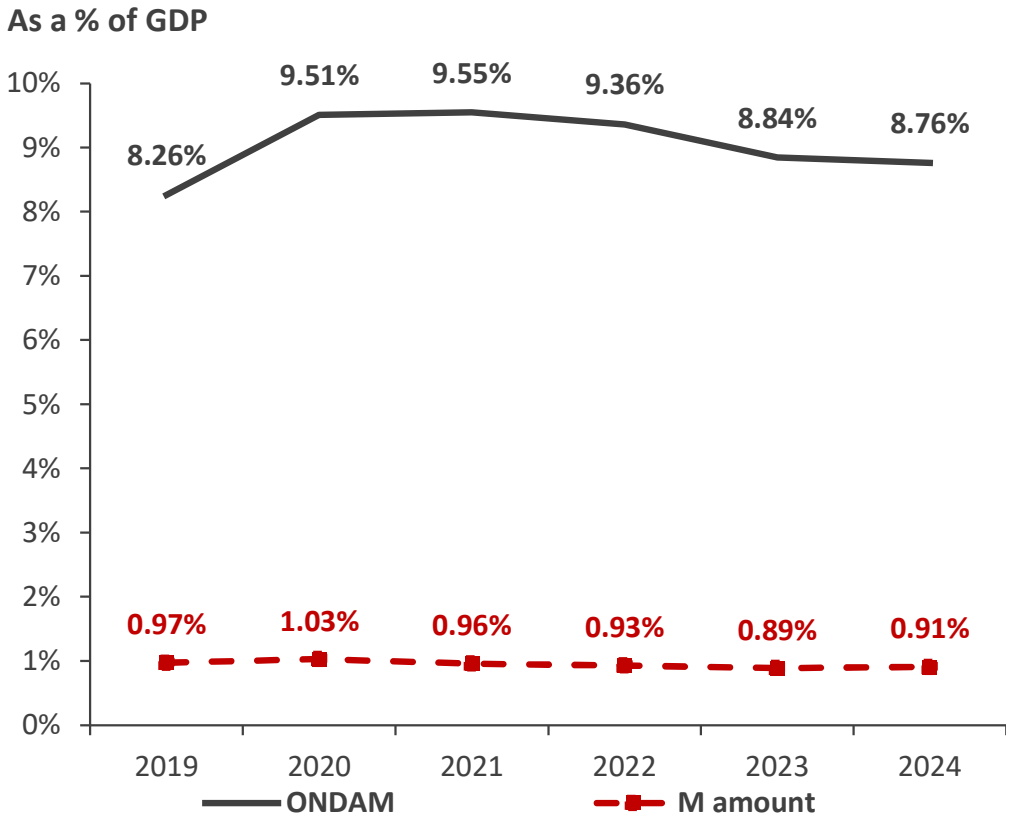
[1] Incl. retail sales and hospital sales for on-top of T2A and retrocession drugs – [2] Money reimbursed to the National Health Insurance Fund, corresponding to the difference between the official drug price list and the net price negotiated with the CEPS – [3] 50% on the portion of the overrun between 0 and 0.5 point, 60% on the portion of the overrun between 0.5 and 1 point and 70% on the portion of the overrun exceeding 1 point – [4] From 5% to 20% for companies under agreement, depending on pharma companies contribution to savings through net price cuts

For 2024, the ONDAM[1] has been set at € 255 B (i.e., 8.8% of the target GDP), and the M amount[2] at ~€ 26.4 B (~10.4% of the ONDAM)

Case study: The safeguard clause (France) (2/2)

M amount evolution (2019-2024)





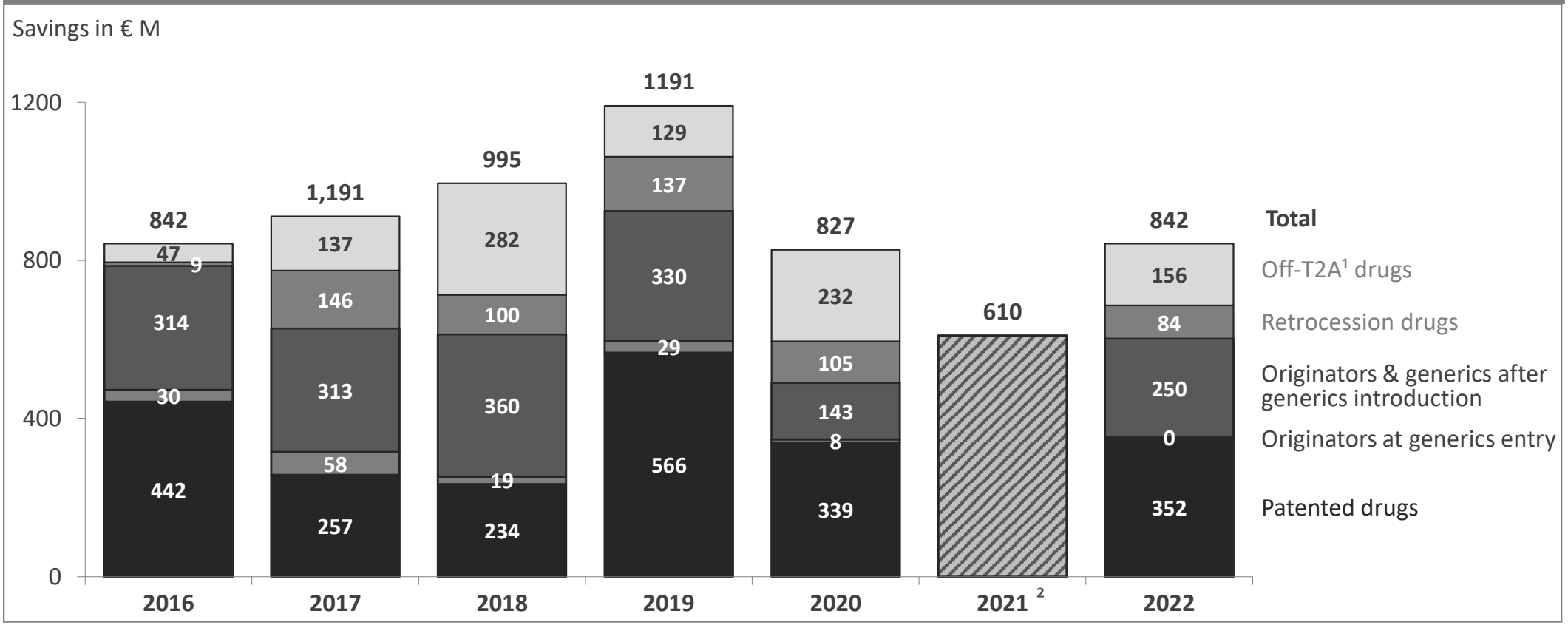
Sources: LFSS 2019 to 2024 – Smart Pharma Consulting analyses

[1] National objective for National Health Insurance Fund expenditure – [2] Trigger threshold of the clawback

Price cuts in France allowed € 842 M savings in 2022, mostly corresponding to price cuts on patented drugs

Case study: Price cuts in France

Savings attributable to price cuts in France (2016-2022)



Sources: CEPS annual report (December 2023) – Smart Pharma Consulting analyses

¹ Hospital drugs funded by the Assurance Maladie, on top of the T2A system – ² No breakdown available

Due to their impact on public budgets, French authorities voted a budget capping for all innovative hepatitis C drugs sales

Case study: HCV budget capping in France (2014)

Background

Initial issue

- In 2014, a **new generation** of treatments of **hepatitis C** such as Solvaldi (sofosbuvir) was launched
- These treatments reached high volumes from their **first year** on the market and **impacted public budgets**

French government solution

- French government, through the vote of the annual Social Security Finance Act (LFSS 2015), implemented an *ad-hoc* **mechanism of budget control** for hepatitis C drugs
- This mechanism was reevaluated in December 2016

Hepatitis C budget capping scheme

- The HAS (health authority) sets the list of products concerned by the capping
- Clawback payments are due by pharma companies to the Assurance Maladie if sales of these products (jointly):
  - Exceed a fixed amount called "Montant W" …
  - … and increase by more than 10% over the previous year
- Clawback payments calculation:
  - For sales between W and W+10%: 50% clawback
  - For sales between W+10% and W+20%: 60% clawback
  - For sales > W+20%: 70% clawback
- A company that signs an ad-hoc agreement with the CEPS may be exempted from the clawback payments for hepatitis C if the amount due to the Assurance Maladie according to this ad-hoc agreement is over or equal to 90% of what would be due under the hepatitis C scheme

→ This scheme allows a broad access to hepatitis C treatments by not rationalizing prescriptions

→ Clawback payments by companies for the fiscal year 2014 amounted to € 76.5 M

→ France is considered to be well positioned (from the public payer perspective) in terms of net price of HCV drugs vs. other European countries

Sources: Legifrance law L138-19-1 (Dec. 2016) – CEPS 2014/2015 annual report – Smart Pharma Consulting analyses

In Germany, AOK, the largest group of statutory health insurance funds which covers ~30% of the population, implemented a class-wide tender for the first time in 2014

Case study: Tenders of statutory health insurance funds in Germany

Background

- **Statutory health insurance funds** are responsible for the supply of drugs to their insured patients and **cover 89% of the population** in Germany (the other 11% being covered by private insurances)
- Statutory health insurance funds **usually run tenders for off-patent medicines based on the INN**
- **Patients** who opt for drugs that did not win tenders are required to cover the **price difference out-of-pocket**, while **physicians** or **pharmacists** may be **sanctioned** for not prescribing / substituting the tendered drugs
- **The federal association of the AOK** is one of Germany's largest group of statutory health insurance funds and covers **~30% of the German population**
- In **2014**, the federal association of the AOK announced the first **class-wide tender** for the **TNF-alpha inhibitors** class on behalf of seven regional AOK funds

Example: TNF-alpha inhibitors tender

- The **tender** grouped the following drugs:
  - Adalimumab (Humira, AbbVie)
  - Certolizumab (Cimzia, UCB)
  - Etanercept (Enbrel, Pfizer)
  - Infliximab branded (Remicade, Merck & Co)
  - Infliximab biosimilar (Inflectra, Hospira)
  - Golimumab (Simponi, Merck & Co)
- The drugs with the **winning bids** were **Inflectra, Cimzia** and **Simponi**
- The contract was run from November 2015 to October 2016, as a **test period**, and included an **option of extension**
- The conditions stated that **only patients' co-payment would apply**, physicians and pharmacists' sanctions would not

Sources: "Germany's AOK funds announce TNF-alpha inhibitors discount contracts, first across entire drug class", HIS – Smart Pharma Consulting analyses

Compulsory licenses are rarely issued but may be used as a threat to negotiate prices or increase access to most vital or strategic drugs, especially in the USA

Reasons to use of compulsory licenses in Western countries

For opportunistic situations	For price negotiations	For a better access to a drug
▪ **Merck & Co., 2005, Italy**: – The Italian competition authority granted a compulsory license to local producers for Tienem (imipenem/cisplatin, Merck & Co.) since it was the only European country where Merck & Co. held a patent – The compulsory license also granted local manufacturers the right to "export the product to European countries where Merck has already lost all patent rights" ▪ **GSK, 2006, Italy**: a similar case was observed in Italy with GSK's sumatriptan succinate	▪ **Bayer, 2001, USA**: – The DHHS[1] used the threat of a compulsory license for the patents on Bayer's Cipro (ciprofloxin), to successfully obtain a 50% price reduction – This negotiation was held while the USA tried to increase their stock of this unique treatment of anthrax ▪ **Abbott, 2004, USA**: to avoid a compulsory license, Abbott agreed to decrease by ~80% the price of its drugs for HIV/AIDS ritonavir ▪ **Merck & Co., 2007, Italy**: – Two years before the expiry of the CPC[2], the Italian competition authority granted a compulsory license to local generic manufacturers for Proscar/Propecia (finasteride) – This decision followed the refusal of Merck & Co. to grant this license and therefore to decrease prices of this drug	▪ **Sanofi-Pasteur, 2006, USA**: the CDC[3] have threatened to use compulsory licenses to expand access to patented technologies used to manufacture vaccines for avian flu ▪ **Genzyme, 2009-2012, USA**: – Genzyme was the only patent holder in the USA for an enzyme replacement therapy of Fabry's disease, Fabrazyme In Europe, Shire's Replagal was also available and based on the same technology – When Genzyme faced production issues in the USA between 2009 and 2012, patients had to be rationed and waiting lists were implemented – Patient associations asked the DHHS in 2010 to grant Shire a compulsory license to gain access to Replagal – The case was solved after Genzyme opened a new plant and solved manufacturing issues in 2012, without compulsory licenses to be issued ▪ **Myriad, 2013, USA**: – The company developed a genetic testing for breast and ovarian cancer based on federally-funded research, but charged $ 3-4 K per test, which was incompatible with broader testing of women – Senator Patrick Leahy asked the NIH to consider compulsory licenses to ensure greater access to genetic testing

Sources: Autorità Garante della Concorrenza e del Mercato – "Recent United States Compulsory Licenses", Knowledge Ecology International – "Recent European Union Compulsory Licenses", Knowledge Ecology International – "Timeline for Fabrazyme, Replagal", Knowledge Ecology International – Smart Pharma Consulting analyses

[1] Department of Health and Human Services – [2] Complementary Protection Certificate – [3] Centers for Disease Control and Prevention

Voluntary licensing gives patients faster and easier access to medicines, even though this access is not always guaranteed and is restricted by the patent holder

Voluntary licensing – Approach

Definition

- A **voluntary license** (VL) is an **authorization** given by the patent holder of an invention to a third party (e.g., a generic company) to produce, market, import and/or distribute that invention in return for a payment of royalties[1]
- VLs are also referred to as "**out-licensing**" and do not necessarily include technology transfer. Thus, the Indian affiliate of Merck & Co has signed a marketing deal with Sun Pharmaceuticals for two patented diabetes drugs (Januvia and Janumet) that will be marketed under different brand names in India
- Depending on the terms of the agreement, the licensee:
  - May act as an agent of the patent holder, with limited freedom, and receive fee

  or
  - Be free to set the terms of sale and distribution within the agreed geographical area, contingent on payment of a royalty
- VLs were requested by the civil society and health groups for more than 15 years to bring more competition on drug price

Analysis

- VL is a **strategic decision**, which is a means to:
  - Prevent compulsory licensing imposed by governments[2]
  - Limit the risks of patent challenges and of "copies" produced by generic companies (by signing agreements with them)
  - Enable the patent holder to reach lower income markets
  - Protect the corporate reputation (by contributing to facilitate the access to medicines, especially in low and lower-middle income countries)
- The terms of the VL agreement are set by the **patent holders** who will **stipulate certain conditions** such as:
  - The scope: countries and market segments (e.g., public vs. private, hospital vs. open care)
  - Possibilities to produce, market, import and/or distribute
  - The quality requirements
  - The exclusivity, semi-exclusivity or non-exclusivity of the license
  - Price ranges
  - Duration (e.g., three years, five years)
  - The amount of royalties to be paid

Sources: Tahir Amin (2007), IFPMA (2013), P. Londeix MDM (2014) – Smart Pharma Consulting analyses

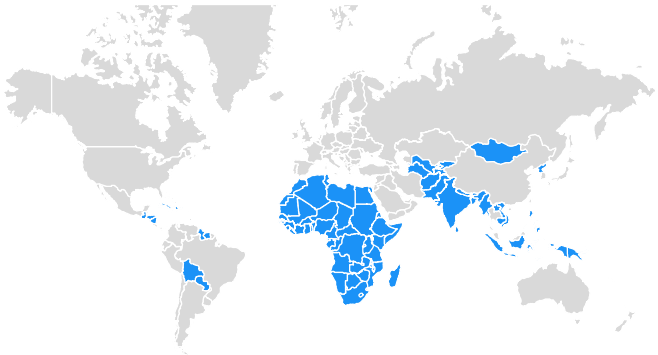
[1] In certain circumstances, a license can be granted to an intermediary sub-licensing agency, such as the Medicine Patent Pool founded by UNITAID since 2010, which will be allowed to negotiate licensing terms with interested licensees –
[2] Such as India, Malaysia, Brazil, Mozambique, Zambia, Zimbabwe, Ghana, Eritrea, Thailand, Ecuador, Indonesia

Gilead has signed voluntary licensing agreements with generic companies to give patients access to its HCV drugs in low and lower-middle income countries

Voluntary licensing – Gilead case study

GILEAD

Definition



- Gilead has signed licensing agreements for sofosbuvir (Sovaldi), ledipasvir/sofosbuvir (Harvoni) and velpatasvir/sofosbuvir with **11 generic companies** for the distribution in **103 developing countries**:
  - Aurobindo, Biocon, Cadila Healthcare, Cipla, Hetero Labs, Laurus Labs, Viatris, Natco Pharma, SeQuent Scientific, Strides Shasun and Sun Pharma
- Gilead has also signed agreements with three **local generic companies** for in-country production and distribution:
  - Ferozsons laboratories (Pakistan), Magic Pharma (Egypt), Pharmed Healthcare (Egypt)

Analysis

- Licensees receive a complete **technology transfer** of the Gilead manufacturing process…
- … and are **free to set the price level** of sofosbuvir and of ledipasvir/sofosbuvir
- However, it does not guarantee an actual access to treatment due to the lack of basic health facilities or to the high HCV burden
- Price will not drop if competition in each country is low
- Gilead receive **royalties' payment** of 7% of the generic price for sofosbuvir and the single tablet regimen of ledipasvir/sofosbuvir to support:
  - Product registrations
  - Medical education and training
  - Safety monitoring

Sources: Gilead press release (Nov. 2017) – IFPMA (2013) – Smart Pharma Consulting analyses

Tiered pricing enables to increase affordability of drugs in lower-income countries but exposes to the risk of parallel trade, diversion and international reference pricing

Pricing differentiation or tiered pricing – Approach

Definition

- **Pricing** "**differentiation**"[1] refers to a company selling identical products/services at different prices to different markets[2]
- It is called "tiered", "equity" or "affordability-based" pricing when the intention is to **improve the affordability** of medicines in low-income markets
- In this system, patients in developed, high-income countries, pay higher prices than patients in developing, low-income or middle-income countries
- For a pharmaceutical company wishing to engage in price differentiation, there is a need to **limit sales at the defined price** to the market of destination and to **put barriers** to prevent buyers from **switching** from one supplier to another (prevent "parallel trade")
- The use of price differentiation strategies has mainly been used for vaccines, contraceptives and antiretrovirals (ARVs) to increase their access in low-income countries
  MSD used this strategy to launch Januvia, a type-2 diabetes drug, in India at a price of 0.64 USD per tablet (20% of the US price) after having consulted 350 Indian doctors and patients

Analysis

- **Adapting drug prices** to the **purchasing power** of different geographical or socio-economic segments could potentially be very **effective to improve access** to medicines for people living in low and middle-countries
- Differential pricing also allows pharmaceutical companies to signal that their pricing policies are **socially responsible** and consistent with their obligations to society
- A **well-implemented differential pricing system** should at least lead to **increase sales** for pharmaceutical manufacturers
- To help pharmaceutical companies differentiate prices and avoid political pressures from middle-income countries (to lower drug prices and to increase access), they could use **intra-country differential pricing** (with wealthier patients seeking treatments and obtain medicines in channels different from their poorer counterparts)
- Pharma companies can also work with **global agencies** to share the risks of arbitrage, and they could develop contractual agreements with public or private distribution channels

Sources: Pharmaceutical pricing - The use of external reference pricing", Ruggieri & Nolte – "Principles for application of international reference pricing systems", EFPIA – "External reference pricing of medicinal products: simulation-based considerations for cross-country coordination", European Commission – Smart Pharma Consulting analyses

[1] Or "pricing discrimination" – [2] Different people or groups of people, including population of different countries

GSK which was one of the first vaccine companies to adopt a tiered pricing approach for its vaccines, has designed a new model in 2013 with seven different tiers

Pricing differentiation or tiered pricing – GSK case study

Definition

- For public markets, GSK's pricing policy focuses on **expanding access** via **national immunization programs** at **affordable prices** for governments
- Maximum prices and country membership in a pricing tier are defined by Gross National Income (GNI) per capita which is used as an indicator of **governments' ability to pay**
- GSK's approach to public sector prices is organized into seven tiers according to the GNI ranking of the countries
- The tier 7, the lowest, corresponds to GAVI[1] eligible countries
- The remaining three World Bank groups of HIC (High Income Countries), UMIC (Upper Middle-Income Countries) and LMIC (Lower Middle-Income Countries) will each comprise two tiers
- Increasing the number of tiers enables GSK to be more finely attuned to a country's ability to pay
- Introducing a **more formalized and transparent approach** should also support governments – particularly those in the process of transitioning out of GAVI support – with their budget planning

Analysis

- Each Income Tier is divided into price ranges based on four criteria, three of which incentivize public health policy commitments to vaccination:
  1. The committed duration for vaccination in the disease area
  2. The coverage of the target population which rewards the health benefit of well implemented vaccination program
  3. For vaccines with broad age recommendations such as cervical cancer vaccines, a government's commitment to vaccinate catch-up cohorts as part of their national immunization program
- The fourth criteria is the committed number of doses to be purchased, which is weighted less than previous ones together to ensure that governments with small populations who are fully committed are not disadvantaged by their size
- In 2016, 16 countries are in the process of transitioning out of Gavi support. These countries have successfully implemented mass vaccination program with new vaccines but are still struggling with the cumulative effect of these programs on national immunization budgets. GSK will provide them with pricing support to transition to their respective Tiers as they are transitioning out of Gavi support

Sources: "Our position on pricing and access", GSK (Oct. 2023) – Gavi website – Smart Pharma Consulting analyses

[1] GAVI is a nonprofit organization based in Geneva that facilitates the purchase of vaccines. It creates a more attractive vaccines market by bringing together 72 developing countries under one umbrella and raising funds from leading donors – largely industrialized-country governments and key multilateral organizations – for the purchase of vaccines. The procurement process is handled through UNICEF

Partnering with patient advocacy groups may help pharma companies generate awareness, shape favorable regulations and obtain earlier access and payer coverage

The influence of Patient Advocacy Groups on pricing and reimbursement decisions

Generating awareness	Shaping the regulation / legislation	Claiming payers' coverage
▪ The question of the **funding of expansive hospital drugs** was questioned in the Netherlands since the mid-1990s ▪ The **public consultation** included regulators, hospitals and private reimbursement companies but **excluded patients** and specialists ▪ It was agreed to **cover** expansive hospital drugs **partly between hospital budgets** and **private insurances**, based on a negotiable percentage ▪ **Patient organizations** in the field of breast cancer (BNV, NFK) **raised the political awareness** that patients would face **inequalities in the access to Herceptin** (Roche) since hospitals have different budgets and healthcare resources allocations	▪ Patient advocacy groups can be **instrumental** in the development of **drugs regulation or legislations** ▪ That was the case in the formation of **orphan drug legislations** in the USA (US Orphan Drug Act) and in the EU (CE n°141/2000). Patient organizations such as Nord (USA) or Eurodis (EU) played the role of "**surrogate pressure groups**" and played a key role during the drafting of legislations ▪ Another example was found in the **USA** when the Centers for Medicare & Medicaid Services (CMS) proposed to **reduce the number** of "**protected classes**" covered by Medicare part D plans[1], i.e., to remove antidepressant, immunosuppressant and antipsychotic classes. Several **patient advocacy groups** partnered within the Partnership for Part D Access to **lobby against CMS proposal**	▪ Patient advocacy groups often play an important role to **promote** the **drug coverage** by payers ▪ This statement is particularly true for the coverage of **orphan drugs** for rare diseases ▪ For example, patient advocacy groups played an important role for the **promotion of R&D** and in **arguing for the full reimbursement** of **Cerezyme** (Sanofi) in the treatment of Gaucher's disease. Genzyme also partnered with the humanitarian organization project HOPE with the aim of guaranteeing the reimbursement of Cerezyme around the world

Sources: "Orphan drug legislation: lessons for neglected tropical diseases", International journal of health planning and management – "Access to Orphan Drugs: A Comprehensive Review of Legislations, Regulations and Policies in 35 Countries", PLOS ONE – Partnership for Part D Access website – "The impact of patient advocacy: the case of innovative breast cancer drug reimbursement", Sociology of Health & Illness Vol

[1] Classes in which all drugs are covered by Medicare under Part D plans (anti-retrovirals; immunosuppressant when used for organ rejection; anti-depressants; anti-psychotics; anti-convulsant agents; and anti-neoplastics)

In most of countries, the financing of the healthcare system is not designed to accommodate innovative pricing models, CAR-T cells

Alternative pricing models

Situation analysis

- Curative therapies have emerged from gene therapy researches for several life-threatening diseases (e.g., multiple myeloma, mantle cell lymphoma)
- Unlike most common drugs which address large patient populations needing life-long therapies, gene therapies like CAR-T cells can cure certain diseases
- CAR-T cells have been proposed by pharma companies at an upfront costs ranging from USD 500 K to several millions
- A new paradigm is required to set prices of these drugs so that payers can finance them

	Use in markets	Use in countries	Drug suitability
Financial risked-based contracts	Full or partial reimbursement based on predetermined financial outcomes	Europe: high USA: emerging	Competitive high-priced drugs (e.g., oncology, biosimilars)
Outcome-based contracts	Full or partial reimbursement if target outcomes are not achieved	Europe: medium USA: emerging	Drugs for which outcomes are easy to measure (e.g., diabetes, hep. C)
Mortgage model	Payers can spread the cost over a defined duration	Emerging	High-priced drugs w/o direct competition (e.g., gene therapy)
Indication-specific model	Differential pricing based on performance by indication	Emerging	When multiple indications with significantly different valuations
Volume-based pricing model	Differential pricing based on volumes	High	Where large quantities are required (e.g., vaccines)

Sources: Adapted by Smart Pharma Consulting after A. Kielhorn & R. Whittington (2022)

The trend of integrating broader inputs in the price equation might be perceived as fair by pharma companies but increases the complexity of their development of evidence

Conclusion – Current trends to determine the price of drugs

- In Europe, **different models cohabit** to set innovative drugs price
- If some countries such as Germany opted for a valuation of drugs based on their **healthcare benefits**, other countries such as France or the UK tend to consider other elements in the equation such as **cost-effectiveness** or **health-related quality of life**
- The **trend** goes towards a **broader** consideration of the **impact** of innovations with the possible integration of elements such as "Wider Societal Benefits", but authorities might face some **difficulties** to implement the concept due to complex **methodologies** and potential **discriminations** between patients' groups
- This trend may **impact pharma companies** which, if they are able to benefit from a "fair" price for their innovations, might as well increase the **level of evidence required** for their price and reimbursement dossiers
- This fact explains why pharma companies must **anticipate their market access process earlier** and **plan** their activities according to local requirements
- In parallel, countries are expected to continue to use **international price referencing** to make sure that they pay a price consistent with comparable economies. Pharma companies must master these processes to make sure that they set their **launch sequences** for an optimal profitability
- Compulsory licenses to negotiate the price of some essential drugs might also still be used by countries

Sources: Smart Pharma Consulting analyses

Smart Pharma
CONSULTING

Healthcare Costs
Regulation in France

Better Insights…
… for Better Anticipation

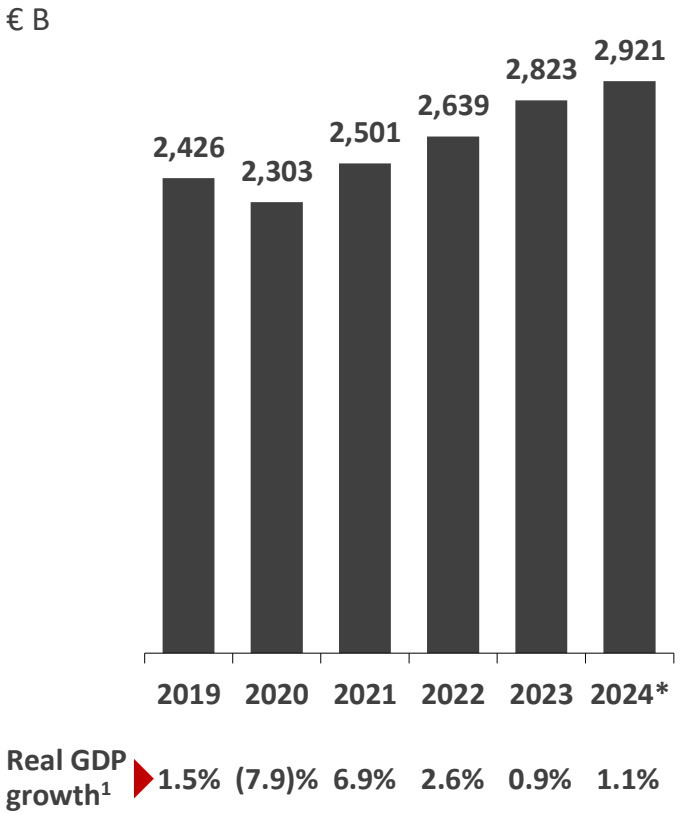
November 2024

1, rue Houdart de Lamotte – 75015 Paris – France
Tel. +33 6 11 96 33 78 – jmpeny@smart-pharma.com – www.smart-pharma.com

With a 2024 public deficit expected to amount to 6.1% of GDP and a public debt of 112.9% of GDP, France is far from the stability objectives defined at EU level (3% and 60%, respectively)

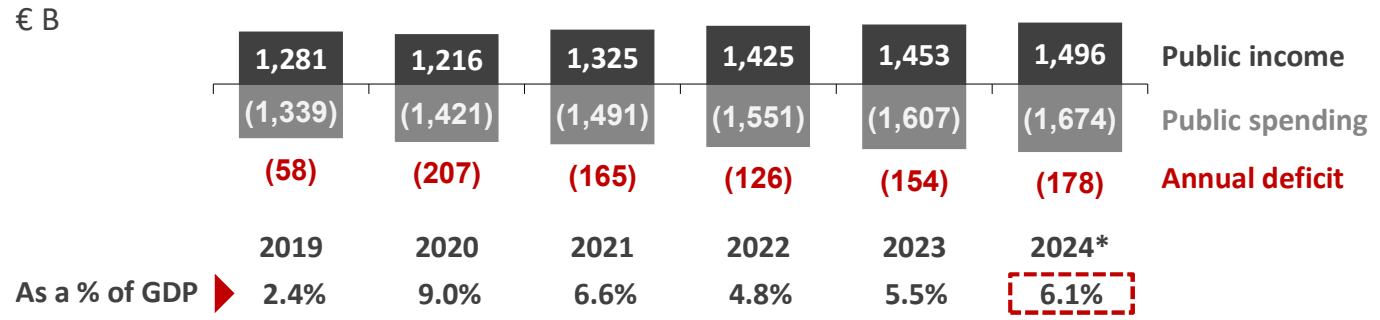
Key macroeconomic indicators (2019 – 2024)

GDP



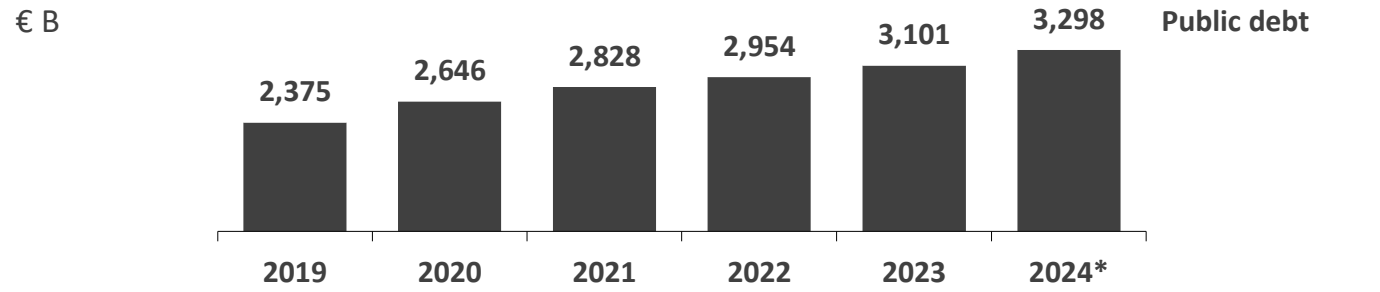
	2019	2020	2021	2022	2023	2024*
Real GDP growth[1]	1.5%	(7.9)%	6.9%	2.6%	0.9%	1.1%

Public annual deficit



	2019	2020	2021	2022	2023	2024*
As a % of GDP	2.4%	9.0%	6.6%	4.8%	5.5%	6.1%

Public debt



	2019	2020	2021	2022	2023	2024*
As a % of GDP	97.9%	114.9%	113.0%	111.9%	109.8%	112.9%

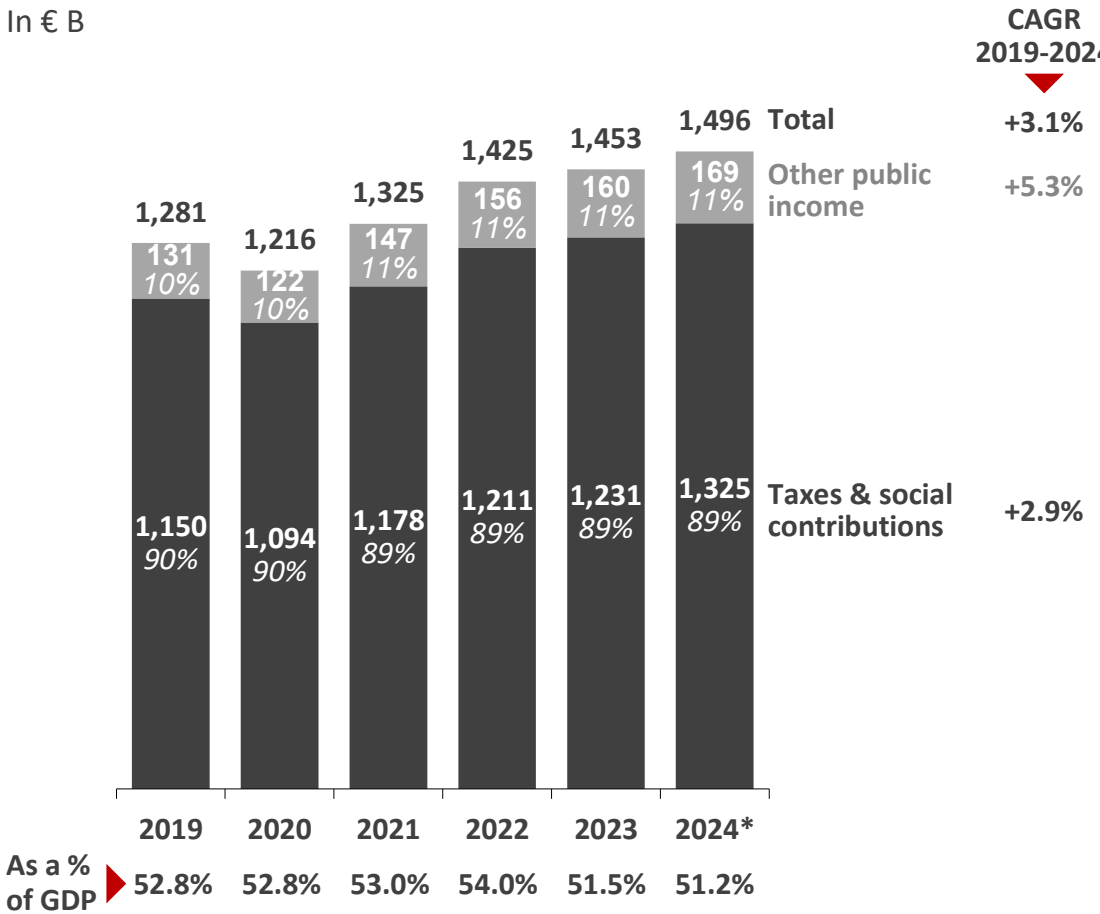
** Estimates, based on the latest figures published by the Ministry of Economy*

Sources: INSEE (November 2024) – HCFPs[2] opinion on the PLFSS[3] 2025 (October 2024) – PLFG[4] 2024 (November 2024) – PSMT[5] 2025-2029 (October 2024) – Stability and Growth Pact (1997) – Maastricht Treaty (1992) – Smart Pharma Consulting analyses

[1] GDP growth rate adjusted for inflation – [2] Haut Conseil des Finances Publiques: High Council of Public Finances – [3] Projet de Loi de Financement de la Sécurité Sociale: Social Security Financing Act Project – [4] Projet de Loi de Finance de Fin de Gestion: Project of Financial Law – [5] Plan budgétaire et Structurel à Moyen Terme: Medium Term Budgetary and Structural Plan

Taxes and social contributions account for 89% of public income, which highly depends on GDP growth that the government estimates at less than +1.5% p.a. over the 2025 – 2028 period

Public income (2019 – 2024)



- Taxes and social contributions account for ~89% of total public income:
  - Social contributions: ~32%
  - Taxes on production (incl. VAT) & imports: ~31%
  - Taxes on revenues (incl. income taxes) & wealth: ~25%
  - Taxes on the capital: ~1%
- Other public incomes (~11%) include:
  - Production revenues[1]: ~7%
  - Property incomes[2]: ~1%
  - Other public incomes: ~3%
- Thus, **public income** highly **depends** on **economic growth**
- With a real **GDP growth** estimated to range from **+1.1%** to **+1.5%** from **2025** to **2028** (as assumed by the Ministry of Economy in its 2025-2029 PSMT[6]), public income should not increase significantly, unless the government takes new compulsory levy measures

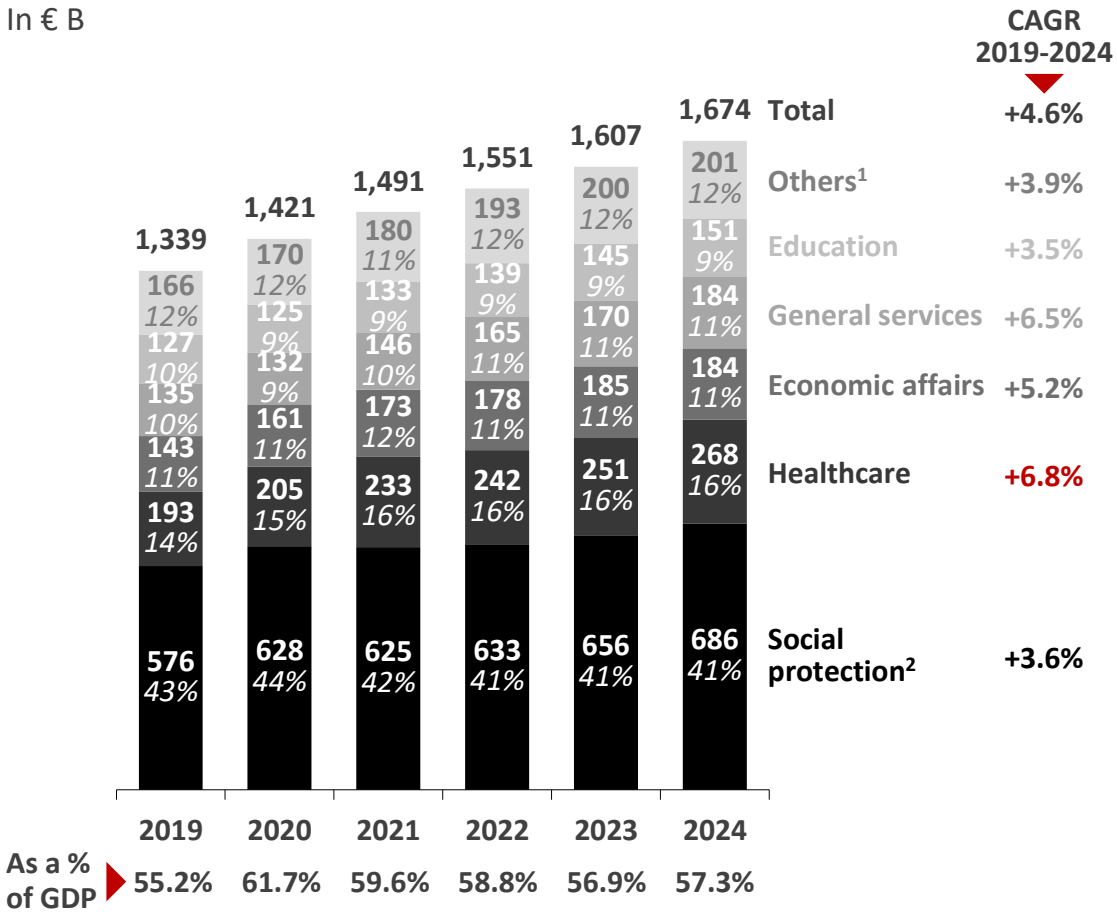
** Estimates, based on the latest figures published by the Ministry of Economy*

Sources: INSEE (November 2024) – HCFPs[3] opinion on the PLFSS[4] 2025 (October 2024) – PLFG[5] 2024 (November 2024) – PSMT[6] 2025-2029 (October 2024) – Smart Pharma Consulting analyses

[1] Revenues from public industrial and commercial activities – [2] Income from properties owned by the State, dividends from companies – [3] Haut Conseil des Finances Publiques: High Council of Public Finances –[4] Projet de Loi de Financement de la Sécurité Sociale: Social Security Financing Act Project – [5] Projet de Loi de Finance de Fin de Gestion: Project of Financial Law – [6] Plan budgétaire et Structurel à Moyen Terme: Medium Term Budgetary and Structural Plan

Although the government and the public payer try to contain the rise of healthcare expenditures, their weight keeps on growing in total public spending

Public spending (2019 – 2024)



- In 2024, public spending in healthcare should reach € 268 B
- It should account for 16% of the total public spending (+2 pts vs. 2019 due to a +6.8% CAGR, higher than the +4.6% CAGR for total public spending and the +3.1% CAGR for total public income)
- It is the 2nd largest public spending item, after social protection
- It is distributed as follows:
  - Hospital services (41%)
  - Ambulatory services (35%)
  - Drugs and medical devices (16%)
  - Public health services (5%)
  - Other items such as public research (3%)
- Drugs is the 3rd largest source of healthcare costs and the easiest on which to apply cost-containment measures as:
  - It is politically better accepted by citizens than any restriction on the other healthcare segments
  - It is technically and practically easy to implement considering the high bargaining power of the government and the public payer vs. pharma companies

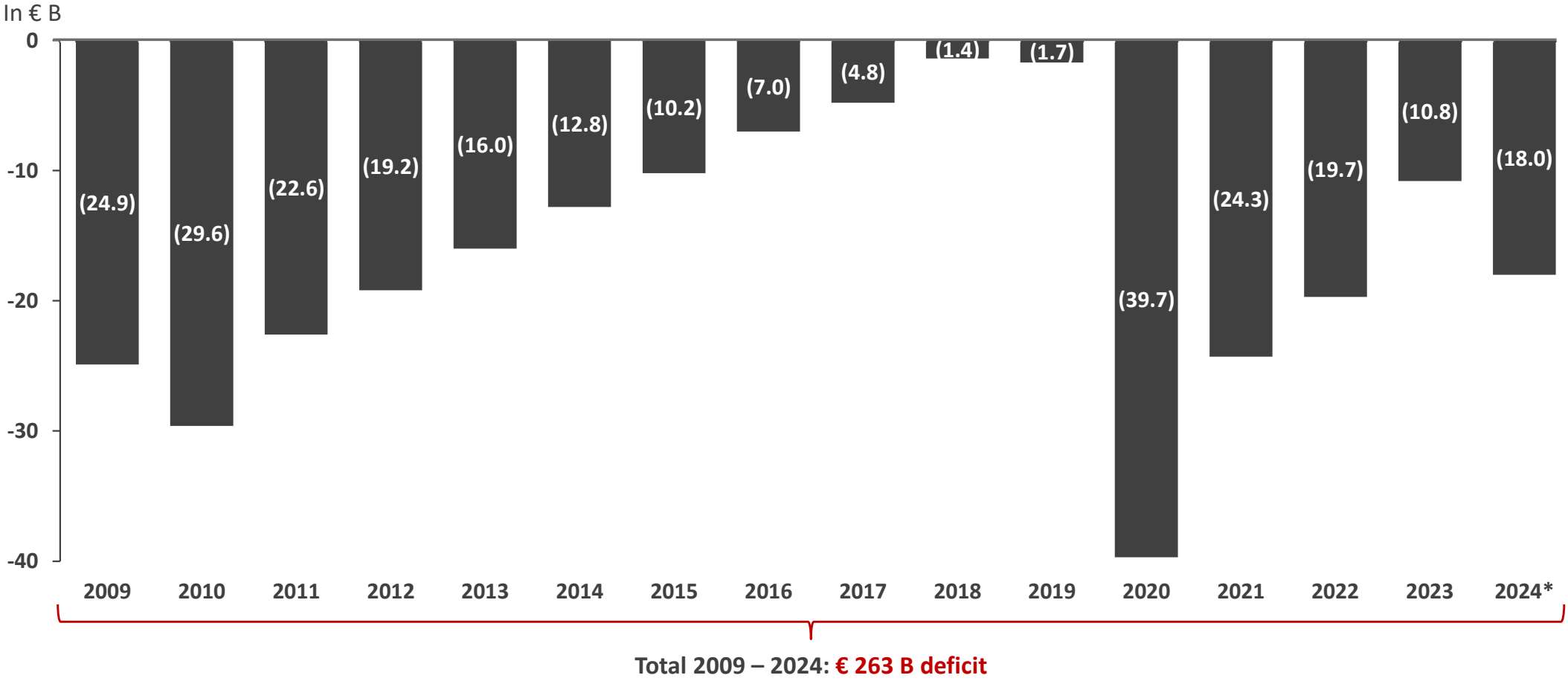
** Estimates, based on the latest figures published by the Ministry of Economy*

Sources: INSEE (November 2024) – HCFPs opinion on the PLFSS 2025 (October 2024) – Smart Pharma Consulting analyses

[1] Incl. defense (3%), public order and safety (3%), leisure, culture and worship (2%), housing and collective facilities (2%) and environmental protection (2%) – [2] Incl. old-age solidarity fund (22%), work stoppages due to illness or disability (5%), family and children (4%), unemployment (3%), social exclusion (2%) and others (5%)

The National Health Insurance Fund cumulated a € 263 B deficit since 2009, of which ~€ 40 B in 2020, resulting from the Covid-19 crisis

National Health Insurance Fund deficit – General regime[1] evolution (2009 – 2024)



Total 2009 – 2024: € 263 B deficit

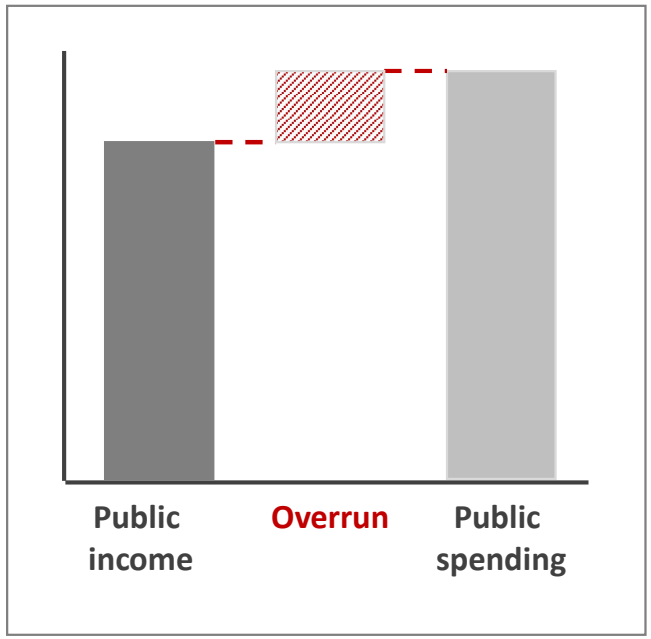
** As estimated n the PLFSS 2025*

Sources: Court of Auditors report (October 2024) – PLFSS 2025 (October 2024) – Smart Pharma Consulting analyses

[1] Including old-age solidarity fund (FSV: "Fonds de solidarité vieillesse")

The government can activate four levers to regulate the cost of the drugs reimbursed by the National Health Insurance Fund

Levers to regulate drug public spending



1 Drugs price & reimbursement

- Price is set by the CEPS at drug launch and then revised down, along the product life cycle (before and after patent expiry)
- The reimbursement rate is set by the MoH, on the recommendation of the Transparency Committee of the HAS (National Authority for Health)[1] and can be modified over time

2 Drugs rebates to the National Health Insurance Fund

- Rebates (i.e., paybacks) are set by the CEPS[2] according to various schemes
- These rebates apply mainly to products having the most impact[3] on drugs cost increase from one year to another
- These rebates do not apply to generics and biosimilars

3 Clawback

- When the net sales of pharma companies exceed the "M amount" (e.g., € 26.4 B for the year 2024) voted by the Parliament for the year to come, they must repay an unpredictable part of the overrun, based on a changing and unclear calculation method

4 Medical control of the healthcare expenses

- Actions implemented by the National Health Insurance Fund to improve the appropriateness of care and reduce the unnecessary consumption of drugs

Sources: PLFSS & Médicament, Leem (September 2024) – Smart Pharma Consulting analyses

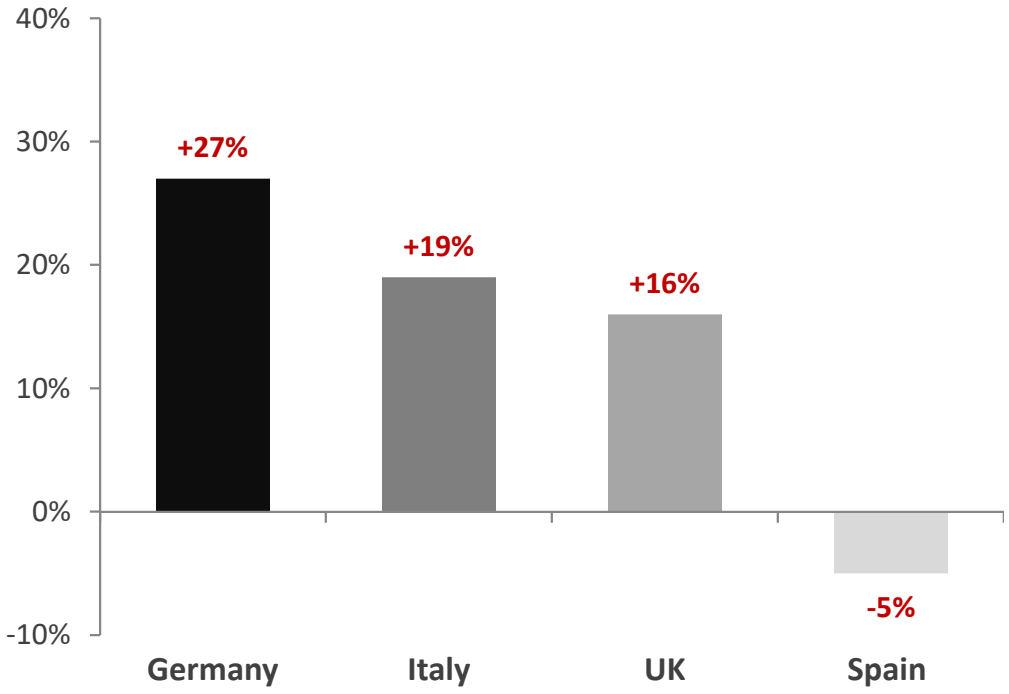
[1] Depending on the indication – [2] Comité Economique des Produits de Santé: Drug Pricing Committee – [3] Such as innovative products having a strong budget impact

When compared to the four largest pharma markets in Europe, the average regulated prices of drugs in France are the lowest, irrespective of whether generics are present or not

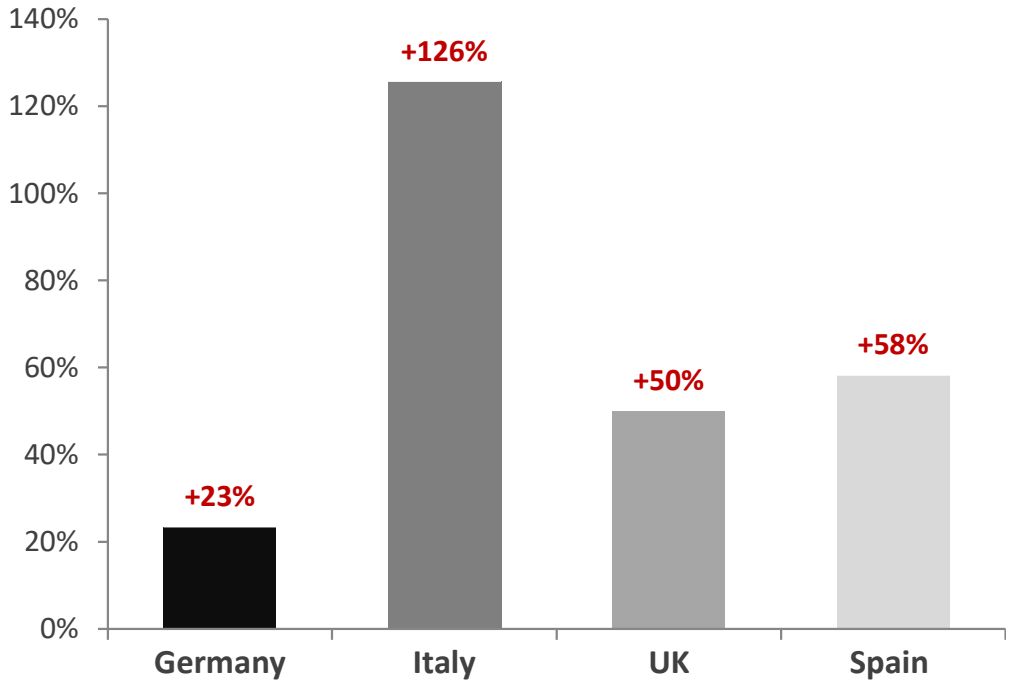
1

Drugs price & reimbursement: International comparisons (2023)

Price differences of selected countries vs. France
Without generic direct competition



Price differences of selected countries vs. France
With generic direct competition



Percentage in relation with the French average regulated price

Sources: International price comparisons 2023, TLV & IQVIA (January 2024) – Smart Pharma Consulting analyses

In 2022, the total net rebates due by pharma companies to the CEPS[1] reached € 7.5 B (incl. € 1.2 B clawback rebates)

2 3

Drugs rebates to the National Health Insurance Fund & Clawback (2022)

3 types of rebates due by pharma companies to the CEPS

	Conventional rebates specific to certain products	Early Access Program (EAP) rebates	Clawback (also called "Safeguard clause" or "M contribution")
Description	**Clauses agreed between CEPS and pharma companies for 349 specific products** ▪ "First-pack" clawbacks ▪ Volume clauses ▪ Capping clauses ▪ Daily dosage clauses ▪ Performance clauses	**Rebates due when the reference price decided by the CEPS is lower than the price invoiced during its EAP period** ▪ Until July 2021, the maximum price per patient per year was € 10,000 for annual sales above € 30 M ▪ Since then, the cap has been removed but specific rebates have been established based notably on product annual sales	▪ **Rebates depending on whether an amount of drugs expenses (the "M amount") is exceeded at year-end** ▪ The M amount was set as follows: – € 24.0 B in 2021 (+1.2% vs. 2020) – € 24.5 B in 2022 (+2.1% vs. 2021) – € 24.9 B in 2023 (+1.6% vs. 2022) – € 26.4 B in 2024 (+6.0% vs. 2023)
Rebates in 2022 (gross amount)	**€ 5.7 B**	**€ 0.8 B**	**€ 1.2 B**

Σ = € 7.7 B gross amount, representing a net amount of € 7.5 B[2]

Sources: CEPS annual report (January 2024) – LFSS 2024 (December 2023) – Smart Pharma Consulting analyses

[1] Comité Economique des Produits de Santé: Drug Pricing Committee –
[2] After deducting € 201 M of credit notes on rebates

Specific clauses may be added to conventions between the CEPS[1] and pharma companies, leading to potential rebates (i.e., paybacks) on certain products depending on various factors

2

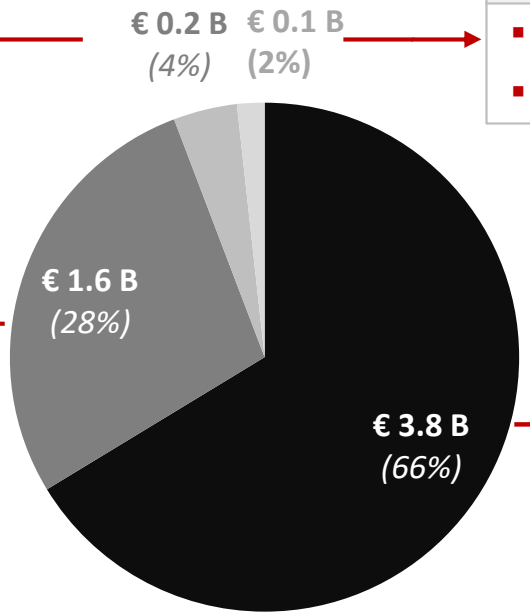
Conventional rebates specific to certain products (2022)

Capping clauses

- These are closed envelopes for orphan drugs (similar to volume clauses, but in value)

Volume clauses

- Rebates due when sales reach a pre-set level (for example, it is used to make sure a drug is not used off-label)



Other specific clauses

- Daily dosages clauses
- Performances clauses

"First-pack" clawbacks

- These correspond to payment of the differential between the price at face value and the net price sought by the CEPS when the risk of parallel exports leads to a need to separate these prices

Σ = € 5.7 B

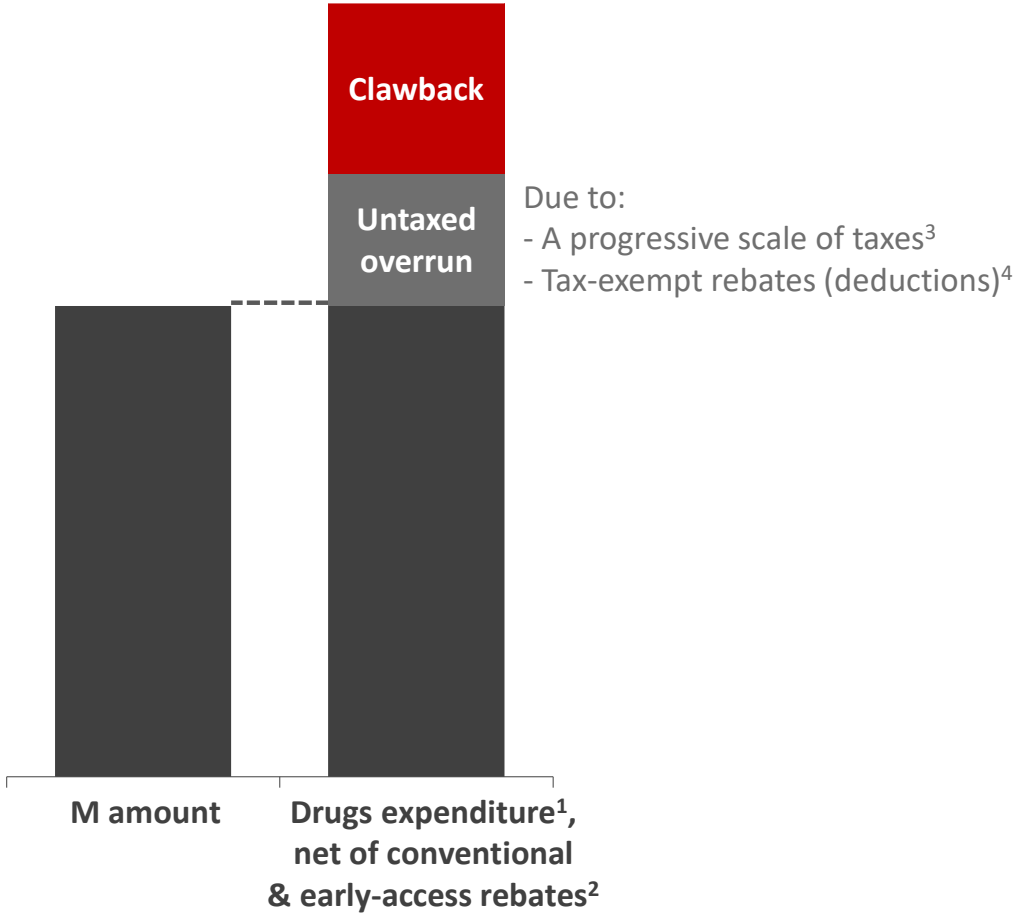
Sources: CEPS annual report (January 2024) – Smart Pharma Consulting analyses

[1] *Comité Economique des Produits de Santé: Drug Pricing Committee*

The clawback is a provision created in 1999 aiming to regulate the health expenditure related to drugs by taxing the pharmaceutical companies

3

Clawback – Definition



- The clawback (also known as "**safeguard clause**" or "**M contribution**") has been created by the 1999 LFSS (Social Security Financing Act)
- It is a financial regulation of the **drugs** market
- The objective is to **limit National Health Insurance Fund expenditure** by imposing a greater financial burden on the market players **who contribute most** to **this expenditure** and to its **growth**
- This mechanism is **triggered** when **drugs expenditure** exceeds a **threshold** (the "**M amount**")
- The value of the **"M amount"** is set each year in relation to the national health insurance expenditure target (ONDAM), by the parliament and voted under the LFSS
- The clawback is **regularly criticized** and has **evolved considerably** through the successive LFSS
- For **2024**, the "M amount" was set at € 26.4 B (+6.0% vs. 2023)

Sources: CEPS annual report (January 2024) – LFSS 2024 (December 2023) – Smart Pharma Consulting analyses

[1] Incl. retail sales and hospital sales for on-top of T2A and retrocession drugs – [2] Money reimbursed to the National Health Insurance Fund, corresponding to the gap between the official list price and the net price negotiated with the CEPS – [3] 50% on the portion of the overrun between 0 and 0.5 point, 60% on the portion of the overrun between 0.5 and 1 point and 70% on the portion of the overrun exceeding 1 point – [4] From 5% to 20% for companies under agreement, depending on pharma companies contribution to savings through net price cuts

Generics were exempted from the clawback until 2019, date from which they were included in the mechanism

3

Clawback – Principles (1/2)

	1999/2000	2001-2005	2005-2009	2010	2011-2014	2015-2016	2017	2018	2019-2021	2022	2023
Companies scope	▪ Not under agreement with the CEPS					▪ All companies ▪ Those that have signed an agreement with the CEPS pay a contribution equivalent to the clause minus an abatement					
Rebates (deductions) on the clawback						▪ 20% rebate for companies under agreement			▪ 5% to 20% rebate for companies under agreement		
Drugs scope											
Retail original drugs	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Retrocession (list 5126-4)			✓	✓	✓	✓	✓	✓	✓	✓	✓
On top of T2A				✓	✓	✓	✓	✓	✓	✓	✓
Early access programs and list 162-16-5						✓	✓	✓	✓	✓	✓
Very Early Access											✓
Import or distribution specialties										✓	✓
Generics									✓	✓	✓
Orphan drugs					**Sales>€30M**	**Sales>€30M**	**Sales>€30M**	**Sales>€30M**	✓	✓	✓
Growing innovative drugs											✓
Drugs bought by SPF[1]											✓

Sources: Legifrance – Smart Pharma Consulting analyses

[1] Santé Publique France: Public agency with expertise in prevention, education and health promotion

Since 2023, the clawback is distributed amongst pharma companies based on both revenues and growth (70% and 30% of the contribution, respectively)

3

Clawback – Principles (2/2)

	1999/2000	2001-2005	2005-2009	2010	2011-2014	2015-2016	2017	2018	2019-2021	2022	2023
Revenues deduction						▪ Conventional rebates (e.g., caping, pay for performance and/or price-volume agreements, early access rebates)					
Authorized growth of total reimbursable rate	▪ Rate of increase of the ONDAM but substituted from 2000, by a specific K rate[1]		▪ ONDAM progression rate but substituted by a specific and identical K rate for the 2 subgroups (retail and hospital markets)			▪ L rate[1]	▪ Lv rate (retail market) ▪ Lh rate (hospital market)		▪ M rate[1] (%)	▪ M amount (in €)	
Tax rates	▪ Between 0.15% and 3.3% of sales depending on the overrun	▪ 50% on the portion of the overrun between 0 and 0.5 point ▪ 60% on the portion of the overrun between 0.5 and 1 point ▪ 70% on the portion of the overrun exceeding 1 point									
Method of distribution	▪ 30% on the share of sales / overall sales ▪ 40% on the share of sales growth in relation to overall growth ▪ 30% on the share of promotional expenses in relation to overall promotional expenses					▪ 50% on the share of sales/overall sales ▪ 50% on the share of sales growth in relation to overall growth			▪ 100% on the sales		▪ 70% on the sales ▪ 30% on growth

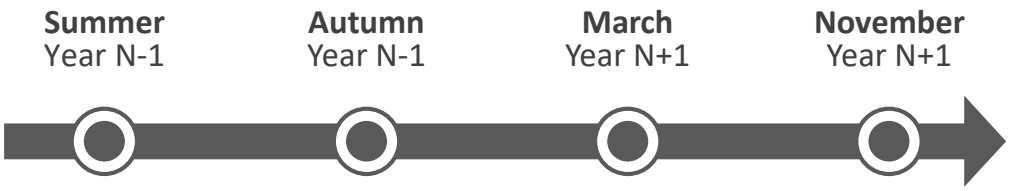
Sources: Legifrance – Smart Pharma Consulting analyses

[1] *Specific rate applicable on the total market*

The clawback is a source of uncertainty for pharma companies operating in France, even if the LFSS 2023 stated that the calculation and the payment had to be completed on November N+1

3

Clawback – Legal timetable



PLFSS[1] crafting (French Parliament)

LFSS[2] vote (French Parliament)

Pharma companies' drugs sales reporting to URSSAF[3]

Clawback calculation by CEPS

Pharma companies' payment

1 ONDAM for year N
National Health Insurance Fund expenditure objective

2 M amount for year N
Drugs expenditure threshold

3 Drugs expenditure for year N
(net of conventional and early access rebates[4])

4 Clawback for year N
Before and after tax-exempt rebates (deductions)

- In recent years, the definitive amount of the clawback was not known until the last quarter of the following year, and even in January 2023 for the 2021 clawback
- The LFSS 2023 redefined the legal timetable, providing that all the process had to be completed on November N+1
- Therefore, the net drugs expenditure of the pharmaceutical industry from the previous year is unknown during the crafting of the PLFSS, which is regularly criticized by pharma companies and even by the Court of Auditors
- This situation leads to a strong unpredictability of the clawback, impairing French subsidiaries attractiveness:
  - Gaps between estimates and actual amounts of the clawback are difficult to understand for parent companies and auditors
  - Negative impact on budget management, with estimates changes that may lead some French affiliates to reopen their previous year financial accounts

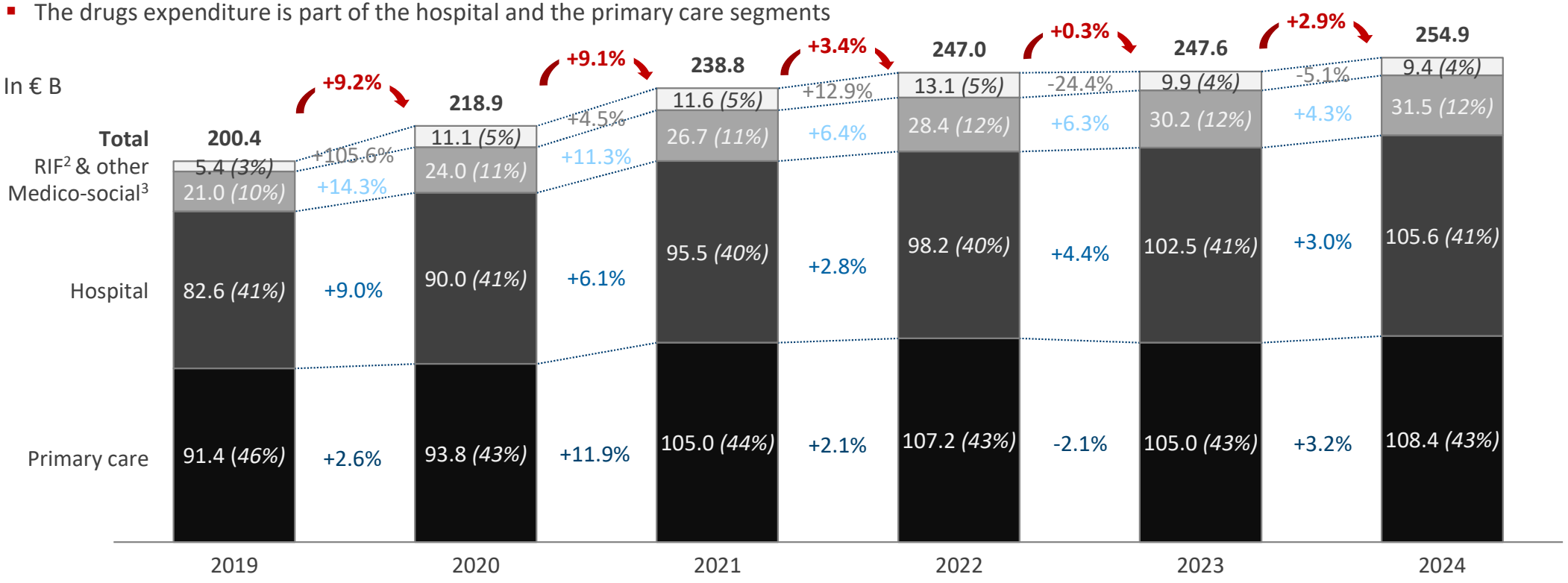
Sources: CEPS annual report (January 2024) – PLFSS & Médicament, Leem (September 2024) – LFSS 2023 (article 18) – Smart Pharma Consulting analyses

[1] Social Security Financing Act Project – [2] Social Security Financing Act – [3] Previously called ACOSS – [4] Money reimbursed by pharma companies to the National Health Insurance Fund, based on a predefined agreement (e.g., amount corresponding to the difference between the official drug price list and the net price negotiated with the CEPS). These rebates apply to certain original drugs, but not to generic, nor to biosimilars

The 2024 ONDAM[1] fixed the annual growth of healthcare expenditure at +2.9% with a higher growth on Medico-social (+4.3%) than Hospital (+3.0%) and Primary care (+3.2%)

1 ONDAM evolution (2019 – 2024)

- The ONDAM is not a budget, but an objective of healthcare spending funded by the National Health Insurance Fund that should not be exceeded
- It is set every year by the Social Security Financing Act (LFSS) which is voted by the Parliament
- The ONDAM does not correspond to all the healthcare benefits considered in the national accounting
- The drugs expenditure is part of the hospital and the primary care segments

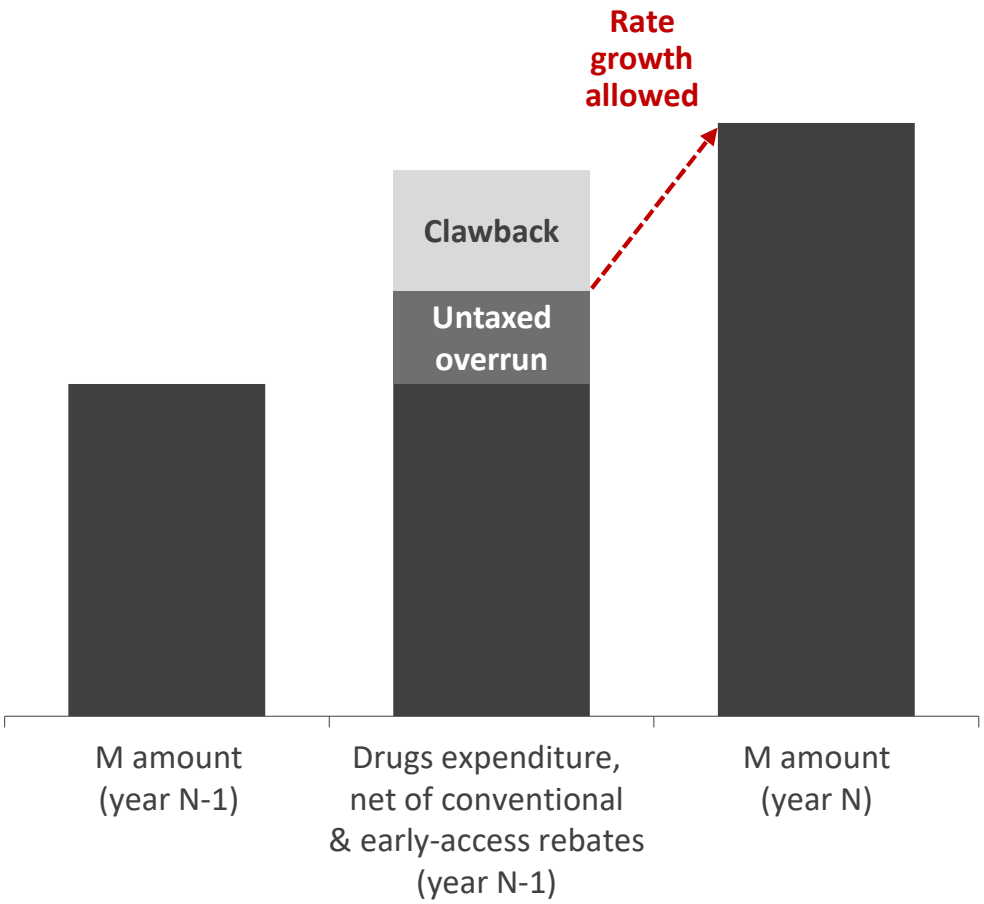


Sources: LFSS 2019 to 2024 – DREES (June 2023) – Smart Pharma Consulting analyses

[1] National objective for National Health Insurance Fund expenditure – [2] Regional intervention fund – [3] Including contribution to old-age institutions and to institutions for disabled persons

The setting methodology of the M amount is less and less transparent, and may even give rise to retrospective adjustments as it was the case in the LFSS 2024 (for the 2023 M amount)

2 M Amount – Setting methodology

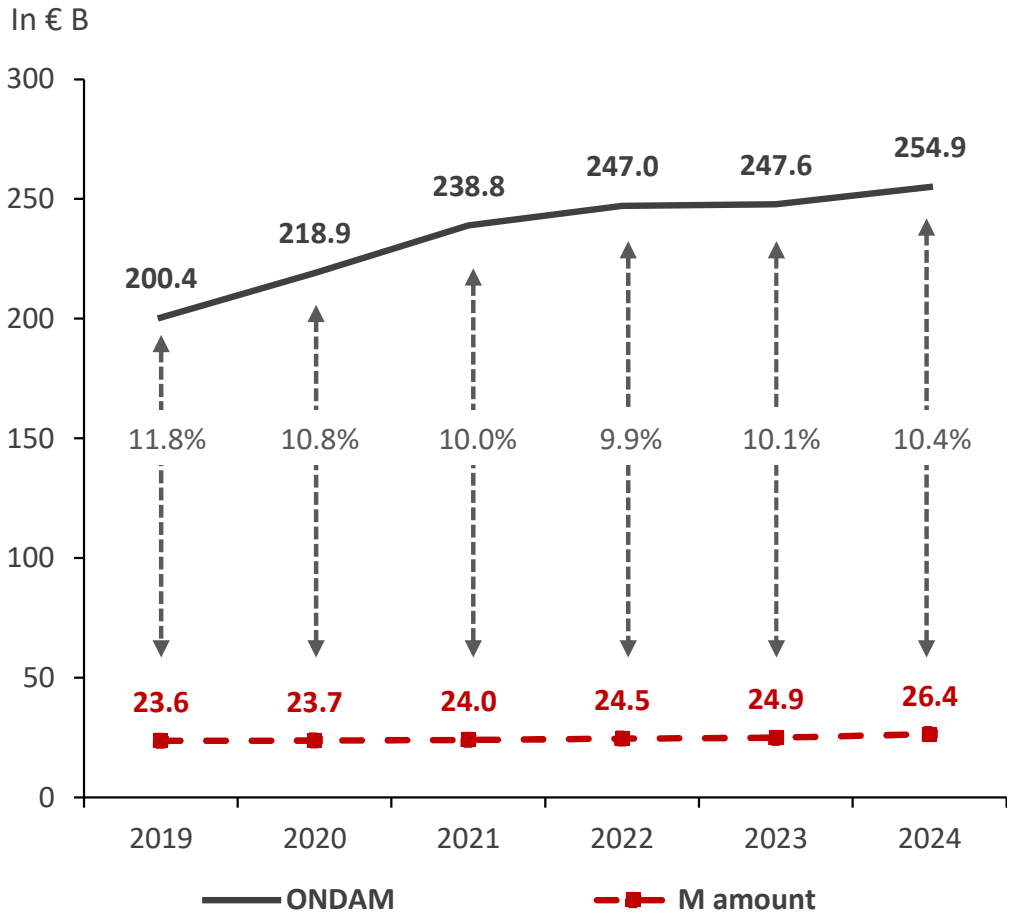


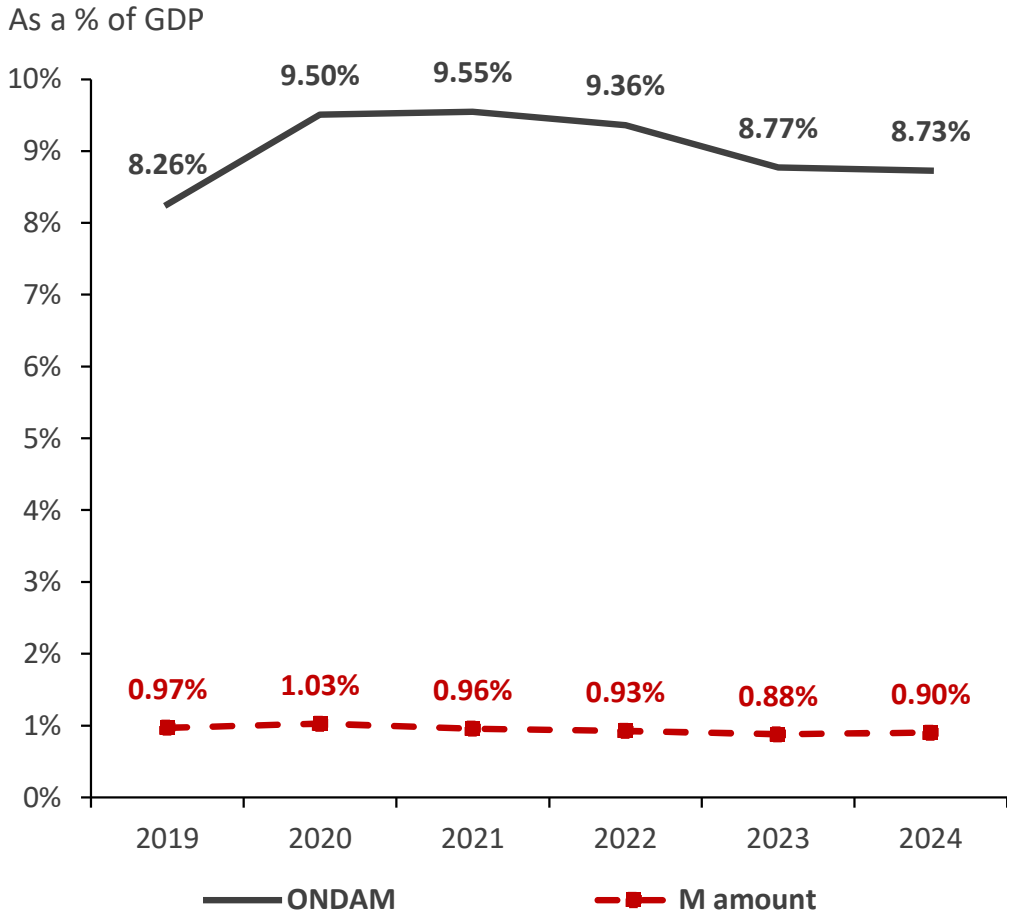
- Between 2015 and 2020, the methodology used to set the triggering threshold of the clawback was established by law
- If this description has no longer appeared in the law, the Administration used the same methodology in the years 2021 and 2022
- The rule applied to set the M amount was as follows: **(Net drugs expenditure N-1 – clawback N-1) x Growth rate**
- This rebasing method allowed to link the evolution of the M amount with the pharmaceutical market evolution (based on the evolution of population needs)
- In 2023, the methodology used to set the M amount was not made public, with a M amount initially set at € 24.6 B (i.e., a +0.4% growth rate vs. 2022)
- The LFSS 2024 eventually revised the M amount for 2023 to € 24.9 B (+1.6% vs. 2022)

Sources: PLFSS & Médicament, Leem (September 2024) – Smart Pharma Consulting analyses

For 2024, the ONDAM[1] has been set at € 255 B (i.e., 8.7% of the GDP), and the M amount[2] at ~€ 26.4 B (~10.4% of the ONDAM)

2 M Amount – Evolution (2019 – 2024)



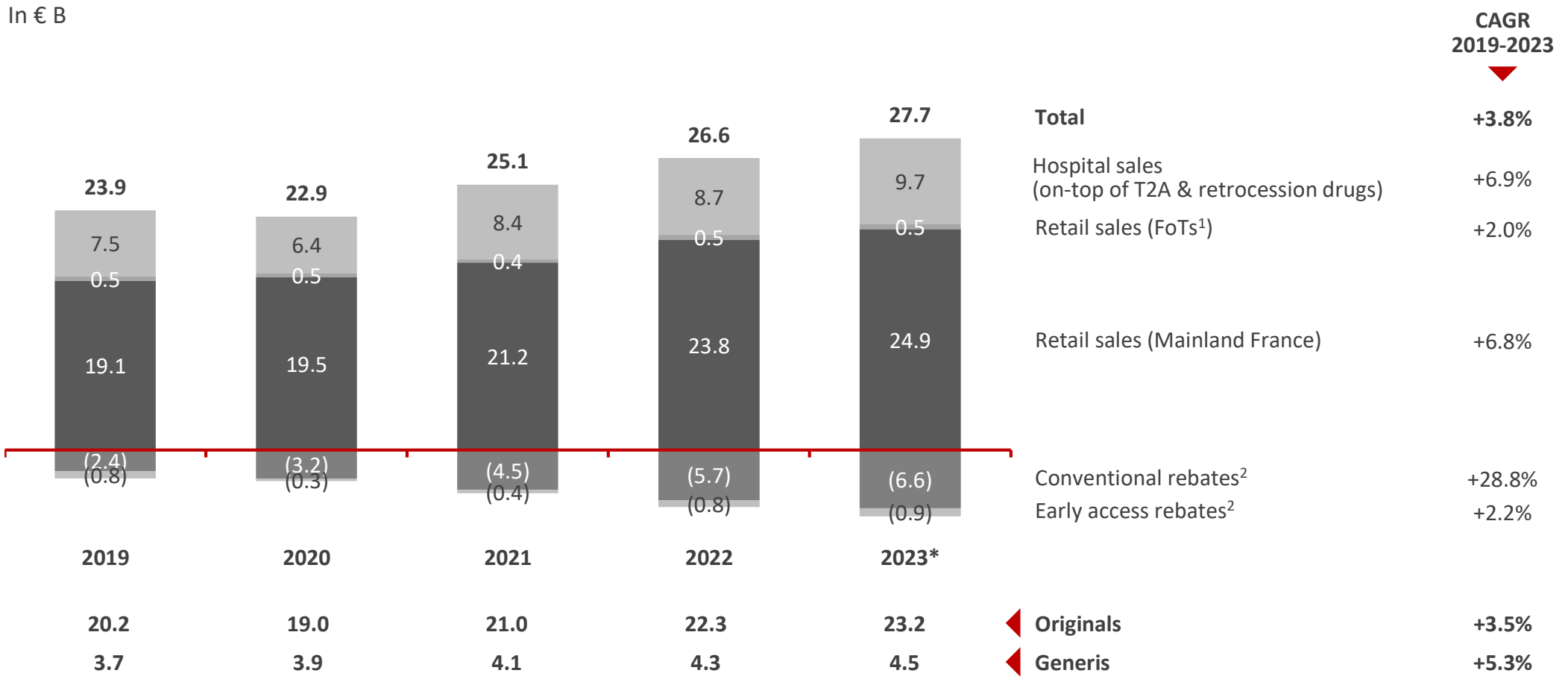


Sources: LFSS 2019 to 2024 – Smart Pharma Consulting analyses

[1] National objective for National Health Insurance Fund expenditure –
[2] Trigger threshold of the clawback

Drugs expenditure, net of conventional & early access rebates, was estimated at € 27.7 B for 2023, representing a +3.8% CAGR over 2019 – 2023 (+3.5% CAGR for originals vs. + 5.3% for generics)

3 Drugs expenditure, net of conventional and early access rebates (2019 – 2023)



** Estimates, based on GERS data and interviews*

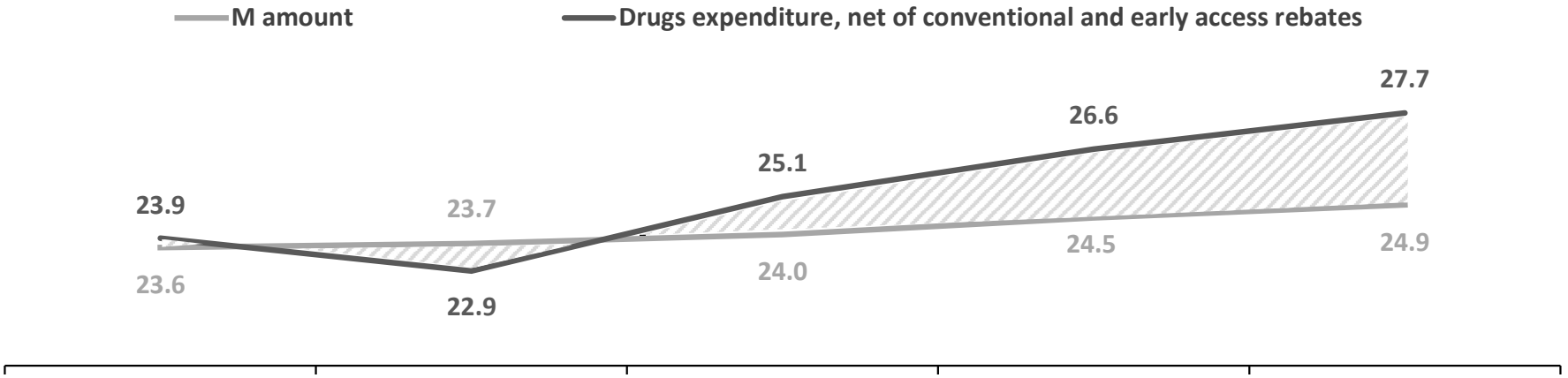
Sources: GERS – Leem – Gemme – CEPS annual report (January 2024) – Smart Pharma Consulting analyses and estimates

[1] French Overseas Territories – [2] Money reimbursed by pharma companies to the National Health Insurance Fund, based on a predefined agreement (e.g., amount corresponding to the difference between the official drug price list and the net price negotiated with the CEPS). These rebates do not apply to generics. These conventional rebates apply to certain original drugs, but not to generic, nor to biosimilars

Drugs expenditure, net of conventional and early access rebates, systematically exceeded the "M amount" between 2019 and 2023 (except in 2020)

4 Clawback – Savings for the National Health Insurance Fund (2019 – 2023)

In € B



Overrun amount	**€ 0.3 B**	**N/A**	**€ 1.2 B**	**€ 2.1 B**	**€ 2.8 B**
Overrun < 0.5 pt (50% clawback)	*€ 0.1 B*	-	*€ 0.1 B*	*€ 0.1 B*	*€ 0.1 B*
From 0.5 to 1 pt (60% clawback)	*€ 0.1 B*	-	*€ 0.1 B*	*€ 0.1 B*	*€ 0.1 B*
Overrun > 1 pt (70% clawback)	*< € 0.1 B*	-	*€ 0.6 B*	*€ 1.3 B*	*€ 1.7 B*
Clawback before rebates	**€ 0.2 B**	**-**	**€ 0.8 B**	**€ 1.4 B**	**€ 1.9 B**
Tax-exempt rebates (deductions)	*-20.0%*	-	*-13.0%*	*-15.1%*	*-15.0%*
Clawback after rebates	**€ 0.1 B**	**-**	**€ 0.7 B**	**€ 1.2 B**	**€ 1.6 B**

** Estimates, based on GERS data and interviews*

Sources: LFSS 2019 to 2024 – CEPS – Leem – Gemme – Smart Pharma Consulting analyses and estimates

The government and the Leem have signed an agreement to keep the capping of the clawback at € 1.6 B in 2025, while generics clawback will be capped at 1.75% of their sales (vs. 2% in 2024)

4 Clawback – Regulatory changes expected (2024 – 2028)

		2024	2025	2026	2027	2028
M amount		▪ € 26.4 B (art. 28, LFSS 2024)	▪ € 27.9 B[1] (art. 9, PLFSS 2025)*			
Clawback capping	**All drugs**	▪ Total clawback capped at € 1.6 B, provided € 600 M savings are generated through proper use and delisting of drugs (agreement signed between the government and the Leem, Nov. 21, 2024)* ▪ Clawback capped at 10% of the basis for calculating the contribution M for each pharma company (art. 28, LFSS 2024)		▪ Clawback capped for each pharma company at 12% of the total net amount reimbursed by the National Health Insurance Fund for their drugs (article 28, LFSS 2024)		
	Generics	▪ Clawback capped at 2% of generics gross sales (art. 28, LFSS 2024)	▪ Clawback capped at 1.75% of generics gross sales (amendment to the PLFSS 2025 adopted by the Senate on Nov. 21, 2024)*			
Clawback calculation				▪ Clawback based on net amount reimbursed by the National Health Insurance Fund, and no longer on sales declared by pharma companies (art. 28, LFSS 2024) ▪ 90% tax rate applied to the difference between the net amount reimbursed by the National Health Fund and the "M amount", and no longer the progressive scale ranging from 50% to 70% depending on the extent of the "M amount" exceeded (art. 28, LFSS 2024)	

** Pending LFSS 2025 vote by the French Parliament*

Sources: PLFSS 2025 – LFSS 2024 – KPMG (January 2024) – Agreement signed between the government and the Leem (November 21, 2024) – Smart Pharma Consulting analyses

[1] Considering the sales declared by pharma companies (that would have corresponded to € 23.3 B reimbursed by the National health Insurance if the reform of the calculation of the clawback rebate had not been postponed conforming to the agreement signed between the government and the Leem on November 21, 2024)

Under discussion measures may have significant impact on pharma companies (e.g., revised calculation of the clawback, stock shortages sanctions, savings on drugs, etc.)

Key measures under discussion*

PLFSS[1] 2025

ONDAM[2] (art. 27)

- ONDAM set at a total amount of € 263.9 B for 2025 (+2.8% vs. revised 2024) including:
  - The funding of measures resulting from conventional negotiations, such as the medical convention signed in June 2024
  - The compensation to health and medico-social facilities for the increase in the CNRACL[3] contributions
  - An increase in retirement benefits (annual revaluation postponed in July 2025)
  - € 5 B savings (on health products, biology, imaging, daily allowances, anti-fraud measures, etc.)

Clawback rebates (art. 9)

- Modification of the basis for calculating drugs expenditure
  - Exclusion of the EMI[4] / ERI[5]
  - Integration of mirror marketing authorizations and off-label prescriptions
- Exemption for new companies (created for less than 1 year)
- When a drug is transferred from a pharma company to another: calculation based on the official date of the transfer
- Adjustments planned to respect the deadlines for notification and payment of the contribution
- M amount set at € 27.9 B (based on sales declared)

Drugs supply (art. 19)

- Improvement of operational systems aimed at preventing drug shortages
- Strengthened penalties against market players failing to respect their obligations in terms of drug supply, with sanctions increased from 30% to 50% of drug sales, up to a limit of € 5 M (vs. a € 1 M ceiling currently applied)
- Publication of financial sanction decisions on the ANSM website for one year

Other measures

Drugs reimbursement

- Drugs reimbursement rates by the National Health System dropped by 5 pts, with reimbursement rates decreased from 65% to 60%, from 30% to 25% and from 15% to 10%
- This measure will be acted through ministerial decree

Public savings on drugs

- Commitment given by the Leem to the government to generate € 600 M savings in return for capping the clawback at € 1.6 B in 2024 and 2025 (through proper use and delisting of drugs)

** As of November 25, 2024*

Sources: PLFSS 2025 – Le Figaro (November 18, 2024) – Agreement signed between the government and the Leem (November 21, 2024) – Smart Pharma Consulting analyses

[1] Projet de loi de la Sécurité Sociale: Social Security Financing Act Project – [2] National objective for National Health Insurance Fund expenditure – [3] Caisse nationale de retraite des agents des collectivités locales: National Pension Fund for local authority agents – [4] Ecart médicament indemnisable: compensable medication gap – [5] Ecart rétrocession indemnisable: compensable retrocession gap

Unpredictability of cost-containment measures and low regulated drug prices strongly impair the French pharma market attractiveness, representing an obstacle to R&D and industrial investment

Key Takeaways

1. With a public deficit amounting to 6.1% of GDP and a public debt of 112.9% of GDP in 2024, France is far from EU objectives (3% and 60%, respectively)

2. With a GDP growth estimated to range from +1.1% to +1.5% by 2028, public income should not increase much, unless the government takes new levy measures

3. The National Health Insurance Fund deficit should reach € 18 B in 2024 (+67% vs. 2023)

4. The government can activate 4 levers to regulate drugs public spending: P&R[1], rebates, clawback and medical control

5. When compared to the four largest pharma markets in Europe, France has the lowest prices for drugs, irrespective of whether drugs are genericized or not

6. The clawback will be capped at € 1.6 B in 2024 and 2025, provided € 600 M savings are generated by pharma companies through proper use and delisting of drugs

Sources: Smart Pharma Consulting

[1] *Price and reimbursement*

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4. Medical Affairs

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Enhancing
MSLs Competence

Benchmarking Study

POSITION PAPER May 2023

Smart Pharma carried out a benchmarking study regarding MSLs' best practices, the key outcomes of which are shared in this position paper

Introduction

Objective

- **Identify MSLs best practices, with a focus on:**
  - Their activities (roles and responsibilities) from both a quantitative and qualitative perspective
  - The planning, monitoring and assessment of their activity
  - Their degree of coordination with other departments (e.g., marketing, sales forces)
  - The way they maintain regular interactions with KOLs
  - Possible evolutions of their role

method

- **Smart Pharma Consulting in-house knowledge:**
  - Previous projects related to MSLs' activity
  - Position paper published in 2017 on MSLs
- **External interviews with 7 experts…**
  - 4 MSL Managers
  - 2 Franchise Medical Heads
  - 1 Deputy Medical Director
- **… from 4 pharmaceutical companies:**

abbvie Bristol Myers Squibb NOVARTIS Pfizer

Sources: Smart Pharma Consulting

The activity of MSLs, medical field teams dedicated to scientific communication, is divided into 3 main categories: reactive, proactive and internal activities

MSLs' activities segmentation

- MSLs are one of pharma companies' field teams dedicated to enhance the full exchange of scientific information with HCPs, especially with KOLs (Key Opinion Leaders)…
- … and to build strong relationships and partnerships with them
- MSLs have a major role in medical expertise and their activities are divided into 3 main categories:

1 Reactive activities

- Reactive activities are carried out following a specific request from a KOL
- This is the core activity of MSLs

2 Proactive activities

- Proactive activities of MSLs are more restricted and correspond to cooperative projects between KOLs and pharma companies

3 Internal activities

- Internal activities are divided into 3 categories:
  - Personal development
  - Internal interactions
  - Administrative tasks

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

Reactive interactions are MSLs' core activity and consist in responding to requests for information from KOLs, supporting Investigator-Initiated Studies (IIS) and Early Access Programs (EAP)

MSLs' reactive activities

1

Reactive activities

Provision of scientific information

- MSLs provide medical information to KOLs upon request (e.g., new clinical data, off-label use)
- The interaction can be remote, face-to-face or through medical staff

IIS

- MSLs respond (positively or not depending on the medical strategy) to requests for collaboration on investigator-initiated studies
- Decisions are more and more made at global level

EAP

- MSLs also accompany expert centers during Early Access Programs (e.g., information on the set-up and eligibility of patients)

Comments from experts interviewed

- *"This represents the major part of the activity but the repartition between the reactive actions is extremely variable according to the product life-cycle"*
- *"The reactive activity represents about 75% of the MSL actions"*
- *"Although it is the result of a request from the KOL, the interaction is not top-down, it is really a discussion that allows MSL to gather insights (e.g., potential new indications)"*
- *"EAPs support can represent up to 90% of the activity during the first 6 months of the program's launch"*

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

Proactive activities correspond to the organization of medical events (e.g., ad boards, congresses, symposiums) and the follow-up of phase I, II, III clinical trials and RWE studies

MSLs' proactive activities

2

Proactive activities

Medical events organization

- MSLs participate in the organization of medical events such as ad boards, congresses, symposiums, staff meetings, other medical meetings at local or region levels

Clinical studies

- MSLs are also involved in the execution of phase I, II and III studies, from selection of investigation centers to the follow-up of the implementation

RWE

- More recently, MSLs have also participated in Real World Evidence studies (RWE), especially in implementation and data collection

Comments from experts interviewed

- *"MSLs are mostly involved in regional events, whereas headquarters medical team takes the lead for national events"*
- *"MSLs are actively involved in medical education events re. improving patient care, treatments, etc."*
- *"RWE is a historical activity for us with MSLs setting up and then relaying to the CRA[1] or a CRO[2]"*
- *"MSLs are involved in RWE studies, while for phase I to III clinical studies their contribution is limited to centers identification"*
- *"Our MSLs are involved in clinical studies"*

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

[1] Clinical Research Associate – [2] Contract Research Organization

The internal activities of MSLs include their personal development, essential to their activity, the sharing of insights with other departments, as well as the associated administrative tasks

MSLs' internal activities

3

Internal activities

Personal development

- Personal development is an important activity for MSLs who must continuously update their scientific knowledge and soft skills (e.g., communication, project organization)

Internal interactions

- Internal interactions are essential to share the insights gathered in the field activity after analysis and synthesis
- Depending on pharmaceutical companies, MSLs can participate in the training of med reps

Administrative tasks

- Administrative tasks represent a significant part of MSLs' daily activity (e.g., planning of interactions with KOLs, filing information in the CRM software)

Comments from experts interviewed

- *"Personal development accounts for about 10-15% of MSLs' activity, but much of it is included in daily activities (e.g., conferences and congresses)"*
- *"MSLs can act as a one-time referent to med reps but we have a Training department independent from the Medical department"*
- *"MSLs complain they don't have enough time for their personal development"*
- *"Interactions between MSLs and med reps and/or the headquarters team are important to have a complete knowledge of each expert center (e.g., change of position of a KOL within the center)"*

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

KOLs, main target and privileged interlocutors of MSLs, are targeted and segmented based on their expertise, the activity of the center where they operate and their availability to collaborate

MSLs' target segmentation

Target	Targeting criteria	Rationale
KOLs 	Expertise	▪ Position (Head of department, Professor, etc.) ▪ Number of publications and impact factor ▪ Number of clinical studies ▪ Member of learned societies and possibly active position ▪ Speaker at conferences and/or other scientific events ▪ Geographic influence (regional, national, international)
	Center activity	▪ Targeting of centers having an important cohort of patients… ▪ … and/or an important clinical research activity
	Availability	▪ KOLs are highly solicited and not always willing to meet MSLs ▪ Some centers impose restrictions that make collaborations difficult (e.g., Gustave Roussy, in France, the largest European cancer hospital requires a contract with the center)

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

MSLs' activity is strongly regulated with the obligation to have non-promotional speeches and to document the reactive aspect of their interactions

MSLs' compliance rules

Compliance of interactions[1]

Non-promotional

- MSLs' scientific communication cannot promote the company's product and they must disseminate messages in an objective manner

Traceability of reactive interactions

- The reactivity of interactions must be documented in the CRM (e.g., request by email from physicians, solicitation by a med rep)
- In the case of an unexpected request (e.g., question during a congress), a summary e-mail is sent afterwards
- The MSL can introduce himself proactively for his first meeting, in order to make himself known to KOLs

Comments from experts interviewed

- *"There are regular internal audits and audits carried out by authorities on the respect of compliance rules by MSLs (interviews, verification of supports, etc.)"*
- *"It is very strict, when MSLs communicate on off-label use, it must absolutely be documented"*
- *"Lots of very strict procedures, proactive activities are only done under contract"*
- *"We use Veeva software for events and Interact for contacts"*
- *"We use Links as our CRM"*

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

[1] *These rules are becoming progressively similar and stricter across European countries*

MSLs acting mainly on demand, no frequency objective is defined, and activity is enhanced by the added-value of interactions, sales force involvement and digital communication channels

MSLs' frequency of interactions

Objective of interactions

As most MSLs interactions are performed in a reactive way, no interaction objective is defined by Medical teams

How to maintain interactions

Added-value content

- Since KOLs have little time to spare, it is important to ensure the quality of interactions...
- ... and propose a large range of high value-added collaborations

Sales force involvement

- The involvement level of sales force impacts the activity of MSLs by being a vector of solicitations from KOLs

Digital communications

- Digital has helped maintain relationships with KOLs during the Covid-19 pandemic and...
- ... has facilitated efficiency and access to hard-to-meet HCPs

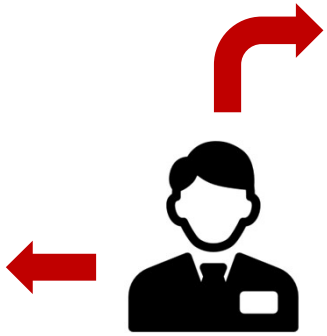
Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

MSLs interact internally with med reps to share insights, during seminars or informal exchanges, but interact little or not at all with Key Account Managers (KAMs) nor the Marketing team

MSLs' interactions with internal departments

Sales force

- Insights sharing can take place during seminars, once or twice a year...
- ...but mostly correspond to an informal sharing of information in regions
- MSLs and med reps are rarely present simultaneously at an event
- Med reps forward KOLs' requests to MSLs, but duo visits are not allowed...
- ...except for the first MSL visit which can be introduced by the med rep but without any scientific content[1]



KAMs

- Occasional and infrequent exchanges on specific regional information

Marketing team

- MSLs do not, or rarely, interact directly with the Marketing team...
- ...which works more closely with the headquarter Medical team

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

[1] *These rules are becoming progressively similar and stricter across European countries*

MSL's action plan is part of the overall medical strategy, but it is established, personalized and implemented regionally according to KOLs' specific needs

MSLs' action plan definition

"How is MSLs' action plan established?"

Established by MSLs

7

- *"The medical strategy is established and implemented by the MSL who adapts it according to the granularity and needs of his region"*
- *"Instructions from the Medical direction allow the activity to be framed in the strategy, but the MSL adapts it in the region to best meet specific needs"*
- *"The medical communication is necessarily oriented by the Medical direction, but the MSL adapts the action plan according to the regional activity"*

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

MSLs' action plans are part of the same global strategy but are developed independently of sales force plans and formalized as a roadmap

MSLs' action plan crafting

"Is MSL action plan written?"

- *"MSLs' action plans are written on an annual basis and are updated as the activities progress"*
- *"Once written and presented, these action plans serve as a roadmap throughout the year"*

"Is MSLs' action plan defined in link to sales force plans?"

- *"The strategic basis is common, but the action plans are defined in total independence"*
- *"Although they have a common goal, MSLs and med reps are two separate channels"*
- *"The timelines of the plans are different"*

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

MSLs' activity can be assessed quantitatively with field time and number of experts engaged or projects conducted and qualitatively by characterizing the nature of the interactions

MSLs' performance metrics (1/2)

Activity

Quantitative indicators

- MSLs' activity can be quantified by measuring:
  - Field time, which is the total amount of interactions with KOLs (categorized by proactive / reactive, remote / face-to-face)
  - Number of experts engaged (contributing to clinical trials, giving lectures, etc.)
  - The number of projects conducted (e.g., ad boards)
  - The number of insights collected from interactions with KOLs

Qualitative indicators

- From a qualitative point of view, MSLs' activity corresponds to:
  - The typology of medical communication topics (e.g., safety, off-label use)
  - The relevance, quality and diversity of the insights gathered (high value-added insights for the strategy)
  - The ability to share these insights in a rigorous and systematic way internally

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

The impact of MSLs' activity is much more difficult to quantify and can essentially be assessed on qualitative criteria

MSLs' performance metrics (2/2)

Impact

Quantitative indicators

- It is difficult to define quantitative indicators to measure the impact of MSLs…
- …and the pharma companies interviewed do not use those indicators to assess MSLs' impact
- Therefore, the variable part of MSLs' remuneration is not based on quantitative objectives…
- …but is linked to the follow-up of the roadmap and to MSLs' individual assessment (e.g., behavior, initiatives taken)

Qualitative indicators

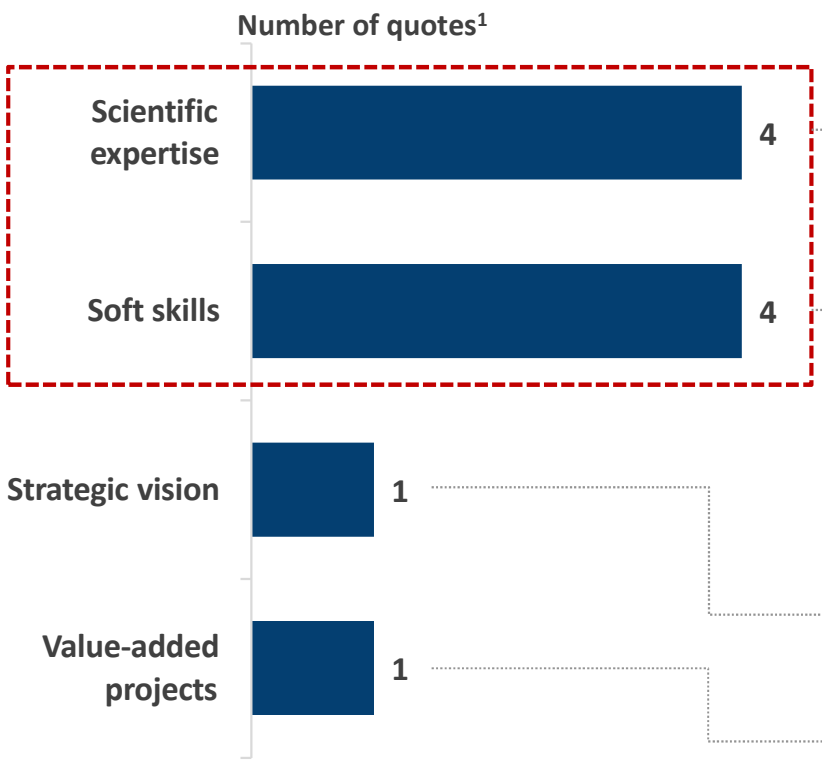
- Concerning the qualitative aspect of the impact, it is possible to evaluate:
  - The perception of medical communication by KOLs through a questionnaire
  - The "unlocking" of centers with whom it was not possible to collaborate previously
  - The success of a project conducted (e.g., recommendations published as a result of an Ad Board to address a given issue)

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

Scientific expertise and soft skills are the key success factors for MSLs to be a complete expert with KOLs they interact with, especially in terms of communication and project management skills

MSLs' key success factors

"What are the key success factors for MSLs?"



- *"You have to be an expert with KOLs to answer their questions and fulfill their needs"*
- *"Be able to quickly become an expert in another indication or therapeutic area to adapt to the evolution of the portfolio"*
- *"The quality of scientific interactions is key for the MSL"*

- *"Communication skills, curiosity, thoroughness and project management skills are essential"*
- *"Listening, identifying needs, personalizing the approach, unlike in the past when MSLs were focused on message delivery"*

- *"Although MSLs have a non-promotional activity, their ultimate goal should be to contribute to improve the business"*

- *"To succeed, an MSL must propose interesting projects for KOLs"*

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

[1] Several answers possible

MSLs have an increasingly important role to play within pharmaceutical companies, in a context of restricted access to HCPs and of very strict regulatory framework

MSLs' challenges & evolution

MSLs' challenges

- Although this is less the case than for med reps, access to HCPs is increasingly restricted as they have less and less time to spare...
- ...which reinforces the need to offer high value-added interactions and projects for KOLs
- Especially since HCPs now have easier access to information through the Internet (e.g., PubMed, congresses summary, products SmPCs[1])
- On the regulatory aspect, MSLs' activity is strongly supervised and limited by authorities...
- ...as well as more and more by time-consuming internal procedures to ensure compliance

MSLs' evolution

- MSLs have an increasingly central role in leading-edge therapeutic areas...
- ...and have a growing role in Early Access Programs support and RWE[2] data generation, that is increasingly valued in Market Access and required by health authorities
- Digital technologies will also impact furthermore MSLs' activity with the flexibility offered by the different communication channels...
- ...and by the development of tools based on Artificial Intelligence likely to transform the patient pathway (e.g., diagnostic algorithm in oncology)

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

[1] Summary of Product Characteristics – [1] Real World Evidence

MSLs' activities are quite homogeneous across Europe, although some adaptations may be required to local specificities

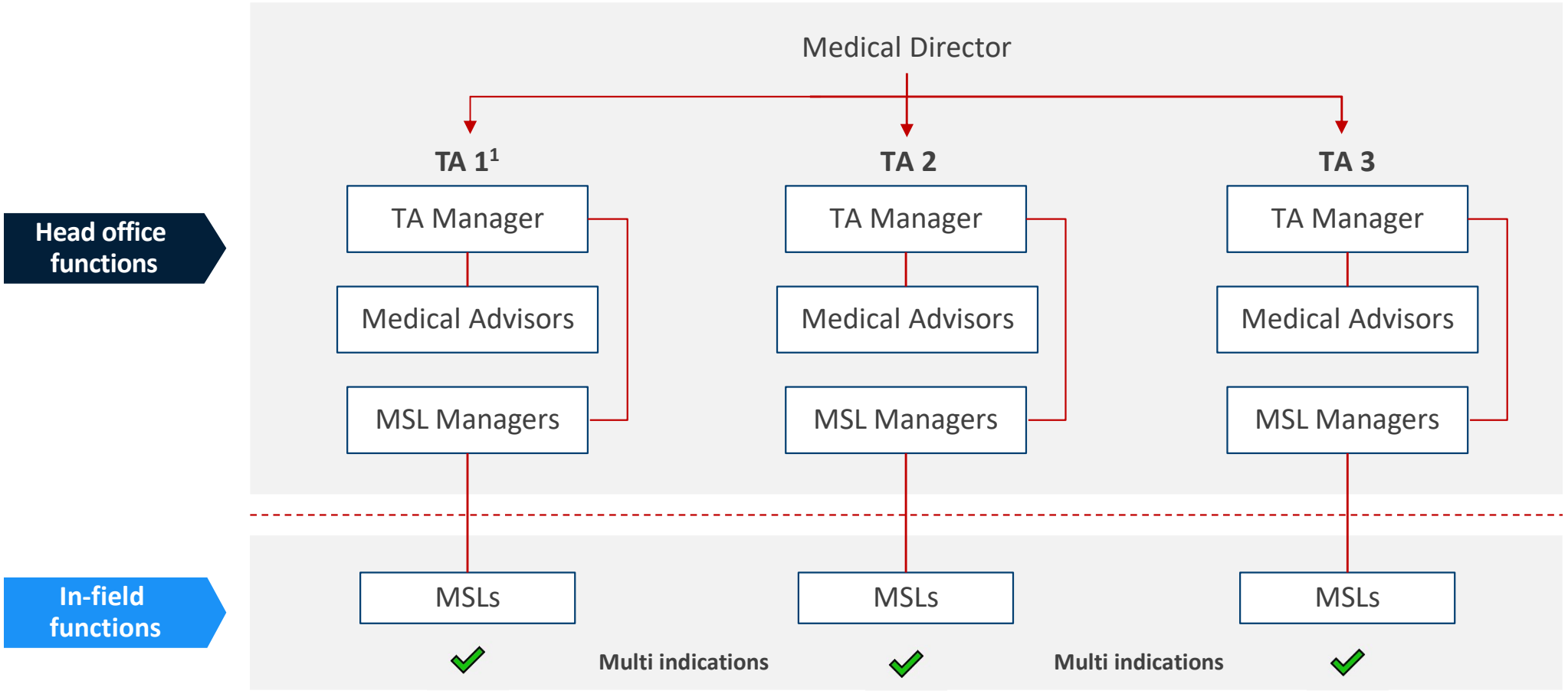
MSLs' activities international landscape

MSLs' activities					
Introduction to HCPs (first contact)	✓	✓	✓	✓	✓
Invitation to congresses	✓	✓		✓	✓
Invitation to Ad boards	✓	✓		✓	✓
Proposal / Support for clinical studies	✓	✓	✓	✓	✓
Comments		▪ Access to private-based HCPs is difficult	▪ MSLs cannot be proactive for RWE studies ▪ Ad boards are difficult to organize in the UK (due to regulation)	▪ MSLs can be proactive since end of 2021	▪ Low concentration of expert centers ▪ Proactivity allowed for new data

Sources: Smart Pharma Consulting analyses, based on interviews with Medical Teams in Europe (May 2022)

In general, MSLs report to an MSL Manager, covering multiple indications, and are the only in-field function of the Medical Affairs department of Pharma companies' affiliates

MSL Teams within Medical Affairs department – Most common structure



Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

[1] Therapeutic Area

To keep on interacting regularly with KOLs, in a context of regulatory constraints and post-Covid-19 crisis, MSLs must propose high quality content and/or co-develop highly valued projects

Key learnings

MSL role

- MSLs are pharma companies **in-field collaborators** dedicated to **exchange scientific information** with HCPs, especially with **KOLs** (most often for multi-indications in a specific therapeutic area)
- MSLs play a **major role in medical expertise** and their activities are split into **3 main categories:**
  - Reactive activities which are their core activities (e.g., response to solicitations)
  - Proactive activities which are done under contract (e.g., speaker partnership, ad boards participation)
  - Internal activities (e.g., personal development, insights sharing, administrative tasks**)**

MSL activity planning & monitoring

- MSLs, who establish their **action plan** according to **regional needs and specificities**, do not have defined interaction objectives due to the reactive nature of their core activities
- MSL activity can be monitored with **quantitative indicators** (e.g., number of interactions) or **qualitative indicators** (e.g., quality of insights gathered)...
- .... but **measuring the impact** of these activities is **complicated** and **not** always **relevant** considering the regulatory constraints

MSL challenges & evolution

- MSL activities being non-promotional, their reactive activities must be documented
- Their role being key, they must propose high value-added content to HCPs to maintain interactions and…
- … strengthen their role in RWE studies and their use of digital tools that are impacting Medical Affairs

Sources: Interviews with 7 experts from 4 pharmaceutical companies (AbbVie, BMS, Novartis, Pfizer) – Smart Pharma Consulting analyses

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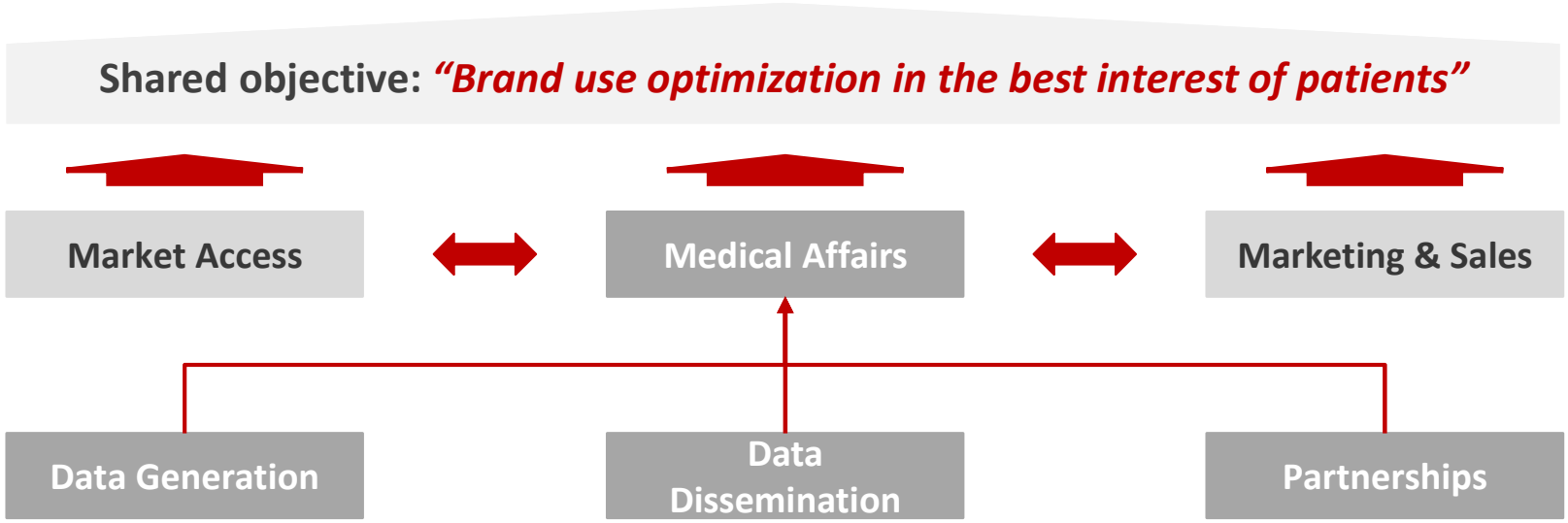
High-Performance
Strategic Medical Plans

5 Key Recommendations

POSITION PAPER May 2023

Medical Affairs activities should contribute to optimize the use of pharma companies' brands by HCPs in the best interest of patients

Medical Affairs mission



- Medical Affairs play a central role in supporting internal[1] company stakeholders to fulfill the needs of external ones[2] on medical aspects re.:
  - Disease management
  - Specific indications
  - Brands
- From a brand perspective, it is essential that Medical Affairs, Market Access and Marketing & Sales departments:
  - Share the same objective
  - Craft a common strategy to meet this objective
  - Coordinate their activities

  in their field of expertise, while complying with regulations

Sources: Smart Pharma Consulting analyses

[1] Including market access, marketing & sales, regulatory affairs, pharmacovigilance, clinical development, etc. – [2] Health authorities, HCPs, PAGs, learned societies

The purpose of Strategic Medical Plans is to allocate the right resources to reach the medical objective set, in an effective and efficient way

Why draft a Strategic Medical Plan?

PURPOSE

- To prioritize medical activities to be carried out, based on:
  - The analysis of the situation
    (e.g., disease management, unmet medical needs, therapeutic alternatives, patient journey)
  - The needs of health authorities, payers, HCPs and patients
    (e.g., generate RWE data, evaluate the medico-economic value of a product, disseminate scientific and medical data)
  - The objective of the company
    (e.g., modify the prescription of a brand, reinforce its proof of efficacy, update medical guidelines, etc.)
- To organize the execution of these medical activities in synergy with other departments of the pharma company
- To monitor the quality of execution and the impact of these activities

Sources: Smart Pharma Consulting analyses

We suggest to adopt the 4 Ws[1] framework to reinforce the relevance and consistency between the national medical situation, medical objective, strategic imperatives and corresponding tactics

How to draft a Strategic Medical Plan?

WHAT?

- Identify key facts and figures related to the national medical environment:
  - Epidemiology
  - Medical care
  - Healthcare facilities
  - Patient care management
  - Stakeholders' opinion and behavior[2]
  - Own pipeline & portfolio

WHY?

- Understand the reasons that have triggered these key facts and figures
- Identify the root causes of stakeholders' opinion and behavior:
  - Health authorities
  - Payers
  - HCPs
  - PAGs and Patients
  - Competitors

SO WHAT?

- Analyze the implications of the medical environment for key stakeholders and the pharma company
- Determine if these key facts and figures represent opportunities or threats for key stakeholders…
- … and what is the importance of their respective impact

WHAT TO DO?

- Based on the three previous steps (WHAT? – WHY? – SO WHAT?) define the relevant medical decisions to be made for the pharma company:
  - Strategic decisions
  - Tactical decisions
  - Organizational decisions (e.g., activities, processes, structure, culture)

Sources: Smart Pharma Consulting analyses

[1] What? – Why? – so What? – What to do? – [2] Authorities, payers, HCPs, PAGs, patients, competitors

Conventionally, Strategic Medical Plans are structured in three sections, on the same model as brand plans or any other business plans

How to structure a Strategic Medical Plan?

Section 1 Situation Analysis

- Epidemiology
- Medical care
- Healthcare facilities
- Patient care management
- Stakeholders' opinion and behavior[1]
- Company's pipeline & portfolio
- SWOT analysis

Section 2 Objective & Strategy

- Global medical strategy (one-page strategy)
- National medical objective
- National medical strategy (one-page strategy)

Section 3 Tactics

- Medical tactics supporting strategic imperatives (SI):
  - Data generation
  - Data dissemination
  - KOL engagement
  - MSL[2] & MA[3] plans
- Medical activities coordinated with other internal stakeholders[4]
- Monitoring process and tools
- Budget

Sources: Smart Pharma Consulting analyses

[1] Health authorities, HCPs, PAGs, learned societies, competitors – [2] Medical Science Liaisons – [3] Medical Advisors - [4] Market access, marketing & sales, regulatory affairs, pharmacovigilance, clinical development, etc.

High-Performance Strategic Medical Plans require method, rigor and pragmatism

5 key recommendations

Recommendation #1

Analyze – don't just describe the medical situation

Recommendation #2

Carry out a structured and fact-based medical SWOT analysis

Recommendation #3

Craft a medical strategy enabling to meet the set medical objective

Recommendation #4

Select key medical activities to support the crafted medical strategy

Recommendation #5

Integrate indicators to monitor activity execution and corresponding impact

Sources: Smart Pharma Consulting analyses

Recommendation #1 → Analyze – don't just describe the medical situation

The situation analysis should focus on identifying and analyzing current and future key medical environment features

What do we observe?

- The situation analysis is most often a situation description
- Knowledge and understanding of the local medical environment are too often inaccurate or incomplete
- The main reasons for these weaknesses come from:
  - Affiliate medical teams considering the strategic medical plans as having little, if any, value for them
  - Insufficient time spent to carry out in-depth analyses to enhance medical environment insights (knowledge and understanding)
  - Lack of reliable data (e.g., epidemiological data)

What do we recommend?

- A robust analysis of the situation requires to identify key medical environment features by gathering precise and reliable data regarding:
  - Epidemiology
  - Medical care
  - Healthcare facilities
  - Patient care management
  - Stakeholders' opinion and behavior
  - Patient care management / patient journey
  - Competitors position and own pipeline and portfolio
- In-depth knowledge and understanding enable to identify opportunities and threats in the environment, and to assess brand strengths and weaknesses

Sources: Smart Pharma Consulting analyses

Recommendation #1 → Analyze – don't just describe the medical situation

The following chart is an enabling tool to identify and analyze the key medical facts and figures relative to the medical environment, and from which implications for the portfolio can be drawn

Medical Situation Analysis Chart

Illustrative

Key Facts & Figures – WHAT?		Driving Factors – WHY?	Implications – So WHAT?
Epidemiology (Prevalence – Incidence)			
Medical care (Diagnosis – Treatment – Guidelines)			
Healthcare facilities			
Patient care management (Patient journey)			
Stakeholders' opinion & behavior	Health Authorities		
	Customer group A (HCPs[1])		
	Customer group B (PAGs)		
	Competitors		
Own pipeline & portfolio			

Sources: Smart Pharma Consulting analyses

[1] *Including: Learned societies, cooperator groups, medical experts*

Recommendation #2 → Carry out a structured and fact-based medical SWOT analysis

The SWOT analysis is a structured summary of the situation analysis from which strategic imperatives are drawn

What do we observe?

- The conventional SWOT framework is not well conceived and most often leads to misuses:
  - It is frequent to see a long list of items, not always relevant, and considered to be of equal importance
  - Opportunities are often confused with strengths, and threats with weaknesses
  - It is not rare for an item to be mixed-up with its cause, leading to wrong strategic decisions[1]
- The frequent inappropriate use of the SWOT framework has led detractors to rename it

"Silly Way Of Thinking"

What do we recommend?

- Opportunities and threats relative to the national medical environment should be structured by topic (i.e., epidemiology, medical care, healthcare facilities, patient care management, stakeholders' opinion and behavior (authorities, HCPs, PAGs, patients, competitors))
- Brand strengths and weaknesses should be evaluated vs. alternative options and consider:
  - The product attributes (efficacy, indications, clinical and real-world data, safety profile, convenience)
  - Related services: to authorities, HCPs, patients, PAGs
  - Corporate reputation: portfolio, pipeline, partnerships
- It is essential to estimate the importance of each item according to its relative importance (RI) by using, for instance, a five-point scale

Sources: Smart Pharma Consulting analyses

[1] *For instance, the fact that a brand has a leading position on a therapeutic area is not necessarily a strength per se. It may just be the result of a factor which is the strength, such as its superior efficacy, acceptability or convenience*

Recommendation #2 → Carry out a structured and fact-based medical SWOT analysis

The "Advanced SWOT" helps medical teams carry out a more specific and relevant assessment of the medical environment and of the brand medical position

Advanced SWOT analytical tool

Medical Environment Opportunities	RI[1]	Medical Environment Threats	RI[1]
▪ Epidemiology (prevalence, incidence) ▪ Medical care (diagnosis, treatment, guidelines) ▪ Healthcare facilities (institutions, CoE[2], networks) ▪ Patient care management (patient journey) ▪ Stakeholders' opinion and behavior (authorities, HCPs, PAGs, patients, competitors)		▪ Epidemiology (prevalence, incidence) ▪ Medical care (diagnosis, treatment, guidelines) ▪ Healthcare facilities (institutions, CoE[2], networks) ▪ Patient care management (patient journey) ▪ Stakeholders' opinion and behavior (authorities, HCPs, PAGs, patients, competitors)	
Brand Strengths	**RI[1]**	**Brand Weaknesses**	**RI[1]**
▪ Product attributes: (efficacy, scope of indications, clinical and real-world data, safety, convenience) ▪ Related services: to authorities, HCPs, patients, PAGs ▪ Corporate Reputation: portfolio, pipeline, partnerships		▪ Product attributes: (efficacy, scope of indications, clinical and real-world data, safety, convenience) ▪ Related services: to authorities, HCPs, patients, PAGs ▪ Corporate Reputation: portfolio, pipeline, partnerships	

Sources: Smart Pharma Consulting analyses

[1] Relative Importance of each item, rated from 5, high importance to 1, low importance – [2] Center of Excellence

Recommendation #3 → **Craft a medical strategy enabling to meet the set medical objective**

The medical strategy is too often crafted irrespective of the medical environment and the tactics are not always carefully selected to support the strategic imperatives

What do we observe?

- Too often, strategic imperatives crafted are not driven from the SWOT analysis or…
- … the link between the SWOT and the strategic imperatives is not clearly established
- In principle, resources and capabilities should be focused to support the strategic imperatives, which is not always the case

What do we recommend?

- The strategic imperatives should be derived from the SWOT analysis
- Strategic imperatives can be a:
  - Medical environment opportunity to seize
  - Medical environment threat to fight again
  - Brand strength to capitalize on, and/or
  - Brand weakness to address
- The preferred strategic imperatives are those the most efficient and effective to achieve the set medical objective for the brand
- It is important to ensure the consistency between the objective – the strategic imperatives – the key tactics

Sources: Smart Pharma Consulting analyses

Recommendation #3 → **Craft a medical strategy enabling to meet the set medical objective**

The Medical Strategy Card is a useful tool to align medical objectives, strategic imperatives and corresponding tactics, while ensuring complementarity with other functions[1]

The Medical Strategy Card

Illustrative

Medical Objective			
Quantitative & Qualitative objectives			
SI #1	**SI #2**	**SI #3**	**SI #4**
Tactical Objectives	**Tactical Objectives**	**Tactical Objectives**	**Tactical Objectives**

Complementarity & coordination with other key functions[1] of the pharma company

Sources: Smart Pharma Consulting analyses

[1] Including market access, marketing & sales, regulatory affairs, pharmacovigilance, clinical development, etc

Recommendation #4 → Select key medical activities to support the crafted medical strategy

Tactics do not always support strategic imperatives and therefore, do not significantly contribute to enhance the medical value of the brand portfolio

What do we observe?

- Key tactics do not always support strategic imperatives…
- … while they should be their operational expression
- In such a case, the probability to meet the medical objective will be lowered
- Key tactics are too often described as a series of activities for which objectives have not been clearly set and the impact formerly measured
- Being rarely based on the assessment of experience, the process to prioritize these tactics is in general, weak
- When tactics are not well-defined, the quality of their execution is generally poor

What do we recommend?

- If Medical Affairs departments are not supposed to promote brands…
- … they should however contribute to optimize their use in the best interest of patients…
- … by contributing to generate and disseminate relevant medical data to health authorities, HCPs and PAGs
- For each tactic, it is important to:
  - Precise the concerned target
  - Set a precise objective
  - Plan the corresponding activities
  - Name a responsible
  - Estimate a budget

Sources: Smart Pharma Consulting analyses

Recommendation #4 → Select key medical activities to support the crafted medical strategy

Each tactic should be carefully selected to best support the strategic imperatives and carefully planned to ensure a high-quality of execution

Table of tactical objectives related to strategic imperatives

Illustrative

Strategic Imperative		Medical Department	

Tactic	Target	Objective	Timing	Responsible	Budget

Sources: Smart Pharma Consulting analyses

Recommendation #5 → Integrate indicators to monitor activity execution and impact

It is rare to see Strategic Medical Plans with integrated monitoring tools and process, which therefore prevents from measuring the efficacy and efficiency of the selected tactics

What do we observe?

- Rare are the companies which integrate, in their strategic medical plans, indicators to monitor:
  - The quality of execution (Key Execution Indicators)

    and/or
  - The impact (Key Performance Indicators) of their tactics
- Without these indicators and the implementation of a monitoring process, it is impossible to evaluate the efficacy and efficiency of the tactics planned in the medical plan
- Thus, a strategic medical planning without monitoring tools can be viewed as a window-dressing exercise

What do we recommend?

- All plans should include monitoring tools and a monitoring process related to each selected tactic
- We recommend to use:
  - Key Execution Indicators (KEIs) which measure the quality of execution of tactics
  - Key Performance Indicators (KPIs) which measure the outcomes of tactics
- By measuring carefully, the quality of execution and the impact of tactics, it is possible to adjust the strategic medical plans (during the year or from the previous year) to make them more efficient and effective

"If you can't measure it, you can't manage it!" – Peter Drucker

Sources: Smart Pharma Consulting analyses

Recommendation #5 → Integrate indicators to monitor activity execution and impact

KEIs[1] and KPIs[2] are both essential; the first type of indicators measuring the quality of execution and the second the degree of objective achievement

Monitoring indicators

Illustrative

KEIs	KPIs
Quantitative	
▪ Timeliness ▪ Resources spent (Man-days, €) ▪ Number of interactions with medical experts ▪ …	▪ Contribution to medical guidelines evolution ▪ Contribution to market access (HTA[3] – DPC[4]) through generated clinical and/or RW data ▪ …
Qualitative	
▪ Quality of ad boards organization (internal / external perception) ▪ Quality of relationships with medical experts ▪ …	▪ Perceived quality of products ▪ Perceived value of services ▪ Corporate reputation improvement ▪ …

"KEIs check that you are on the right track and KPIs check that you arrive at destination"

Sources: Smart Pharma Consulting analyses

[1] Key Execution Indicators – [2] Key Performance Indicators – [3] Health Technology Assessment – [4] Drug Pricing Committee

Recommendation #5 → Integrate indicators to monitor activity execution and impact

This proposed ID Card includes, on one page, a planning section and a monitoring section for each key tactic

ID Card

Illustrative

▪ **Strategic imperatives**: precise the SI this tactic is supposed to support ▪ **Tactical objective:** define the specific objective of this tactic ▪ **Description:** describe briefly the tactic	▪ **Stakeholder type:** internal, external (e.g., HCPs, payers, PAGS) ▪ **Number of stakeholders:**	**Importance** **L–M–H***

Planning	Actions	Timing	Owner	FTE / OpEx
What are the key actions to realize this tactic?	1.			•

Monitoring	Quantitative / qualitative metrics	Indicator objective	Indicator achievement	Key implications / Comments
Key Execution Indicators (Quality of implementation)	•	•	•	•
Key Performance Indicators (Impact of the action)	•	•	•	•

Sources: Smart Pharma Consulting analyses

** L = Low – M = Medium – H = High*

Strategic Medical Plans are essential to ensure the optimal use of drugs, knowing the increasing importance of medical evidence to drive opinion and behavior of external stakeholders[1]

Key takeaways

- ***D***esign Strategic Medical Plans to allocate the right resources to reach the medical objective…
- … and not just as a formality to be reported at corporate or management committee level
- ***A***dopt the 4Ws[2] (What? – Why? – so What? – What to do?) approach to improve the relevance, the consistency and the robustness of the content
- ***A***pply the "Advanced SWOT" for a better analysis of the medical environment, the competitive landscape and the company's product position, while identifying and prioritizing opportunities, threats, strengths and weaknesses
- ***S***eek preference rather than satisfaction of external stakeholders by improving their perception of the product attributes, the quality of the proposed services and the corporate reputation
- ***M***ake the best use of the "Medical Strategy Card" to formalize clearly and precisely the medical objective, the strategic imperatives and the corresponding key tactics
- ***D***efine Key Execution Indicators and Key Performance Indicators to monitor respectively the quality of execution and the impact of the medical tactics

Sources: Smart Pharma Consulting analyses

[1] Authorities, payers, HCPs, PAGs, patients – [2] What: gathering of data regarding market sales and stakeholders' opinion and behavior. Why: understanding of the factors triggering market and stakeholders' data. So What: implications for the brand. What to do: strategic and tactical decisions to be made to achieve the brand ambition, based on the situation analysis

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Medical Affairs
Best Practices…

… in a Changing Environment

POSITION PAPER June 2023

The purpose of this position paper is to analyze strategic, tactical and organizational best practices of Medical Affairs departments in a changing environment

Introduction

CONTEXT

- Over the past decade, Medical Affairs have moved from a support function providing medical information…
- … to a strategic function collecting insights to direct R&D to better fulfill unmet needs and…
- … disseminating scientific and medical data to take the best advantage of innovations

OBJECTIVE

- Provide information about the evolving mission and organization of Medical Affairs departments
- Share thoughts re. Medical Affairs strategic planning and implementation
- Make recommendations likely to improve the contribution of Medical Affairs to value creation for patients, HCPs and Pharma companies

METHOD

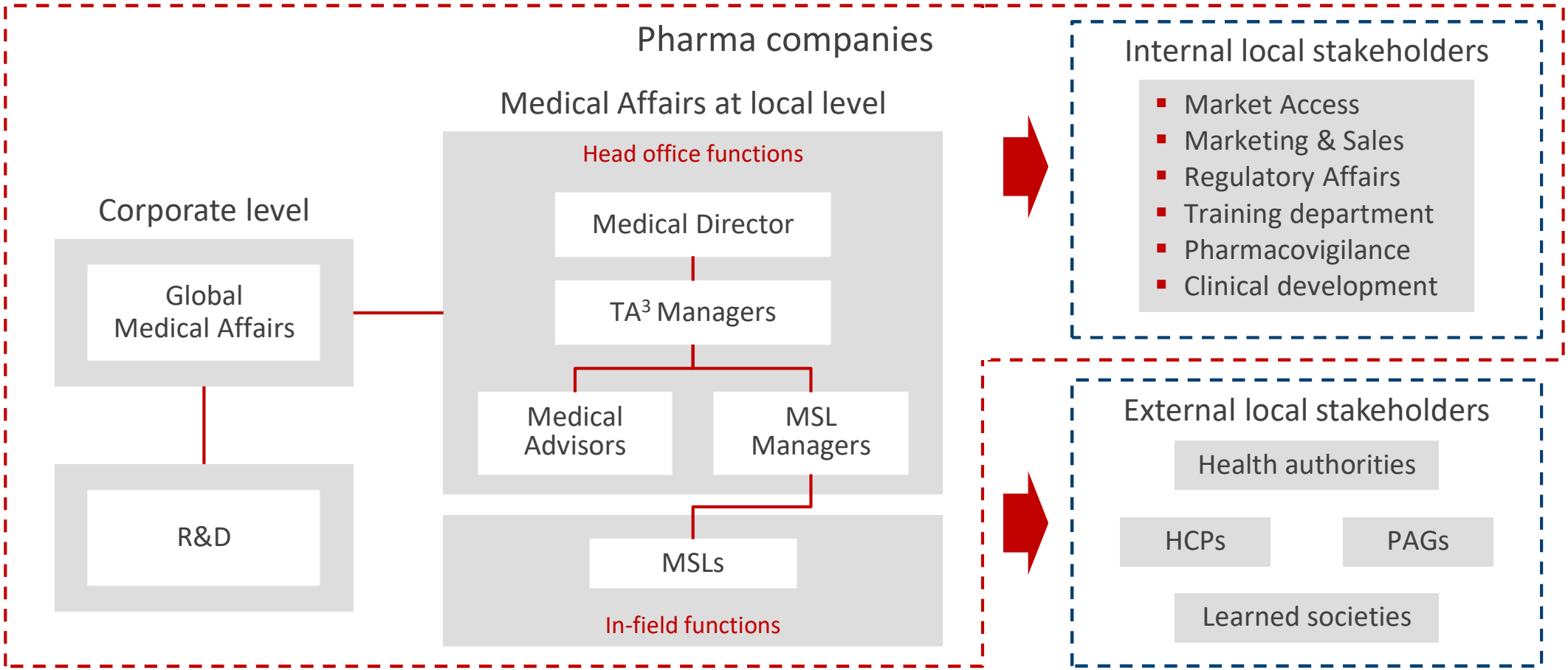
- The content of the position paper is based on:
  - Desk research carried out in May 2023
  - Smart Pharma Consulting experience and previous publications related to medical topics
  - Selected interviews with senior executives from Pharma companies' Medical Affairs department

Sources: Smart Pharma Consulting

Medical Affairs are at the crossroads of pharma companies, interacting internally with all operational functions; and externally with health authorities, HCPs[1], PAGs[2] and learned societies

Medical Affairs positioning

Illustrative

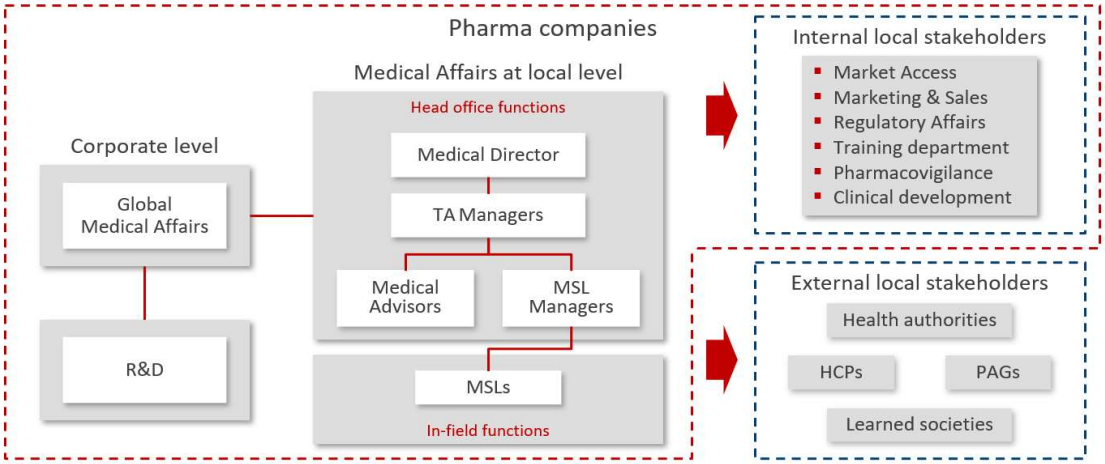


Sources: Smart Pharma Consulting analyses

[1] Especially KOLs – [2] Patient Advocacy Groups – [3] Therapeutic Area

Medical Affairs guarantee a two-way communication to align R&D programs with medical needs and to favor the optimal use of marketed brands by generating supportive evidence

Medical Affairs mission (1/2)



Insights gathering

Gathering of insights re. medical needs from which they will craft a medical strategy to direct and contribute to prioritize the pharma company R&D programs

Data generation & dissemination

Generation and dissemination of medical and scientific data to help HCPs optimize disease management with the company's drugs by supporting their proper usage

Medical education

Knowledge sharing and education of internal and external stakeholders throughout products lifecycle:

- Early-development: to raise KOLs interest
- Pre-launch: to build awareness and position the product
- Launch: to educate on clinical evidence and product use
- Post launch: to provide CME (Continuing Medical Education)

Scientific platform development

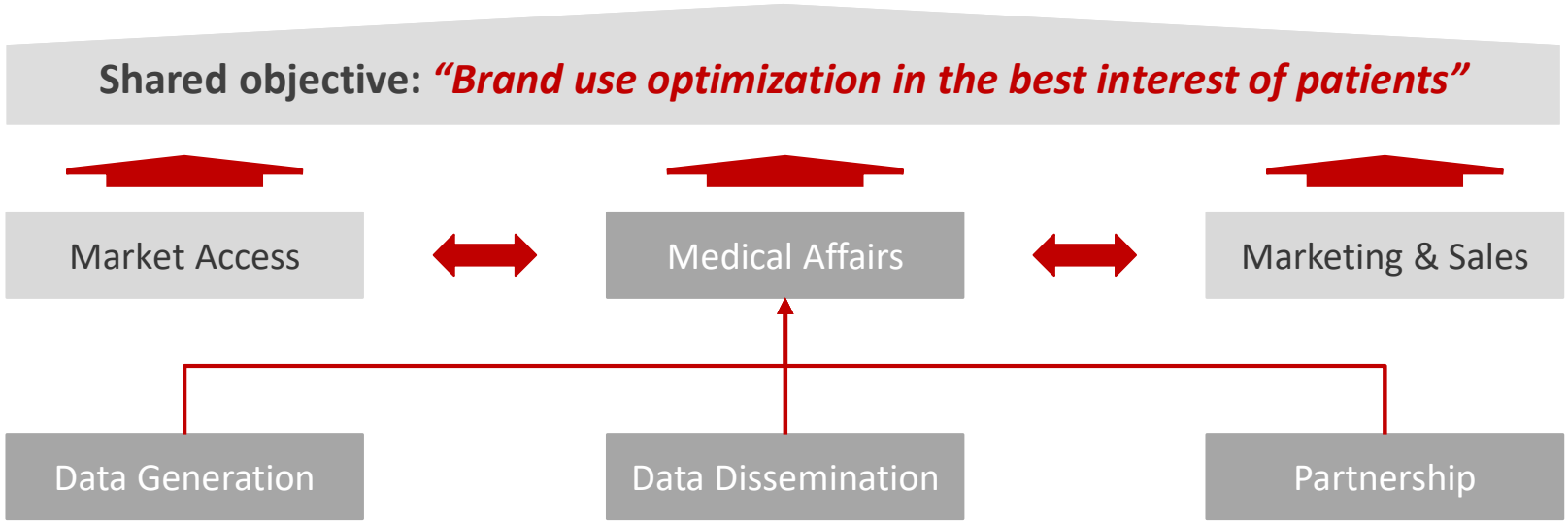
Development of a living document[1], regularly updated, to ensure that disease state and drug information are consistently and optimally communicated

Sources: "Medical Affairs Strategy - Four responsibilities", www.vintura.com – "Four Cornerstones of Pharma Medical Affairs" by L. Dezzani (2021) – Smart Pharma Consulting analyses

[1] Cross-functional process led by Medical Affairs but involving other departments of pharma companies (HEOR[2], market access, marketing & sales[3], regulatory affairs, pharmacovigilance, clinical development, etc.) – [2] Health Economics and Outcomes Research – [3] Including med reps, key account managers, key institution managers

Medical Affairs activities should contribute to optimize the use of pharma companies' brands by HCPs in the best interest of patients

Medical Affairs mission (2/2)



- Medical Affairs play a central role in supporting internal[1] company stakeholders to fulfill the needs of external ones[2] on medical aspects re.:
  - Disease management
  - Specific indications
  - Brands
- From a brand perspective, it is essential that Medical Affairs, Market Access and Marketing & Sales departments:
  - Share the same objective
  - Craft a common strategy to meet this objective
  - Coordinate their activities

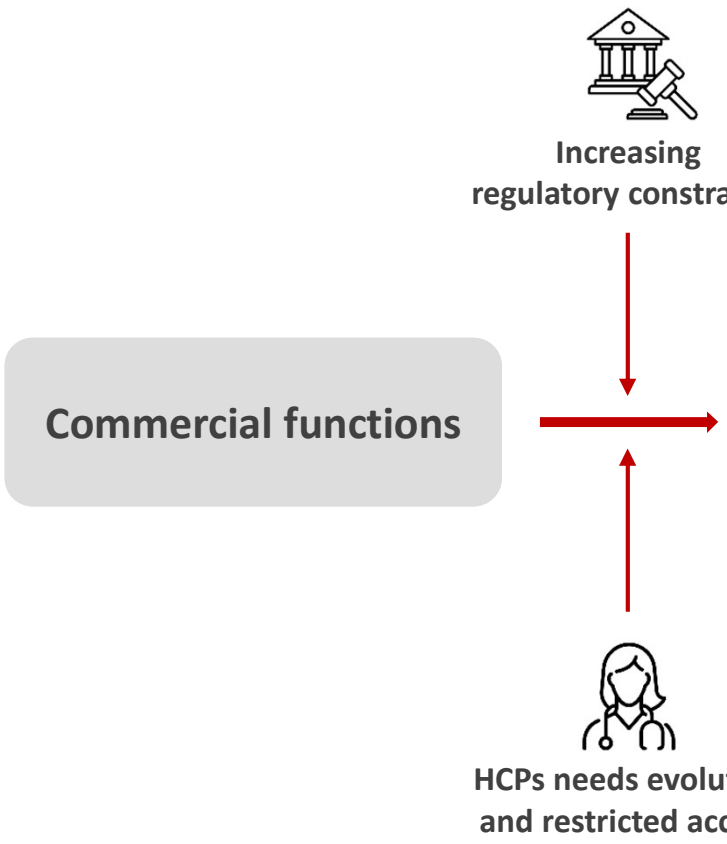
  in their field of expertise, while complying with regulations

Sources: Smart Pharma Consulting analyses

[1] Including HEOR[3], market access, marketing & sales[4], regulatory affairs, pharmacovigilance, clinical development, etc. – [2] Health authorities, HCPs, PAGs, learned societies – [3] Health Economics and Outcomes Research – [4] Including med reps, key account managers, key institution managers

The role of Medical Affairs has evolved into an independent and pillar function mainly due to the increasing pressure from authorities, and evolving expectations and practices of HCPs

Shift of Medical Affairs interactions with other affiliate departments



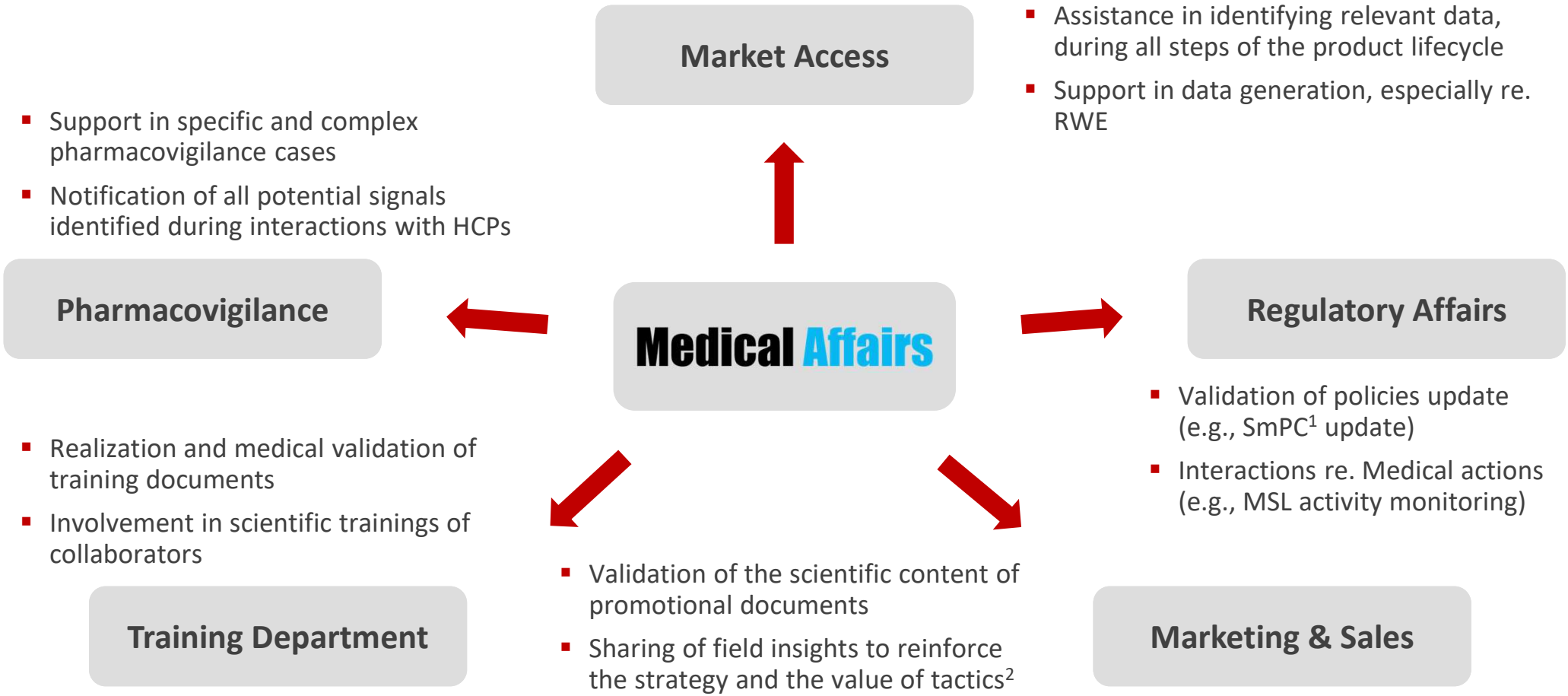
Medical Affairs function evolution

- Initially, Medical Affairs were almost entirely dedicated to medical information, but became a strategic department due to:
  - Increasing regulatory constraints from authorities (e.g., restriction of drug promotion targeting HCPs, required clinical data)
  - Evolution of HCPs needs towards scientific information on the whole environment, beyond the drug
  - Restricted med reps' access to HCPs, looking for value-added interactions
- The role of Medical Affairs is even more important with the development of state-of-the-art therapeutic areas and innovative and more complex therapies (e.g., rare diseases, gene therapy, oncology)
- Medical Affairs make the link between R&D and Commercial functions…
- …that were separated before

Sources: "Medical Affairs: its role and added value within pharmaceutical industry", C. Picard (2021) – The role of Medical Affairs in moving from R&D to Commercialization (2013) – Smart Pharma Consulting analyses

Medical Affairs have a cross-functional role and act as a true scientific platform and partner, for all key internal departments

Interactions with internal local stakeholders

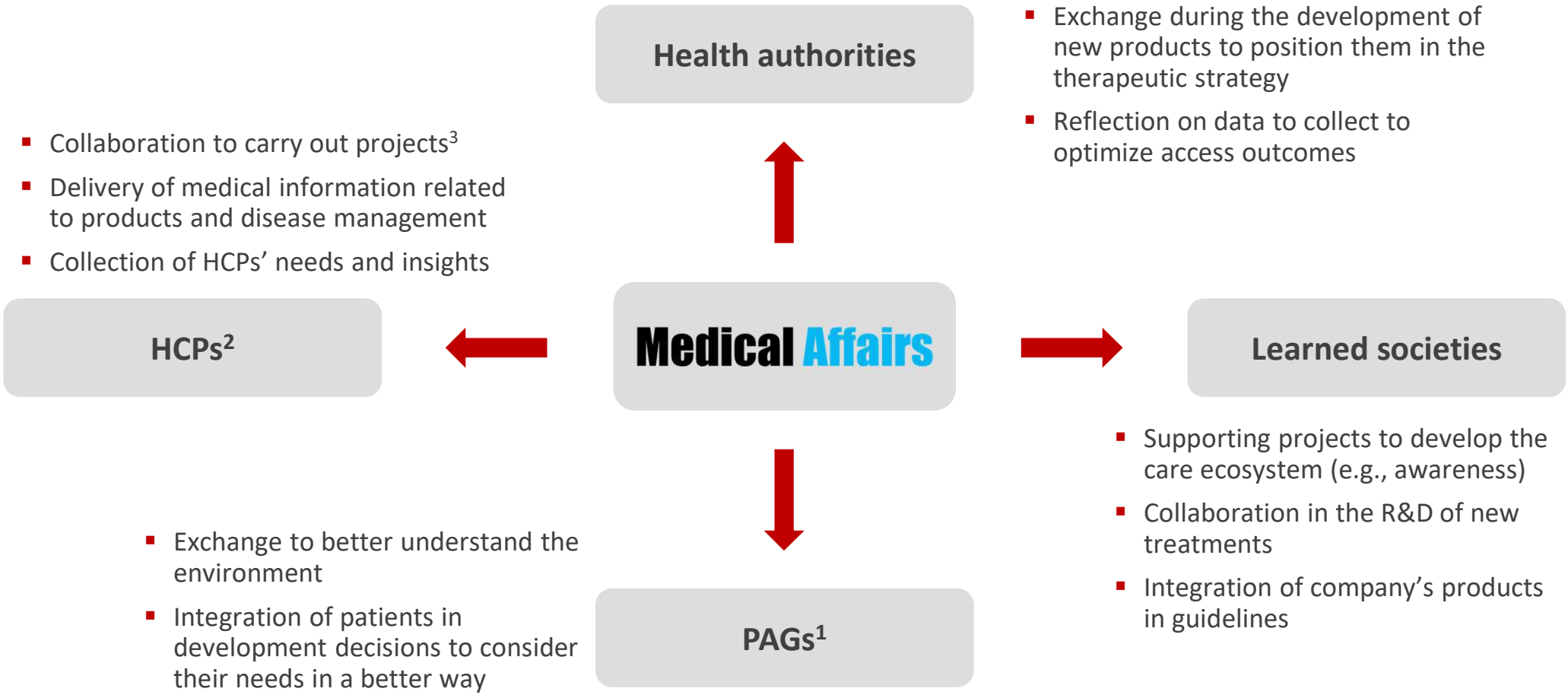


Sources: "Medical Affairs: its role and added value within pharmaceutical industry", C. Picard (2021) – Complete guide on pharmaceutical medical affairs, Viseven (2022) – Smart Pharma Consulting analyses

[1] Summary of Products Characteristics – [2] Especially while developing brand plans

Medical Affairs have an essential role to play towards key external stakeholders, whether in product and disease knowledge collection, management, and delivery

Interactions with external local stakeholders



Sources: The role of medical affairs in positive and appropriate engagement with PAGs (Openhealth group 2022) – "Medical Affairs: its role and added value within pharmaceutical industry", C. Picard (2021) – Smart Pharma Consulting analyses

[1] Patient Advocacy Groups – [2] Especially KOLs – [3] E.g., Investigator-initiated study, speakers at congress, advisory board

Medical Advisors play a key role within Medical Affairs by ensuring the downward alignment of the global medical strategy at national level and providing local insights to Global Medical Affairs

Medical Advisor role

Mission

- The Medical Advisor is the scientific and medical expert of a pathology, its environment and related treatments
- He ensures the accuracy and the relevance of the scientific and medical data that are collected and disseminated

Activities with internal stakeholders

- Ensure a two-way communication w/ Global Medical Affairs
- Develop a national medical strategy formalized in a plan
- Propose scientific and medical data to be used for marketing authorization and/or value dossiers
- Identify non-interventional studies to fulfill a need
- Validate the scientific content of promotional materials
- Develop training documents and train collaborators
- Provide expert opinion re. pharmacovigilance cases
- Validate the update of SmPCs[1] made by Regulatory Affairs
- Support MSLs (i.e., training, content, strategy sharing)

Activities with external stakeholders

HCPs

- Support HCPs to carry out research projects[2]
- Interact during congresses, symposia and other meetings[3]

Health authorities

- Select data to position scientifically new drugs in the therapeutic strategy in the context of market access

Learned societies

- Collaborate on projects to improve patient screening, diagnosis, therapeutic choices, therapeutic adherence, etc.

Patient Advocacy Groups (PAGs)

- Gather PAGs needs to define projects to fulfil patient needs

Sources: "Medical Affairs: its role and added value within pharmaceutical industry", C. Picard (2021) – Smart Pharma Consulting analyses

[1] Summary of Products Characteristics – [2] Such as collaborative studies or Investigator-Initiated Studies – [3] HCPs can also be selected by Medical Advisors to participate to advisory boards, to give lectures, etc.

MSLs are the field team of Medical Affairs in pharma companies, who are dedicated to the development of relationships with KOLs and to high-level scientific communications

Medical Science Liaison (MSL) role

Mission

- The Medical Science Liaison (MSL) is field-based in a designated territory where he focuses on building non-promotional relationships with KOLs and other HCPs
- He is allowed to discuss off-label indications re. drugs on HCPs' demand

Activities with internal stakeholders

Global Medical Affairs

- Translate the global medical strategy at its territory level
- Coordinate the execution of research projects by KOLs[1]
- Gather medical insights from the field[2]

Marketing & Sales

- Develop an action plan complementing the med reps' one
- Answer questions and train on scientific environment
- Co-organize local scientific events[3]

KAMs[4] & KIMs[5]

- Provide medical data to support hospital listing process
- Provide medico-economic data re. company's drugs

Activities with external stakeholders

HCPs

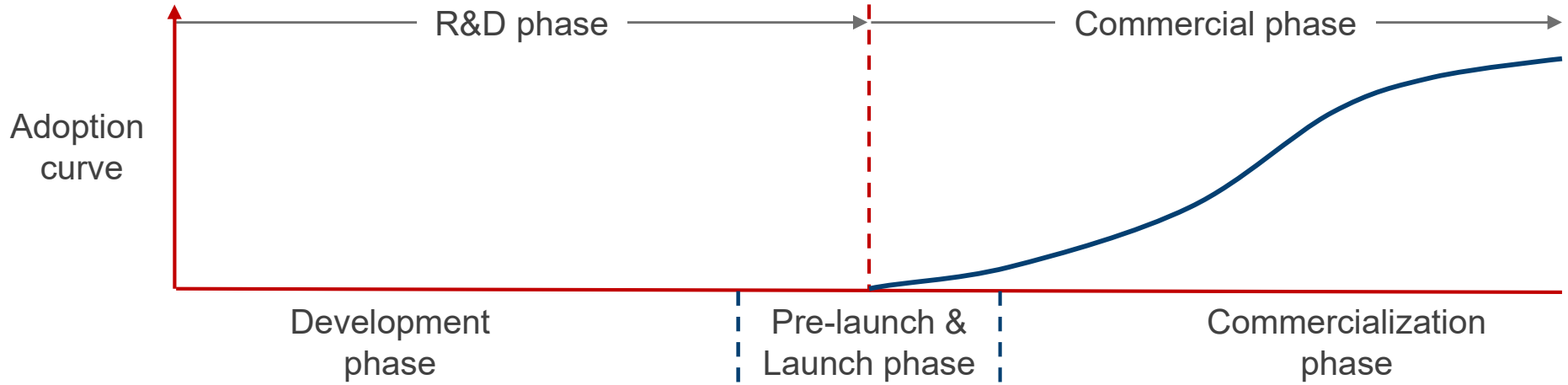
- Map and target KOLs to raise their interest for new drugs
- Identify high potential centers and investigators for company-sponsored clinical studies
- Support studies implementation jointly with CRA[6]
- Collect insights re. medical needs, drug use and competition
- Contribute to medical education of HCPs for better drug use
- Respond to HCPs requests re. clinical development, RWE studies, Investigator-Initiated Studies (IIS)
- Interact with HCPs during congresses, symposia and other meetings, such as advisory boards

Sources: "Medical Affairs: its role and added value within pharmaceutical industry, C. Picard (2021) – "The changing role of the modern MSL", Pharmaceutical Market Europe, October 2015 – Interviews with 5 MSLs – Smart Pharma Consulting analysis – Smart Pharma Consulting analyses

[1] Collaborative studies or Investigator-Initiated Studies – [2] E.g., KOLs needs, frequent medical questions / objections – [3] Such as staff meetings in hospital departments, medical meetings, webinars – [4] Key Account Managers – [5] Key Institution Managers who interact with regional health authorities and payers – [6] Clinical Research Associates

Medical Affairs play an essential role to ensure that clinical development will fulfill patient unmet needs and that health authorities, payers and HCPs will make the best use of marketed drugs

Medical Affairs activities along the drug lifecycle



Medical Affairs key activities

Development phase

- Proactive insight gathering re. unmet medical needs…
- … to translate science into clinical practice
- Identification of clinical and medico-economic meaningful differentiators

Pre-launch & Launch phase

- Insight gathering
- Clinical and medical data dissemination
- KOL identification/mapping
- Participation to ad boards
- Management of early access programs (EAP)

Commercialization phase

- Contribution to RWE and economic data generation & dissemination
- Participation to ad boards
- Preferred contact point of KOLs to support IIS[1]
- Internal & external training

Sources: Smart Pharma Consulting analyses

[1] *Investigator-Initiated Studies*

The use of digital technology in clinical trials facilitates patient recruitment and retention, reduces associated costs and generates real-world evidence

Medical Affairs digitalization: Clinical data generation

sanofi

Real-world evidence generation

- **Digital tools** represent an opportunity to generate **real-world evidence** and thus strengthen patient's role to assess drugs value and to design innovative products
- Their development has been facilitated by **rapid advances in technology**[1]
- The generation of these data offers a better understanding of **real-world care pathway** with the help of **new indicators** such as:
  - **PROMs (Patient-Reported Outcomes Measures)**
  - **PREMs (Patient-Reported Experience Measures)…**
- **…**enabling to **evaluate the quality of care** as perceived by patients

Case study: VERKKO trial application

- A **Phase IV trial** has been launched, **fully digitally** using a **connected blood glucose meter**, by Sanofi in collaboration with Mendor and eClinicalHealth
- 60 patients **recruited via Facebook** with an **81% conversion rate** (recruitment/application), which is better than typical recruitment results
- The digitalization of the study resulted in a:
  - High **patient satisfaction**
  - **Reduced coordination time** by 2/3
  - **Patient-centered** study design

Sources: eClinicalHealth Announces Successful Results for an Entirely Remote Online Clinical Trial (Businesswire 2016) – From recruiting to data collection, the impact of connected digital health in clinical trials (Nadir Ammout 2016) – Smart Pharma Consulting analyses

[1] *Smartphones, tablets, electronic medical records, big data analysis through AI, etc.*

Digital tools and channels offer a wider choice of innovative ways to deploy medical communication strategy and have changed the profile of KOLs

Medical Affairs digitalization: Medical communication

Digital channels

- Use of innovative formats to communicate with HCPs (e.g., chatbots, podcasts, webinars) is increasing
- Digitalization of MSL activities and interactions with KOLs has become increasingly important
- Post-Covid-19, 66% of KOLs surveyed by the MSL Society indicated that they preferred to use digital tools over face-to-face visits with MSLs
- Thus, more and more MSLs and medical advisors adopt an omnichannel approach with KOLs

Content personalization

- As for medical reps, AI-based tools provide a better understanding of HCPs' needs (e.g., habits, learning preferences)…
- …and advanced analysis of interactions allows to propose the most engaging and impactful content for HCPs
- Digital tools are particularly useful to disseminate specific data to KOLs because they facilitate the identification, collection, storage and structure of scientific and medical information

KOL / DOL

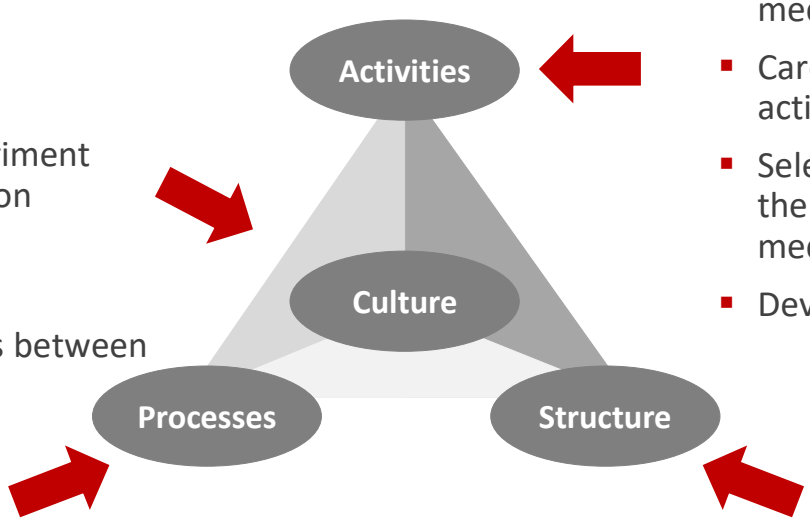
- The emergence of digital channels has changed the landscape of medical influencers:
  - DOLs (Digital Opinion Leaders) who have an influential role in sharing medical information on social networks, coexist with…
  - KOLs, knowing that less than 30% of the latter have a social media presence
- Ideally, companies will identify experts that combine the strengths of traditional and digital thought leaders and develop relationships with the most relevant of them

Sources: Transforming Medical Affairs: Tapping the alchemy of storytellers and digital start-ups (McKinsey 2019) – Medical Affairs Digitization (PharmExec.com 2021) – Digital Medical affairs with a human touch – To maximize KOL impact, Medical Affairs needs a digital strategy too (PharmaSpectra resources 2021) – How to digitalize MSL teams for increased efficiency (Pharmafield) – Medical affairs: Key imperatives for engaging and educating physicians in a digital world (McKinsey 2018) – Smart Pharma Consulting analyses

The Medical Affairs organization should be designed and adjusted to best support the implementation of the medical strategy crafted by the pharma company

Key organizational dimensions to be leveraged

- Develop a culture of superior stakeholder satisfaction
- Develop a powerful vision so that collaborators feel connected[1]
- Install a participative culture[2]
- Engrain a culture of excellence
- Encourage pro-activity, agility and experiment to find new solutions to excel in execution



- Provide direction and resources for achieving medical strategic objectives
- Focus on activities that best support the medical strategy
- Carefully plan the execution of key medical activities
- Select a limited number of metrics to monitor the quality of execution and the impact of medical activities
- Develop the skills of collaborators

- Facilitate cross-functional collaborations between Medical Affairs and other departments
- Develop tools to:
  - Align objective, strategy and tactics
  - Measure the quality of execution and the impact of activities
  - Reinforce the cohesion of teams
  - Learn from experience
- Streamline processes and set up standards of excellence

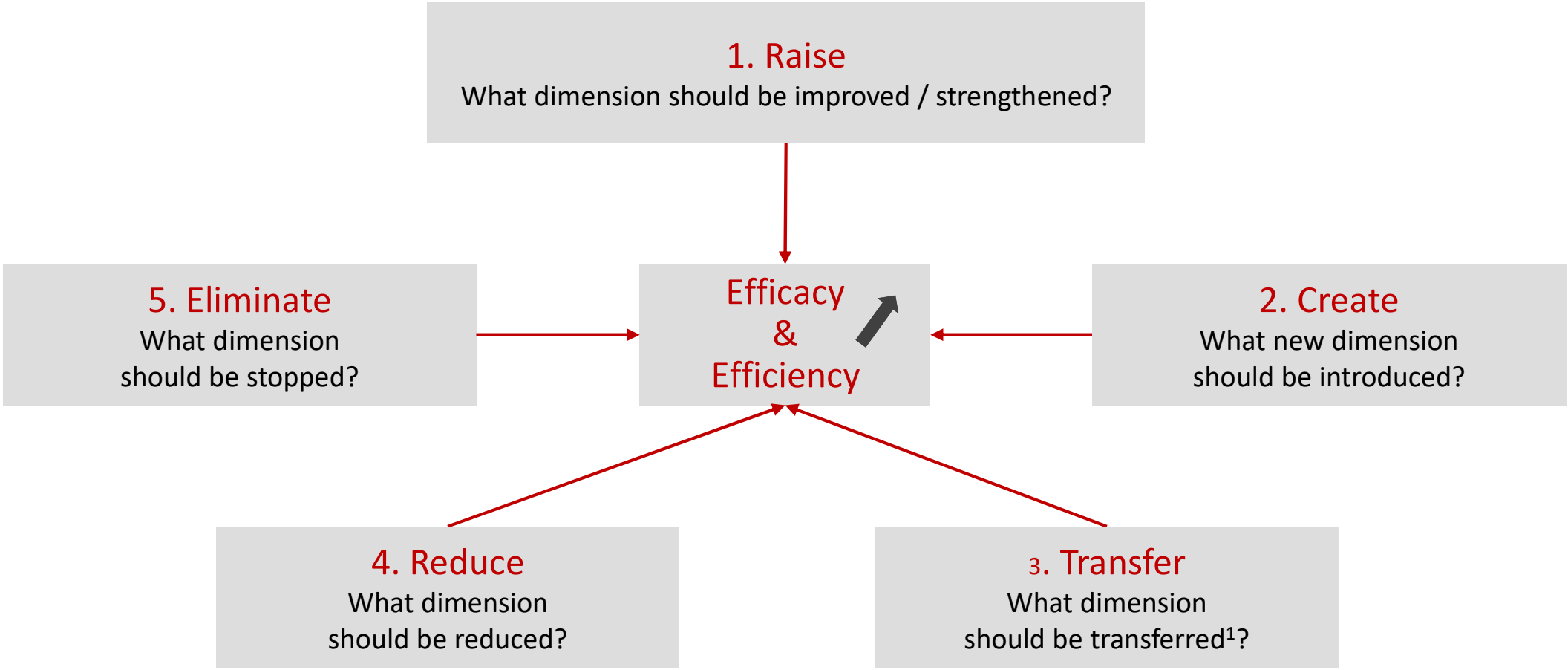
- Design an adaptative structure
- Set up a flat and lean organizational chart
- Simplify structures by eliminating needless complexity
- Delineate lines of command and decision rights

Sources: Smart Pharma Consulting

[1] Set clear performance expectations, hold them accountable, give them regular feedbacks, reward their performance, share outcomes, etc. – [2] Solicit ideas and inputs, listen to people, select and implement their most appropriate suggestions

When applied to Medical Affairs departments, the five following actions can help improve their organizational efficacy and efficiency

How to leverage key organizational dimensions?



Sources: Smart Pharma Consulting adapted from Blue Ocean Strategy by W. Chan Kim and Renée Mauborgne (2005)

[1] To another department, colleague or outsourced

The purpose of Strategic Medical Plan is to allocate the right medical resources to reach the medical objective set, in an effective and efficient way

Strategic medical plan – Structure

Conventionally, strategic medical plans are structured in three sections

Section 1 Situation Analysis

- Epidemiology
- Medical care
- Healthcare facilities
- Patient care management
- Stakeholders' opinion and behavior[1]
- Company's pipeline & portfolio
- SWOT analysis

Section 2 Objective & Strategy

- Global medical strategy (one-page strategy)
- National medical objective
- National medical strategy (one-page strategy)

Section 3 Tactics

- Medical tactics supporting strategic imperatives (SI):
  - Data generation
  - Data dissemination
  - KOL engagement
  - MSL[2] & MA[3] plans
- Medical activities coordinated with other internal stakeholders[4]
- Monitoring process and tools
- Budget

Sources: Smart Pharma Consulting analyses

[1] Health authorities, HCPs, PAGs, learned societies, competitors – [2] Medical Science Liaisons – [3] Medical Advisors – [4] Market access, marketing & sales, regulatory affairs, pharmacovigilance, clinical development, etc.

High-Performance Strategic Medical Plans require method, rigor and pragmatism

Strategic medical plan – Recommendations

Recommendation #1

Analyze – don't just describe the medical situation

Recommendation #2

Carry out a structured and fact-based Medical SWOT analysis

Recommendation #3

Craft a medical strategy enabling to meet the set medical objective

Recommendation #4

Select key medical activities to support the crafted medical strategy

Recommendation #5

Integrate indicators to monitor activity execution and corresponding impact

Sources: Smart Pharma Consulting analyses

Medical Affairs will evolve in their activities with the development of digital tools but also, in their role which is becoming increasingly central and essential within the pharma industry

What is the future of Medical Affairs?

Insights Management

- Use of conventional and digital scientific data sources (e.g., publications, social listening, connected devices) and…
- …capitalization on digital tools (e.g., algorithms, AI) to generate and analyze HCPs and patient insights that are valuable to direct pharma companies' R&D programs, and deliver relevant medical information

Scientific Evidence Generation

- New digital tools allow to generate RWE data...
- ...which are more and more requested by health authorities and valuable for pharma companies
- Science, safety and transparency are the key drivers of Medical Affairs and a clear governance strategy for new tools must be established

Medical Affairs Transformation

- Medical Affairs are becoming a "Pillar function" oriented towards patients' life improvement as a whole and not only focusing on drugs
- Therefore, several new roles are emerging to fulfill this function (e.g., patient officers)
- In addition, technologies are expanding beyond-the-pill to improve patient care (e.g., DTx[1])

Stakeholders Engagement

- Medical Affairs are at the crossroads of stakeholders (e.g., HCPs, PAGs[2], health authorities)
- Thus, they must determine best value-added strategies to engage stakeholders and develop sustainable relationships
- Patient-centric initiatives are increasing, with patients engaged as soon as product development

Sources: Medical Affairs: A pillar function in transformation (BearingPoint) – 4 Medical Affairs trends for 2023 and beyond (2022) – Smart Pharma Consulting analyses

[1] Digital Therapeutics – [2] Patient Advocacy Groups

Smart Pharma
CONSULTING

Best-in-class
Medical Science Liaisons

How to boost MSL's Competence & Performance

POSITION PAPER February 2017

This position paper proposes strategic and operational methods, tools and advice to boost Medical Science Liaisons (MSLs) competence and performance

Context & Objective

- **Medical Science Liaisons (MSLs) play a pivotal role to maintain a close relationship with KOLs[1] who are instrumental in:**
  - Developing new products through their collaboration in pre-clinical and / or clinical trials
  - Raising the awareness and the preference – indirectly or directly – for their products in the mind of HCPs[2] but also of health authorities, PAGs[3], individual patients, etc.
- **The increasing role of Medical Science Liaisons (MSLs) results from:**
  - New molecular entities becoming more and more complex…
  - … and mainly prescribed by specialists, less and less inclined to be informed by medical reps
- **In this position paper, Smart Pharma Consulting proposes:**
  - Methods, tools and advice to boost **MSLs competence and performance**
  - **KOL Partnership Model** to recruit and manage KOLs in a more efficient and effective way

Sources: Smart Pharma Consulting

[1] Key Opinion Leaders – [3] Health Care Professionals – [3] Patient Advocacy Groups

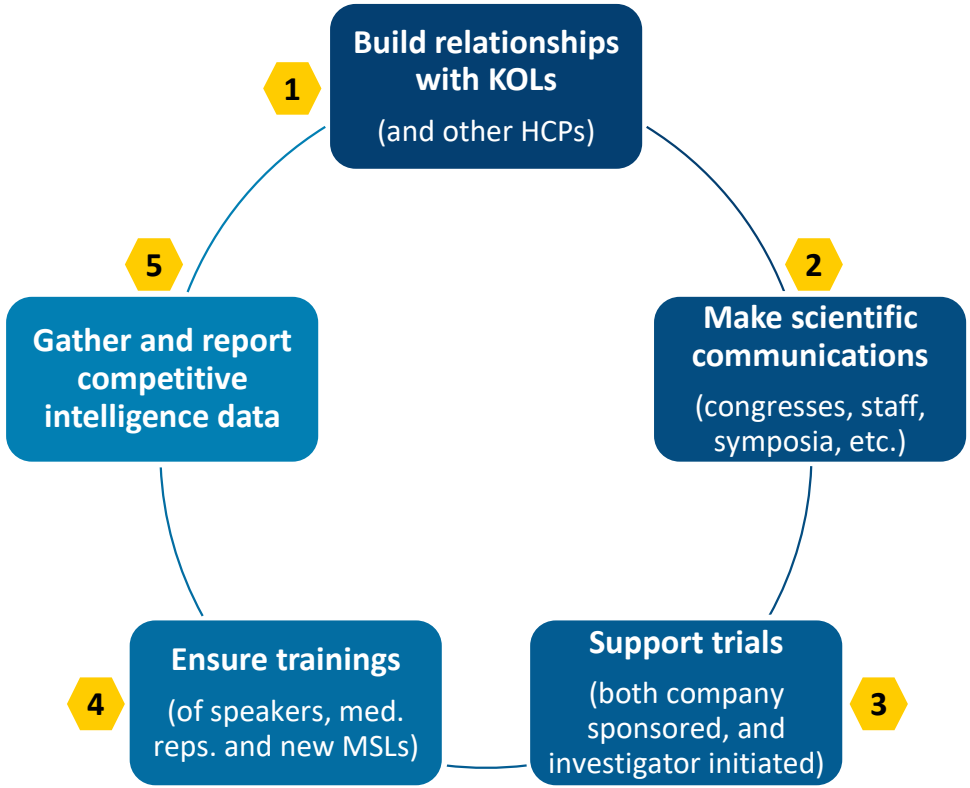
MSLs are the field team of medical affairs in pharma companies, who are dedicated to the development of relationships with KOLs and to high-level scientific communications

Overview: MSLs

MSLs: Medical Science Liaisons[1]

- MSLs are one of pharma companies' field teams dedicated to enhance the full exchange of **scientific information** with physicians, especially with KOLs
- MSLs have a more robust scientific background than medical representatives, such as: **MSc, MD, Pharm. D, PhD degrees** (90% of them have a doctorate degree)
- MSLs were first established by **Upjohn Pharmaceuticals** (now Pfizer) in **1967** with the objective **to build a strong relationship with KOLs**
- The central activity of MSLs is to develop long-term, peer-to-peer **relationships with KOLs**
- MSLs are in most cases affiliated to the **medical affairs department** (whereas med reps. are affiliated to the sales / marketing department)

Core activities[2] of MSLs



Sources: MSL Society – "An insight into the emerging role of regional medical advisor in the pharmaceutical industry", Perspectives in Clinical Research, 2013 – Smart Pharma Consulting analysis

[1] Other names than MSLs can be used by pharmaceutical companies such as: Medical Liaisons, Regional Medical Managers, Regional Scientific Managers, Scientific Affairs Managers, Medical Information Scientists, Clinical Liaisons – [2] Excluding administrative time

KOLs have the potential to influence their peers, but also other stakeholders in a specific area, at international, national and local levels

Overview: KOLs

KOL: Key Opinion Leader

- The acronym KOL is generally used to qualify physicians who have a **recognized expertise in a specific field** (e.g., oncology, endocrinology, epidemiology, biostatistics, etc.)…
- … and who can **influence the opinion** and **the medical practice** (e.g., treatment scheme, prescribing habits, preference for a given product, etc.) of their peers (specialists or GPs)
- KOLs may also contribute to **modify medical guidelines** when they are members of learned societies or when they advise health authorities
- KOLs' influence can be at international, national or local levels
- Other stakeholders may also be considered as KOLs (e.g., members of governments, of health authorities, of learned societies, of patient advocacy groups, journalists, pharmacists, nurses, etc.)

Pyramid of influence & types of influencers

Sources: Smart Pharma Consulting

Other stakeholders than physicians likely to have an influence on medical practices and physicians' preference for a product

The relationships between pharmaceutical companies[1] and healthcare professionals are increasingly regulated, and potential conflicts of interest must be disclosed

Regulatory framework[2] regarding KOLs & pharmaceutical companies' partnerships

European regulations - Directive 2001/83/CE (Article 94)

- Prohibition of bonuses, benefits (in cash or in kind) from pharmaceutical companies to prescribers
- Hospitality at a reasonable level

France

- **Prohibition of benefits** (in cash or in kind), in any form whatsoever, directly or indirectly, for medical professionals
- Obligation to **disclose potential conflicts of interest** between health professionals or health facilities with pharmaceutical companies
- Measures put in place in the DMOS law **extended to students in healthcare** and patient advocacy groups

UK

- **Interdiction to supply, offer or promise gift, pecuniary advantage or benefit** to HCPs in connection with the promotion of medicines or as an inducement to prescribe, supply, administer, recommend, buy or sell any medicine
- During meetings organized by pharma companies, **provision of inexpensive items only** (pens, etc.) that **must not bear the name of any medicine** or any information about it

Germany

- No influence of HCPs in a **dishonest** manner and therefore **no** advantages **granted** or **promised**
- **Open** and **transparent** cooperation
- Existence of a code for the collaboration (FSA) of the pharmaceutical industry with physicians, pharmacists and other healthcare professionals to **avoid conflicts of interest**

Italy

- **Prohibition** of **any kind of economic incentives** designed to compensate healthcare professionals for time taken from normal professional activities in order to participate in congressional events
- Participation in conferences related to the role performed by the industries in the field of research, development and scientific data and inspired by **ethical, scientific** and **cost-effective criteria**

Spain

- **Prohibition** of **direct or indirect offering** or provision of any type of incentive, prize or gift (in cash or in kind) to HCPs
- **Previous communication to authorities of all events** of a scientific or promotional nature, organized or sponsored by pharma companies
- No **organization** or **sponsor** of events that take place **outside of Spain** (unless it makes more sense from a logistical standpoint)

Sources: http://eur-lex.europa.eu/ – Leem – The ABPI Code of Practice for the Pharmaceutical Industry – Code of conduct farmindustria – Farmaindustria Code of practice – Compliance issues for pharmaceutical companies in Germany

[1] Including biotechnology and medical devices companies – [2] Extracts

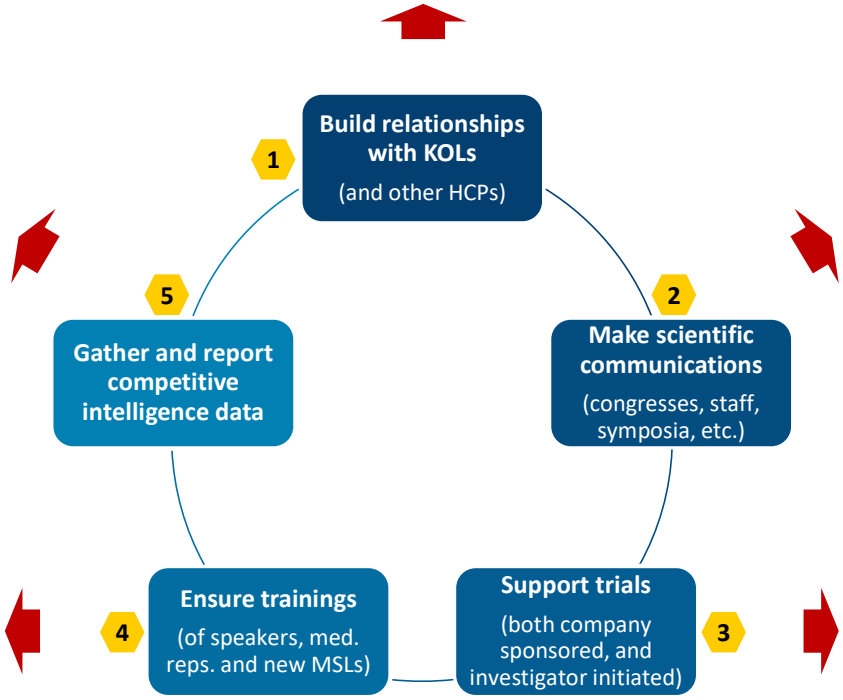
MSLs are often asked to cover a large scope of activities in collaboration with both internal and external stakeholders

MSLs' detailed core activities

- Identification, selection and collaboration with KOLs: setting-up of boards, organization and participation in scientific information meetings, development of continuous medical education (CME) projects, patients or physicians' associations funding, etc.
- Management of Investigator Initiated Studies (IIS)[1]: requests processing and follow-up
- Invitations to congresses / symposia, etc.

- Presence in congresses and attendance to competitors' presentations
- Desk research: on competitors, on therapeutic areas, on medico-economic studies
- Critical review of scientific papers

- Training and certifications of med. reps.
- Training of other functions, such as marketing
- Training of speakers communicating on companies' products / therapeutic areas, etc.
- Writing of supports for FAQ&O[2]



- Answers to HCPs' medical questions
- Participation in scientific information meetings (staffs, face to face, etc.) for on- and off-label indications, re. therapeutic areas and products in the pipeline
- Presentation of studies in congresses / symposia

- Identification of needs and demands of KOLs for IIS
- Identification of high potential centers and investigators for company-sponsored clinical trials
- Support for studies carried out and followed-up jointly with CRAs (Clinical Research Associates)

Sources: "An insight into the emerging role of regional medical advisor in the pharmaceutical industry", Perspectives in Clinical Research, 2013 – Interviews with 5 MSLs – Smart Pharma Consulting analysis

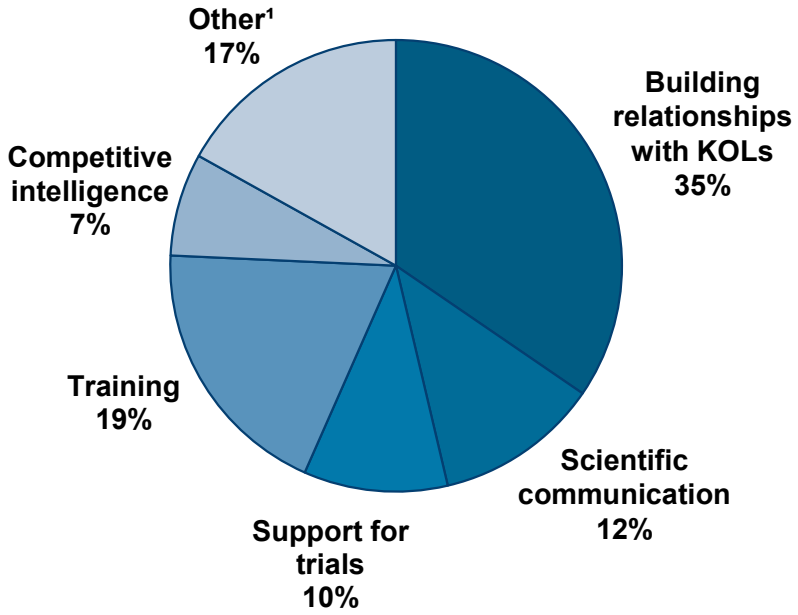
[1] Also called: Investigator-Initiated Trials or IIT – [2] Frequently Asked Questions & Objections

Building relationships with KOLs and training HCPs or colleagues account together for ~55% to 60% of MSLs' activity in both pre- and post-launch settings

MSLs' time allocation per core activities

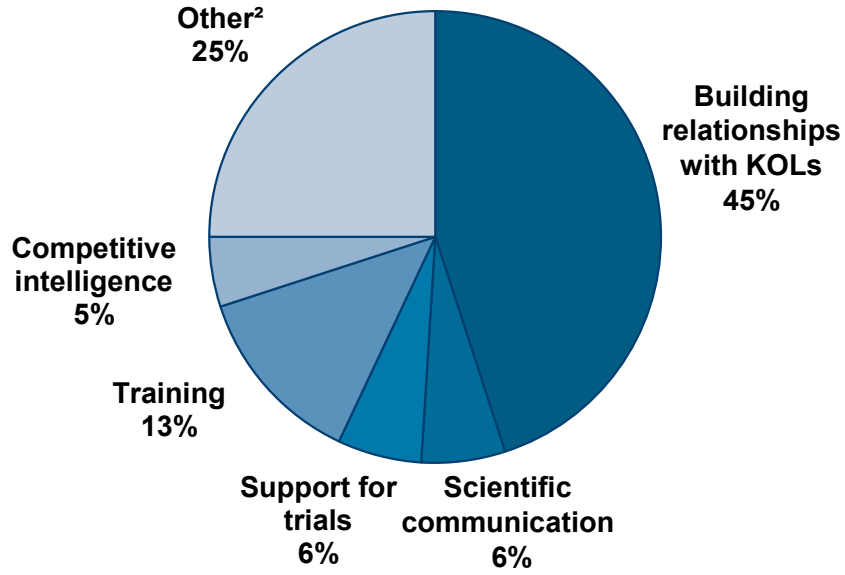
MSLs share the same core activities from one company to another,
but there could be important variabilities in planning and duties

Pre-launch product



Number of respondents: 11 pharma companies

Post-launch product



Number of respondents: 11 pharma companies

Sources: "Aligning the Activities and Goals of Medical Science Liaison Teams for Strengthened Corporate Sustainability", MSL World – Interviews with 5 MSLs – Smart Pharma Consulting analysis

[1] Including pre-launch transversal activities with marketing or medical teams, etc. –
[2] Including support to other field forces, participation in internal advisory boards, etc.

MSLs must support KIMs[1] who facilitate regional market access, KAMs[2] who ensure listing of products at hospital level and marketing and sales reps who promote them

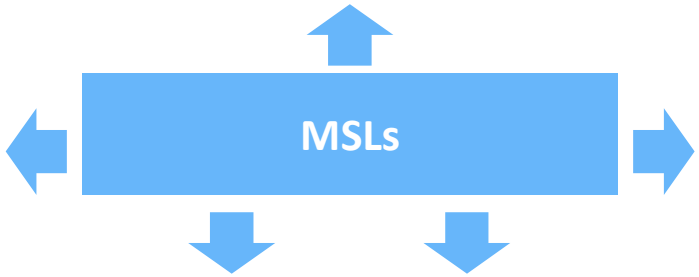
The transversal role of MSLs

Key interactions with corporate medical affairs

- **Medical strategy:** Determined by corporate medical affairs and translated locally by MSLs
- **Coordination:** Between corporate and MSLs projects with KOLs, especially re. company-sponsored clinical trials and IIS[1]
- **Training:** Corporate medical affairs ensure trainings of MSLs
- **Feed-back from the field:** On future KOLs, on clinical trial centers needs, on frequent medical questions / objections, etc.

Key interactions with marketing

- **Brand teams:** Integration of MSLs' key activities/actions
- **Coordination:** Between marketing and MSLs projects with KOLs
- **Training:** MSLs may train marketing teams on medical issues



Key interactions with Key Account Managers (KAMs)

Increasing number of interactions between MSLs and KAMs:

- **Scientific presentations** of MSLs during **hospital listing** processes

Key interactions with Key Institution Managers (KIMs)

KIMs, who interact with **regional health authorities** and **payers**, may ask for MSLs help to **highlight** the **medical** or even **medico-economic** profile / benefit of a brand or of a TA[2]

Key interactions with sales team

- **Medical information:** Answers to scientific questions / objections
- **Local scientific events:** staffs and scientific meetings co-organization (scientific part by MSLs and logistic by med. reps.)
- **Training:** med. reps. on scientific / medical environment related to the promoted brand
- **Local medical and commercial strategy:** Development of Integrated Regional Strategic Plans and monthly follow-up meetings

Sources: "The changing role of the modern MSL", Pharmaceutical Market Europe, October 2015 –Interviews with 5 MSLs – Smart Pharma Consulting analysis

[1] Key Institution Managers – [2] Key Account Managers – [3] Investigator Initiated Studies – [4] Therapeutic Area

MSLs teams face recurrent issues that can be addressed if pharma companies implement the relevant actions

Six main issues facing MSLs teams

		Key issue	What to do?
1	Distinction from sales / marketing	▪ Role confusion persists in the mind of some HCPs / KOLs	▪ Information campaigns to be carried out to inform stakeholders of the specific role of MSLs ▪ Information should be provided through calls
2	Disconnection with corporate initiatives	▪ Initiatives initiated by corporate (clinical trials, etc.) not coordinated with MSLs teams	▪ The coordination should be improved by implementing standard communication processes and rules
3	Distraction from core activities	▪ MSLs, for being well trained and effective professionals, cannot contribute to tasks such as health economics, outcomes research, etc.	▪ MSLs' responsibilities and objectives should be clearly defined and internally communicated through information campaigns
4	Extensive geographical zones	▪ MSLs teams being small; they have to cover large geographic areas and must undertake frequent travels	▪ Alternative communication technologies such as web conferencing, e-mailing, teleconferences, etc., should be considered
5	Complex regulatory environment	▪ Government agencies keep on scrutinizing on how products are promoted by pharma companies	▪ Pharma companies should focus on MSLs' compliance with local regulations… ▪ … which should be carefully monitored
6	Trend towards specialization	▪ The development of secondary care products and the increasing complexity of science lead to major training requirements for MSLs	▪ Pharma companies should keep on investing on their MSLs' scientific training

Sources: "Implementing a MSL team", Publicis Touchpoint – "Aligning the Activities and Goals of Medical Science Liaison Teams for Strengthened Corporate Sustainability ", MSL World – Interviews with 5 MSLs – Smart Pharma Consulting analysis

MSLs' most important challenge is certainly to create highly valued interactions and trusted collaborative relationships with KOLs to support companies and products

MSLs' challenges – Required skills – Expected outputs

MSLs' challenges

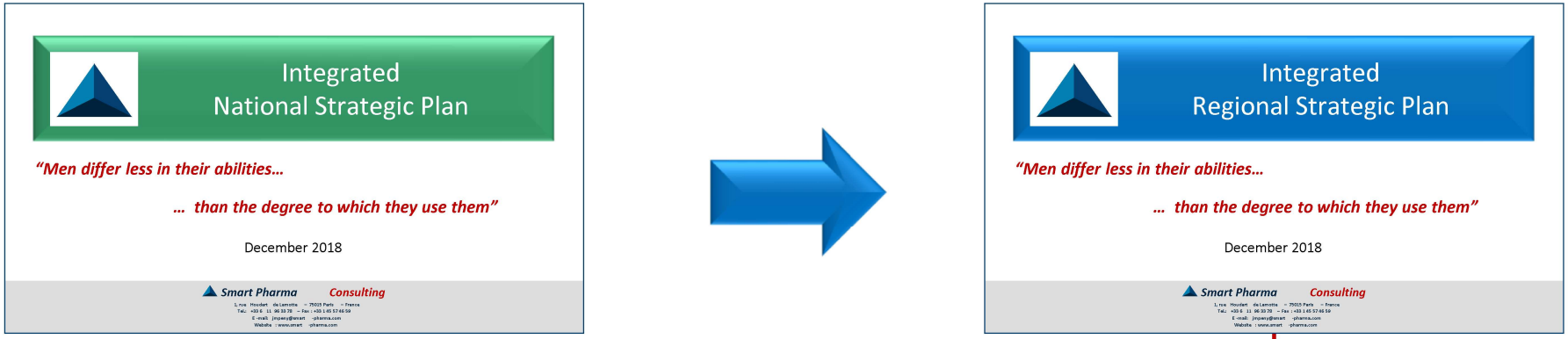
- Keeping up with the **latest scientific information**
- Building strong and sustainable **relationships with KOLs**
- Managing **multiple and diversified tasks**
- Complying with **national regulations** and **internal code of conducts**
- Ensuring effective **coordination with collaborators**

Required skills	Expected outputs
Excellent **scientific knowledge** and **understanding** to carry out peer-to-peer discussions during interactions with KOLs	Ability to **inform**, **challenge** and / or **convince KOLs** based on robust and updated scientific evidence
Strong **communication skills** to properly position: – The company's therapeutic expertise – A given product at pre- or post-launch stage	**Convince** KOLs to **carry out research** or **clinical studies** **Convince** KOLs to **support** the company's **products**
Ability to **manage projects** with KOLs (e.g., while supporting investigators-initiated studies or company-sponsored clinical trials)	**Identification** of clinical **research opportunities** with KOLs **Effective implementation** of **clinical research** trials
Ability to **train / teach** and / or develop support documents for companies' collaborators and / or HCPs	**Improvement** of participants' **knowledge, understanding** of the **disease area** and of the **benefits** of the company's **products**
Capture and **share insight** gathered through interactions between KOLs' and all customer-facing teams	**Profiling** and **selecting** the relevant **KOLs to partner with** **Fulfilling** of **KOLs needs** related to MSL activities
Cooperate and **coordinate activities** with other **customer-facing collaborators** and **corporate teams** interacting with KOLs	MSLs being the preferential contact of KOLs, they will **ensure consistent interactions** and **address potential issues**
Comply with national regulations and ethical considerations regarding disseminated information (e.g., off-label)	**Prevent the company** to **be sued** and to **be fined**
Ability to **manage time**, **set priorities** and **adjust unforeseen changes** inherent to MSLs' job	**Timely and proper execution** of multiple tasks under the responsibility of MSLs

Sources: "The changing role of the modern MSL" Pharmaceutical Market Europe October 2015 – Smart Pharma Consulting analysis

MSLs' activities should be integrated in a Regional Strategic Plan to ensure synergies with marketing, sales, market access and patient adherence departments' activities[1]

Integrated Regional Strategic Plan – Principle



Medical Section

- **Collaborators:** MSLs
- **Key clients:** national and regional KOLs
- **Key objectives:** build strong and sustainable relationships with KOLs to develop advocacy
- **Key activities:** interactions with KOLs, scientific lectures at congresses, symposia, staff meetings, support of research clinical trials, training of speakers and collaborators from marketing and sales teams, support of Key Institution Managers (KIMs) and Key Account Managers (KAMs) while meeting their clients, competitive intelligence initiatives

Marketing & Sales Section

- **Collaborators:** brand managers, area managers, medical representatives
- **Key clients:** physicians, retail and hospital pharmacists
- **Key objectives:** strengthen brand preference
- **Key activities:**
  - **Marketers:** crafting of a brand preference strategy leveraging brand attributes, perceived quality of associated services and corporate reputation
  - **Sales forces:** medical calls, invitations to medical meetings, congresses and proposal for services likely to strengthen brand preference

Access & Adherence Section

- **Collaborators:** Key Account Managers (KAMs) and Key Institution Managers (KIMs)
- **Key clients:** regional health authorities, regional payers, hospital directors, hospital purchase managers, PAGs[2], etc.
- **Key objectives:** facilitate the hospital listing, and improve patient adherence
- **Key activities:** development of medico-economic studies to facilitate the market access of brands and support of projects to improve patients' adherence, to promote the proper use of drugs

Sources: Smart Pharma Consulting

[1] In compliance with the national regulations and the companies' internal policies –
[2] Patient Advocacy groups

MSLs' activities should be defined in an Integrated Regional Strategic Plan in coordination with marketing, sales, market access and adherence departments

Integrated Regional Strategic Plan – Structure of the Medical Section

Structure

- **Situation analysis**
  - KOLs mapping (level of influence – advocacy behavior)
  - Activity review (quantitative and qualitative analysis):
    - KOLs' partnership (calls, preparation of staff meetings, invitation to congresses, support of IIS[1] and / or of the company-sponsored clinical trials, etc.)
    - Participation in congresses
    - Training of speakers, of marketing and sales collaborators
    - Support to Key Institution Managers (KIMs) in charge of regional market access and patient adherence programs
    - Support to Key Account Managers (KAMs) in charge of product listing at hospital (or purchasing platform) levels in highlighting medical benefits
    - Competitive intelligence data gathering and analysis
  - Measurement and assessment of activities' impact
  - MSL Advanced SWOT analysis[2]
- **Ambition & strategic priorities**
  - Ambition setting
  - Strategic priorities to fulfill the ambition set (MSL Strategy Card)[2]
  - Key activities to support strategic priorities:
    - Shared activities with other departments (e.g., marketing, sales, KAMs, KIMs)
    - Non-shared activities
  - Monitoring of the quality of execution and impact of activities

Sources: Smart Pharma Consulting

[1] Investigator Initiated Studies – [2] Developed by Smart Pharma Consulting

The Advanced SWOT is a useful tool to help MSLs analyze and evaluate regional medical opportunities and threats as well as their own competitive position

Integrated Regional Strategic Plan – Specific tools of the Medical Section (1/4)

MSL Advanced SWOT

Opportunities	*Relative importance*[1]
What regional changes are likely to favor the medical environment? 1. **National & regional regulations** relating to MSLs' activities (e.g., off-label communication, invitation process to congresses, grants, etc.) 2. **KOLs' opinion & position** re. the company and its products, KOL's level of influence 3. **Scientific events**: regional congresses, other meetings	

Threats	*Relative importance*[1]
What regional changes are likely to disfavor the medical environment? 1. **National & regional regulations** relating to MSLs' activities (e.g. off-label communication, invitation process to congresses, grants, etc.) 2. **KOLs' opinion & position** re. the company and its products, KOL's level of influence 3. **Scientific events**: regional congresses, other meetings	

Strengths	*Relative importance*[1]
What are the absolute or relative advantages of the company's medical activity at regional level vs. competition? 1. **Relationships with KOLs**: quality and sustainability 2. **Scientific communications**: congresses, staff meetings, symposia, etc. 3. **Support to trials**: company-sponsored trials and IIS[2] 4. **Training** of speakers, med. reps, new MSLs, etc. 5. **Competitive intelligence**: data gathering and analysis	

Weaknesses	*Relative importance*[1]
What are the absolute or relative disadvantages of the company's medical activity at regional level vs competition? 1. **Relationships with KOLs**: quality and sustainability 2. **Scientific communications**: congresses, staff meetings, symposia, etc. 3. **Support to trials**: company-sponsored trials and IIS[2] 4. **Training** of speakers, med. reps, new MSLs, etc. 5. **Competitive intelligence**: data gathering and analysis	

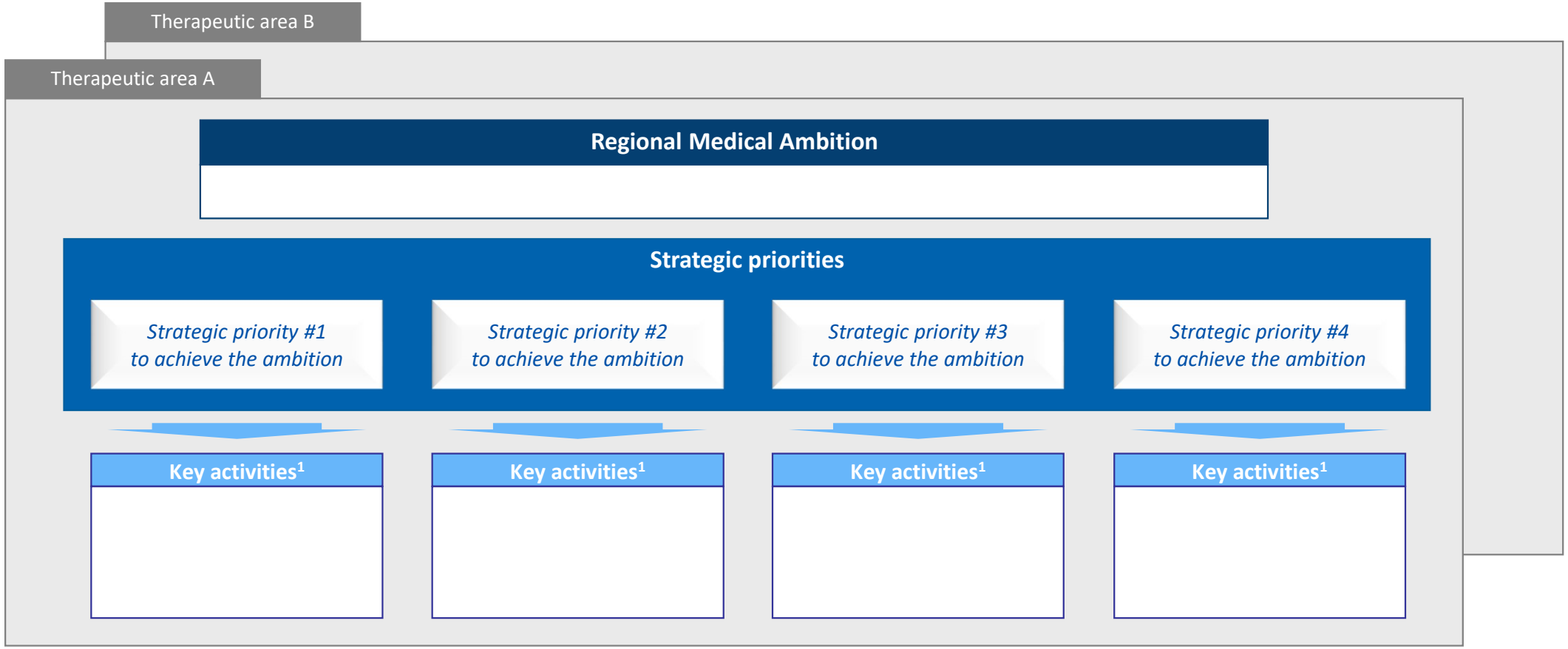
Sources: Smart Pharma Consulting

[1] Ranking from 5 =very important to 1 = limited importance – [2] Investigator Initiated Studies

The MSL Strategy Card will help design a "one-page strategy" including his ambition, the strategic priorities to meet it and the corresponding medical activities

Integrated Regional Strategic Plan – Specific tools of the Medical Section (2/4)

MSL Strategy Card



Sources: Smart Pharma Consulting

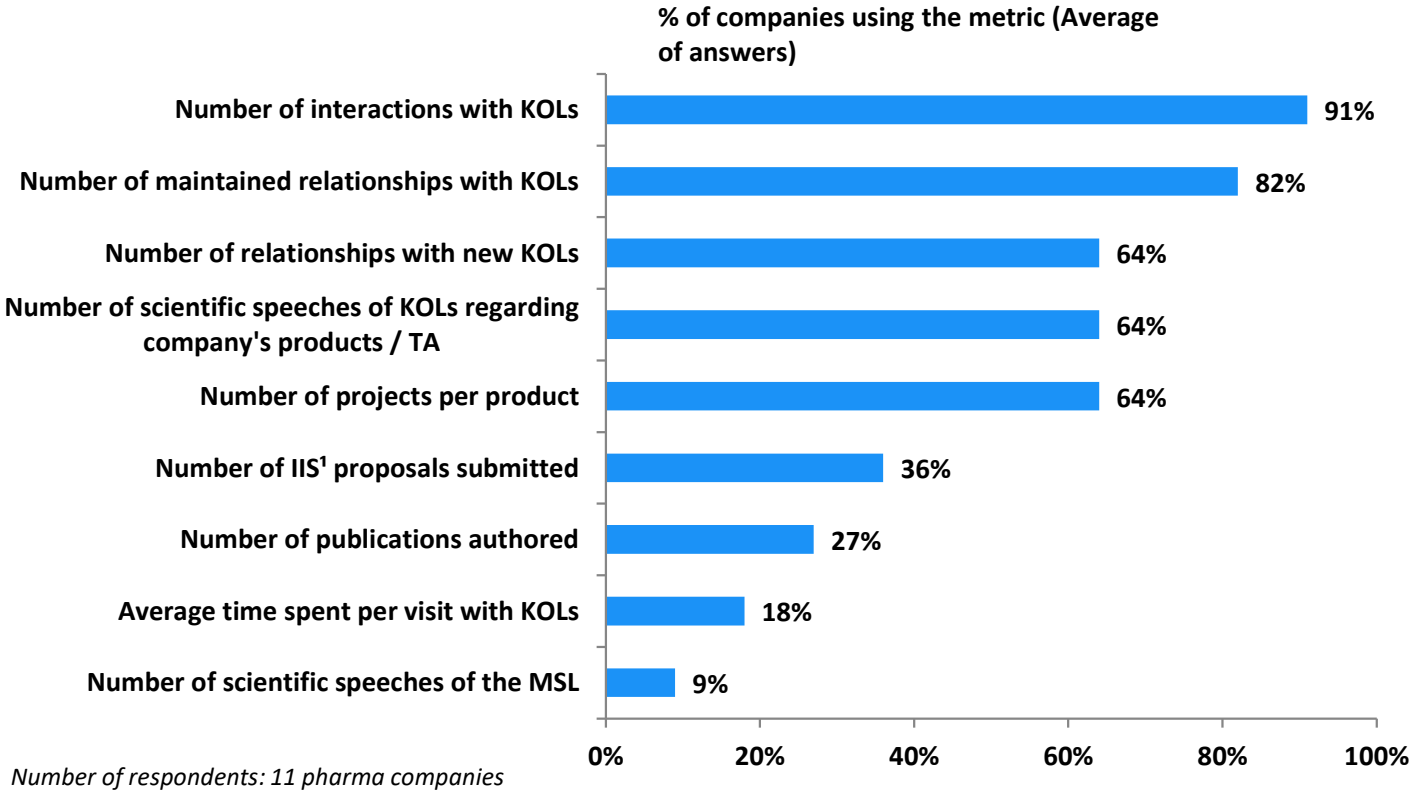
[1] To support the corresponding strategic priority

The assessment of MSLs' activity often includes quantitative criteria based on their relationships with KOLs since they are not allowed to be incentivized on sales

Integrated Regional Strategic Plan – Specific tools of the Medical Section (3/4)

Performance metrics to assess MSLs' activity – Current practice in Europe

Quantitative metrics



Number of respondents: 11 pharma companies

Qualitative metrics

- Some companies use **qualitative metrics** as well to assess the activity of their MSLs such as:
  - KOLs' satisfaction surveys (55% of companies)
  - Qualitative assessment of relationship with KOLs (45% of companies)
  - Internal feedbacks (9% of companies)
  - Level of contribution to company's research (9% of companies)

Sources: "Aligning the Activities and Goals of Medical Science Liaison Teams for Strengthened Corporate Sustainability ", MSL World – Smart Pharma Consulting analysis

[1] Investigator initiated studies

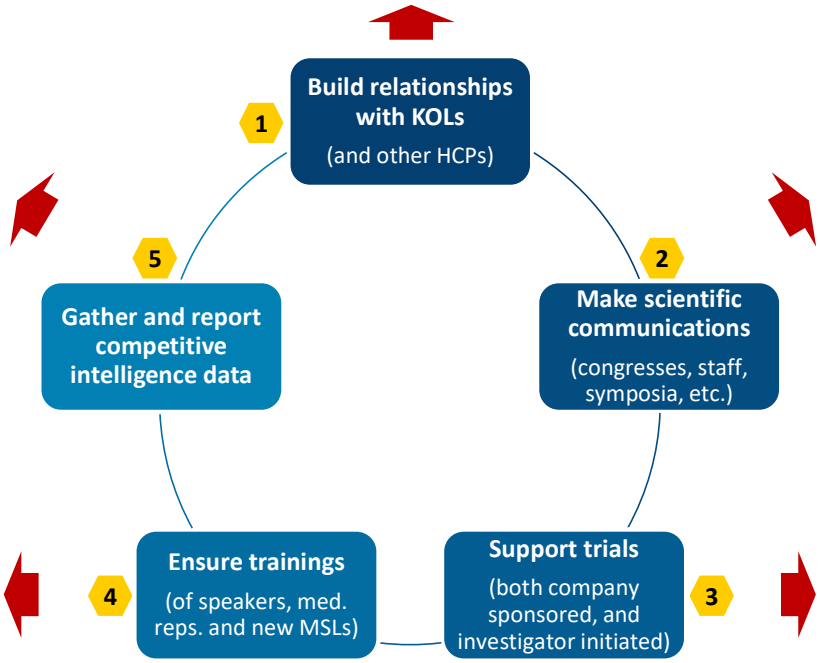
Qualifying MSLs' activity is a challenge, however, several qualitative and quantitative metrics can be considered for pharma companies to ensure a proper monitoring

Integrated Regional Strategic Plan – Specific tools of the Medical Section (4/4)

Recommendations of metrics to monitor MSLs' activities

- Number of partnerships initiated with KOLs
- Number of contacts and / or time spent with KOLs in face-to-face meetings, teleconferences, staff meetings, etc.
- Qualitative assessment of KOLs partnership management

- Number of competitive reports
- Number of congresses reviews
- Quality of information gathered



- Number of speeches delivered
- Number of articles authored
- Number of attendees
- Qualitative feedbacks of attendees

- Number of people trained
- Qualitative feedbacks of trained people

- Number of IIS[1] and / or company-sponsored clinical trials submitted / completed
- Number of investigators or patients included in company sponsored-clinical trials

Sources: Interviews with 5 MSLs – Smart Pharma Consulting analysis

[1] Investigator initiated studies

An effective collaboration with KOLs requires to follow a rigorous recruitment process that should be based on the gathering of accurate information

Recruitment & Management process of KOLs

The 4 key steps

Recruitment

1. **Objective setting**
   - What to expect from KOLs?
   - What does the KOL expect from us?
2. **Targeting**
   - Who are the KOLs that should be selected and why?

Management

3. **Implementation plan**
   - Which actions/interactions should be carried out with KOLs?
4. **Follow-up**
   - How to guarantee an effective/ efficient relationship with KOLs?

- Relationships with KOLs should be defined according to the set objectives
- Then, the prospective KOLs should be profiled and targeted
- Once KOLs have been selected, their interactions with the pharma company and the activities they are expected to implement should be defined and formalized in an implementation plan
- The implementation of the plan should be carefully monitored with the help of KPIs (Key Performance Indicators) and of KEIs (Key Execution Indicators)

Sources: Smart Pharma Consulting

Before defining the activities to be carried out by KOLs, specific objectives, consistent with a global objective, must be set for each of them

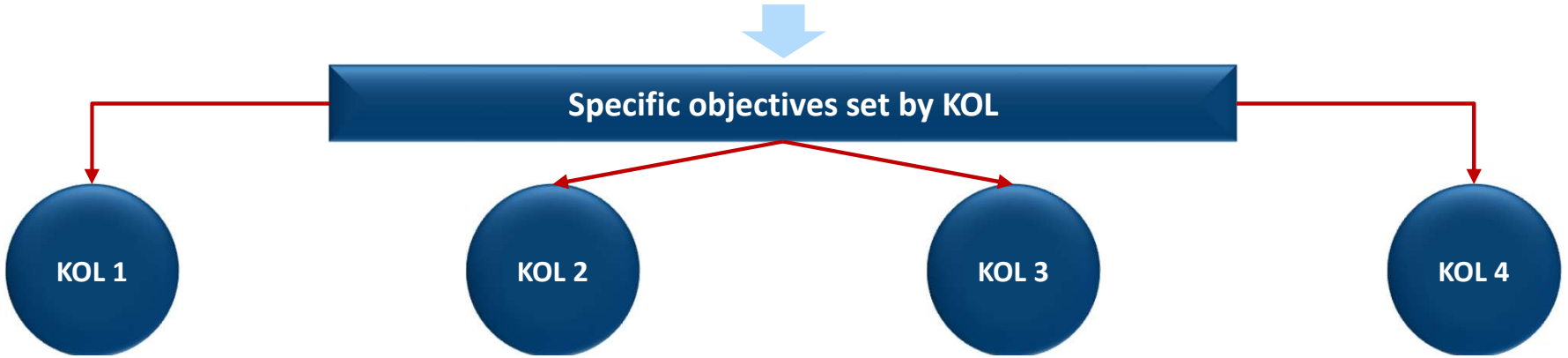
Objective setting

1

Partnerships with KOLs should be part of a global strategy,
including also market access, medico-marketing and sales initiatives

Global objective

Define precisely what is expected from the partnership with KOLs,
in terms of direct or indirect benefits for the product under development or marketed by the pharma company



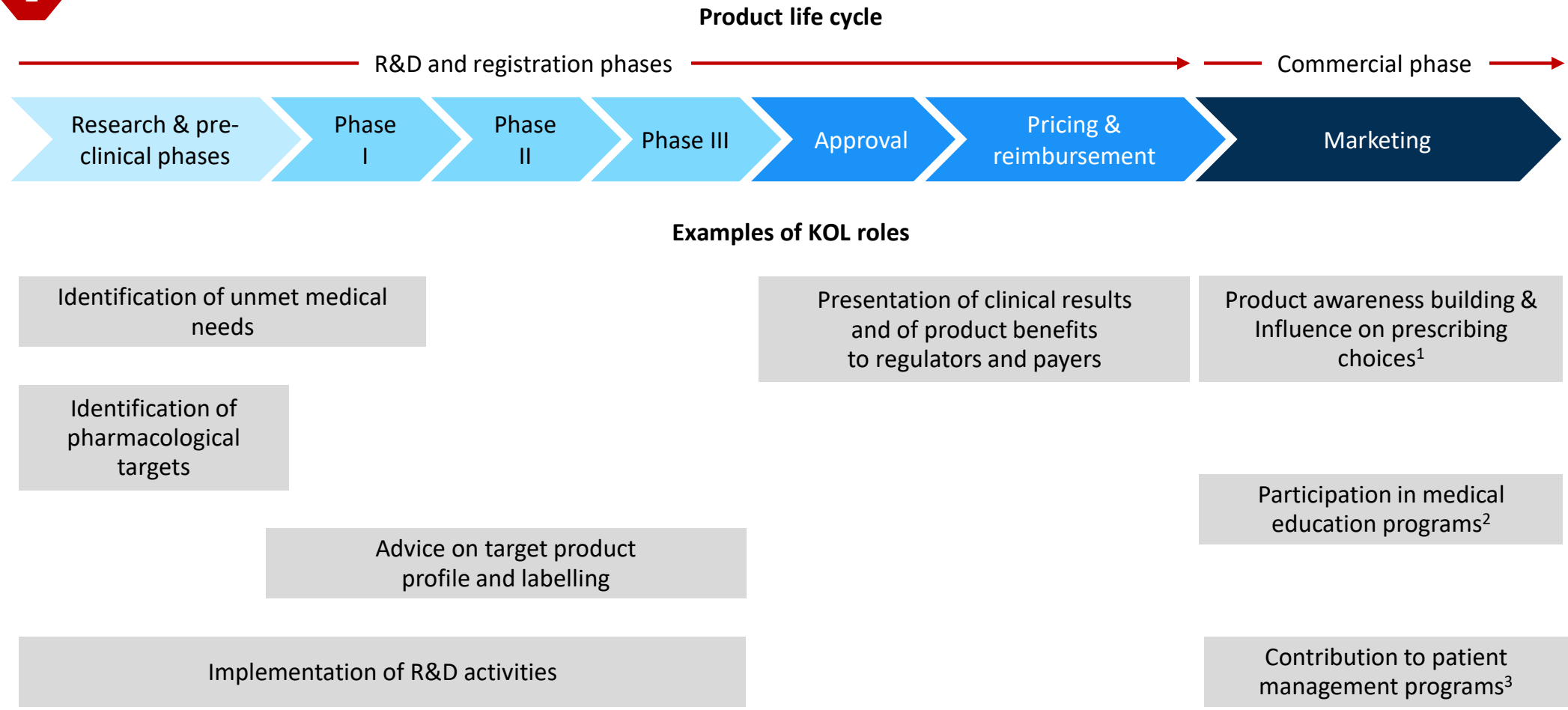
Define specifically what is expected from each KOL to support the product
and what support the latter expects from the pharma company, on a professional standpoint

Sources: Smart Pharma Consulting

The objective of the KOL partnership and the corresponding activities will depend on where the product is positioned on its life cycle

Examples of KOL roles according to the product life cycle

1



Sources: Adapted from GBI Research, Market Rx, by Smart Pharma Consulting

[1] Through articles, lectures, etc. – [2] Through Continuous Medical Education (CME) programs – [3] Through projects carried out with patient advocacy groups (PAGs)

The targeting phase should enable to identify the KOLs with whom a partnership should be beneficial and to understand their networks of influence

KOLs targeting – Methodology (1/2)

2

	Key questions	What to do?
Selection criteria	▪ What are the relevant selection criteria to be used considering the final objective?	▪ Review of relevant criteria (e.g., level of influence, scope of influence, scientific/media awareness, membership of a network, etc.) ▪ Selection of a limited number of relevant criteria
KOLs profiling	▪ What information should be collected? ▪ How to collect and analyze this information?	▪ Internal / external databases review to qualify KOLs ▪ Assessment of the number of publications, quotes, lectures during conferences and congresses, etc.
KOLs segmentation	▪ What is the degree of interest and the likely support of the KOL for the product?	▪ Mapping of preselected KOLs on a matrix according to the most relevant criteria ▪ Identification of KOLs' networks
KOLs selection	▪ Who are the KOLs that should be selected to partner with? ▪ For which kind of partnership?	▪ Selection of KOLs ▪ Preliminary definition of the type of partnerships to be carried out with the targeted KOLs

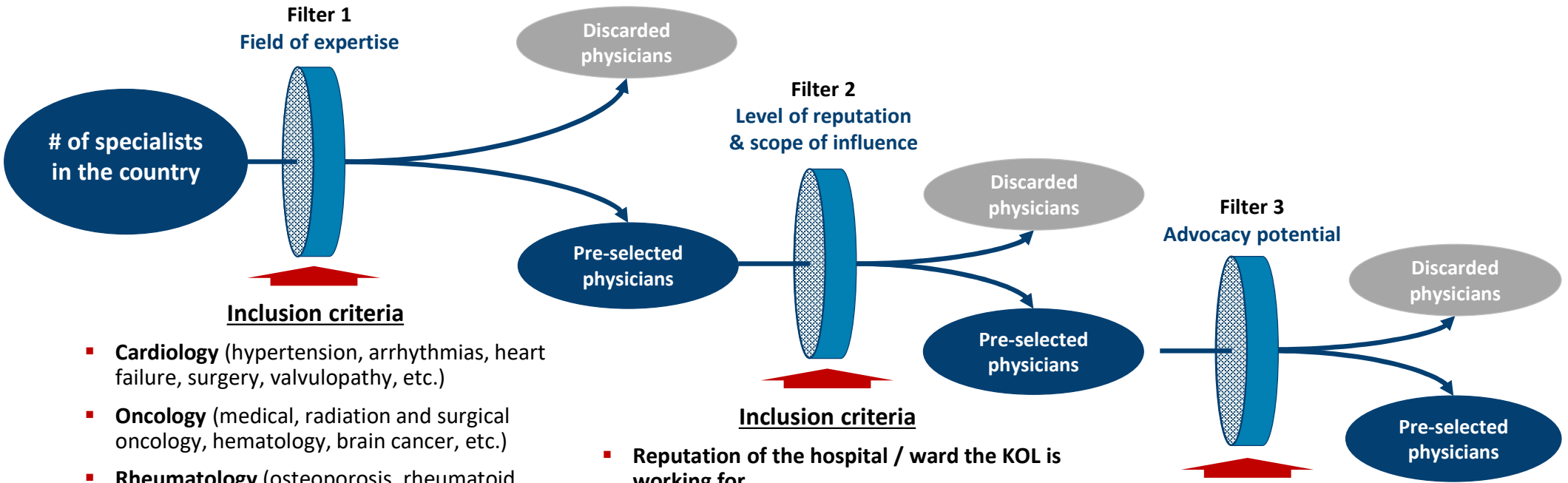
Sources: Smart Pharma Consulting

Relevant selection criteria and gathering of accurate and reliable information about the KOL profile are of utmost importance to optimize the value of the partnership

KOLs targeting – Methodology (2/2)

2

Screening process (illustrative)



Inclusion criteria

- **Cardiology** (hypertension, arrhythmias, heart failure, surgery, valvulopathy, etc.)
- **Oncology** (medical, radiation and surgical oncology, hematology, brain cancer, etc.)
- **Rheumatology** (osteoporosis, rheumatoid arthritis, osteoarthritis, psoriatic arthritis, etc.)
- **Technical expertise** (design of clinical studies, biostatistics, epidemiology, public healthcare, patients' adherence, etc.)

Inclusion criteria

- **Reputation of the hospital / ward the KOL is working for**
- **Reputation of the KOL** (based on status, honors, publications, etc.)
- **Power of influence** (on peers, health authorities, PAGs[1])
- **Scope of influence** (international, national, local)

Inclusion criteria

- **Communication skills**
- **Inclination to communicate** (in favor of a product)

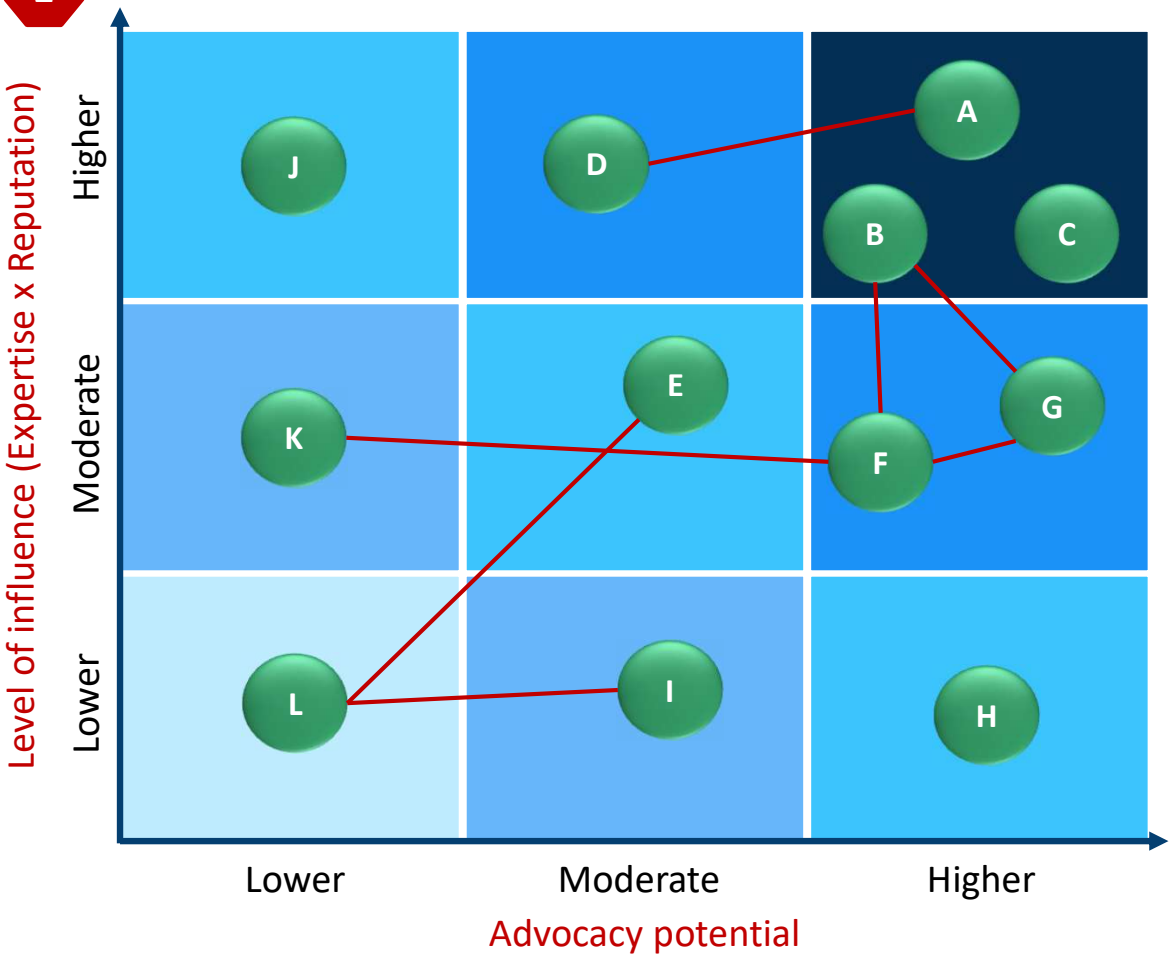
Sources: Smart Pharma Consulting

[1] *Patient advocacy groups*

The proposed matrix is a useful tool to prioritize the candidate KOLs to partner with and to pre-define the type of partnerships that could be considered with them

KOL targeting – Segmentation & selection

2



- The proposed matrix facilitates the **final selection** (targeting) of pre-selected KOLs based on their **level of influence** and their inclination to support the development and/or the use of the pharma company product
- The matrix helps to define the kind of **partnerships** to be set with the KOLs
- The prioritization of the targeted KOLs, should also consider:
  - The **life cycle** of the product
  - The **networks** of influence of the KOLs

Priority 1 Priority 2 Priority 3 Not a Priority
Networks of influence amongst KOLs

Sources: Smart Pharma Consulting

Qualification of KOLs should be documented with reliable data collected through desk research and field research (e.g., interviews of peers and of prospective KOLs)

How to qualify KOLs?

2

What data to collect?	How to collect data?	How to analyze data?
▪ **Status** (e.g., head of medical department, professor, age, public vs. private practice, place(s) of practice)	▪ Internet, direct search	▪ Being head of hospital and professor is a plus
▪ **Field of expertise/interest** in a therapeutic area, in a technique, etc.	▪ Probing by MSL[1], medical reps and other collaborators of the pharma company	▪ KOLs should express their field of interest over the long term and their expectations from a partnership with the pharma company
▪ **Level of reputation & scope of influence**	▪ Field research (e.g., peers, pharmacists' interviews, etc.)	▪ Internal or national level is preferable in general to local level (but it depends on the objective)
▪ **Communication skills**	▪ Analysis of past performances ▪ Interviews of peers	▪ Verbal communication (e.g., lectures, courses) ▪ Written communication (e.g., articles, websites)
▪ **Type & level of communication** – # articles published (impact factor[2], peer-/ non peer reviewed journals, position as an author…) – # of trainings p.a. (CME[3]) – Teaching activity at university – Presence on the Internet – # of lectures (congresses, round tables) – # of quotes by journalists in current year	▪ Review of scientific articles published (PubMed/Medline, Google scholar, Expertscape) ▪ Probing by collaborators of the pharma company and peers' interviews to evaluate trainings, teaching activities and lectures ▪ Google searching for presence and quotes on the Internet	▪ The higher the impact factor is, the better ▪ Each KOL should be ideally positioned as 1st or last author in articles ▪ The higher the number of trainings, teaching seminars and lectures, the better ▪ Perceived quality of articles, training, teaching and lectures should be assessed
▪ **Membership in learned societies** – Title / position / activities	▪ On the website of the learned societies or by calling them	▪ Being a member of the management board is a plus
▪ **Inclination to partner with a pharma company and to support its products**	▪ Probing by collaborators of the pharma company	▪ They should clearly express their interest in the product and the company… ▪ … and in the types of partnerships they are looking for

Sources: Smart Pharma Consulting

[1] Medical Science Liaison – [2] It measures the average frequency with which the article has been cited in a particular year. It is used to measure the importance or rank of a journal by calculating the number of times its articles are quoted – [3] Continuous medical education

To convince KOLs to partner, it is important to consider their expectations and to highlight the benefits, they will draw from it, in terms of professional development

How to convince KOLs to partner?

2

What do they want?

- Qualify a KOL to **design a partnership that will fulfill his professional expectations** *(simultaneously with that of the pharmaceutical company)*:
  - Is the KOL yet a partner of the pharmaceutical company?
  - What has qualitatively and quantitatively his level of involvement been?
  - What has his feed-back from previous collaborations been?
  - What is his mid- to long-term professional ambition?
  - What does he expect from pharmaceutical companies in general, and specifically?
  - Is he looking for a long-term partnership?
  - Is he more inclined to enter a “win-win” partnership or a “fee-for-service” transaction?

What should be proposed?

- Based on the knowledge and understanding of the KOL’s professional expectations…
- … propose ideas – to be discussed – of activities to be carried out through the partnership
- **Emphasize the benefits the KOL will draw** in terms of **personal awareness** and **competence development** through the partnership:
  - Increasing awareness and fame through publication of articles, interviews in media, presentations during congresses, lectures during medical meetings, etc.
  - Increasing reputation and extending influence by participating to scientific works (e.g., clinical trials)
  - Professional development through the access to recent information, to high education programs[1], by working in new research/medical areas, etc.
  - Funding of Investigator Initiated Studies (IIS)

Sources: Smart Pharma Consulting

[1] Especially for Rising Opinion Leaders

The KOL ID card is a practical tool which contains in one single page the most important information required to qualify and then recruit pre-selected KOLs

Tool to facilitate the recruitment process: KOL ID card

2

KOL name	(First name – surname)	Medical status	MD – head of medical department – professor of medicine, etc.	Location	Address & City
Specialty	(Oncology – cardiology, etc.)	Medical setting	Private hospital – public hospital – teaching hospital – private office	Country	

Specific objectives for the pharma company	•
Specific benefits for the KOL	•

Items		Assessment[1]	Facts / Rationale	Source
KOL Profile	Field of expertise/interest in the therapeutic area	International - National - Local	•	
	Level of reputation	Low -Medium-High	•	
	Scope of influence	Low -Medium-High	•	
	Advocacy potential	Low -Medium-High	•	

Recommendations	Priority[1]	Rationale
Medical department	Low -Medium-High	•

Final decision	
Selection: YES - NO	Rationale:

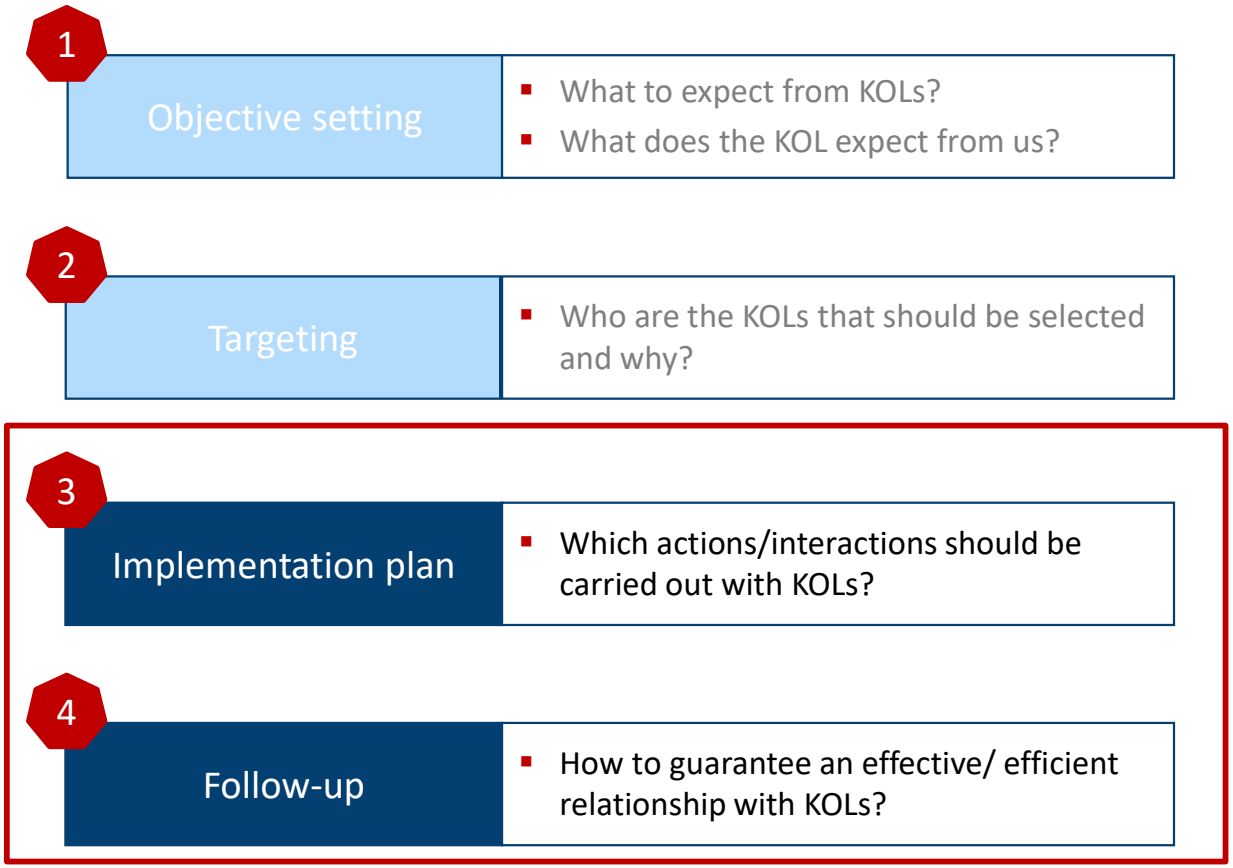
Sources: Smart Pharma Consulting

[1] *Circle your answer*

An effective collaboration with KOLs requires to follow a rigorous recruitment process that should be based on the gathering of accurate information

Recruitment & Management process of KOLs

The 4 key steps



- Relationships with KOLs should be defined according to the set objectives
- Then, the prospective KOLs should be profiled and targeted
- Once KOLs have been selected, their interactions with the pharma company and the activities they are expected to implement should be defined and formalized in an implementation plan
- The implementation of the plan should be carefully monitored with the help of KPIs (Key Performance Indicators) and of KEIs (Key Execution Indicators)

Sources: Smart Pharma Consulting

Pharma companies should balance what they expect from KOLs in terms of activities and what they give them in terms of services to ensure a win-win partnership

Services proposed to & activities carried out by KOLs

3

KOL Digital Platform (2.0)[1]

- **Access to scientific information** (e.g., articles, databases, expert reports, clinical cases)
- **Organization of peer meetings with top international KOLs** (e.g., congresses, symposiums, forums, etc.)
- **Technical support to publish articles** (e.g., medical writing, proof reading, peer pre-review)
- **Technical & funding support for Investigator Initiated Studies**
- **Slide kits for training/teaching programs**
- **Ad hoc support on demand basis** (e.g., media training, training on statistics, change management in a ward)

KOL Customer Manager[2]

Activities carried out by KOLs (Illustrative)

Sources: Smart Pharma Consulting

[1] Access limited to KOLs – [2] Each KOL should have a dedicated Customer Manager (e.g. a MSL) – [3] Such as Visual aids, leaflets for patients – [4] Continuous Medical Education – [5] Such as lectures to sales forces, face-to-face meetings with the marketing team, etc.

If KOLs share the objective of the pharma company and accept to communicate, the following means can influence medical practices and help better position products

Potential value of KOL activities (1/2)

3

Article writing

- KOLs may support the pharmaceutical company's priorities by communicating in scientific journals, professional magazines or lay press regarding:
  - New medical approaches, new guidelines, patient management, etc. in a given therapeutic area, etc.)
  - The position of its products in the therapeutic strategy
- Perceived reliability by readers: **H**
- Number of exposed readers: **L** to **H**

Lectures during symposia

- While giving lectures, KOLs may accept to cover topics of interest for the company…
- … and/or position their products vs. direct competitors or indirect therapeutic alternatives
- KOLs may also share their own experience as a prescriber of the company's products
- Perceived reliability by participants: **M**
- Number of exposed attendants: **L**

Press conference

- Press conferences enable to have indirectly access to a larger number of readers
- The messages conveyed by KOLs may sometimes be modified by journalists
- It is rare for KOLs to make strong statements in favor of a product during a press conference
- Perceived reliability by readers: **M**
- Number of exposed readers: **H**

Training of peers / CME[1]

- KOLs may communicate to their peers, to pharmacists, to nurses, etc., during training sessions regarding:
  - Medical topics of interest for the pharma
  - The position of its products in the therapeutic strategy
- In such circumstances, KOLs may convey strong messages, if they decide to do so
- Perceived reliability by participants: **M-H**
- Number of exposed attendants: **M**

***H**: Higher – **M**: Medium: – **L**: Lower*

Sources: Smart Pharma Consulting

[1] Continuous Medical Education

KOLs can be of great value through direct collaboration (by training, informing, giving advice, etc.) with medical, marketing and sales teams of the pharma company

Potential value of KOL activities (2/2)

3

Participation to internal meetings

- KOLs may play an effective role during internal meetings by:
  - Informing / training medico-marketing-sales teams about scientific trends and position of competitors
  - Role playing with sales reps (e.g. selling forums)
  - Being invited as a "guest star" to show collaborators the ability of the pharma company to partner with top medical leaders

Promo material review

- KOLs may collaborate with the marketing team by contributing to the creation of promotional materials
- Thus, they can create value by:
  - Suggesting messages
  - Developing a scientific rationale to support messages/claims of the products
  - Assessing and editing the content of promotional materials (visual aid, booklet…)

Advisory board member

- Advisory board meetings with KOLs should be preferred to individual meetings with KOLs when the objective is to:
  - Generate innovative ideas or concepts (brainstorming sessions)
  - Estimate key market trends (including stakeholders' opinions and behaviors)
  - Obtain a consensual opinion regarding market environment, products development, marketing strategy, etc.

Participation to scientific studies

- KOLs, especially if they are supposed to sign or co-sign the corresponding publication, may be very helpful to:
  - Participate to the design of the study
  - Carry out the study (either about a given pathology only or a pathology & its treatments involving the pharmaceutical company product)
- Involvement of KOLs in medical/clinical studies will depend on their field of interest

Sources: Smart Pharma Consulting

To build a useful and effective "KOL Partnership Plan", it is recommended to follow the 5-step process proposed here-below

KOL Partnership Plan (K2P) – How?

3

- Step 1: Design of templates that can be shared with the KOLs and the pharmaceutical company's collaborators (i.e., from market access, medical, marketing departments)
- Step 2: Filling up of the templates by the KOL Customer Manager assigned by the pharmaceutical company to the KOL (e.g., MSL) in coordination with the Medical Director and possibly with the Marketing Director[1]
- Step 3: Review and adjustment of the content of the K2P by the MSL with the KOL:
  - Objectives
  - Services proposed by the pharmaceutical company
  - Activities to be carried out by the KOL
  - Fees to be paid at a fair market value (if any)
  - Monitoring process of each service/activity
- Step 4: Follow up of the K2P:
  - Prepare the planned services/activities
  - Analyze the quality of execution of these services/activities
  - Reconsider – if not relevant anymore – planned services/activities
- Step 5: Assessment of the partnership:
  - Twice a year by the KOL Customer Manager and the KOL to measure the level of mutual satisfaction and decide about potential adjustments to be carried out
  - Once a year by a committee including: the Medical Director, the Marketing Director, the KOL Customer Manager, and possibly the General Manager, to evaluate the KOL partnership and decide about potential adjustments

Sources: Smart Pharma Consulting

[1] If allowed by national and corporate regulations

The "KOL Partnership Plan" should include key information extracted from the KOL ID card[1], specify the objectives of the partnership, its scope and duration

KOL Partnership Plan (K2P) – Model: Introduction

3

KOL name	(First name – surname)	**Medical status**	MD – head of medical department – professor of medicine, etc.	**Medical setting**	Private clinic – private hospital – public hospital – teaching hospital
Interest/ Expertise	(e.g., Pulmonology, cardiology, etc.)	**Reputation/ Influence**	Private hospital – public hospital – teaching hospital – private office	**Advocacy potential**	Address & City & Country
KOL Customer Manager	(First name – surname – position in the company)	**Role**	(Describe briefly his role vis-a-vis the KOL)	**Coordination with…**	(Indicates the other collaborators whom to coordinate)

Objectives of the partnership	•			
Specific scope of the partnership[2]	•	•	•	•
Duration of the partnership	**Starting date**		**Ending date**	
	•		•	

Sources: Smart Pharma Consulting

[1] See the proposed format p.111 – [2] Examples: Development of a digital tool to improve patients' adherence, Coordination of a multi-centric study, Expert support to estimate the medico-economic value of a new product, Lectures during medical meetings organized with peers, etc.

The "KOL Partnership Plan" should also describe the services proposed to the KOL and the activities the latter will carry out, as well as monitoring indicators

KOL Partnership Plan (K2P) – Model: Service/Activity Card[1]

3 4

Service or Activity #1	Pharma company objective	KOL objective	Key step description	Timing
•	•	•	•	•

Quality of execution Indicators		Expected impact Indicators		Comments
Expected	Achieved	Expected	Achieved	
•	•	•	•	•
•	•	•	•	

Sources: Smart Pharma Consulting

[1] This card should be duplicated by service/activity

Key execution and performance indicators are essential to optimize the chance of a proper execution of services/activities and of a win-win partnership

Examples of tool to monitor partnerships with KOLs

4

Pharma company's services	Key execution indicators (KEIs)	Key performance indicators (KPIs)
▪ Access to scientific information ▪ Organization of peer meetings with top international KOLs ▪ Technical support to publish articles ▪ Technical & funding support to IIS[1] ▪ Slide kits for training/teaching programs ▪ Ad hoc support on demand basis	▪ Interest (10-point scale) ▪ Utility (10-point scale) ▪ Practicality (10-point scale) ▪ Implementation[2] (10-point scale)	▪ Global level of satisfaction of KOLs (10-point scale) ▪ Inclination of KOLs to support the pharma company products: – Number of lectures / trainings / publications – Quality/objectivity of messages conveyed to peers, pharmacists, patients, etc. ▪ Increased level of KOLs awareness and reputation ▪ Increased level of products awareness and reputation
KOLs' activities	**Key execution indicators (KEIs)**	**Key performance indicators (KPIs)**
▪ Lecture during symposia ▪ Training of peers	▪ Interest (10-point scale) ▪ Utility (10-point scale) ▪ Practicality (10-point scale) ▪ Implementation[2] (10-point scale)	▪ Global level of satisfaction of attendees (10-point scale) ▪ Inclination of attendees to support & prescribe the product: – Number of lectures / trainings / publications – Quality/objectivity of messages conveyed to peers, pharmacists, patients, etc.
▪ Article writing	▪ Acceptance by recognized journals (scientific, medical, or in lay press, etc.) ▪ Post on highly regarded websites	▪ Impact factor (for scientific/medical journals) ▪ Number of broadcasted issues for lay press ▪ Number of views / likes on Internet ▪ Contribution of content to support the product
▪ Press conference	▪ Number of journalists and quality of articles	
▪ Participation in scientific studies	▪ Implementation (number of patients recruited, timing, cost vs. plan)	▪ Publication of an article in a renowned scientific journal ▪ Impact of the publication on product reputation

Sources: Smart Pharma Consulting

[1] Investigator Initiated Studies – [2] Logistics, timing, cost vs. plan

9 Recommendations *to Boost MSLs' Competence & Performance*

1. Clarify MSLs' roles and responsibilities to avoid confusion with medical representatives
2. Maintain a high scientific knowledge and understanding to guarantee high quality interactions and relationships with KOLs
4. MSLs' activities should be consistent with their ambition and their strategic priorities, as defined both at national and regional levels
5. Develop an Integrated Regional Strategic Plan[1] including a Medical section formalizing MSLs' ambition, strategic priorities and key activities, in line with marketing, sales, market access and adherence departments priorities
6. Define quantitative and qualitative metrics to monitor MSLs' activities and identify potential corrective measures to be introduced
7. Optimize MSLs' limited time by prioritizing their efforts and using new communication technologies, whenever relevant
8. Apply the KOL Partnership Model as follows:
   a. Define clear and precise objectives for each of them
   b. Build the relationship based on an exchange of services rather than a fee-for-service deal
   c. Ensure an open and transparent relationship
   d. Make sure that the services provided to the KOL contribute to fulfill his needs and expectations
   e. Don't ask KOLs to promote your products, which would affect his reputation and your company's one
   f. Make the best use of the KOL limited time by organizing useful exchanges
   g. Assign a KOL Customer Manager (e.g., an MSL) who will be the KOL-preferred contact point and who will ensure alignment and information sharing between all collaborators of your company in contact with him
9. Define internal guidelines and a control process to prevent any compliance issues that could damage the corporate reputation

Sources: Smart Pharma Consulting

Smart Pharma Consulting Services – Optimizing the MSLs' performance (Case study)

Problem to be addressed

- The pharma company *MediSearch* has a team of 6 MSLs specialized in oncology
- The Medical Affairs Director of the French subsidiary questions how MSLs could help improve *MediSearch*'s reputation and the perception of its products by oncologists

Proposed approach

1. Kick-off meeting:
   - → Agreement on the conditions for carrying out the mission (adjustment of the approach, definition of the roles & responsibilities of each member of the project group)
   - → Precise definition of the deliverables
2. Interviews with 20 KOLs in oncology:
   - → Analysis of the determinants of pharma companies' reputation and of their products' image in oncology
   - → Identification of pharma companies whose MSLs are considered by oncologists as the "best-in-class"
3. Reflection workshop:
   - → Presentation & analysis of the results of the interviews conducted with the 20 KOLs
   - → Definition of "best practices" enabling MSLs to strengthen *MediSearch*'s corporate reputation as well as the image of its products
4. Formalization of recommendations:
   - → Drafting of a guide of "best practices" (e.g., management of interactions with KOLs, activity planning, priority management, development of a culture of services, etc.)
   - → Proposal for a strategic and operational plans model for MSLs, including quantitative and qualitative indicators for monitoring their activities
   - → Setting up of a training program for MSLs

Sources: Smart Pharma Consulting

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Strategic KOL Engagement Planning

How to improve Efficacy & Efficiency?

POSITION PAPER May 2019

This position paper proposes guidelines to help pharmaceutical companies partner with KOLs to better support the development and the marketing of their products

Context & Objective

- **KOLs[1] are part of the means used by pharma companies to:**
  - Develop their products through pre-clinical and clinical trials
  - Disseminate information (scientific, medical, therapeutic, etc.) to raise health authorities, payers, HCPs (Health Care Professionals), PAGs (Patient Advocacy Groups), individual patients' awareness to optimize the positioning and the usage of their products

- **This position paper:**
  - Reviews the best practices in terms of KOL engagement
  - Proposes a simple but rigorous approach and…
  - … a set of practical tools…

  … to recruit, engage and manage KOLs

This position paper has been written, assuming that it is not illegal nor reprehensible to collaborate with medical thought leaders to influence other stakeholders' opinion and behavior vis-à-vis a medical practice or a given medicine, provided it is in the best interest of patients

Sources: Smart Pharma Consulting

[1] In this position paper, the definition of KOL is limited to influential physicians

KOLs have the potential to influence their peers, but also other stakeholders in a specific area, at global, international, national and local levels

Working definitions (1/2)

KOL (Key Opinion Leader)

- KOLs are also called: Key Experts, Key Therapeutic Area Experts, Key Scientific Experts, Thought Leaders, Influencers, depending on the companies
- KOLs are **recognized** physicians with an **expertise in a specific field** (e.g., oncology, endocrinology, epidemiology, biostatistics, etc.)…
- … and can **influence the opinion** and **the medical practice** (e.g., treatment scheme, prescribing habits, preference for a given product, etc.) **of their peers** (specialists or GPs)
- KOLs contribute also to **modify medical guidelines** when they are members of learned societies or when they advise health authorities
- Their influence can be global, international, national or local
- Other stakeholders are also considered as KOLs[1]

Pyramid of influence & types of influencers

Sources: Smart Pharma Consulting

[1] *Such as members of governments, of health authorities, of learned societies, of patient advocacy groups, journalists, pharmacists, nurses, etc.*

Strategic KOL Engagement Planning is essential for pharma companies to ensure an effective, efficient and sustainable relationship with KOLs

Working definitions (2/2)

KOL Engagement

- KOL engagement is a **process** in which pharma companies **build** and **maintain constructive** and **sustainable relationships** with KOLs
- KOL engagement is **essential** for **understanding** their **wants** and **needs**; and **may** result in implementing ideas that **benefit** both **KOLs** and **pharma companies**
- Engaging with KOLs **occurs** when pharma companies want to **consider** the **views** and **involvement** of **KOLs** in making and implementing a scientific or medical decision…
- … **which might** have an indirect **business impact**
- Pharma companies should **initiate open**, **two-way dialogue**, **seeking solutions** to issues of mutual interest

Strategic KOL Engagement Planning

- Considering the **increasing complexity** of the pharmaceutical **environment** and of **pharma companies** organizations[1], it is essential to **plan** and **organize** the **interactions with KOLs**
- Thus, pharma companies should develop Strategic KOL Engagement **Plans** to **ensure** that KOL Engagement **initiatives**:
  - **Support** the Critical Success Factors (**CSF**) to fulfill the corresponding Strategic Imperatives (**SI**) of the related product
  - Are put in a **mid-** to **long-term perspective** to **build** a **sustainable** win-win **relationship**
  - Are carried out in a **coordinated manner** across the company departments and from headquarter to affiliates to **guarantee** an **optimal efficiency**

Sources: Roche internal documents (2015) – Smart Pharma Consulting

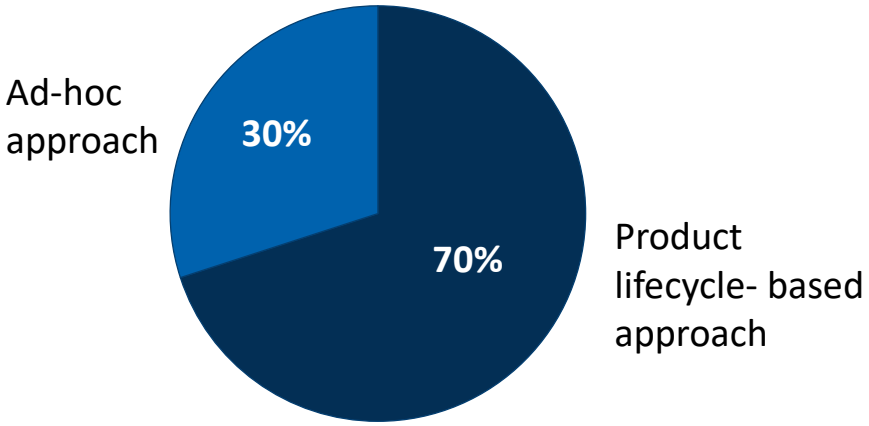
[1] People from different departments (e.g., medical, marketing, sales, etc.) can be in regular contact with the same KOL

More and more pharma companies are adopting an integrated strategic approach of their relationship with KOLs, based on their product position on their life cycle

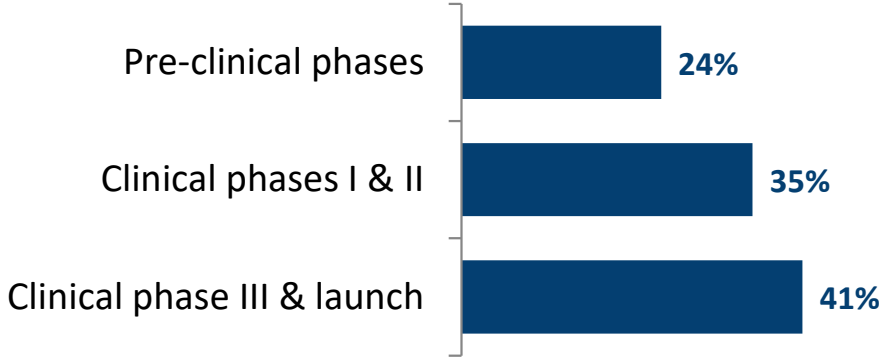
Types of KOL engagement

- According to a study carried out in 2017 by Arx Research, through interviews of 47 executives from medical departments of 34 life science organizations, across 15 countries:
  - 70% of companies indicate that their strategy to engage with KOLs is based on the position of the product on its life cycle, while the remaining 30% adopt an ad-hoc approach
  - 24% of surveyed companies engage with KOLs during pre-clinical phases of the product development and…
  - … 41% begin developing relationships at phase III of their product life cycle, or after
- KOLs exposed to early research and development phases will better support the products due to:
  - A better understanding of the underlying science
  - A better commitment and interest in outcomes

KOL engagement approach



KOL engagement according to product lifecycle



Sources: Arx Research (2017) – Smart Pharma Consulting analyses

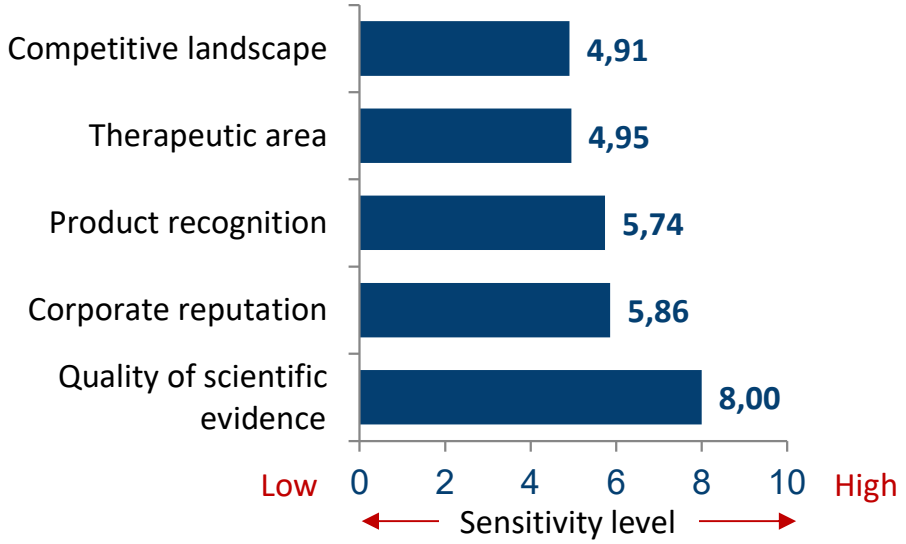
The strength of KOL engagement will strongly depend on the quality of scientific evidence related to the product as well as on corporate and product perception

KOLs engagement & Influencing factors

- From preclinical to phase II studies, Global KOLs are engaged to carry out scientific and clinical activities
- At phase III level, Global, International and National KOLs are mainly involved in clinical studies and in disseminating scientific information to physicians' communities
- While preparing the launch of their products or of new indications, pharma companies may engage KOL to support the preparation of the marketing authorization and of the price & reimbursement dossiers
- At launch time, pharma companies usually shift the balance of their focus to national and local KOLs
- The quality of the scientific evidence is critical to establish strong and effective relationships with KOLs
- Corporate reputation and product recognition are also essential to expect a clear commitment from KOLs

Global & International KOLs engaged at Phase III and Launch phase

Factors influencing KOL relationships

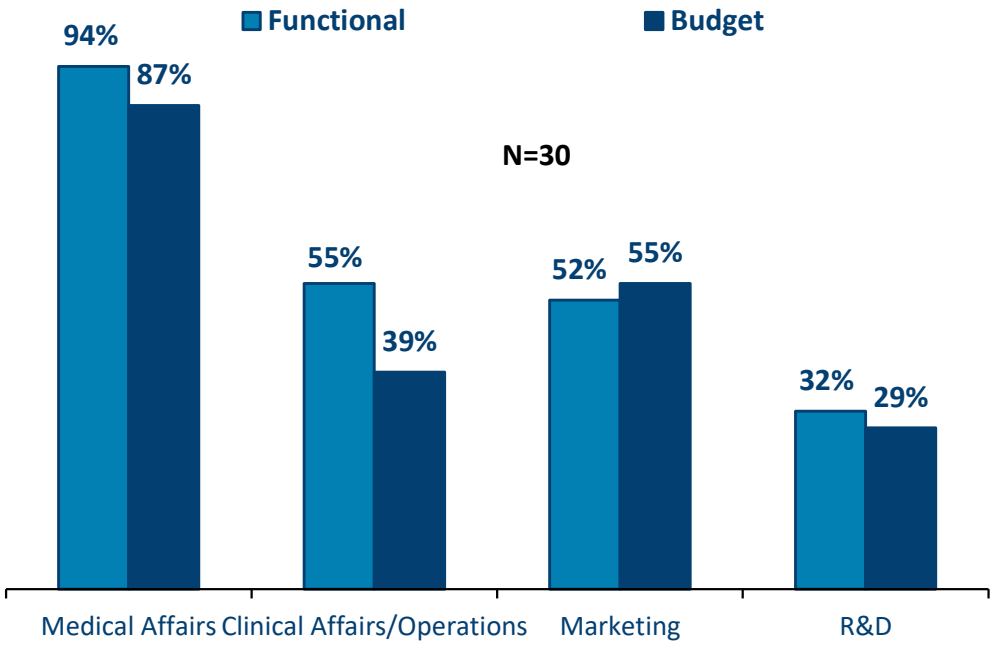


Sources: Arx Research (2017) – Smart Pharma Consulting analyses

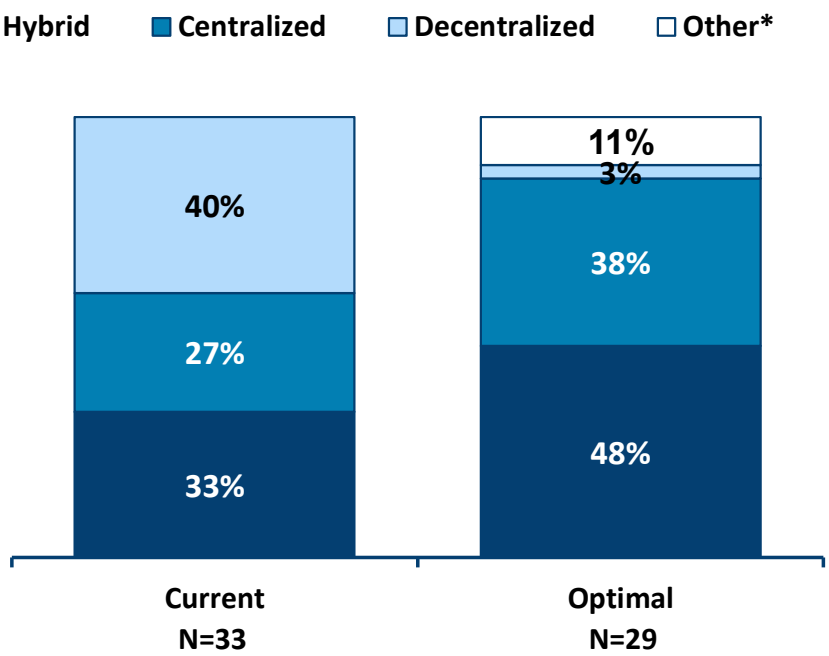
The hybrid and centralized management of KOLs are viewed as optimal by interviewees as they enable better coordinated and more consistent interactions

KOLs management by pharma companies

KOL Management responsibility at pharma companies



KOL Management organization at pharma companies



- Functional and budget responsibility for KOL management are mainly in the hands of Medical Affairs departments

- Decentralized organizations are used by 40% of companies but recommended by only 3% of them due to lack of coordination and consistency

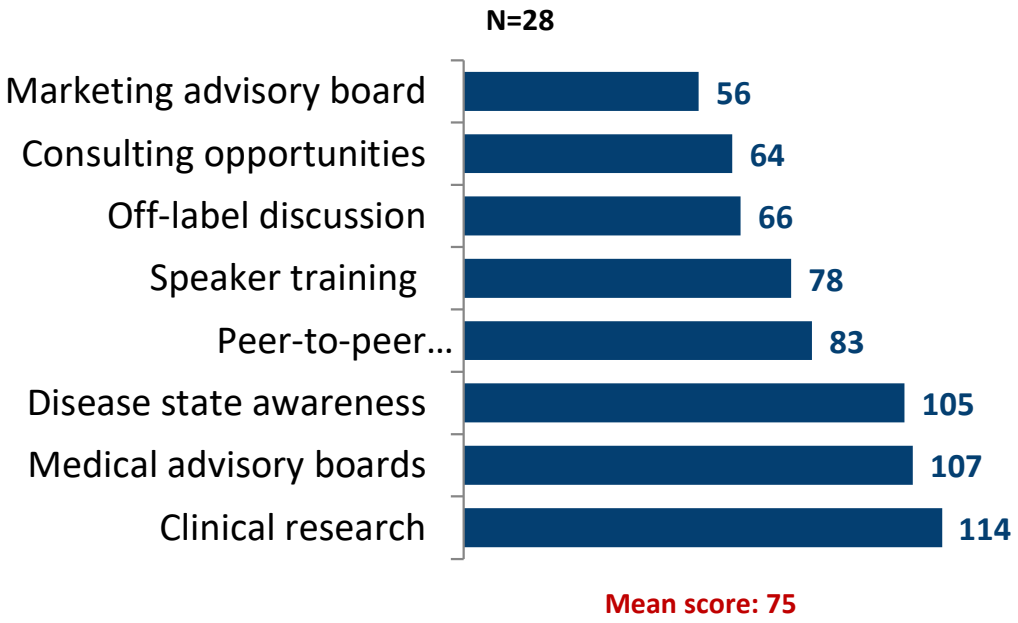
Sources: Best Practices, LLC (2014 & 2016) based on 33 companies, amongst which: AbbVie, Amgen, Bayer, Genentech, Genzyme, Janssen, Merck & Co, Pfizer, Roche – Smart Pharma Consulting analyses

** One respondent considers there is no ideal system to manage KOLs. It depends on the business needs*

If KOLs services are mainly focused on clinical research, clinical advisory boards and disease state awareness exchanges; their impact is most often not formally evaluated

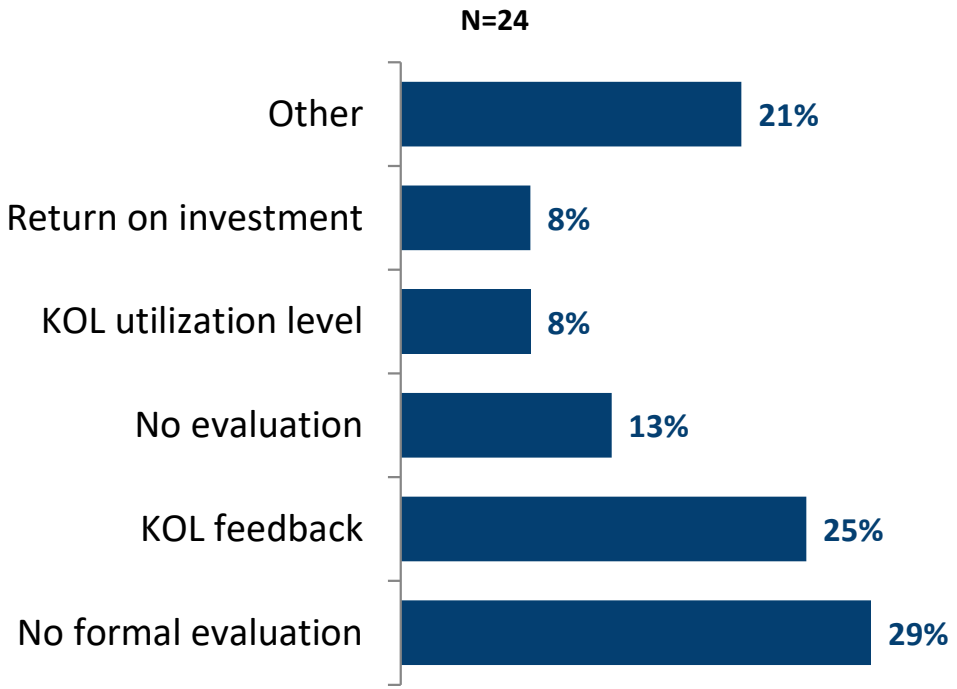
Main KOLs services & assessment

Most important services carried out by KOLs



Note: Score based on the average importance rating (0 to 5) multiplied by the number of respondents per activity

Evaluation of KOL Management & Engagement



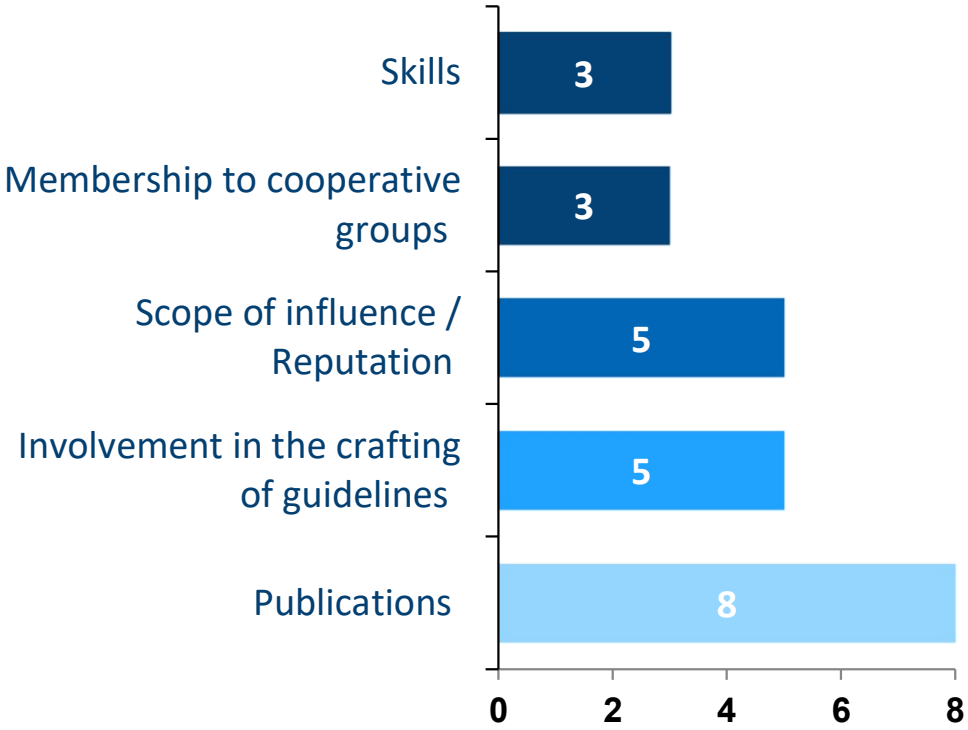
- Clinical research support, participation to medical advisory boards and disease state awareness are viewed as the most important KOLs activities
- There is no formal nor systematic measurement of the impact of KOLs engagement carried out by most of the pharma companies from the panel

Sources: Best Practices, LLC (2014 & 2016) based on 33 companies, amongst which: AbbVie, Amgen, Bayer, Genentech, Genzyme, Janssen, Merck & Co, Pfizer, Roche – Smart Pharma Consulting analyses

Few of the 8 benchmarked pharma companies have put in place a systematic and formalized process to qualify and select Global KOLs

Global KOLs qualification & selection

Main criteria to select Global KOLs



Note: Behavior & personality has been mentioned by one interviewee, as well as KOLs field of interest

Data gathering

Process → Formal process

Sources →
- External agency if new TA[1]
- Inputs from affiliates
- Internal / external cross-check

Tools → Centralized database

"In case of doubts, Global Medical Affairs may contact local Medical Affairs to get their own opinion regarding a Global KOL"

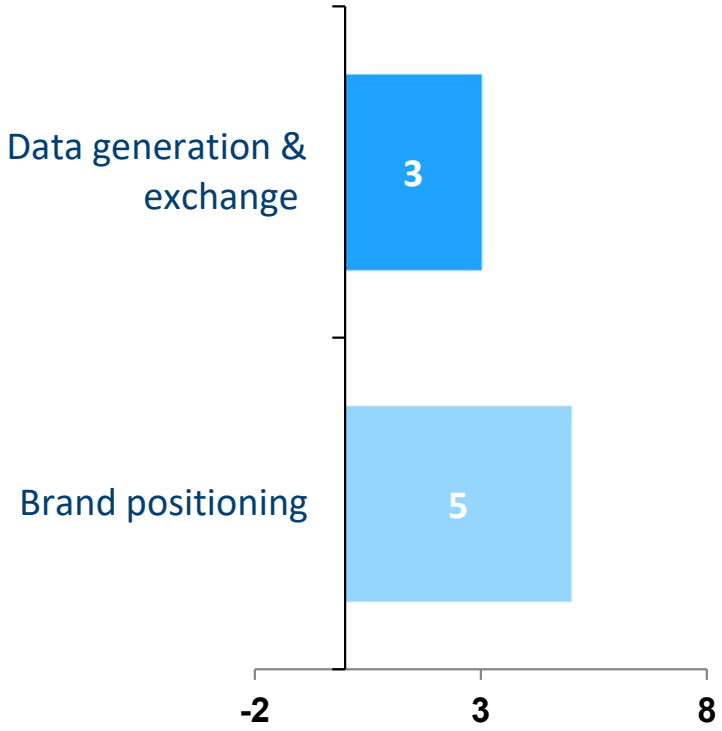
Sources: Interviews of 8 Senior Medical executives from Bayer, BMS, Celgene, Gilead, Janssen, MSD, Pfizer, Roche – Smart Pharma Consulting analyses

[1] *Therapeutic Area*

According to the spontaneous statements of interviewees, Global KOLs are mainly engaged to give advice on brand positioning, produce and exchange scientific data

Main objectives while engaging with Global KOLs

Main objectives[1]



"While engaging with a KOL, we make sure he is interested by the project on which we want to involve him"

Objective setting

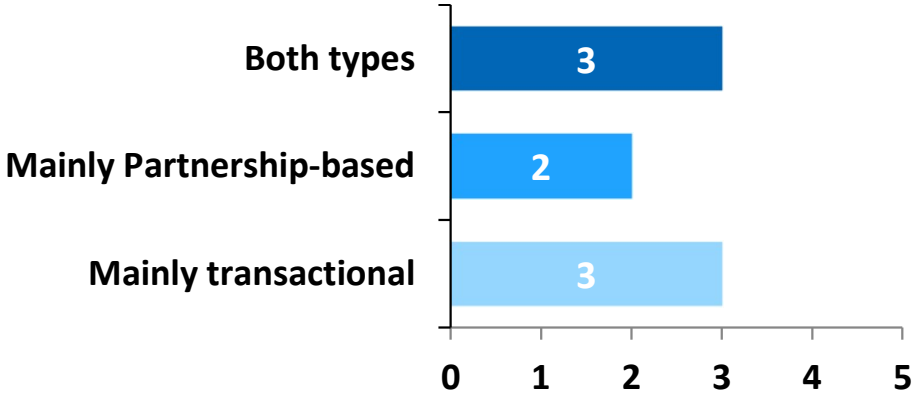
No formal approach, based on specific KOL expertise and company needs

Objective alignment on product Strategic Imperatives & Critical Success Factors

No formal alignment / no global vision

Alignment on Global Strategic Brand Plan / R&D Plan / Global Medical Affairs Plan

Type of agreements



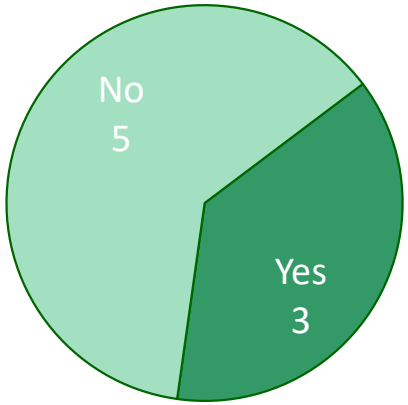
Sources: Interviews of 8 Senior Medical executives from Bayer, BMS, Celgene, Gilead, Janssen, MSD, Pfizer, Roche – Smart Pharma Consulting analyses

[1] *Several answers possible*

Global KOL engagement plans are most often not formalized for each KOL and their follow-up over time is far from being systematic

Global KOL engagement planning & execution follow-up

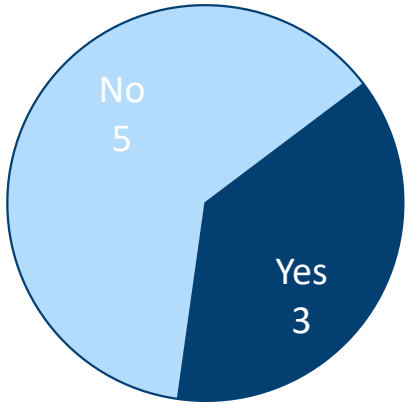
Global KOL engagement plans



"We prepare an engagement plan but by project rather than by KOL. We engage a KOL to carry out a project"

Execution quality follow-up

System to monitor the implementation of Global KOL engagements



"In Europe, it is difficult to evaluate the performance of KOLs. It should be fact-based and not a judgement"

Main difficulties while engaging with Global KOLs

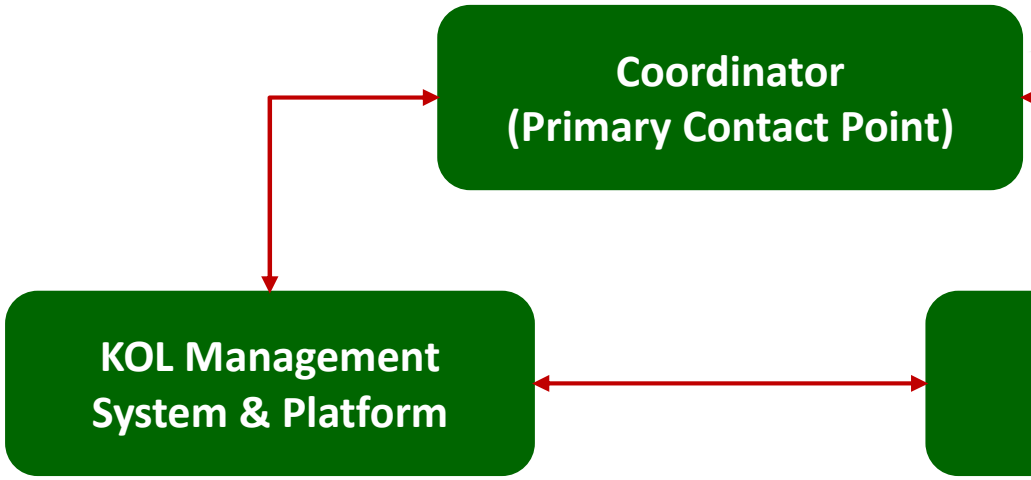
Poor internal alignment and multiple contact points 

Overbooked and overused KOLs 

Sources: Interviews of 8 Senior Medical executives from Bayer, BMS, Celgene, Gilead, Janssen, MSD, Pfizer, Roche – Smart Pharma Consulting analyses

The effective KOL management requires a cross-functional team working in the same direction, in a coordinated manner, with the help of a shared information system

Strategic KOL Management components



- Coordinates interactions with KOLs
- Oversees the management system
- Guarantees the quality of the collaboration

- Stores information relative to:
  - KOLs profiles
  - KOL engagement plans
  - KOL interactions
- Limits the access of certain medical information to commercial collaborators[1]

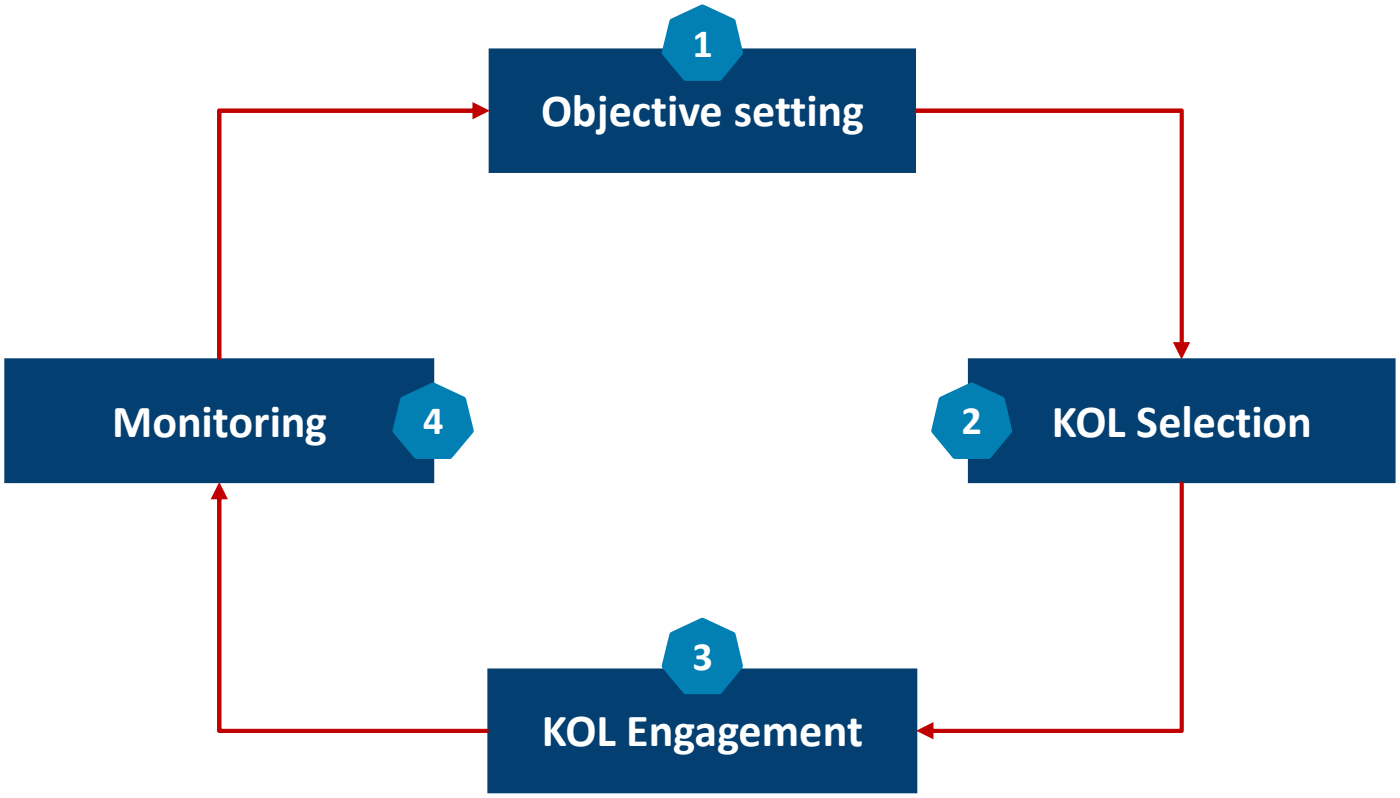
- Gathers and analyzes information[2] across access, medical and commercial departments
- Prioritizes the activities to be carried out by individual KOL according to the product needs and the KOL profile

Sources: Smart Pharma Consulting

[1] Whenever required by the compliance rules – [2] Internal and external sources

The following 4-step approach is proposed to ensure an effective and efficient Strategic KOL Engagement Planning

A 4-step approach

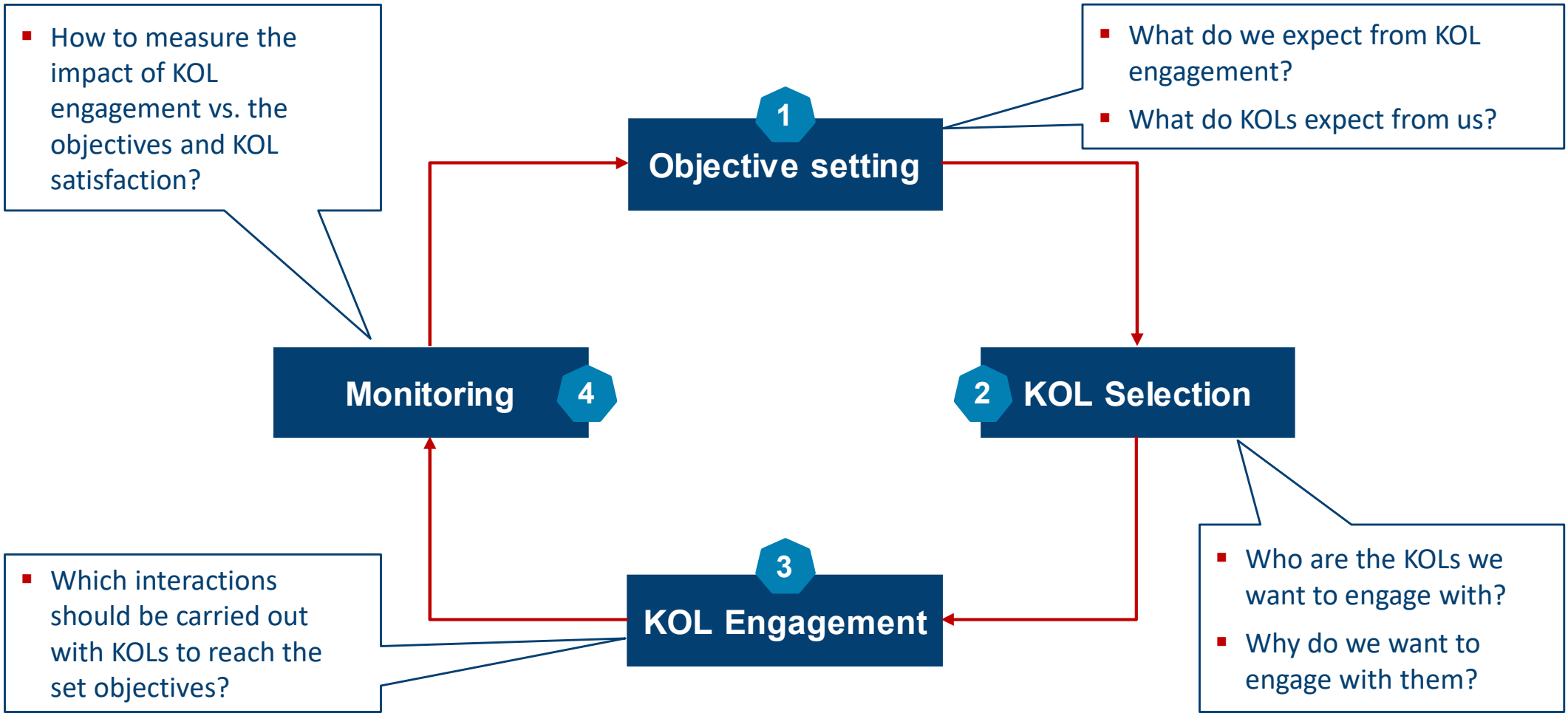


- Relationships with KOLs should be defined according to the set objectives
- Then, the prospective KOLs should be profiled and targeted
- Once KOLs have been selected, their interactions with the pharma company and the activities they are expected to carry out should be defined and formalized in an engagement plan
- The execution of the plan should be carefully monitored with the help of KPIs (Key Performance Indicators) and of KEIs (Key Execution Indicators)

Sources: Smart Pharma Consulting

At each step, the following key questions should be carefully answered to ensure the proper implementation of the proposed Strategic KOL Engagement Planning process

Key questions to be answered by key step



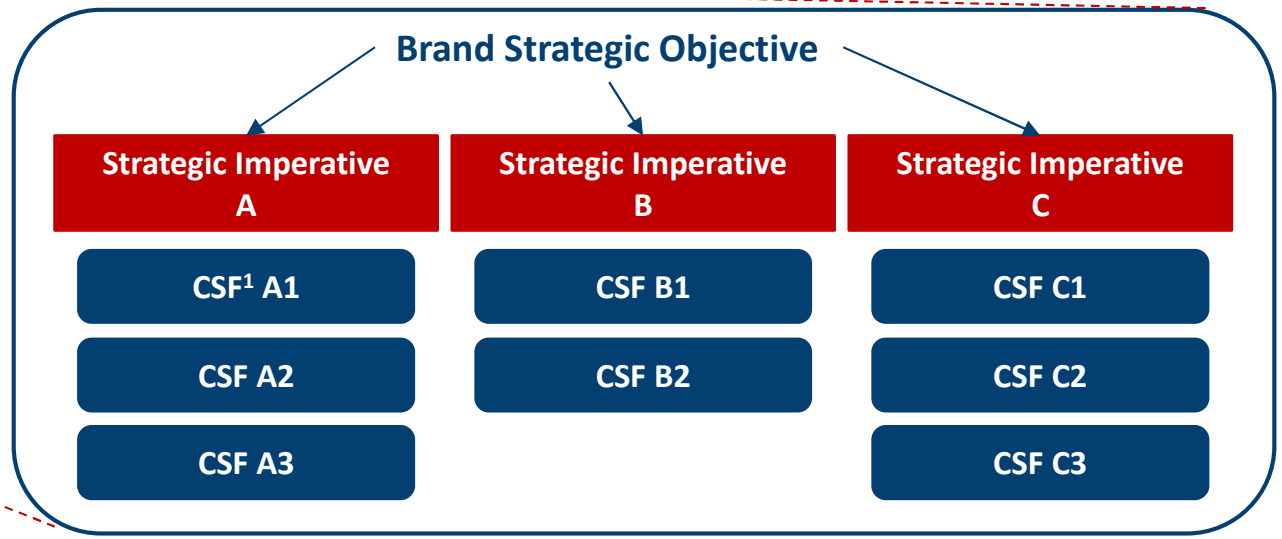
Sources: Smart Pharma Consulting

The global objectives set for KOL engagements should contribute – directly or indirectly – to meet the brand strategic objectives, irrespective of its life cycle position

Strategic alignment

1

Strategic Brand Plan (2020 – 2023)



The global objective of KOL engagements must support one or several CSFs and thus, contribute to fulfill the strategic imperatives to reach the Brand Strategic Objective

Sources: Smart Pharma Consulting

Before defining the KOL Engagement Plan, specific objectives by KOL, consistent with the Brand Strategic Objective, must be set

Global vs. individual objective setting

1

Global objectives

Define precisely what is expected from KOL engagement,
in terms of direct or indirect benefits for the brand
under development or marketed by the pharma company

Individual objectives set by KOL

Define specifically what is expected from each KOL to support the product
and what support each KOL expects from the pharma company, on a professional standpoint

Sources: Smart Pharma Consulting

The objective of the KOL partnership and the corresponding activities will depend on where the product is positioned on its life cycle

Examples of objectives along the product life cycle

1

Product life cycle

R&D and registration phases → Commercial phase →

Research & pre-clinical phases	Phase I	Phase II	Phase III	Approval	Pricing & reimbursement	Marketing

Examples of KOL roles

- Identification of unmet medical needs
- Identification of pharmacological targets
- Advice on target product profile and labelling
- Implementation of R&D activities
- Presentation of clinical results and of product benefits to regulators and payers
- Product awareness building & influence on prescribing choices[1]
- Participation in medical education programs[2]
- Contribution to patient management programs[3]
- Real World Data generation/ phase IV studies
- IIT[4]

Sources: Adapted from GBI Research, Market Rx, by Smart Pharma Consulting

[1] Through articles, lectures, etc. – [2] Through Continuous Medical Education (CME) programs – [3] Through projects carried out with patient advocacy groups (PAGs) – [4] Investigator Initiated Trials

The selection phase consists in a 4-step process leading to a pool of KOLs with whom to engage to benefit (directly or indirectly) the brand

Methodology

2

	Key questions	What to do?
Selection criteria	▪ What are the relevant selection criteria to be used considering the final objective?	▪ Review the relevant criteria (e.g., level of influence, scope of influence, scientific/media awareness, membership of a network, presence in Internet, etc.) ▪ Select a limited number of relevant criteria
KOLs profiling	▪ What information should be collected? ▪ How to collect and analyze this information?	▪ Review internal / external databases to qualify KOLs ▪ Assess the number of publications, quality of journal, the impact factor, Almetrics[1], quotes, lectures during conferences and congresses, etc.
KOLs segmentation	▪ What is the scope of influence and the degree of interest of the KOL for the brand and the related disease(s)?	▪ Map a preselection of KOLs on a matrix according to the most relevant criteria ▪ Identify KOLs networks of collaboration and influence (e.g., cooperative groups)
KOLs selection	▪ Who are the KOLs that should be engaged? ▪ For which kind of engagement?	▪ Select the KOLs ▪ Preliminarily define the types of engagement to carry out with the selected KOLs

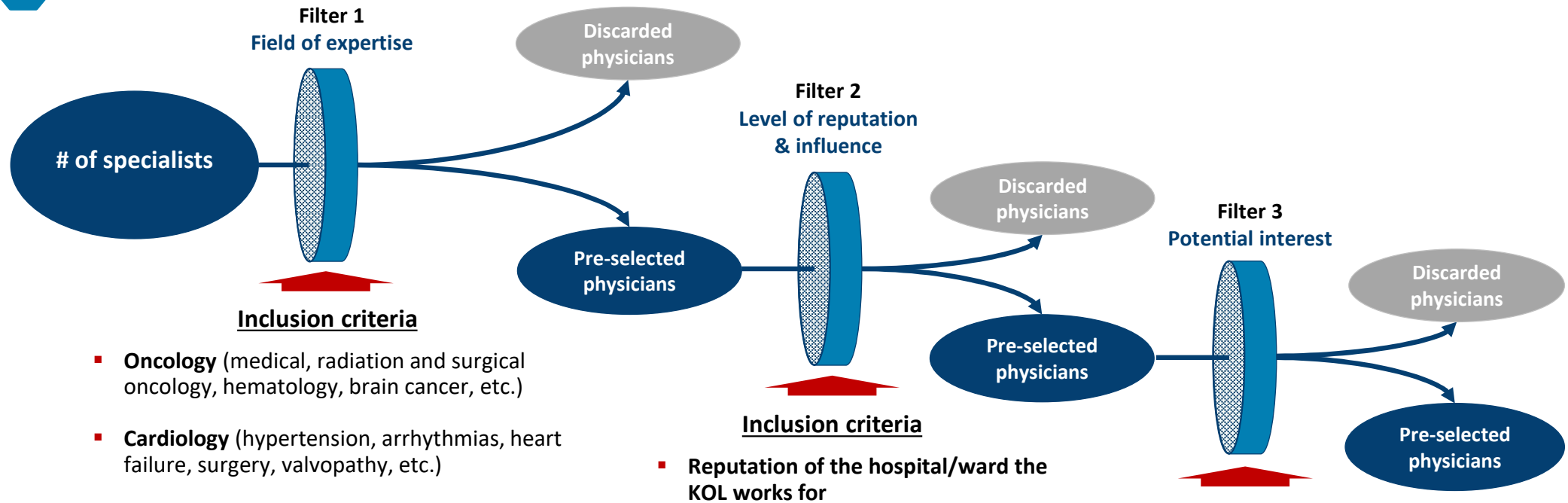
Sources: Smart Pharma Consulting

[1] Collects and collates disparate information on the online activity surrounding scholarly content

Relevant selection criteria and gathering of accurate and reliable information about the KOLs profiles are of utmost importance to optimize the value of their engagement

Screening process (illustrative)

2



Inclusion criteria

- **Oncology** (medical, radiation and surgical oncology, hematology, brain cancer, etc.)
- **Cardiology** (hypertension, arrhythmias, heart failure, surgery, valvopathy, etc.)
- **Rheumatology** (osteoporosis, rheumatoid arthritis, osteoarthritis, psoriatic arthritis, etc.)
- **Technical expertise** (design of clinical studies, biostatistics, epidemiology, public healthcare, patients' adherence, etc.)

Inclusion criteria

- **Reputation of the hospital/ward the KOL works for**
- **Reputation of the KOL** (based on status, honors, publications, etc.)
- **Power of influence** (on peers, health authorities, PAGs[1])
- **Scope of influence** (global, international, national, local)

Inclusion criteria

- **Inclination to communicate** (in a neutral or positive way)
- **Communication skills** (written and/or verbal)

Sources: Smart Pharma Consulting

[1] Patient advocacy groups

Qualification of KOLs should be documented with reliable and real-time data collected through desk research and field research (e.g., interviews of peers, pre-identified KOLs)

How to qualify KOLs? (1/2)

2

What data to collect?	How to collect data?	How to analyze data?
▪ **Education** (e.g., university – hospital) ▪ **Medical activity/position** (e.g., specialty, medical department, status in the medical department) ▪ **Teaching activity/position** (e.g., topics taught, professor, lecturer) ▪ **Field of expertise and interest** (e.g., specific disease, pharmacological route, mode of action, medical technique) ▪ **Membership in learned societies** (titles / positions / activities) **and/or in more or less structured networks**	▪ Internet search, direct search ▪ Field research (e.g., peers, hospital pharmacists' interviews, etc.) ▪ Probing by collaborators from the medical department (e.g., MSLs[1]) and collaborators from other departments of the pharma companies (data could be stored and shared on a platform) ▪ KOL Management vendors (e.g., Truven; KOL, LLC; OpenQ; Veeva Systems)	▪ Being head of hospital and professor is a plus ▪ Reputation of the hospital/teaching hospital or of the private institution where the KOL works should be considered ▪ Global or International scopes of influence are preferable, in general, to national or local levels (but it depends on the objective) ▪ Being a member of the management board of a learned society is a plus in terms of potential level of influence

Sources: Smart Pharma Consulting

[1] *Medical Science Liaisons*

Qualification of KOLs should be documented with reliable and real-time data collected through desk research and field research (e.g., interviews of peers, pre-identified KOLs)

How to qualify KOLs? (2/2)

2

What data to collect?	How to collect data?	How to analyze data?
▪ **Communication activities** – # articles published (impact factor[1], Almetrics[2], peer-/non peer reviewed journals, principal investigator (PI), etc.) – # of training/teaching activities p.a. (CME[3]) – # of lectures (congresses, symposiums, round tables) – Presence on the Internet – # of quotes by journalists in current year	▪ Review of published scientific articles (PubMed/Medline, Google scholar, Expertscape, Cochrane Library) ▪ Evaluation of training/teaching activities and lectures by interviewing peers and collaborators of pharma companies ▪ Google searching for presence and quotes on the Internet	▪ The higher the impact factor is, the better ▪ KOLs should be ideally positioned as 1st or last author in articles ▪ A high number of training/teaching seminars and lectures is a plus ▪ The perceived quality of articles, training, teaching and lectures should be assessed
▪ **Partnership activities** – Types of activities (e.g., lectures, clinical investigations, advisory boards) – With the company and its competitors – Potential level of interest (inclination to support the development/the proper use of a brand)	▪ Review of past performances with the company or its competitors (e.g., probing by collaborators of the company) ▪ Interviews of peers	▪ Verbal (e.g., lectures, courses) and written communication (e.g., articles, websites) ▪ KOLs should express their field of interest over the long term and their expectations from an engagement with the pharma company

Sources: Smart Pharma Consulting

[1] It measures the average frequency with which the article has been cited in a particular year. It is used to measure the importance or rank of a journal by calculating the number of times its articles are quoted – [2] Collects and collates disparate information on the online activity surrounding scholarly content – [3] Continuous medical education

The following table shows a proposed approach to evaluate and rank candidate KOLs to set up a list of Top Global KOLs, that should be continuously updated

Scoring of candidate KOLs

2

Illustrative

	Profiling parameters	Prof. A	Prof. B	Prof. C	Dr. D
EXPERTISE	Pharmacological expertise	8	0	6	0
	Academic research	5	9	0	0
	Clinical research	5	0	9	5
	Clinical practice	0	0	6	9
	Scientific advisory board	8	8	7	6
	Sub-total score (A)[1]	**5.2**	**3.4**	**5.6**	**4.0**
AWARENESS	Publication record	8	5	4	3
	Speaker record	3	4	8	7
	Communicate skills	6	6	5	7
	Density of the network	5	7	7	3
	Sub-total score (B)[1]	**5.5**	**5.5**	**6.0**	**5.0**
	Impact Index[2] score (A x B)[1]	**14.3**	**9.4**	**16.8**	**10.0**
	KOL degree of interest	**Moderate**	**High**	**Moderate**	**Low**
	Ranking	**2**	**3**	**1**	**4**

- The candidate KOLs can be ranked according to their field of expertise, their associated level of recognition in these fields, and their level of awareness
- The KOL degree of interest for the product should also be considered
- The assessment could be done on a 10-point scale based on data coming from external providers, a panel of peers who will score each expert, combined with the internal insights available at the pharma companies' level, etc.
- This approach will help make a first cut of the Top Global KOLs that should be continuously reevaluated

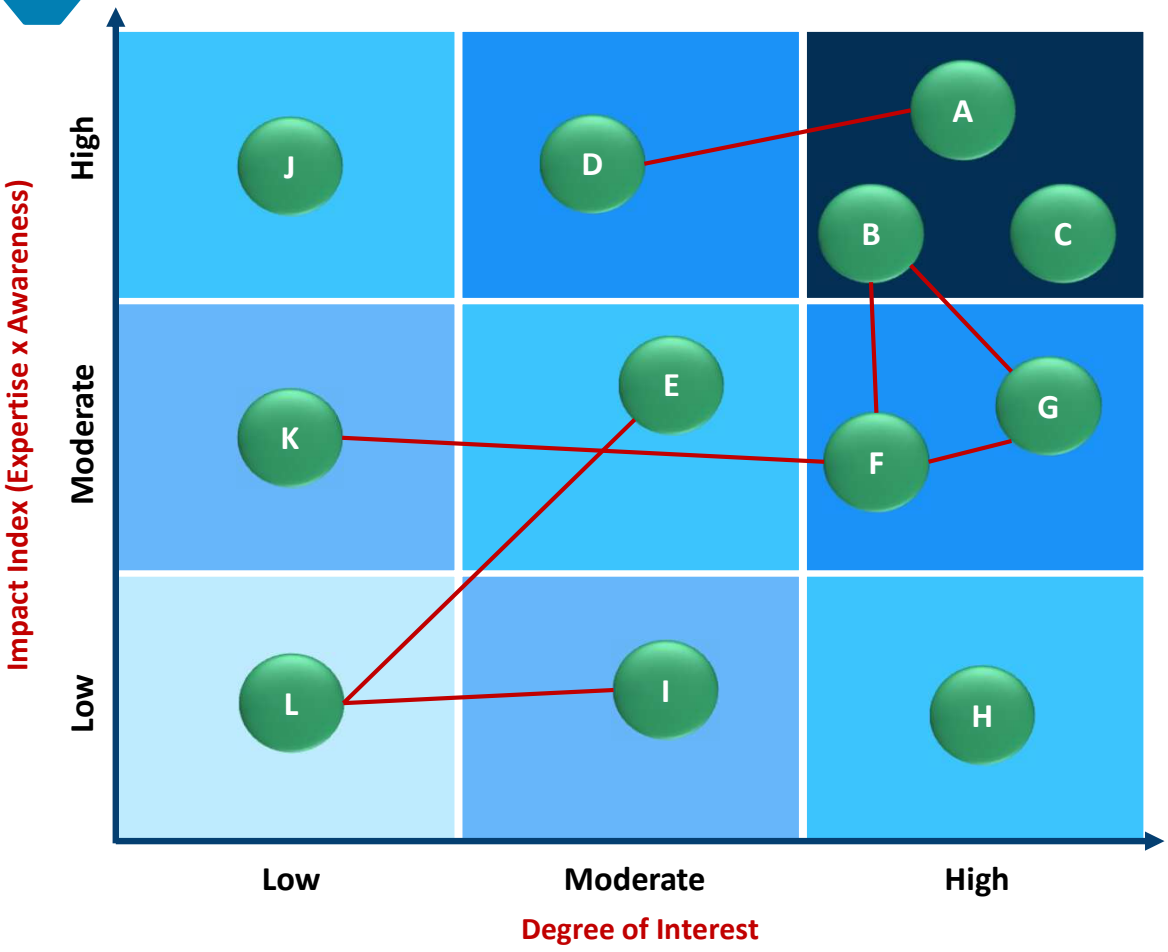
Sources: Niche Science & Technology (2016) – Smart Pharma Consulting analyses

[1] Average of the marks obtained – [2] [Expertise x Awareness] / 2

The proposed matrix is a useful tool to prioritize the KOLs with whom to engage and to pre-define the types of collaboration to carry out with them

KOL targeting – Segmentation & selection

2



- The proposed matrix facilitates the **final selection** (targeting) of pre-selected KOLs based on their:
  - **Impact index** (combining their degree of expertise and awareness[1])
  - **Potential interest**
- The impact index reflects the KOLs ability to influence other stakeholders (i.e., HCPs, policy makers, payers, patients, PAGs)
- The degree of interest reflects the KOLs willingness to support:
  - The development of the company brand
  - The proper use of the brand, once marketed
- The network[2] of KOLs should also be considered

Priority 1 | Priority 2 | Priority 3 | Not a Priority

Networks of influence / collaborations amongst KOLs

Sources: Smart Pharma Consulting

[1] Including on Internet – [2] Network of influence / collaboration amongst KOLs

To convince KOLs to partner, it is important to consider their expectations and to highlight the benefits, they will draw from it in terms of professional development

How to convince KOLs to partner?

2

What do KOLs want through engagements?

- The selection of KOLs should consider the **benefits they can offer** to the pharma companies and the **benefits** the pharma **companies** can **offer to them**
- *For so doing, the following questions should be addressed:*
  - Is the KOL yet a partner of the pharma company?
  - What has been qualitatively and quantitatively his level of involvement?
  - What has been his feed-back (level of satisfaction) from previous collaborations?
  - What is his mid- to long-term professional ambition?
  - What does he expect from collaborations with pharma companies?
  - Is he looking for a long-term partnership or a "fee-for-service" transaction?

What should pharma companies propose to KOLs?

- Based on KOLs professional expectations, pharma companies can **propose ideas** of "**win-win**" **activities** to be carried out through engagements
- The **benefits** the **KOLs** will draw in terms of **personal awareness** and **competence development** through the engagement should be **emphasized**:
  - **Opportunity to participate in** publication of articles, interviews in media, presentations during congresses, lectures during medical meetings, etc.
  - **Provide expert opinion/guidance and/or…**
  - **… opportunity to participate in clinical research (e.g., clinical trials) or to carry out IITs**[1]
  - **Professional development** through the access to recent information, to high education programs[2], by working in new research/medical areas, etc.

Sources: Smart Pharma Consulting

[1] Investigator Initiated Trials– [2] Especially for Rising Opinion Leaders

Pharma companies should be able to manage dynamically their selected KOLs by attracting newcomers and putting an end to some existing collaborations

Dynamic management of selected KOLs

2

Entering KOLs

Current pool of selected KOLs

- Guidance for new product development
- Data generation (pre-clinical or clinical)
- Creation of credible and persuasive medical content
- Advice regarding product strategy (e.g., positioning)
- Facilitation of patient access to new therapies

Leaving KOLs

- KOLs entering the reservoir of partners should fulfill specific objectives
- Depending on the needs to be fulfilled, the expertise and motives of the KOL, the expected engagement will be:
  - Either strategic and renewed for several years (partnership)
  - Or tactic and carried out on an ad-hoc basis (transaction) for a specific activity (e.g., lecture, clinical study)

- To manage dynamically – and efficiently – a pool of KOLs, it is important to stick to certain rules:
  - The objective of the collaboration should be clearly set to avoid any misunderstanding
  - The expected engagement from the KOL and services from the pharma company should be specifically defined
  - The fulfilment of the contractual obligations should be closely monitored and the gaps, if any, filled up by mutual agreement

- KOLs may leave the reservoir of partners based on:
  - Joint decision (e.g., completion of an ad-hoc agreement)
  - Decision made by the pharma company (e.g., engagement not satisfactorily fulfilled, difficulty to collaborate with the KOL)
  - Decision made by the KOL (e.g., mismanagement of the relationship by the company, lack of interest in the product or the requested activities)

Sources: Smart Pharma Consulting

Pharma companies should balance what they expect from KOLs in terms of activities and what they give them in terms of services to ensure a win-win partnership

Services proposed to & activities carried out by KOLs

3

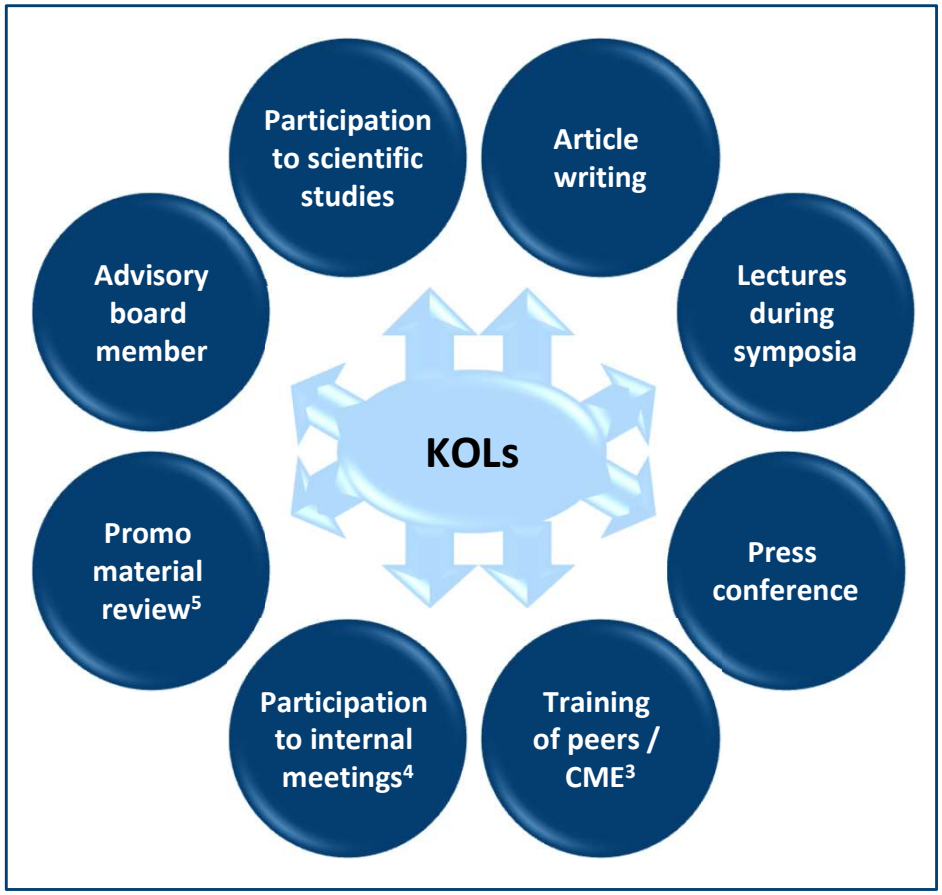
Services proposed to KOLs (Illustrative)

KOL Digital Platform (2.0)[1]

- **Access to scientific information** (e.g., articles, databases, expert reports, clinical cases)
- **Organization of peer meetings with top international KOLs** (e.g., congresses, symposiums, forums, etc.)
- **Technical support to publish articles** (e.g., medical writing, proof reading, peer pre-review)
- **Technical & funding support for Investigator Initiated Studies**
- **Slide kits for training/teaching programs**
- **Ad hoc support on demand basis** (e.g., media training, training on statistics, change management in a ward)

KOL Manager[2]

Activities carried out by KOLs (Illustrative)



Sources: Smart Pharma Consulting

[1] Access limited to KOLs – [2] Each KOL should have a dedicated KOL Manager (e.g., a MSL) – [3] Continuous Medical Education – [4] Such as lectures to sales forces, face-to-face meetings with the marketing team, etc. – [5] Such as visual aids, leaflets for patients

If KOLs share the objective of the pharma company and accept to communicate, the following means can influence medical practices and help better position products

Potential value of KOL activities (1/2)

3

Article writing

- KOLs may support the pharma company priorities by communicating in scientific journals, professional magazines or lay press regarding:
  - New medical approaches, new guidelines, patient management, etc.
  - The position of its products in the therapeutic strategy

*Perceived reliability by readers: **H***
*Number of exposed readers: **L-H***

Lectures during symposia

- While giving lectures, KOLs may accept to cover topics of interest for the company…
- … and/or to position its product vs. direct competitors or indirect therapeutic alternatives based on scientific data/ rationale
- KOLs may also share their own experience as a prescriber of the company products

*Perceived reliability by participants: **M***
*Number of exposed attendants: **L***

Press conference

- Press conferences enable to have indirectly access to a larger number of readers
- The messages conveyed by KOLs may sometimes be modified by journalists
- It is rare for KOLs to make strong statements in favor of a product during a press conference

*Perceived reliability by readers: **M***
*Number of exposed readers: **M-H***

Training of peers / CME[1]

- KOLs may communicate to HCPs during training sessions regarding:
  - Medical topics of interest for the pharma company
  - The position of its products in the therapeutic strategy
- In such circumstances, KOLs may convey strong messages, if they decide to do so

*Perceived reliability by participants: **M-H***
*Number of exposed attendants: **M***

***H**: Higher – **M**: Medium: – **L**: Lower*

Sources: Smart Pharma Consulting

[1] Continuous Medical Education – [2] Physicians, pharmacists, nurses, etc.

KOLs can be of great value through direct collaboration (by training, informing, giving advice, etc.) with medical and marketing teams of the pharma company

Potential value of KOL activities (2/2)

3

Participation to internal meetings

- KOLs may play an effective role during internal meetings by:
  - Informing / training medico-marketing teams about scientific trends and position of competitors
  - Being invited as a "guest star" to show collaborators the ability of the pharma company to partner with top medical leaders
  - Playing a role with sales reps (e.g., selling forums)

Participation to scientific studies

- KOLs, especially if they are supposed to sign or co-sign the corresponding publication, may be very helpful to:
  - Participate to the design of the study
  - Carry out the study (either about a given pathology only or a pathology & its treatments involving the pharmaceutical company product)
- Involvement of KOLs in medical/clinical studies will depend on their field of interest

Advisory board member

- Advisory board meetings with KOLs should be preferred to individual meetings with KOLs when the objective is to get advice on:
  - **Estimating** the impact of key **market trends**:
    - Scientific innovation
    - New product development
    - Evidence generation
    - Market access strategy
    - Marketing strategy (positioning)
  - New **ideas** or **concepts**

Promo material review

- KOLs may collaborate with the marketing team by contributing to the creation of promotional materials
- Thus, they can create value by:
  - Suggesting messages
  - Developing a scientific rationale to support messages/claims of the products
  - Assessing and editing the content of promotional materials (visual aid, booklet…)

Sources: Smart Pharma Consulting

A comprehensive KOL engagement strategy requires from pharma companies to gain an in-depth understanding of KOL challenges, motivators and expectations

KOLs challenges – motivators – expectations

3

Challenges

- **Trusting pharma**: product efficacy and safety, corporate reputation and service quality
- **Pharma engagement approach**: transactional arrangement vs. real relationship, multiple contact points
- **Time and doctor/patient ratio**
- **Regulation**: compliance, accountability, disclosure of compensation from pharma companies

Motivators

- Prestige and renown
- Better healthcare outcomes
- Scientific journals and publications
- Membership in advisory boards, steering committees
- Formulation of guidelines and medical policies
- Speaking opportunities at congresses, symposia
- Participation in clinical trials and academic researches

Expectations from pharma companies

- Fair market value remuneration
- Presence in KOLs field of expertise
- Consistency, communication, support and interaction
- Value-adding interactions with pharma companies' collaborators
- Research assistance
- Credibility and commitment to patient care
- Continuous engagement
- Genuine involvement & meaningful partnerships
- Transparency

"One goal that most KOLs share is to capture attention and prestige within their community"

Sources: Pharma's Guide to Effective KOL Engagement, Phanish Chandra (August 2017) – Smart Pharma Consulting

In general, the most common criticisms by KOLs at pharma companies are related to absence of true partnerships and of cohesive internal strategy and processes

Top 10 poor pharma companies' practices & key learnings

3

Top 10 poor practices

1. "30-page confidentiality agreement"
2. Unclear unspoken objectives
3. Inconsistent honoraria payments across projects
4. Strong commercial bias in discussions about treatments
5. Lack of listening
6. Lack of on-going communication
7. Sporadic approach: "No follow-up to show how they used our input or what they did"
8. "17 different people from the same company contacted me in the course of one month"
9. Changes in staff: "I never know who is who"
10. Relationship held by the CRO

Key learnings

- Set clear objectives
- Favor partnership-based to transactional agreements
- Consider what KOLs want from a relationship with pharma companies
- Ensure a transparent communication
- Have a clear demarcation between commercial, medical and clinical needs (and others, if needed)
- Ensure a consistent and coordinated communication between the pharma company and the KOLs

Sources: Study carried out in the UK, Uptake Strategies (January 2014) – Smart Pharma Consulting analyses

The development of a KOL Engagement Plan is a centerpiece to maximize the probability of success while partnering with KOLs

KOL engagement plan (1/2)

3

- The development of a clear – precise – concise and shared engagement (activity) plan, between KOLs and pharma companies – will ensure that:
  - Objectives of collaboration are well understood and agreed upon
  - Reciprocal expectations are well defined and accepted
  - Respective commitments are fulfilled and in due time
- The preparation of an engagement plan increases the probability of success of the partnership over time…
- … and minimizes the risks of mutual disappointments
- The KOL Engagement Plan (KEP) will facilitate the coordination and the communication across the pharma company and thus optimize synergies across market access, medical and marketing departments

Sources: Smart Pharma Consulting

To build a useful and effective KOL Engagement Plan, it is recommended to follow the 5-step process proposed here-below

KOL engagement plan (2/2)

3

1. Design of templates that can be shared with KOLs and the pharma company collaborators (i.e., from market access, medical, marketing departments)

2. Filling up of the plan by the pharma company collaborators assigned to the KOL under the supervision of the Medical Director and Marketing Director[1]

3. Reviewing/adjustment of the plan by the KOL and the KOL Manager[2]:
- Objectives
- Services offered by the pharma company
- Activities carried out by the KOL
- Fees (if any) at a fair market value
- Monitoring process of services/activities

4. Follow-up of the plan:
- Prepare the planned services/activities
- Analyze the quality of execution of these services/activities
- Reconsider – if not anymore relevant – planned services/activities

5. Assessment of the engagement by:
- The KOL Manager and the KOL to measure the level of mutual satisfaction and decide about potential adjustments[3]
- A committee incl.: the Medical Director, the Marketing Director, the KOL Manager to evaluate the KOL engagement and decide about potential adjustments[4]

"To find common ground is a key success factor in KOL engagement"

Sources: Smart Pharma Consulting

[1] If allowed by national and corporate regulations – [2] It is recommended to assign one KOL manager who is the preferred point-of-contact for the KOL – [3] Ideally, twice a year – [4] Ideally, once a year

Individual KOL Engagement Plans should be co-developed by the KOL and the pharma company to avoid any misunderstanding and subsequent disappointments

Development of KOL Engagement Plans

3

Strategic Brand Plan (2020 – 2023)

- The KOL engagement plan should be developed to support the Brand Strategic Objective as per the Strategic Brand Plan
- Each individual KOL engagement plan should be designed accordingly and be consolidated in a single document
- The Consolidated KOL Engagement Plan can cover a period lasting from one year to 3 or even 5 years, depending on the product position on its life cycle

Sources: Smart Pharma Consulting

The KOL Engagement Plan should be formalized in a document that could be structured as proposed in the table of contents, here-below

Structure of a Consolidated KOL engagement plan

3

Illustrative

Table of Contents

- Introduction
  - Brand Strategic objective (vision)
  - Brand Strategic Imperatives & Critical Success Factors
  - Brand development priorities (3-year perspective)
- Expected contribution from the pool of Global KOLs
- Expected contribution from individual Global KOLs
  - Type of agreement (ad-hoc, partnership, duration, etc.)
  - Key activity selection (e.g., advisory board meeting, lecture, clinical study, peer-to-peer trainings)
  - Key activity description (e.g., objective, timing, accountability, budget)
  - Key activity monitoring (e.g., KPIs[1] and KEIs[2])

Sources: Smart Pharma Consulting

[1] Key performance indicators – [2] Key execution indicators

The KOL Engagement Plan should include key information extracted from the KOL database, specify the objectives of the collaboration, its scope and duration

Individual KOL engagement plan – ID Card

3

Illustrative

KOL name	First name – surname	**Medical status**	MD – head of medical department – professor of medicine, etc.	**Medical setting**	Private hospital – Public hospital – Teaching hospital
Expertise	E.g., therapeutic area, organ, pharmacology, academic and/or clinical research, scientific advisory boards, etc.	**Awareness**	Publications – Lectures – Communication skills - Network	**Impact Index[1]**	Numerical scale to be determined
Degree of Interest	Low – Moderate – High	**Points of vigilance**	E.g., mobility, adherence to deadlines, quality of presentation documents, etc.	**Ranking**	

Primary objectives of the collaboration	•			
Specific activities planned within the engagement[1]	•	•	•	•

Type of agreement	**Duration of the agreement**		
• Transactional agreement:	• Annual:	from: ---/---/---	to: ---/---/---
• Partnership agreement:	• Multi-year:	from: ---/---/---	to: ---/---/---

Sources: Smart Pharma Consulting

1 Examples: Development of a digital tool to improve patients' adherence, coordination of a multi-centric study, expert support to estimate the medico-economic value of a new product, lectures during medical meetings organized with peers, etc.

The KOL Engagement Plan should describe the activities the KOL is engaged to carry out to meet specific objectives, and it should include monitoring indicators

Individual KOL Engagement Plan – KOL Activity Card

3 4

Illustrative

KOL Activity	• Lecture, training of peers, advisory board, press conference, article writing, IIS, clinical study, etc.	Objectives	•	Pharma company contact point	

Key implementation steps	Timing	Points of caution	Expected output / value of the activity for…		
			… the KOL herself/himself	… the pharma company	… 3rd parties ----------
•		•			
•		•			
•		•	•	•	•
•		•			
•		•			

Feasibility (High – Moderate – Low)		Key Execution Indicators		Key Performance Indicators	
Technical	•	• These indicators measure the quality of execution of the activity		• These indicators measure the impact (output/value/benefit) of the activity for the different targets (the KOL, the pharma company and possibly for 3rd parties, like peers, patients, PAGs)	
Regulatory	•				
Financial	•				

Sources: Smart Pharma Consulting

The KOL Engagement Plan should also describe, plan and follow up the services proposed to the KOL, as a constituent of the partnership-based agreement signed

Individual KOL Engagement Plan – Partnership-based Service Card

3 4

Illustrative

Pharma company services	• Access to scientific information, technical support to publish articles, provision of training/teaching materials, organization of peer meetings, etc.	Objectives	•	Pharma company contact point	

Key implementation steps	Timing	Points of caution	Expected output / value of the service for…	
			… the KOL herself/himself	… the pharma company
•		•		
•		•		
•		•		
•		•	•	•
•		•		

Feasibility (High – Moderate – Low)		Key Execution Indicators		Key Performance Indicators	
Technical	•	• These indicators measure the quality of execution of the service provided to the KOL		• These indicators measure the impact of the service provided to the KOL	
Regulatory	•				
Financial	•				

Sources: Smart Pharma Consulting

Key execution and performance indicators are essential to optimize the chance of a proper execution of services / activities and of a win-win partnership

Examples of tools to monitor engagements with KOLs (1/2)

4

KOLs activities	Key execution indicators (KEIs)	Key performance indicators (KPIs)
▪ Lecture during symposia or congresses	▪ Interest (10-point scale) ▪ Utility (10-point scale) ▪ Practicality (10-point scale) ▪ Implementation[1] (10-point scale)	▪ Global level of satisfaction of attendees (10-point scale) ▪ Inclination of attendees to support & prescribe the product: – Number of lectures/trainings/publications – Quality/objectivity of messages conveyed to peers, pharmacists, PAGs, etc.
▪ Training of peers		
▪ Article writing	▪ Acceptance by recognized journals (scientific, medical, or in lay press, etc.) ▪ Post on highly regarded websites	▪ Impact factor and Altmetrics[2] (for scientific / medical journals) ▪ Number of broadcasted issues for lay press ▪ Number of views / likes on Internet ▪ Contribution of content to support the product
▪ Press conference	▪ Number and quality of press conferences conducted	
▪ Participation in scientific studies	▪ Implementation (number of patients recruited, timing, actual costs vs. budget)	▪ Publication of an article in a renowned scientific journal ▪ Impact of the publication on product reputation

Sources: Smart Pharma Consulting

[1] Logistics, timing, actual costs vs. budget – [2] Collects and collates disparate information on the online activity surrounding scholarly content

Key execution and performance indicators are essential to optimize the chance of a proper execution of services / activities and of a win-win partnership

Examples of tools to monitor engagements with KOLs (2/2)

4

Pharma company services	Key execution indicators (KEIs)	Key performance indicators (KPIs)
▪ Access to scientific information	▪ Interest (10-point scale) ▪ Utility (10-point scale) ▪ Practicality (10-point scale) ▪ Implementation[2] (10-point scale)	▪ Global level of satisfaction of KOLs (10-point scale) ▪ Inclination of KOLs to support the pharma company products: – Number of lectures / trainings / publications – Quality/objectivity of messages conveyed to peers, pharmacists, patients, etc. ▪ Increased level of KOLs awareness and reputation ▪ Increased level of products awareness and reputation
▪ Organization of peer meetings with top global / international KOLs		
▪ Publications' support		
▪ IIT[1] support		
▪ Slide kits for training / teaching programs		
▪ Ad hoc support on demand basis		

Sources: Smart Pharma Consulting

[1] Investigator Initiated Trails – [2] Logistics, timing, cost vs. plan

Future trends
in KOL Engagement Planning

- Fewer opportunities for transactional and agreements (e.g., ad-hoc contributions such as lecture at a symposium)
- Greater independence of KOLs and increasing pro-bono contribution where mutual benefits lie (e.g., research program, lectures reinforcing their awareness)
- More independent collaboration projects, indirectly or not connected to a specific product (e.g., research program, education program, best practice sharing)
- Increasing presence, awareness and influence of KOLs on Internet
- Broader definition of KOLs from clinical expert to patient advocate, payor, academic institution, charity, etc.
- Evolving internal policies to foster transparency and compliance with industry code of practice

Sources: Study carried out in the UK, Uptake Strategies (January 2014) – Smart Pharma Consulting analyses

Recommendations for a
Successful KOL Engagement Planning

1. Define **clear** and **precise objectives for each KOL**
2. Build a **relationship** based on an **exchange of services / activities** (vs. fee-for-service deal)
3. Make sure that **services** provided to KOLs **contribute to fulfill** their **needs/expectations**
4. Ensure an **open** and **transparent relationship**
5. Do not ask **KOLs** to **promote** your **products**, you would affect their reputation and yours
6. Make the **best use** of **KOLs limited time** by organizing useful exchanges
7. Assign a **KOL Manager** who is the KOL-preferred contact point and who ensures alignment and information sharing between all collaborators of your company in contact with her/him
8. Create a **technology platform** to **store**, **structure** and **share data** relative to KOL profiles and engagements (planned and achieved)

*Define **internal guidelines** and a **control process** to prevent any **compliance issues** that could damage your corporate reputation*

Sources: Smart Pharma Consulting

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5. Marketing

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CONSULTING

Best-in-class
Pharma Marketers

Implementing
the Brand Booster Program

POSITION PAPER May 2019

The Brand Booster Program includes specific concepts, methods and tools which have been designed to develop Pharma Marketers competence and performance

Context

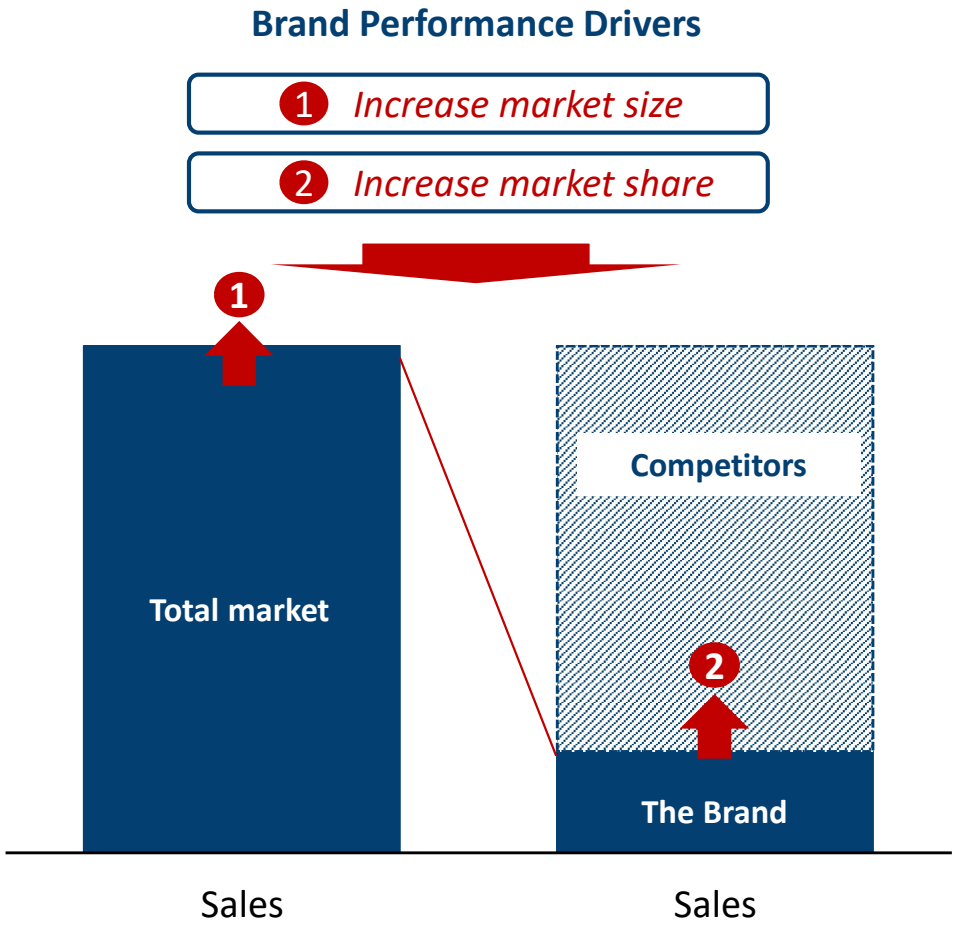
- **Over the past decade, pharma marketing functions have decreased in importance due to:**
  - External factors:
    - → **Health authorities** have raised regulatory **barriers** restricting the scope of possible marketing initiatives
    - → **Healthcare professionals** have **reduced** the number of **interactions** with marketing and salespeople and have become less and **less sensitive to operational[1] investment**
  - Internal factors:
    - → **Marketing decisions** are more and more shifting from affiliates to headquarters, losing insight into their customers
    - → **Marketers have** more and more **difficulties** in **differentiating** their brands
- **Smart Pharma Consulting has set up** the innovative **Brand Booster Program** to help **Marketers strengthen** their **competence**, **improve** the **performance** of their brands and become **Best-in-Class Pharma Marketers**

Sources: Smart Pharma Consulting

[1] Medico-marketing-sales

The Brand Booster Program helps Pharma Marketers optimize the performance of their brands by giving the priority to strategies that increase their market shares

Objective



- The slowdown in the pharma market growth leads pharma companies to focus on gaining market shares
- The Brand Booster Program (BBP), which has been developed to help pharma companies achieve this objective, is based on three frameworks:
  - The Brand Preference Mix (BPM) driving market share gain
  - The Behavioral Prescriber Segmentation (BPS), which improves the efficacy and efficiency of marketing investments
  - The Individual Prescriber Plan (IPP), which formalizes tailor-made operational[1] activities for an optimal efficiency
- The Brand Booster Program guarantees consistency between market reality and marketing activities to be implemented to boost brands sales

Sources: Smart Pharma Consulting

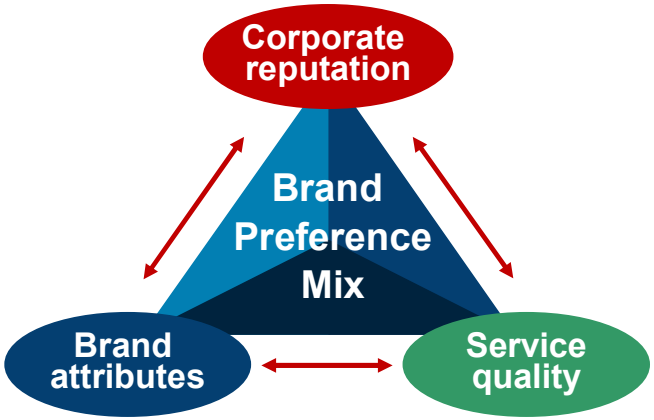
[1] Medico-marketing-sales

The Brand Booster Program relies on three simple, logical and complementary frameworks that can be advantageously combined for a faster and higher impact

Executive Summary – Frameworks

Brand Preference Mix

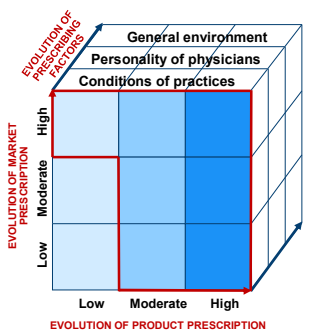
Brand Preference Triangle



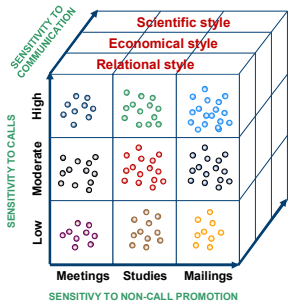
- The share of brand prescription is driven by physicians' preference level
- This level can be enhanced by acting on the Brand Preference Mix (BPM), i.e., brand attributes, service quality and corporate reputation

Behavioral Prescriber Segmentation

Dynamic Prescribing Potential



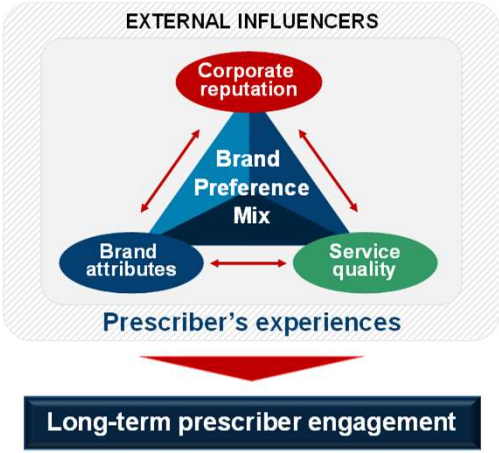
Permeability to Investments



- The Behavioral Prescriber Segmentation is built on 3 dimensions:
  - Factors that drive the dynamics of prescribers' prescriptions[1]
  - Prescribers' personalities
  - Prescribers' permeability to investments[2]

Individual Prescriber Plan

Prescriber-Centric Strategy



- The cornerstone of the Individual Prescriber Plan is the individual prescriber-centric strategy
- This strategy is about building positive experience with the company, the brand and the services to boost preference

Sources: Smart Pharma Consulting

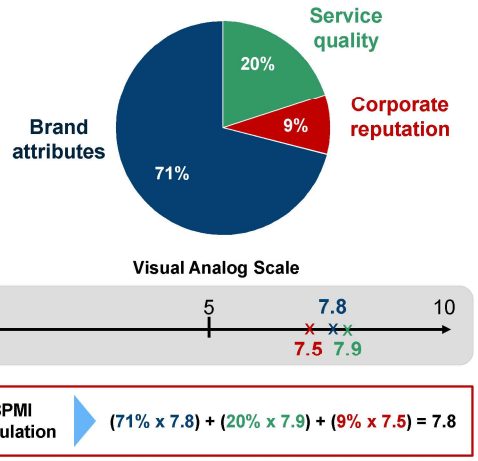
[1] By market (competitors + brand) and by brand – [2] Medico-marketing-sales investments

The tools supporting the Brand Booster Program are pragmatic and user-friendly, which facilitates their use by pharma marketers

Executive Summary – Tools

Brand Preference Mix

Brand Preference Mix Index



- The Brand Preference Mix Index is a practical measurement tool that can be used at national level, at hospital/ department level, or at individual prescriber level through face-to-face or phone interviews

Behavioral Prescriber Segmentation

Individual Prescriber Portrait

Physicians	Evolution Market/Brand	Permeability to calls/marketing	Personality dominance
A	High/ Moderate	High/ Mailings	Relational
B	Moderate/ High	High/ Meetings	Scientific
C	High/High	Low/ Studies	Scientific
D	Moderate/ Moderate	High/ Meetings	Economic
E	Low/Low	High/ Meetings	Relational

- The Behavioral Prescriber Segmentation tracks by prescriber:
  - The evolution of its prescriptions
  - The dominant traits of its personality
  - Its permeability (accessibility + sensitivity) to operational[1] investments

Individual Prescriber Plan

Prescriber-Centric Brand Plan

- The Individual Prescriber Plan describes, on a brand and client basis:
  - Qualitative & quantitative objectives
  - Strategic levers & corresponding medico-marketing-sales initiatives to meet these objectives
  - Monitoring tools (KEIs[2] – KPIs[3])

Sources: Smart Pharma Consulting

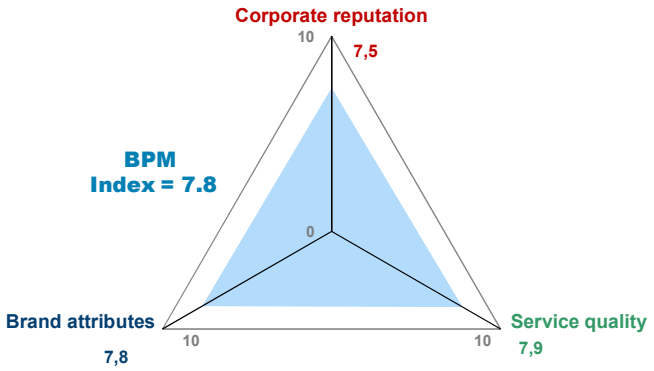
[1] Medico-marketing-sales – [2] Key Execution Indicators – [3] Key Performance Indicators

The Brand Booster Program helps to determine the optimal level and nature (channel, message, tone) of operational[1] resources to be allocated per physician

Executive Summary – Benefits

Brand Preference Mix

Brand Preference Map



- In addition to providing the necessary data to measure the Brand Preference Mix Index, interviews will provide information to identify the strategic levers and the key initiatives to implement to reinforce the three dimensions of the Brand Preference Mix

Behavioral Prescriber Segmentation

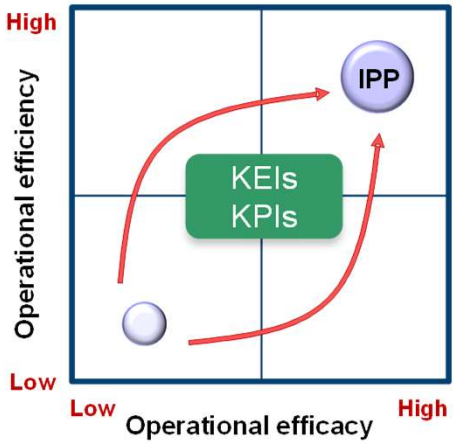
Individual Prescriber Operational[1] Mix

Physicians	# of Calls	# of Meetings	# of Studies	# of Mailings	Messages & Style
A	12	2	0	4	Dialogue Services
B	8	5	0	0	Scientific
C	6	1	2	0	Scientific
D	6	2	1	1	Economic
E	4	1	0	0	Dialogue Services

- The Behavioral Prescriber Segmentation provides a behavioral portrait for each prescriber, allowing a more effective/efficient targeting and a customized allocation of operational[1] resources for each prescriber

Individual Prescriber Plan

Operational Performance Matrix



- The Individual Prescriber Plan improves operational efficacy/efficiency through:
  - A rigorous planning of operational activities
  - A systematic monitoring of the execution and impact of activities[1] with specific indicators (KEIs[2] – KPIs[3])

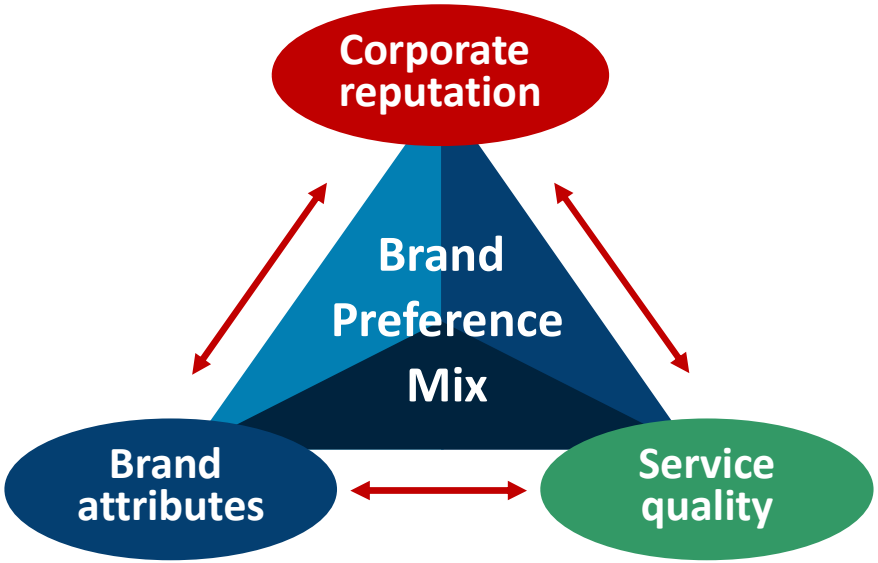
Sources: Smart Pharma Consulting

[1] Medico-marketing-sales – [2] Key Execution Indicators – [3] Key Performance Indicators

The Brand Preference Mix determines the key drivers that can be activated to enhance prescribers' preference and ensure maximum market share

Brand Preference Mix – Framework (1/2)

Brand Preference Triangle



- As the great majority of prescribers use several brands for a given pathology:
  - The **challenge** for pharma companies is to **increase** their **preference** for their brands, **to get** a **bigger share** of their **prescriptions** (vs. competitors)
  - Strengthening the **preference** of a prescriber for a brand **must go beyond** securing brand **loyalty** only
- To **reinforce** brand **preference**, pharma companies should **optimize** their Brand Preference Mix:
  - The **perceived value** of their **brand** (product) **attributes**
  - The **perceived quality** of the **services** they offer and deliver to physicians
  - Their **corporate reputation**
- The **links between** the three components of the Brand Preference Mix should be **well established** in the mind of prescribers

Sources: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

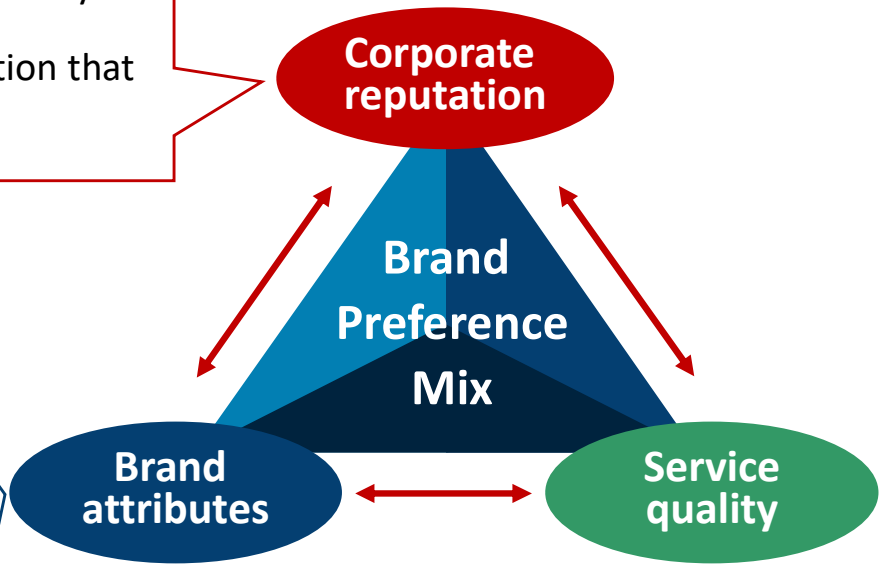
To boost the preference of physicians for their marketed brands, Pharma Marketers can leverage the three components of their Brand Preference Mix (BPM)

Brand Preference Mix – Framework (2/2)

Levers to be activated

- Convey an appealing corporate identity
- Maintain a high corporate reputation that induces preference

- Highlight attributes in a way that generates preference
- Create a perception of uniqueness
- Leverage corporate reputation & service offering



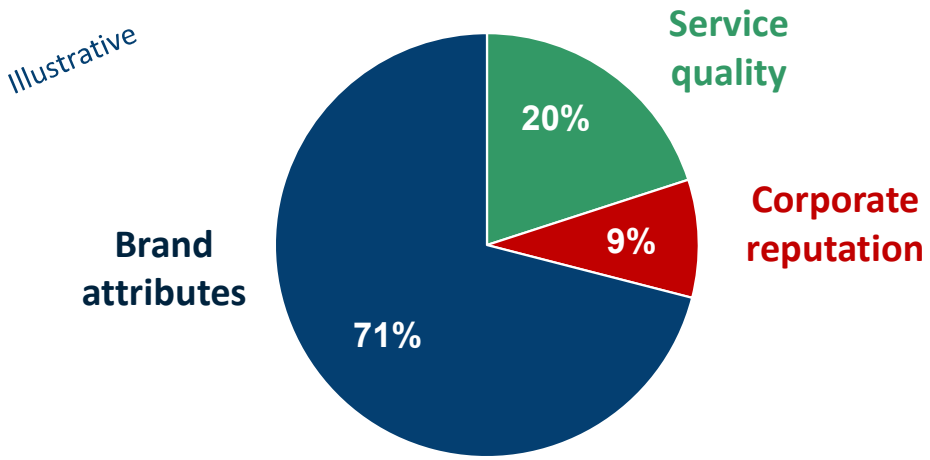
- Deliver services…
- … that are highly valued based on their level of:
  - → Interest
  - → Utility
  - → Practicality
  - → Quality of execution
- Select and design services that will lead to corporate and / or brand preference
- Make sure services are related to the company and / or the brand

Sources: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

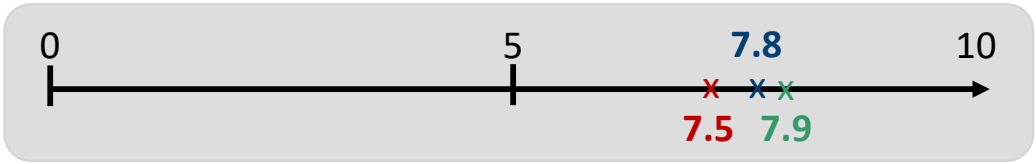
The Brand Preference Mix Index (BPMI) enables to evaluate the brand performance on each of its preference components, over time and compared to its competitors

Brand Preference Mix – Tool

Brand Preference Mix Index



Visual Analog Scale



BPMI calculation ▶ **(71% x 7.8) + (20% x 7.9) + (9% x 7.5) = 7.8**

- The Brand Preference Mix Index (BPMI) is a measurement tool that takes into account:
  - The relative importance of each BPM component (i.e., corporate reputation, brand attributes and associated service quality) per brand
  - The score of the brand, on a 10-point scale, for each of its preference components
- The BPMI can be defined per customer[1], per indication, per form, etc.
- The BPMI scores the customer perception at a given point in time, making possible to track the evolution of this perception over time and to compare it to competitors, considering:
  - External events (i.e., related to health authorities, competitors and customers' behaviors)
  - Internal events (i.e., related to operational activities[2], quality of services offered, communication strategy, etc.)

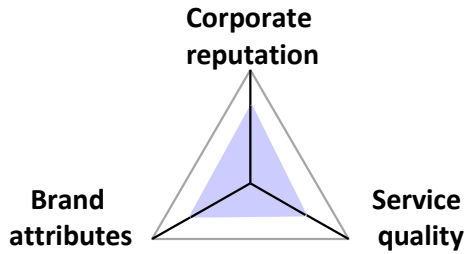
Sources: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

[1] Physicians, patients, pharmacists, nurses, payers, health authorities, etc. – [2] Medico-marketing-sales

The BPM Index can be assessed at national level through market research studies and at hospital/department and individual levels through interviews by sales forces

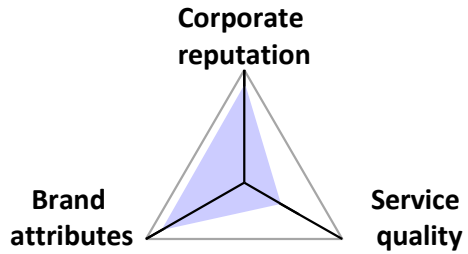
Brand Preference Mix – Method (1/2)

National level



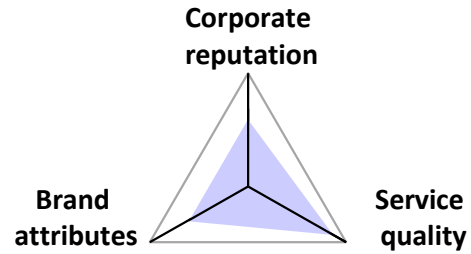
- The Brand Preference Mix Index (BPM Index) should be measured, at the national level, through face-to-face or phone interviews by an external agency
- The number of interviewees should be approximately 30 for specialists and 60 for GPs, in medium to large markets such as France, Germany, Italy, Spain, the UK, etc.
- The rationale behind the scores obtained for each dimension of the BPM Index must be investigated

Hospital / Department level



- The BPM Index can also be measured at a hospital or a hospital department level (i.e., cardiology, oncology, etc.) through interviews carried out by the field forces (i.e., medical reps, KAMs, MSLs, etc.) of pharmaceutical companies[1]
- Interviews can be either concentrated on key hospitals and/or departments or carried out on all those that have been targeted
- The reasons that support the evaluation should be captured

Prescriber level



- The BPM Index should be measured at the level of each targeted prescriber through face-to-face interviews carried out by medical reps or other field force collaborators
- Prescribers should be interviewed at least once a year, but ideally twice a year
- Medical reps should carefully and precisely identify the reasons that motivate the marks granted by the prescribers for their brands and those of their most important competitors

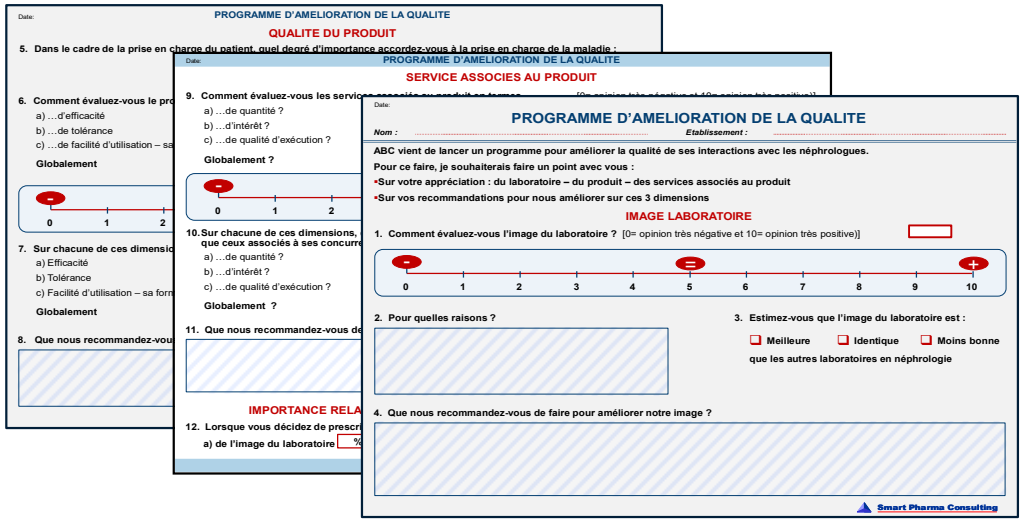
Sources: Smart Pharma Consulting

[1] Can be alternatively carried out by an external agency in a limited number of hospitals and/or medical departments

Med reps can monitor the brand performance with the "Brand Preference Mix Index" while calling upon their targeted physicians and thus, fine-tune their activities

Brand Preference Mix – Method (2/2)

Assessment guide for medical reps



From observation to decision: The 4 Ws approach

WHAT?	WHY?	SO WHAT?	WHAT TO DO?
What are the scores of the brand by each physician?	Why did the physician give these scores?	What are the implications of his assessment for the brand?	What should be done to reinforce the preference to the brand?

- Recent experiences have shown that:
  - >95% of physicians accept to be questioned on the three components of the BPM
  - >80% of physicians consider that the BPM approach conveys a positive image
  - >85% of medical reps say that the BPM helps improve their insight into physicians
- Once physicians have evaluated the brand with the BPM, they are asked:
  - What is the rationale supporting these scores?
  - What should be done to raise their preference to the brand?
- Then, med reps can fine-tune their messages, their activities, physician by physician, based on the feedback
- The collected information should be shared with marketers who will define specific initiatives to reinforce prescribers' preference to the brand

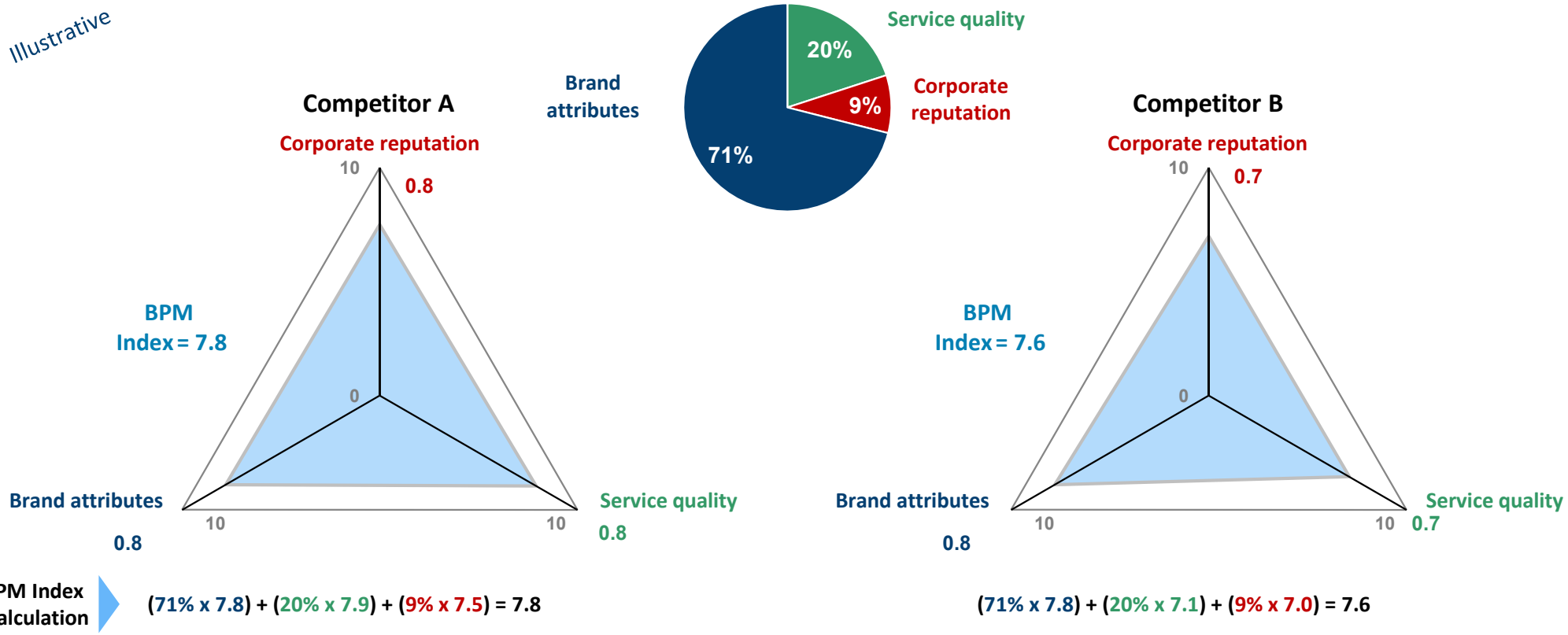
Sources: Smart Pharma Consulting

The Brand Preference Mix Index permits to track the performance of each brand on the three dimensions of the Brand Preference Mix, down to the individual prescriber

Brand Preference Mix – Benefits (1/2)

Brand Preference Map

Illustrative



BPM Index calculation

(71% x 7.8) + (20% x 7.9) + (9% x 7.5) = 7.8

(71% x 7.8) + (20% x 7.1) + (9% x 7.0) = 7.6

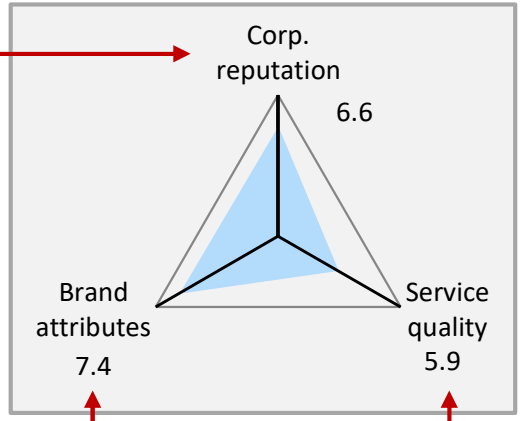
Sources: Smart Pharma Consulting

It is possible to identify the rationale behind the scores of the brands for each component of the Brand Preference Mix and then to find solutions to improve them

Brand Preference Mix – Benefits (2/2)

1. Corporate Reputation Score

Critical factors	Weight	Weighted score
Access to medicine	30%	1.5
Ethics	30%	2.7
Community involvement	15%	1.2
Innovation	15%	0.6
Employees at work	5%	0.3
Environment	5%	0.3
Score	S= 100%	6.6/10



3. Brand Attributes Score

Critical factors	Weight	Weighted score
Efficacy	40%	3.2
Safety	30%	1.8
Convenience	15%	1.5
Scope of indications	10%	0.7
Price	5%	0.2
1st-to-launch	0%	0.0
Score	S= 100%	7.4/10

2. Service Quality Score

Critical factors	Weight	Weighted score
Scientific information	40%	1.6
Scientific partnership	30%	2.4
Sponsorship	15%	0.9
Professional trainings	10%	0.7
Career development support	5%	0.3
Score	S= 100%	5.9/10

1. The Corporate reputation score is strongly driven by CSR[1] and scientific commitment which requires regular and well-structured communication to prescribers
2. The Service quality score depends mainly on the quality of scientific information, for which medical reps remain an important communication channel
3. The Brand attributes score depends on different components according to the product type (OTC vs. Rx), its lifecycle stage and its reimbursement status

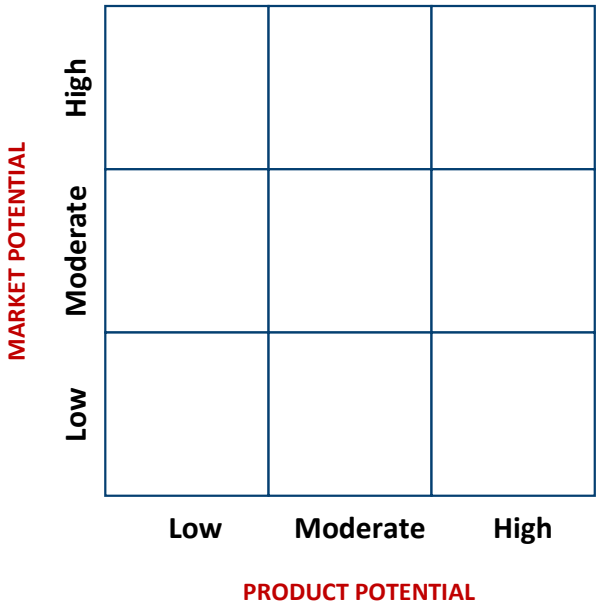
Sources: Smart Pharma Consulting

[1] Corporate Social Responsibility

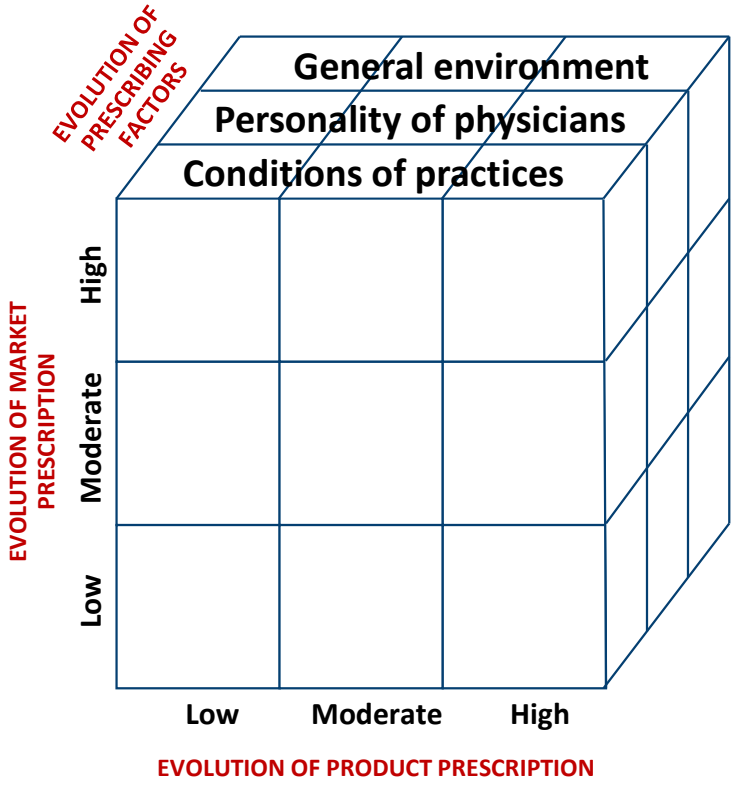
The replacement of a static profiling of physicians by a dynamic one, enables to capture more relevant and accurate insights regarding their prescribing potential

Behavioral Prescriber Segmentation – Framework (1/2)

Static physician segmentation



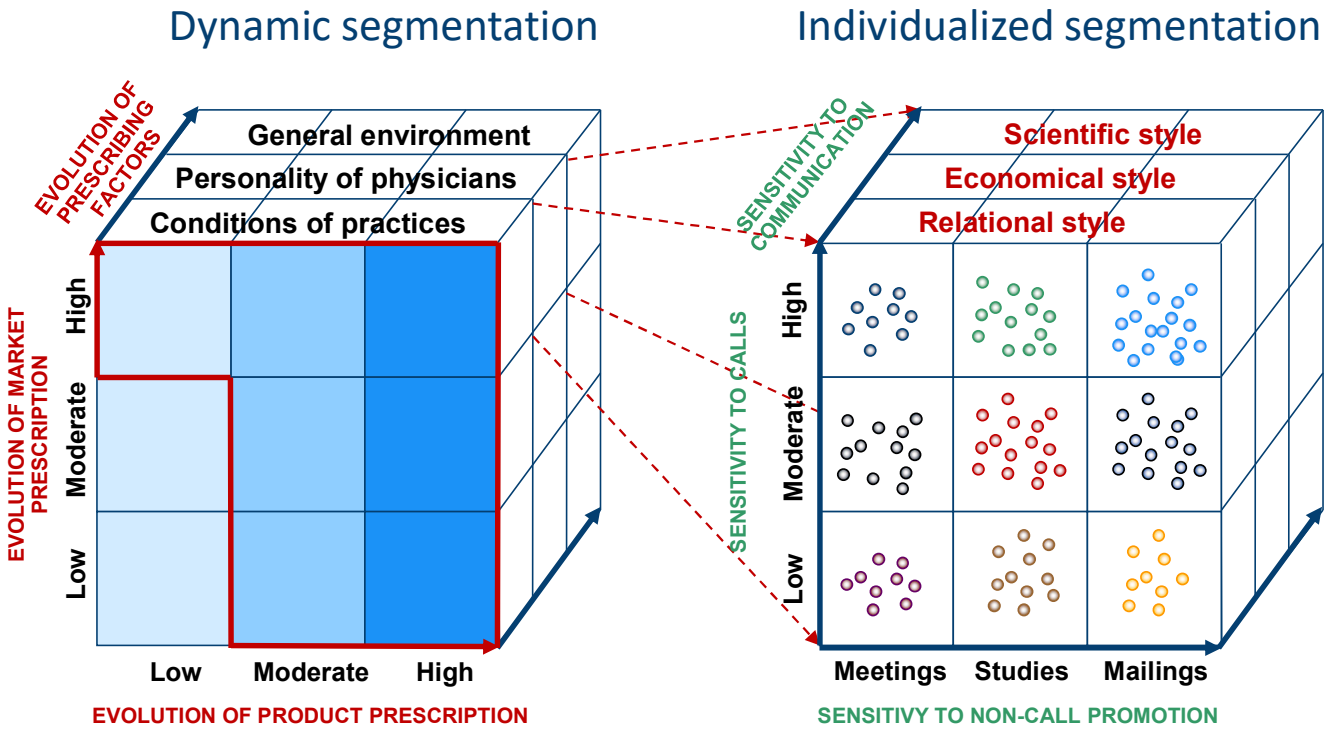
Dynamic physician segmentation



Sources: "Pharma Marketing Tool box", J.-M. Peny, Smart Pharma Consulting, 2015, 246 p.

The Behavioral Prescriber Segmentation is based on the dynamic assessment of the prescription potential and on the permeability to investment per individual prescriber

Behavioral Prescriber Segmentation – Framework (2/2)



**** Key factors that determine the evolution of market[2] and brand prescriptions by physician***

- *Environment (e.g., patient flow, regulations, public health initiatives, Sick Funds decisions, reimbursement, drug prices, influencers such as Key Opinion Leaders, etc.)*
- *Personality (e.g., innovative, conservative or resistant profile, willingness to try new therapeutic protocols, new products, etc.)*
- *Medical practice (e.g., habits of prescriptions, involvement in clinical studies, compliance with guidelines, etc.)*

- The Behavioral Prescriber Segmentation (BPS) optimizes the efficacy and efficiency of the operational[1] investments targeted at each prescriber
- The BPS consists in identifying:
  - The evolution of market[2] and brand prescriptions by physician
  - The key factors determining that evolution (environment, personality and medical practice)*
  - The permeability (accessibility and sensitivity) to operational channels and activities such as:
    - Face-to-face calls
    - Other operational initiatives (including digital ones)
  - The personality dominance of each physician (relational, economic, scientific)

Sources: "Pharma Marketing Tool box", J.-M. Peny, Smart Pharma Consulting, 2015, 246 p.

[1] Medico-marketing-sales – [2] Market includes the brand of the pharmaceutical company and the competitors' ones

The Individual Prescriber Portrait keeps a track record of sales potential dynamics, permeability to operational[1] activities and personality dominance for each prescriber

Behavioral Prescriber Segmentation – Tool

Individual Prescriber Portrait

Physicians	Evolution Market/Brand	Permeability to calls/marketing[2]	Personality dominance
A	High/ Moderate	High/Mailings	Relational
B	Moderate/ High	High/Meetings	Scientific
C	High/High	Low/Studies	Scientific
D	Moderate/ Moderate	High/Meetings	Economic
E	Low/Low	High/Meetings	Relational

- To implement the Behavioral Prescriber Segmentation, it is necessary to set up a process to collect, store, analyze and retrieve three sets of data for each prescriber:
  - The evolution (negative, neutral, positive) of their prescription level:
    - Market dynamics (the brand + its competitors)
    - The brand dynamics
  - Their permeability (accessibility and sensitivity) to operations[1]:
    - Face-to-face calls
    - Other operational channels, including digital ones (e.g., remote e-detailing, e-mailing, e-meetings, websites, etc.)
  - The dominant trait of their personality (relational, scientific, economic)
- Medical reps and other collaborators in contact with prescribers should be involved in the collection of those data, which should be updated on an ongoing basis
- These data will define the “Individual Prescriber Portrait” that will then be used to set the optimal level and mix of operational activities for each prescriber

Sources: “Pharma Marketing Tool box”, J.-M. Peny, Smart Pharma Consulting, 2015, 246 p.

[1] Medico-marketing-sales – [2] Marketing meaning other channels than medical calls

The level and mix of operational[1] activities for each prescriber depend on his specific profile which should be mainly documented by medical representatives[2]

Behavioral Prescriber Segmentation – Method

Profiling

- Assessment of Market/Product dynamics evolution per prescriber by med reps on a regular basis:
  - Observation and probing of physicians…
  - … and of other relevant healthcare professionals
- Identification of the key drivers that influence the prescribing dynamics of each physician (environment, personality, medical practice)
- Identification of each physician's permeability (access & sensitivity) to operational channels & activities
- Definition of each physician's personality dominance (relational, scientific, economic)

Segmentation

- Segmentation of physicians based on the following individual characteristics:
  - Market dynamics
  - Product (brand) dynamics
  - Factors that drive these dynamics
  - Permeability to medico-marketing-sales activities, including the preferred channels
  - Drivers related to the dominant traits of their personality that will contribute to influence their prescribing choices:
    - Scientific drivers
    - Economic drivers
    - Relational drivers

Adjustment

- Determination of the magnitude of the operational effort per prescriber considering:
  - The prescription dynamics for a given indication (the Market) and for the pharmaceutical company product (the Brand)
  - The degree of operational permeability to operational channels (including digital ones) and to operational activities
- Definition of the communication messages based on:
  - The market potential (patient flow and diagnosis rate)
  - The prescribing habits
  - The reasons that determine the product choice

Sources: "Pharma Marketing Tool box", J.-M. Peny, Smart Pharma Consulting, 2015, 246 p.

[1] Medico-marketing-sales – [2] Other pharma company collaborators in contact with prescribers and their influencers should also contribute to enrich the prescribers' profile (e.g., medical, marketing and other sales collaborators)

The Behavioral Prescriber Segmentation permits to adjust medico-marketing and sales activities to the respective sensitivity and personality of each physician

Behavioral Prescriber Segmentation – Benefits

Physicians	Individual Prescriber Portrait			Individual Prescriber Operational Mix				
	Evolution Market/Brand	Permeabilityto calls/marketing	Personality dominance	# of Calls	# of Meetings	# of Studies	# of Mailings	Messages & Style
A	High/ Moderate	High/ Mailings	Relational	12	2	0	4	Dialogue Services
B	Moderate/ High	High/ Meetings	Scientific	8	5	0	0	Scientific
C	High/High	Low/ Studies	Scientific	6	1	2	0	Scientific
D	Moderate/ Moderate	High/ Meetings	Economic	6	2	1	1	Economic
E	Low/Low	High/ Meetings	Relational	4	1	0	0	Dialogue Services

- The Behavioral Prescriber Segmentation (BPS) offers pharmaceutical companies a more reliable estimate of individual prescribers' prescription potential than conventional approaches do
- The BPS also helps to acquire a better understanding of factors driving prescribers' brand preference
- Thus, by implementing the BPS, pharmaceutical companies can determine, for each prescriber, the operational actions likely to be the most:
  - Effective (message content and style of communication)

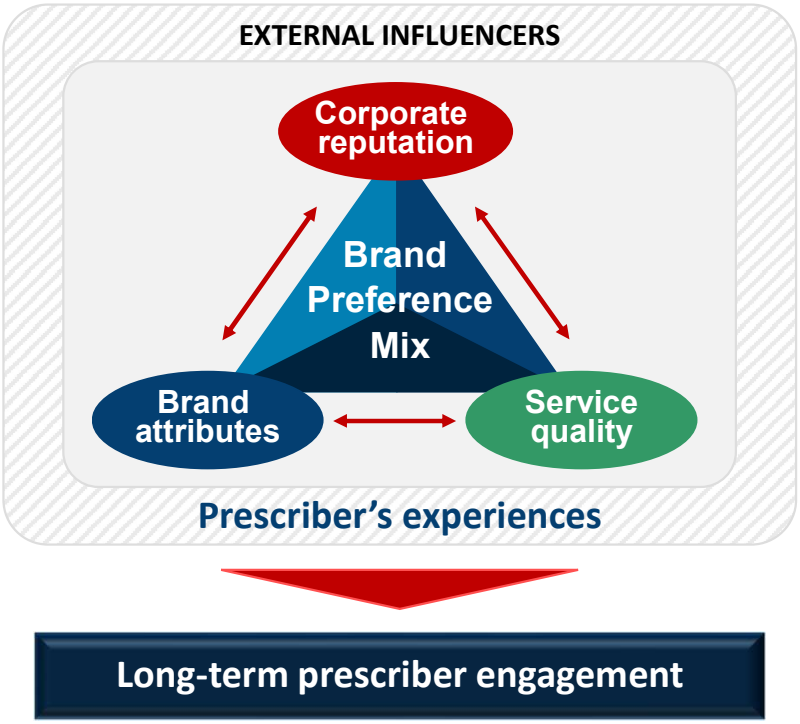
    and
  - Efficient (level and nature of efforts)

Sources: "Pharma Marketing Tool box", J.-M. Peny, Smart Pharma Consulting, 2015, 246 p.

The Individual Prescriber Plan is essential to structure and formalize a Prescriber-Centric Strategy to secure Brand Preference and long-term engagement

Individual Prescriber Plan – Framework

Prescriber-Centric Strategy



- The Individual Prescriber Plan (IPP) is built around prescribers who represent the most important customer category for Rx-driven brands of pharma companies
- Depending on the type of products, physicians, nurses, pharmacists and even patients can all be considered as "prescribers"
- External influencers, such as health authorities, politicians, sick funds, private health insurance, patient advocacy groups, professional associations, pharmaceutical companies, key opinion leaders, etc., may also play an essential role by modifying the behavior of prescribers
- Prescriber-centricity requires going that extra mile to please the prescriber and ensure that he enjoys the experience of being:
  - A prescriber of the company and of its brand(s)
  - A beneficiary of the associated services
- Positive experiences are essential to create sustainable prescriber preference to brands and to induce their long-term engagement (active loyalty)

Sources: Smart Pharma Consulting

The Individual Prescriber Plan makes it possible to set objectives by individual prescriber and define the appropriate operational activities to meet these objectives

Individual Prescriber Plan – Tool (1/3)

Prescriber-Centric Brand Plan

- The Individual Prescriber Plan is structured like a Brand Plan, but analyses are carried out from the prescriber's perspective
- The situation analysis section should highlight, for each prescriber:
  - The driving forces that influence his prescribing behavior
  - His preferred communication channels and the ones likely to influence him the most
  - His personality (relational, economic, scientific)
- The prescriber-centric SWOT should consider the prescriber's prescription potential, as well as his values, perceptions and motivations
- A qualitative and quantitative objective should be set prescriber by prescriber
- Strategy and tactics should aim at:
  - Creating more value for the prescriber
  - Reinforcing his preference for the brand
- KEIs[1] and KPIs[2] should be defined to ensure appropriate execution and resource allocation

Sources: Smart Pharma Consulting

[1] Key execution indicators – [2] Key performance indicators

Before making the decision to invest in operations[1] at targeted prescribers, expected impact should be clearly defined, as well as execution and performance indicators

Individual Prescriber Plan – Tool (2/3)

Check-list to support operational investment decisions

Illustrative

What is the objective of the action?	What are the KEIs[2]?	What are the KPIs[3]?
▪ Create / reinforce awareness	▪ % of the target covered by the action	▪ Brand Preference Mix index
▪ Generate interest	▪ % of the target exposed to the action	▪ Preference Ladder step
▪ Develop brand preference	▪ % of the target impacted by the action	▪ Key message memorization rate
▪ Increase share of prescription	▪ % of the target having a positive opinion of the action (usefulness, Interest, practicality, quality of execution)	▪ Share of prescription
▪ Increase compliance	▪ Implementation time required vs. planned	▪ Sales evolution
▪ Limit substitution rate	▪ Actual vs. budgeted cost	▪ Variation in the number of treatment initiations
▪ Get the brand listed		▪ Profit evolution in euros
▪ Fine tune the profile of the prescriber or of other customers		▪ % of hospitals having listed the brand
		▪ Return on investment

Sources: "Pharma Marketing Tool box", J.-M. Peny, Smart Pharma Consulting, 2015, 246 p.

[1] Medico-marketing-sales activities – [2] Key execution indicators – [3] Key performance indicators

The a priori and a posteriori assessment tools help objectivize that planned or existing activities will significantly contribute to reinforce the Brand Preference Mix

Individual Prescriber Plan – Tool (3/3)

A priori assessment tool

Description		Objective		Target (HCPs, patients, etc.)	

Expected Value by the Target			Exclusivity			Expected Link to the Brand		
Evaluation*		Rationale	Evaluation		Rationale	Evaluation		Rationale
Interest	1 2 **3** 4 5	•	Total	✓		Magnitude	●	•
Usefulness	1 2 3 **4** 5		Partial	✓				
Convenience	1 **2** 3 4 5		None	✓		Sustainability	●	•
Execution	1 2 **3** 4 5							
Total	1 2 **3** 4 5							

Barriers		Rationale	KPIs (Key performance indicators)	KEIs (Key execution indicators)	Decision	
Technical	●	• Implementation	•	•	GO	
Regulatory	●	• Compliance				
Economic	●	• Estimated cost and return			No GO	

A posteriori assessment tool

Description		Objective		Target (HCPs, patients)	

Perceived value by the target			Exclusivity			Link to the product		
Evaluation*		Rationale	Evaluation		Rationale	Evaluation**		Rationale
Interest	1 2 **3** 4 5		**Total**			Magnitude	f – M - F	
Usefulness	1 2 **3** 4 5		**Partial**	✓				
Convenience	1 2 **3** 4 5		**None**			Sustainability	f – M - F	
Execution	1 2 **3** 4 5							
Total	1 2 **3** 4 5							

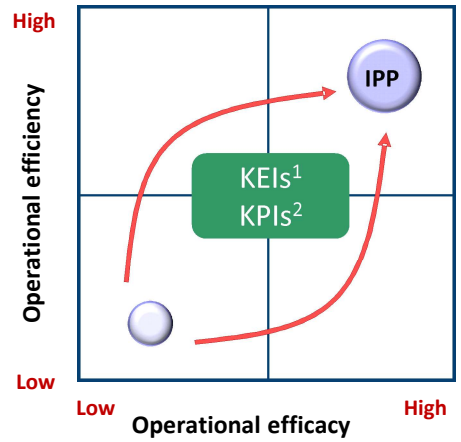
Impact on brand preference		Rationale	Solutions to reinforce toe preferential power		
				Initiatives	Evaluation
High			**1**		
Moderate	✓		**2**		
Low			**3**		
None			**4**		

Sources: Smart Pharma Consulting

The Individual Prescriber Plan enables pharmaceutical companies to turn prescriber insight into competitive advantages in a more effective and efficient manner

Individual Prescriber Plan – Benefits

Operational Performance Matrix



Key Execution Indicators (KEIs[1])

- **Level and mix of operational activities (medico-marketing-sales) vs. plan**
- **Quality of execution of activities:**
  - Disease, competition and brand knowledge
  - Management of health economics issues
  - Ability to handle questions and objections
  - Knowledge and understanding of prescriber's profile
  - Adjustment of communication style and of message content to the prescriber's profile
  - Ability to trigger multi-channel initiatives
  - % of calls carried out with an iPad

Key Performance Indicators (KPIs[2])

- **Impact on performance:**
  - Level of sales and evolution (in euros, units, prescriptions, patients)
  - Level of prescription share and evolution (in euros, units, prescriptions, patients)
  - Level of initiations and evolution
  - Level of prescription switches and evolution (of prescriptions, patients)
- **Impact on behavior:**
  - Level of prescriber interest
  - Product memorization rating
  - Intention to prescribe rating

- The Individual Prescriber Plan (IPP) is a useful tool to support a Prescriber-Centric Strategy
- Prescribers' experiences and perceived values with:
  - The brand
  - The services related to the brand
  - The pharmaceutical company

  are captured and analyzed with the help of the Brand Preference Mix Index (BPMI)
- The Behavioral Prescriber Segmentation (BPS) provides an accurate knowledge of each prescriber:
  - Prescription potential for the market and the brand
  - Permeability to operational[3] channels, messages and communication styles
- Thus, it is possible to design a fine-tuned "business plan" for each (key) prescriber, in such a way that operational efficacy and efficiency are optimized
- The quality of execution will be tracked with KEIs, and the performance measured with KPIs

Sources: Smart Pharma Consulting

[1] Key execution indicators – [2] Key performance indicators – [3] Medico-marketing-sales activities

The Individual Prescriber Plan[1] should be precisely elaborated by a team of collaborators interacting, on a regular basis, with the concerned prescribers

Individual Prescriber Plan – Method

Exploring Individual Prescriber insight[2]

- Key questions to be answered:
  - Who are the most critical prescribers to focus on to develop brand growth?
  - What will drive their brand preference?
- Ongoing exploration and discovery of individual prescriber insight are key to answering these two questions
- Prescriber-related insight collected by:
  - Medical representatives
  - Medical Scientific Liaisons (MSLs)
  - Other collaborators like Key Account Managers who meet prescribers or influencers
- Data should be stored in a shared database, opened to medical, marketing and sales collaborators that interact with prescribers[3]

Crafting Individual Prescriber strategy & tactics

- Prescriber insight must be translated into effective operational[4] activities likely to reinforce brand preference
- When there is a potential to create high reciprocal value for the prescriber and the company, a one-on-one customized program should be built according to the following steps:
  1. Evaluate the level of potential value for the prescriber and the company
  2. Understand individual prescriber needs, brand preferences, behaviors
  3. Create a "business plan" including services, communication styles, message contents and operational channels adjusted to each prescriber
  4. Track prescriber experiences and all aspects of his satisfaction to ensure high level of brand preference

Designing Individual Prescriber Plan[2]

- Each prescriber plan should be built by a "prescriber team" which includes the collaborators who interact with the prescriber and know him best
- The strategy and the corresponding tactics are supported by Individual Prescriber Portraits, which should be fine-tuned and updated by the team
- Before deciding to implement any operational activity, the following key questions should be answered:
  - What is the objective?
  - How should it be implemented?
  - What is the cost?
  - What is the expected impact?
- An individual action plan should be set

Sources: Smart Pharma Consulting

[1] Can be a part of the "Individual Prescriber Plan" when other customers have to be considered, such as: pharmacists, patients, health authorities, etc. – [2] Insight corresponds to the knowledge and understanding of customers' needs, preferences and behaviors based on analyses of qualitative and quantitative data – [3] If permitted by local regulations and internal company compliance policy – [4] Medico-marketing-sales activities

The Brand Booster Program is a best-in-class program based on deep prescriber insight, value creation for prescribers and optimization of resource allocation

Value of the Brand Booster Program (1/2)

- The Brand Preference Mix is the central pillar of the Brand Booster Program developed by Smart Pharma Consulting
- To create a strong and sustainable brand preference, marketers can identify the root causes of prescribers' brand valuation with the help of the Brand Preference Mix Index
- The Behavioral Prescriber Segmentation approach makes it possible to get deeper insight regarding prescribers' needs, motivation, behavior and experience that are all essential to target the most attractive prescribers:
  - Those who have a high potential of prescription growth for the market[1] and the brand
  - Those who are the most permeable to medico-marketing-sales activities
- The Individual Prescriber Plan is a key element to help pharmaceutical companies express their strategic priorities and tactics in terms of value creation per prescriber and to align their resources accordingly to create a sustainable brand preference in an effective and efficient way

Sources: Smart Pharma Consulting

[1] Market includes the brand of the pharmaceutical company and the competitors' ones

The Brand Booster Program is a powerful and comprehensive approach, based on three components, enabling Marketers to optimize the performance of their brands

Value of the Brand Booster Program (2/2)

Brand Preference Mix

- By measuring the performance of their brand with the BPM Index, marketers will be able to:
  - Define their strategic priorities to strengthen prescribers' preference
  - Evaluate the impact of their strategies and of the corresponding tactics
- The BPM Index should be calculated for each targeted client once or twice a year
- Based on the analyzed results, a series of customized actions will be defined and implemented at individual prescriber level

Behavioral Prescriber Segmentation

- The BPS enables marketers to fine-tune operational[1] investments per prescriber…
- … by identifying:
  - His capability/willingness to prescribe the competing brands
  - The driving forces influencing his prescribing behavior
  - His permeability[2] to operations
  - Acceptable/convincing messages
  - Appropriate style of communication
- The BPS success requires:
  - The implementation of a simple and systematic process to collect data
  - The development of operational tools that take into account the diversity of prescribers' behaviors and permeability

Individual Prescriber Plan

- To make their brands preferred, marketers must develop:
  - A prescriber-centric strategy/tactics
  - A prescriber-centric brand plan
- Prescriber-centric strategy is about creating positive experiences through the three components of the BPM
- This requires deeper insight to develop strategies and tactics to intensify their positive perception
- A prescriber-centric brand plan captures the prescriber perspective and estimates his real perception of the company, its products and its services

Sources: Smart Pharma Consulting

[1] Medico-marketing-sales activities – [2] Accessibility and sensitivity to different channels

As the author of the Brand Booster Program, Smart Pharma Consulting is the best positioned to ensure its smooth and efficient implementation by pharma companies

Smart Pharma Consulting Services (1/2)

Brand Booster Program Implementation

Brand Preference Mix

- Design and implementation of national studies to measure the Brand Preference Mix Index
- Design and facilitation of the implementation of Brand Preference Mix Index measurement at hospital/department and at prescriber levels through sales forces

Behavioral Prescriber Segmentation

- Presentation and training of the medico-marketing-sales departments to learn how to:
  - Collect prescriber insight to define an Individual Prescriber Portrait
  - Quantitatively and qualitatively adjust operational efforts for each targeted prescriber

Individual Prescriber Plan

- Design of an Individual Prescriber Plan structure, including monitoring tools
- Training of marketers and other collaborators to correctly prepare Individual Prescriber Plans
- Challenge of teams involved in the preparation and development of Individual Prescriber Plans

Sources: Smart Pharma Consulting

Smart Pharma Consulting supports national and international multi-disciplinary[1] brand teams with robust methodologies, practical tools and a challenging attitude

Smart Pharma Consulting Services (2/2)

Smart Pharma Experience & Approach

Support to 80 brands in 17 different disease areas:

1. Addictology
2. Allergy
3. Cardiology
4. Dermatology
5. Gastroenterology
6. Gynecology
7. Infectious diseases
8. Metabolism / Diabetes
9. Metabolism / Diabetes
10. Neurology
11. Nephrology
12. Oncology / Hematology
13. Ophthalmology
14. Pulmonology
15. Psychiatry
16. Rheumatology
17. Urology

- We provide robust methodologies and practical tools to strengthen situation analyses
- We facilitate the identification of relevant strategic priorities to achieve pre-set objectives…
- … and the selection of the corresponding tactics[2] including the appropriate monitoring tools[3]
- We positively challenge brand teams to enhance the quality of their analyses and recommendations

Key issues addressed by our approach

1. How to best evaluate the market dynamics and the brand performance?
2. How to measure the impact of recent investment decisions?
3. How to build market scenarios?
4. How to carry out an *Advanced SWOT*[4] analysis?
5. How to set rational performance objectives[5]?
6. How to define the corresponding relevant strategy with the help of the *Advanced SWOT* analysis?
7. How to determine the optimal mix and level of medico-marketing and sales investment per brand and across different brands of a portfolio?

Sources: Smart Pharma Consulting

[1]Marketing, sales, medical, business excellence, market access, etc. – [2] Medico-marketing and sales activities – [3] Key execution indicators and Key performance indicators – [4] See Smart Pharma Tool Box – [5] See Masterclass "Market Analysis & Forecasting" proposed by Smart Pharma Consulting

Smart Pharma
CONSULTING

Five Pharma Marketing Solutions…

… to outperform the competition

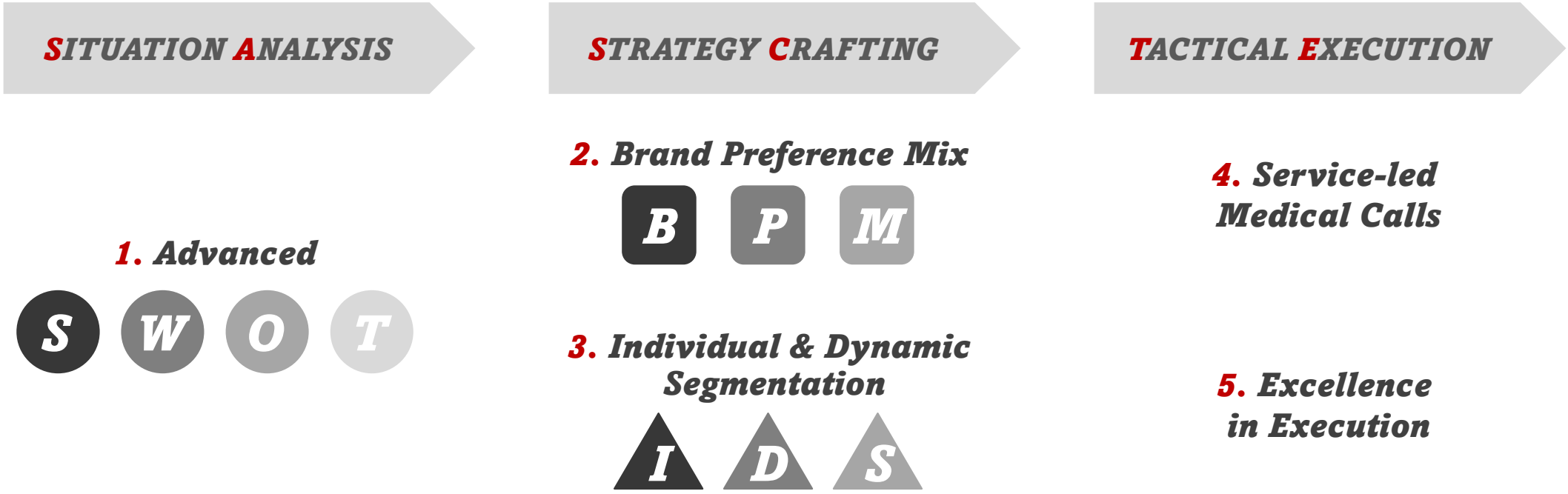
1. Advanced SWOT Analysis
2. Brand Preference Mix
3. Individual & Dynamic Segmentation
4. Service-led Medical Calls
5. Excellence in Execution

POSITION PAPER November 2023

Smart Pharma Consulting has developed five marketing solutions to address specific challenges faced by pharma companies

Introduction

- The following five marketing solutions – developed by Smart Pharma Consulting – have shown to be particularly relevant and effective when applied by pharma companies
- They cover three key steps of the marketing process:



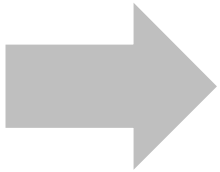
Sources: Smart Pharma Consulting

The SWOT framework is rarely properly used, preventing marketers from deducing the most relevant key strategic drivers to optimize their brand performance and achieve their objective

1. Advanced SWOT Analysis – Introduction

WHAT IS THE PROBLEM?

- The SWOT framework is a structured summary of the competitive environment from which the strategic drivers will be drawn to meet the brand objective
- However, it is poorly designed, leading to a long list of items, not always relevant
- Its detractors have renamed the SWOT framework *"Silly Way Of Thinking"*



WHAT IS THE SOLUTION?

- To benefit from the SWOT framework, it is important to improve its structure and…
- … to create a clear bridge between its analytical outcomes and the strategic imperatives to meet the brand objective
- To do so, Smart Pharma Consulting has:
  - Adjusted the structure of the SWOT
  - Clarified the links to draw a strategy

Sources: Smart Pharma Consulting

The Advanced SWOT framework categorizes and prioritizes the key components to focus on, while assessing market opportunities and threats, brand strengths and weaknesses

1. Advanced SWOT Analysis – The Solution

Market Opportunities	RI[1]
▪ Authorities ▪ Customers ▪ Competitors	

Market Threats	RI
▪ Authorities ▪ Customers ▪ Competitors	

Brand Strengths	RI
▪ Product attributes ▪ Associated services ▪ Corporate reputation	

Brand Weaknesses	RI
▪ Product attributes ▪ Associated services ▪ Corporate reputation	

Strategic imperatives should be derived from the SWOT analysis and depend on the brand objective set

- The "Advanced SWOT" framework structures:
  - Market opportunities and threats into stakeholders' (authorities[2] – customers[3] – competitors) behaviors
  - Brand strengths and weaknesses based on:
    - The product attributes (features – price – distribution – promotion)
    - The associated services to physicians, their patients and institutions
    - The reputation of the marketing company
- It is also essential to prioritize the listed items by evaluating their Relative Importance with, for instance, a five-point scale
- Strategic imperatives drawn from the Advanced SWOT can be:
  - A market opportunity to seize
  - A market threat to fight against
  - A brand strength to capitalize on, and/or
  - A brand weakness to address

Sources: Smart Pharma Consulting

[1] Relative Importance of each item, rated from 1, low importance to 5, high importance – [2] Government and policy makers – [3] Payers, physicians, patients, patient advocacy groups, etc.

The Advanced SWOT helps carry out a more specific, relevant and robust assessment of the market situation and of the brand competitive position from which to draw strategic imperatives

1. Advanced SWOT Analysis – The Benefits

- Knowing that market opportunities and threats depend on stakeholders' behavior, the Advanced SWOT analysis focuses on:
  - Authorities who define the rules of the game
  - Customers who drive the brand performance
  - Competitors against whom defend the brand
- Brand strengths and weaknesses depending not only on product efficacy, safety and convenience, the Advanced SWOT includes the analysis of:
  - Its price, distribution and promotion
  - Its associated services
  - The reputation of its marketing company

- The ranking of the items – vertically within each quadrant and horizontally across different quadrants – facilitates the selection of the strategic drivers to meet the brand objective

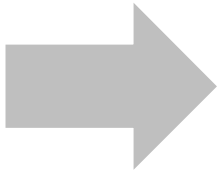
Sources: Smart Pharma Consulting

Pharma companies struggling – more and more often – to differentiate their products on their sole clinical attributes, the Brand Preference Mix brings additional differentiating dimensions

2. Brand Preference Mix – Introduction

WHAT IS THE PROBLEM?

- The great majority of prescribers use several brands for a given pathology that are often little differentiated
- The challenge for pharma companies is to create a difference that is perceived as important enough…
- … to generate the prescribing preference of physicians



WHAT IS THE SOLUTION?

- To increase physicians' preference for their brands, pharma companies should value:
  - The attributes of their products
  - The associated services they offer
  - Their corporate reputation
- Thus, the links between the brands, the associated services and the corporate reputation should be well established

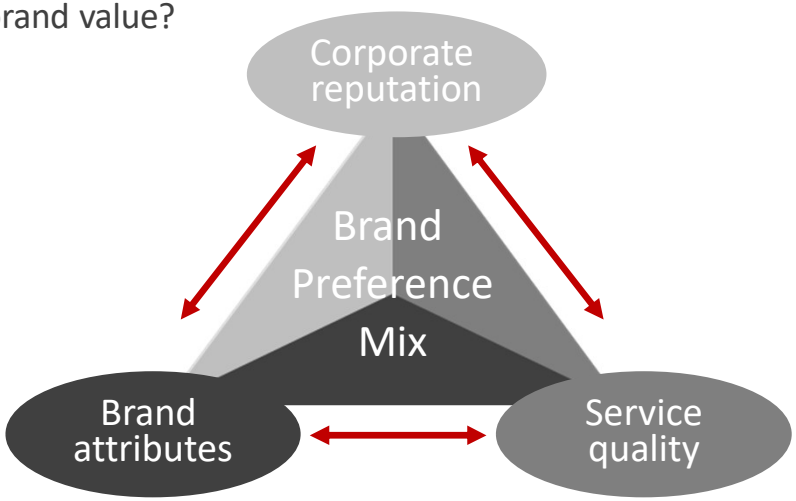
Sources: Smart Pharma Consulting

The Brand Preference Mix Index permits to track the performance of each brand on the three dimensions of the Brand Preference Mix, down to the individual prescriber

2. Brand Preference Mix – The Solution

Brand Preference Mix (BPM)

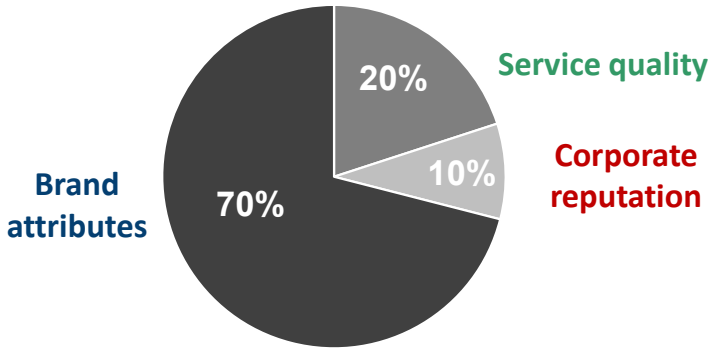
- How to create a superior and appealing identity that enhances the brand value?



- How to highlight products differences so that to generate preference from physicians?
- How to leverage corporate reputation and service offering?
- How to deliver services valued by physicians, institutions they work for, and/or patients?
- How to select services inducing corporate / brand preference?

Brand Preference Mix Index (BPMI)

Illustrative



Visual Analog Scale

BPMI ▶ (70% x 7) + (20% x 8) + (10% x 6) = 7.1

- The BPMI can be measured per physician and per brand
- It scores the physician perception over time, considering:
  - External events[1]
  - Internal events[2]

Sources: Smart Pharma Consulting

[1] Related to health authorities, competitors and customers' behaviors – [2] Related to medico-marketing and sales activities, quality of services offered, communication strategy, etc.

The Brand Preference Mix has been developed to help marketers enhance the preference of physicians for their brands by a customized resource allocation at individual level

2. Brand Preference Mix – The Benefits

- Physicians' preference is more powerful than customer satisfaction to optimize market share
- The Brand Preference Mix can be applied individually to each physician, by in-field teams
- The Brand Preference Mix Index helps to evaluate the impact of marketing activities by physician
- The outcomes of this index enable to adjust the content of interactions and…
- …. the services to be offered to individual physicians based on the collected insights
- Physicians perceive the Brand Preference Mix approach as very positive and relevant

By applying the 4 Ws approach, the Brand Preference Mix solution
ensures a robust consistency between the information collected and the decisions made

WHAT?	WHY?	SO WHAT?	WHAT TO DO?
What are the scores of the brand per physician?	Why did the physician give these scores?	What are the implications of these scores?	How to reinforce the preference to the brand?

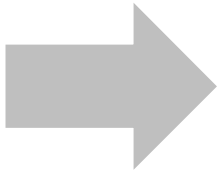
Sources: Smart Pharma Consulting

In an important changing environment – more than ever – pharma companies must carry out an individual and dynamic profiling of their targeted physicians to optimize their promotional impact

3. Individual & Dynamic Segmentation – Introduction

WHAT IS THE PROBLEM?

- The physicians' segmentation adopted by pharma companies is in general based on static and extrapolated data such as:
  - The number of patients they treat
  - The prescription share of the brand
- In a changing environment, this method is not sufficient to provide relevant and accurate information to segment and then target physicians



WHAT IS THE SOLUTION?

- It is essential to collect data from each individual physician, on a regular basis, by in-field teams of pharma companies
- In addition to monitoring the evolution of:
  - The number of treated patients
  - The prescription share of the brand per physician…
- … one must identify the factors that drive their prescribing behavior

Sources: Smart Pharma Consulting

The portrait of each physician keeps a track record of its behavior regarding the marketed brand, his permeability[1] to pharma companies' interactions, and his personality traits

3. Individual & Dynamic Segmentation – The Solution

Physicians' Portrait

Illustrative	# of patients / Brand PS[2]	Permeability to Calls / Non-calls	Personality dominance
A	Growing / Stable	High / Mailings	Relational
B	Stable / Growing	High / Meetings	Scientific
C	Stable / Stable	Medium / Meetings	Economic

Resource Allocation per Physician

Illustrative	Calls #	Meetings #	Studies #	Mailing #	Messages / Style
A	10	2	0	3	Dialogue / Services
B	6	3	1	0	Scientific
C	4	3	0	2	Economic

- It is necessary to collect, store, analyze and retrieve for each physician:
  - The impact of his behavior re. the number of patients he treats, and the prescription share of the pharma company brand
  - His permeability to medical calls and other non-call activities
  - His personality traits
- In-field collaborators should be involved in the collection of those data, which should be updated on an ongoing basis

- The Physicians' Portrait is used to set, for each of them:
  - The optimal level and mix of medico-marketing and sales activities
  - The appropriate content and style of communication
  - This proposed approach helps to acquire a better understanding of factors driving physicians' behavior, and especially their brand preference
- Generative AI is instrumental to support a high-quality profiling of physicians and an optimal allocation of corresponding resources

Sources: Smart Pharma Consulting

[1] Accessibility and sensitivity – [2] PS stands for Prescription Share

The Individual & Dynamic Segmentation (IDS) helps marketers to determine the optimal level and nature (channel, message, tone) of operational[1] resources to be allocated per physician

3. Individual & Dynamic Segmentation – The Benefits

- This proposed approach helps to acquire a better understanding of factors (e.g., environment, personality, medical practice) driving physicians' prescribing behavior

- The individual and dynamic segmentation of physicians enables to optimize their targeting…

  … and to define the most efficient level and nature of interactions to modify favorably their behavior

is a must-have to ensure an optimal resource allocation per physician

- The Individual & Dynamic Segmentation is essential to structure and formalize a Prescriber-Centric Strategy to secure physicians' brand preference and long-term engagement

Sources: Smart Pharma Consulting

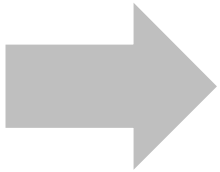
[1] *Medico-marketing and sales*

Medical call experiences are generally considered by physicians of limited value, which explains their dissatisfaction and their increasing reluctance to meet medical reps

4. Service-led Medical Calls – Introduction

WHAT IS THE PROBLEM?

- Access of medical reps to physicians is declining and calling time reducing
- Two main reasons explain this trend:
  - Physicians work overload due to staff shortages and increasing number of patients
  - Physicians perceive medical calls as a waste of time due to lack of usefulness and/or interest in their content



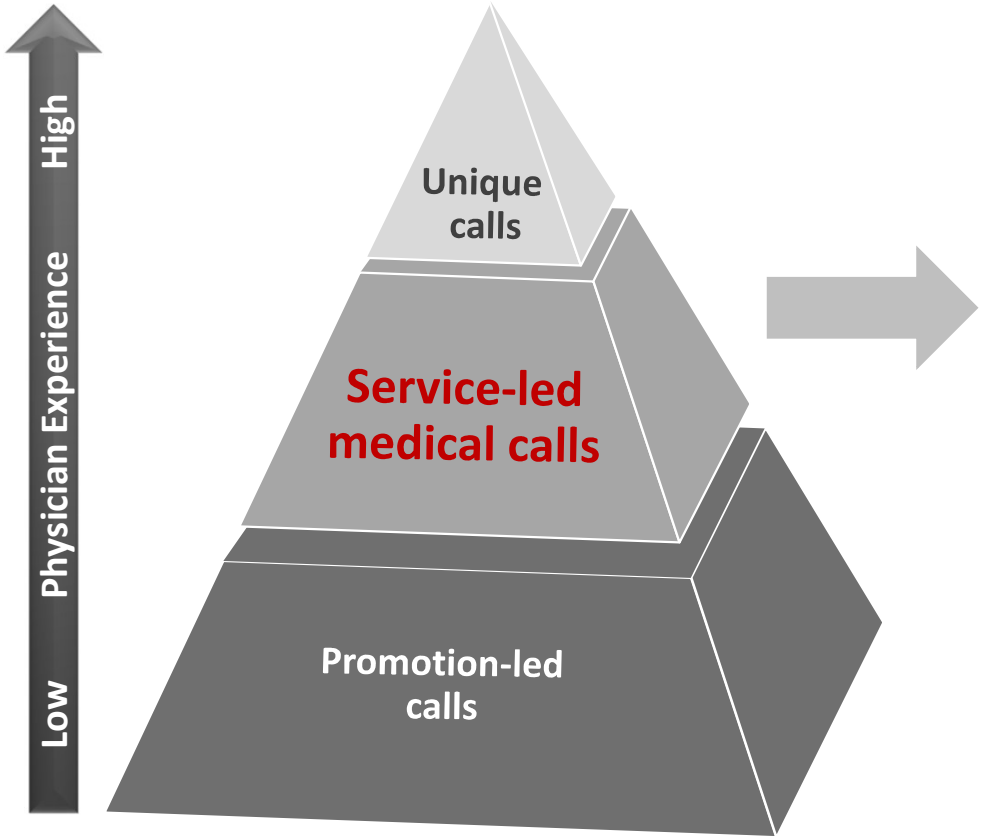
WHAT IS THE SOLUTION?

- Physicians are more inclined to meet medical reps if they bring them a real benefit
- To achieve this, service-led medical calls should be designed to offer physicians:
  - Relevant, trustworthy and up-to-date information
  - Useful services
  - Enjoyable interactions

Sources: Smart Pharma Consulting

If well designed and executed, medical calls may offer physicians an outstanding experience that will help medical reps secure regular and impactful interactions

4. Service-led Medical Calls – The Solution



- Service-led calls require to identify for each physician:
  - His fields of interest so that to develop a minimum knowledge to be able to discuss and share thoughts
  - His professional needs to select those for which an answer will be proposed
- Perfect call execution must consider the:
  - Context of the call (e.g., collective calls)
  - Physician behavior (e.g., thoughtful, talkative)
  - Objective of the call (e.g., inform, offer a service)
- Medical reps must also strive to impress physicians by their knowledge, thoughts and behavior[1]
- Once a year, medical reps should ask each physician his opinion about the quality of the medical calls and suggestions for improvement

Sources: Smart Pharma Consulting

[1] *Empathy, good mood, enthusiasm, kindness, etc.*

Service-led medical calls will lead to more regular contacts, better memorization of the calls and a higher probability to convince physicians, and increase their preference for the marketed brand

4. Service-led Medical Calls – The Benefits

For Medical Reps

- Better efficacy (memorable – convincing – enhancing physicians' preference)
- Better personal image (positive differentiation vs. other medical reps)
- More pleasure at work

For Physicians

- More interesting
- More useful
- Better executed interactions
- Opportunity to have a good time

"The purpose of the
SERVICE-LED MEDICAL CALLS
is to turn each call into a memorable positive experience for each physician"

For Pharma Companies

- Improvement of the corporate reputation
- Enhanced business performance

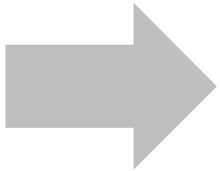
Sources: Smart Pharma Consulting

Excellence in execution is the ability to carry out a plan in an outstanding and better manner than competitors so that to generate customer preference

5. Excellence in Execution – Introduction

WHAT IS THE PROBLEM?

- Business failures depend more on strategy execution than on the strategy itself
- Poor marketing execution is mainly due to:
  - Non relevant or efficient activities[1]
  - Insufficient insights re. physicians[2]
  - Poor quality of interactions
  - Suboptimal cross-functional activities[3]
  - Non-systematic evaluation of impacts



WHAT IS THE SOLUTION?

- The search for excellence must be a fundamental pillar of the pharma company that will be materialized in the design of its organization through its four dimensions:
  - The activities to be carried out
  - The structure to enable the execution
  - The processes to monitor the quality
  - The culture to engage collaborators

Sources: Smart Pharma Consulting

[1] In other words, activities which do not properly support the chosen strategy – [2] Or other customers such as: pharmacists, patients, patient advocacy groups, etc. – [3] Especially between medical, marketing and sales functions, but not only

Excellence in Execution requires to set a shared objective, the relevant strategy to reach it, high standards of quality; and to ignite the passion of collaborators

5. Excellence in Execution – The Solution

"Excellence is a set of beliefs, ways of thinking, a matter of discipline, and ways of focusing"

6 Tips to boost Excellence in Execution

1. Set the ambition of delivering product and service excellence which are second to none
2. Explain the strategy so that to align, inspire and motivate people in charge of its execution to excel
3. Set a structure and processes to encourage / facilitate the search for excellence by all the collaborators of the company
4. Build a team in charge of execution that is capable, accountable and passionate about exceeding customer expectations
5. Focus the executed activities on the actions the company excels at and that are the most important to support the strategy
6. Carefully plan and monitor with specific execution[1] and performance[2] indicators the activities supporting the strategy

Sources: Smart Pharma Consulting

[1] With Key Execution Indicators measuring the quality of execution –
[2] With Key Performance Indicators measuring the impact of the executed activities

Striving for excellence in execution will deliver a superior value-added experience leading to customers' preference over competitors offer

5. Excellence in Execution – The Benefits

For Collaborators[1]

- Better efficacy and efficiency of the activities carried out to support the strategy
- Shared objective giving meaning to their actions and fostering cooperation and collaboration across multifunctional teams

For Customers[2]

- Higher probability to meet their needs and…
- … their expectations from pharma companies
- More positive experience (satisfaction, delight and happiness) while interacting with collaborators of the pharma company

"The thing that keeps a business ahead of the competition is ***EXCELLENCE IN EXECUTION****" – Tom Peters*

For Pharma Companies

- Improvement of the corporate reputation
- Enhanced business performance

Sources: Smart Pharma Consulting

[1] Font line and back-office ones – [2] Physicians, pharmacists, patients, patient advocacy groups, etc.

These five marketing solutions – specifically designed for pharma companies – are instrumental to outperform the competition and boost the brands performance

Key Takeaways

1. Advanced SWOT	Helps to carry out a more specific, relevant and robust assessment of the brands' competitive position
2. Brand Preference Mix	Enables to monitor and thus set the promotional activities at individual physician level to enhance their preference
3. Individual & Dynamic Segmentation	Helps to determine the optimal level and nature of operational resources to be allocated per physician
4. Service-led Medical Calls	Lead to more regular contacts, better memorization and increased preference of physicians for the marketed brands
5. Excellence in Execution	Requires to set a shared objective, strategy, high-quality standards, and to ignite the passion of collaborators

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Strengthening
Brand Preference

The Brand Preference Mix Approach

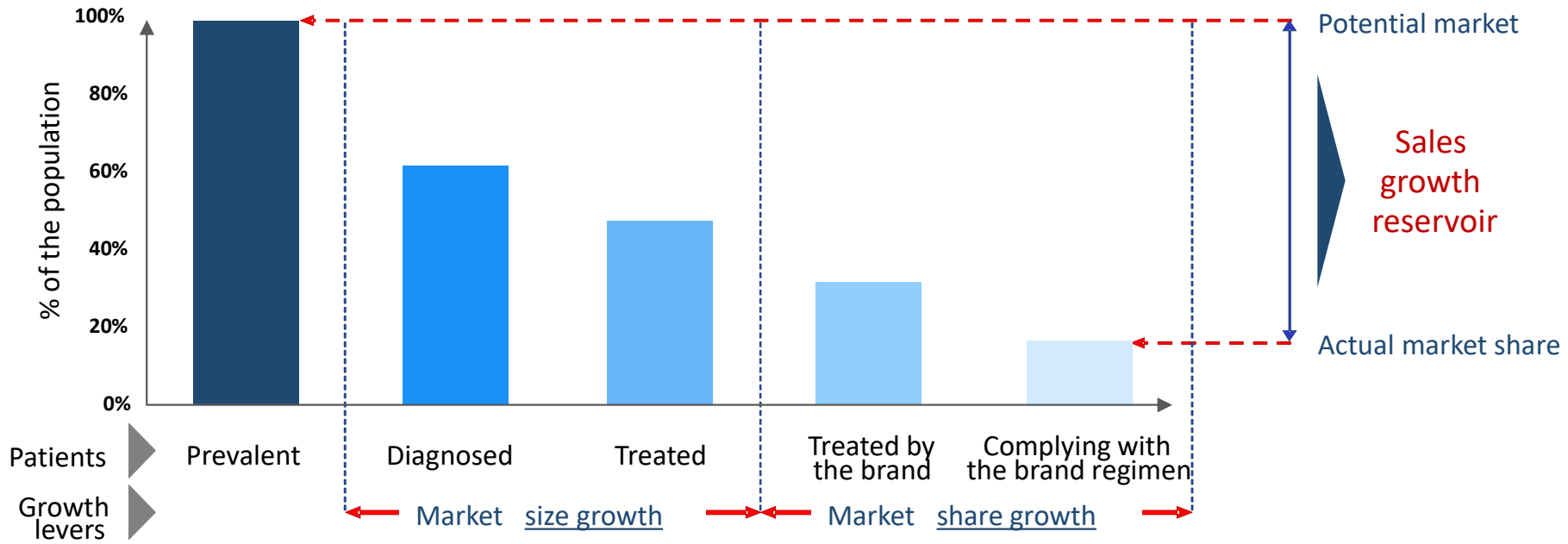
POSITION PAPER

October 2016

In the current environment, market share gain should be the top strategic priority, over reliance on market size growth, to optimize the performance of either established or new brands

Introduction

Market growth vs. market share growth



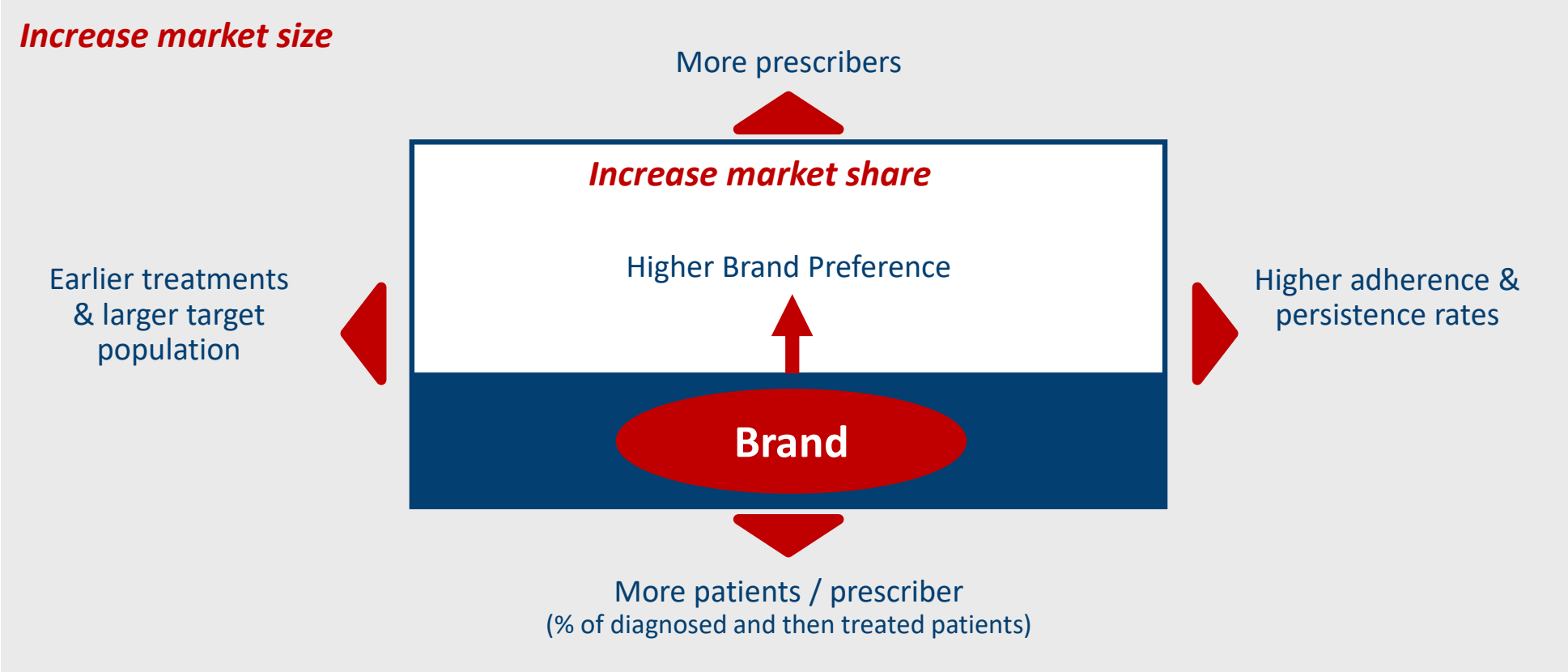
- In an environment where the growth of market is decelerating, gaining market share has become vital for pharma companies to increase their sales
- When several brands are available for a given pathology, enhancing prescribers' brand preference vs. competitors is key to gain market share and thus to succeed in the marketplace
- Thus, for their established or new brands, pharma companies must make the gain of market share their top priority

Sources: Smart Pharma Consulting

Market share gain, which is directly related to stakeholders' level of preference, is the most important determinant of products performance[1]

Introduction

Impact on the performance of pharmaceutical companies



Sources: Smart Pharma Consulting

[1] *Particularly in an environment in which the market growth is severely constrained by budgetary controls on health spending imposed by health authorities*

Unlike customer satisfaction, customer preference enables to gain market share, but for so doing, brands are required to offer benefits perceived as unique and superior

Why should preference supersede satisfaction?

Customer Satisfaction		Customer Preference
▪ Results from the fulfillment of one or several expectations	*Definition*	▪ Results from a superior solution to existing alternatives
▪ Secures customer loyalty	*Impact*	▪ Secures loyalty and enables to conquer new customers
▪ Identification of expectations ▪ Offering of solutions to fulfill these expectations ▪ Assessment of customer satisfaction (e.g., customer satisfaction survey)	*Implementation*	▪ Identification of expectations ▪ Assessment of superiority level to induce customer preference ▪ Offering of unique & preferential solutions ▪ Measurement of the preference level with tools (e.g., BPM Index[1])

"Do not just be liked, try to be preferred!"

Sources: Smart Pharma Consulting

[1] *Brand Preference Mix Index*

Consumers' preference for an iPhone vs. a BlackBerry is not only based on products attributes

From difference to preference

iPhone

≠

BlackBerry

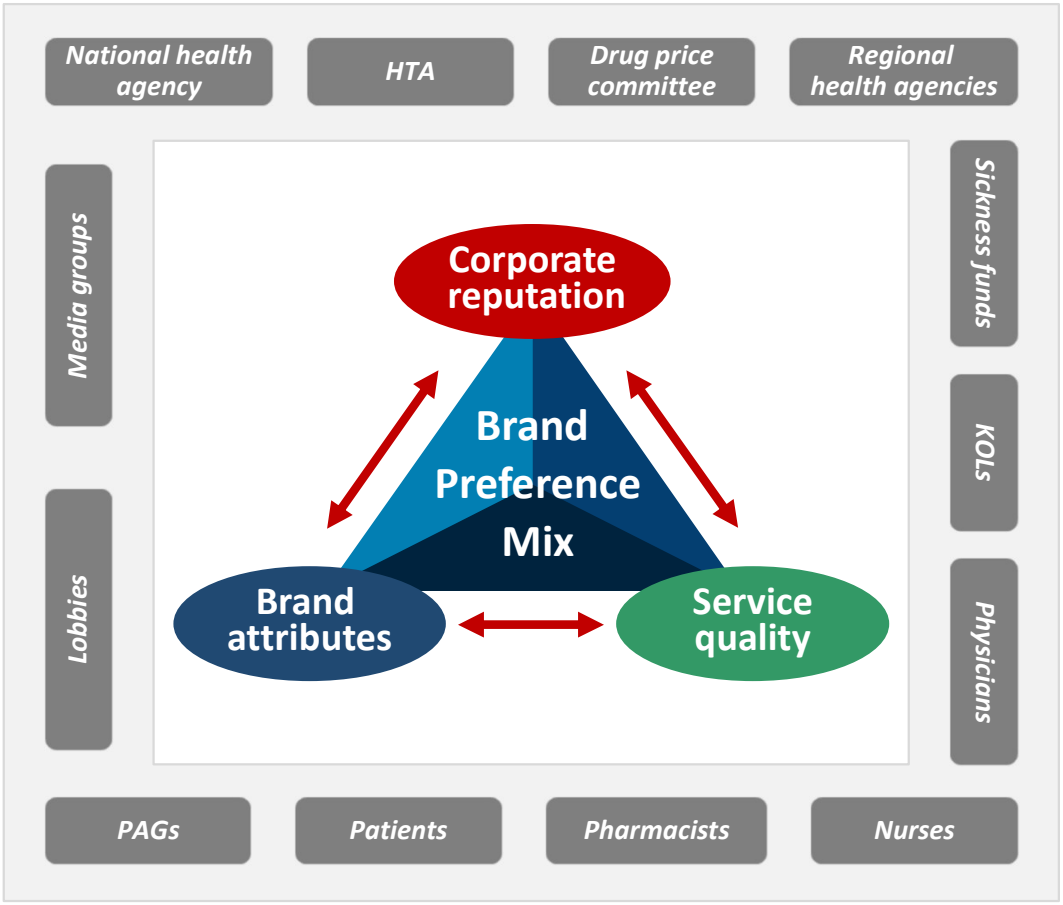
1. What are the main differences between an iPhone & a BlackBerry?
2. Does the corporate reputation (Apple vs. RIM[1]) play a role?
3. Is the service offering attached to each product significantly different[2]?
4. How are these differences transformed into preference?

Sources: Smart Pharma Consulting

[1] Apple is very famous and has a good reputation, in contrast to RIM (Research in Motion Limited, renamed BlackBerry since January 30th, 2013) – [2] As opposed to Apple that created Apple Stores, BlackBerry has no specific store

The Brand Preference Mix is an easy and effective approach to strengthen the preference of stakeholders for brands marketed by pharmaceutical companies

Brand Preference triangle



- To change stakeholders' preference:
  - Health authorities
  - Payers (Insurance system) and buyers
  - KOLs/experts
  - Prescribers and other healthcare professionals
  - Patients and Patient Advocacy Groups (PAGs)

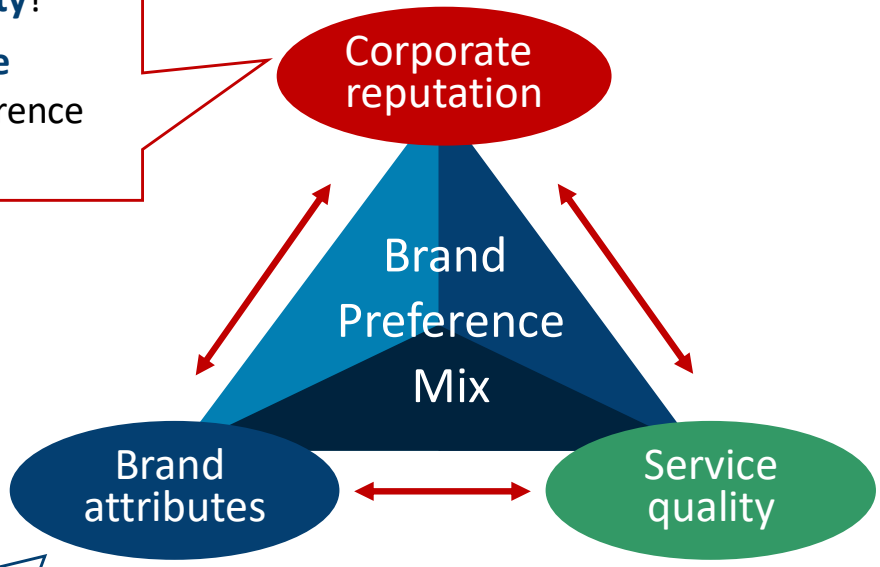
  for a brand, pharmaceutical companies can act on three components:
  - Corporate and collaborators reputation
  - The quality of proposed services
  - The image / the perceived quality of product's attributes
- These three components are more or less linked between them by stakeholders

Sources: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

To optimize the Brand Preference Mix of their products, pharmaceutical companies should address several key issues

How to optimize the Brand Preference Mix?

- How to create a **superior image**?
- How to build an **appealing identity**?
- How to maintain a good **corporate reputation** that induces the preference of stakeholders[1]?



- How to install a perception of **uniqueness**?
- How to generate "preference" from stakeholders by highlighting specific product **attributes**?
- How to **leverage** corporate **reputation** and **service** offering?

- How to deliver **innovative services valued** by customers?
- How to ensure a sustainable **excellence** in the **execution** of these services?
- How to select and design **services** leading to **higher corporate** / **brand preference**?
- How to make sure that the proposed services are **recognized** and **memorized** as produced by the **company** and that they are related to the **brand**?

Sources: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

The strength of the brand depends on its identity (i.e., the sum of its objective and subjective characteristics) and on its degree of awareness

Brand strengths components (1/2)

AWARENESS

- Awareness rating:
  - Top of mind
  - Spontaneous
  - Assisted

  } vs. competitors
- The awareness rating depends on cumulated marketing investments dedicated to the brand since its launch, including:
  - Medical calls
  - Press ads
  - Scientific meetings
  - Clinical studies
  - Etc.

X

IDENTITY

Objective components

- Efficacy
- Safety
- Convenience
- Price
- Services

} vs. competitors

Subjective components

- Appearance (e.g., packaging, color, form, taste, texture, etc.)
- Personality (e.g., history, positioning communication style, etc.)
- Affectivity (e.g., feeling conveyed by the company and its collaborators, etc.)

= Brand strength

"The brand strength reflects its ability to create customer loyalty over time"

Sources: Smart Pharma Consulting, Adapted after G. Lewi and J.N. Kapferer

Certain brands benefits from an extraordinary level of awareness and from an extremely strong identity based on tangible and/or intangible components

Brand strengths components (2/2)

AWARENESS

- Certain brand have reached such a widespread awareness that they have become an antonomasia:
  - Frigidaire
  - Klaxon
  - Kleenex
  - Post-it
  - Scotch

- However, antonomasia is exceptional in the pharma market:
  - Valium
  - Tagamet
  - Prozac
  - Viagra

IDENTITY

- Few pharma brands have managed to build a very robust identity, combining their tangible and intangible components:

Since the launch of Glivec, in 2001, patients do not die anymore from Chronic myeloid leukemia (CML)

Zantac (Glaxo), a me-too of Tagamet (SKB) became the world top selling brand in the mid 90' with peak sales > USD 500M thanks to an "aggressive" marketing strategy[1]

Sources: Smart Pharma Consulting

[1] Since the merger of Glaxo-Welcome and SmithKline-Beecham (SKB), both Zantac and Tagamet belong to GSK

The corporate image should reflect companies' identity and lead to a strong and appealing reputation, likely to generate confidence and stakeholders' preference

Link between corporate image – identity – reputation

Corporate Identity

It is the "**personality**" of the company, based on its **attributes**, **values** and the **way it interacts** with employees and external stakeholders

Pharmaceutical company

Stakeholders (internal & external)

Corporate Image

It is the **sum** of **stakeholders' impressions**, resulting from **interactions**, from **messages** **delivered by** the **company**, its **customers**, **competitors**, etc.

Corporate Reputation

It is a **collective representation** of stakeholders' **opinion** based on their **perception** of company's **past behavior** and **performance**, as well as of its **future prospects**[1]

"It takes 20 years to build a reputation and five minutes to ruin it" *W. Buffet*

Sources: Adapted by Smart Pharma Consulting from "Corporate reputation: the definitional landscape" (2001-2003), M.L. Barnett, J.M. Jermier, B.A. Lafferty

[1] The perception (judgement) of stakeholders can be influenced by external factors such as: media coverage, new regulations, change in customers' behavior and/or competitors' strategy

Stronger corporate reputation leads to an increased operational efficacy and efficiency which impact companies' performance

Impact of corporate reputation on performance

A good corporate reputation is an emotional bound that can boost a company's success by:

- Generating more positive feedback from media and pressure groups
- Creating a more favorable outlook from regulators and rating agencies, thus decreasing financing cost and increasing value
- Attracting capital resources and strategic business partners, thus expanding business opportunities
- Attracting, motivating and retaining talented employees, thus enhancing innovation capabilities and value
- Encouraging consumers to buy products and services
- Driving profitable sales in crowded markets
- Resisting better in a crisis mode, investors giving the company the benefit of the doubt

Sources: Adapted from D.A Whetten and A. Mackey 2002 by Smart Pharma Consulting – Reputation Institute 2016

The global and individual reputation of pharma companies can be improved through a higher focus on innovative R&D, access programs and ethic in business practices

Global corporate reputation of the pharma industry

The 3 pillars of corporate reputation in the pharma industry

Involvement in R&D and innovation	Access initiatives & CSR[1]	Ethic in business and marketing practices
▪ Focus investments on current unmet medical needs rather than on market potential only ▪ Keep an R&D / marketing & sales investment ratio >1 ▪ Invest in R&D and in manufacturing in countries of interest	▪ Ensure access to the medicines to every patient (through performance-based pricing agreements with payers, financial support for uninsured patients) ▪ Propose initiatives focused on patients aiming at improving education / compliance / use ▪ Focus on your employees' satisfaction at work	▪ Communicate transparently regarding R&D costs and results, pricing and marketing practices ▪ Avoid over-claim and provide objective information ▪ Patient-focused initiatives aiming at a better education / compliance / products good use

Communication (direct by pharma companies and indirect by external influencers)[2]

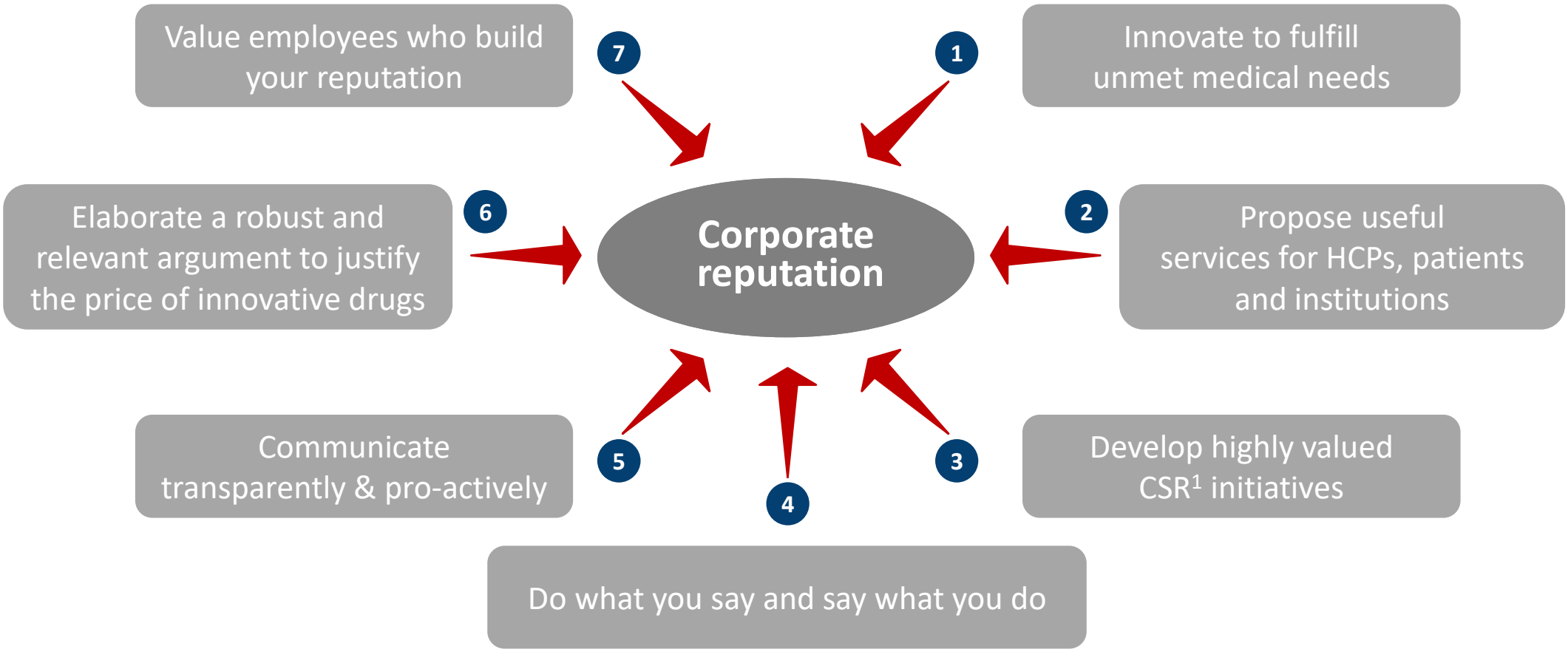
"Reputation and trust are earned through actions, results, and the way companies communicate"

Sources: "The reputation, image and influence of the pharmaceutical industry: Regaining credibility", Journal of Medical Marketing, 2007 – Smart Pharma Consulting analyses

[1] Corporate Social Responsibility – [2] Politics, pressure groups including patient advocacy groups, activists, journalists,

Pharma companies must put their stakeholders in the center of their strategy, "walk the talk", and be as transparent as possible to get trusted, esteemed and preferred

7 imperatives to improve the reputation of pharma companies



Sources: Smart Pharma Consulting

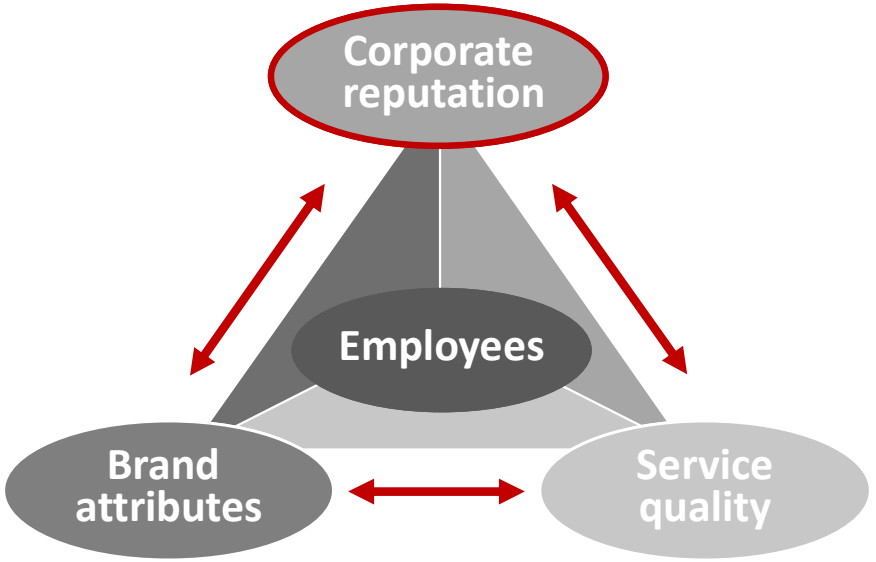
[1] Corporate Social Responsibility

With dwindling drug differentiation, pharma corporate reputation contributes to strengthen the preference of stakeholders (e.g.; authorities, payers, HCPs, patients, investors)

Why superior corporate reputation creates competitive advantage?

- Correlation between financial performance and corporate reputation has been clearly evidenced over the past 20 years
- Higher corporate reputation, than competitors' one:
  - Leads to a more favorable position to negotiate with health authorities and payers, resulting in earlier market entries and better prices
  - Strengthens brand preference by KOLs, HCPs, PAGs, patients, etc., resulting in market share optimization
- Pharma companies' experience / expertise in specific therapeutic areas must be communicated with robust scientific evidence to enhance the perception of brands value by decision makers at market entry and penetration levels
- Strong positive reputation is built on credibility, reliability, responsibility, trust and transparency

Brand Preference Mix[1]



The Brand Preference Mix is an easy and effective approach to strengthen the preference of stakeholders for marketed brands

"Boosting corporate reputation contributes to reinforce stakeholders' preference and companies' performance"

Sources: Smart Pharma Consulting

[1] *See the position paper "Brand Preference optimization" https://smart-pharma.com/wp-content/uploads/2019/07/Stakeholders-Brand-Preference-Mix-2016-EN-web.pdf*

To generate preference for brands, associated services must be highly valued, unique if possible; and linked – directly or indirectly – to the corresponding brands

Definition of the "preferential power" of a service

The "preferential power" of a service is based on its…

… Value

The valuation of a service is based on stakeholders' assessment of 4 key factors:

1. Its usefulness
2. Its interest
3. Its convenience
4. Its quality of execution

… Uniqueness

- The uniqueness of a service will reinforce preference, provided it is highly valued
- Uniqueness is either:
  - Total
  - Partial
  - Non-existent

… link to the product

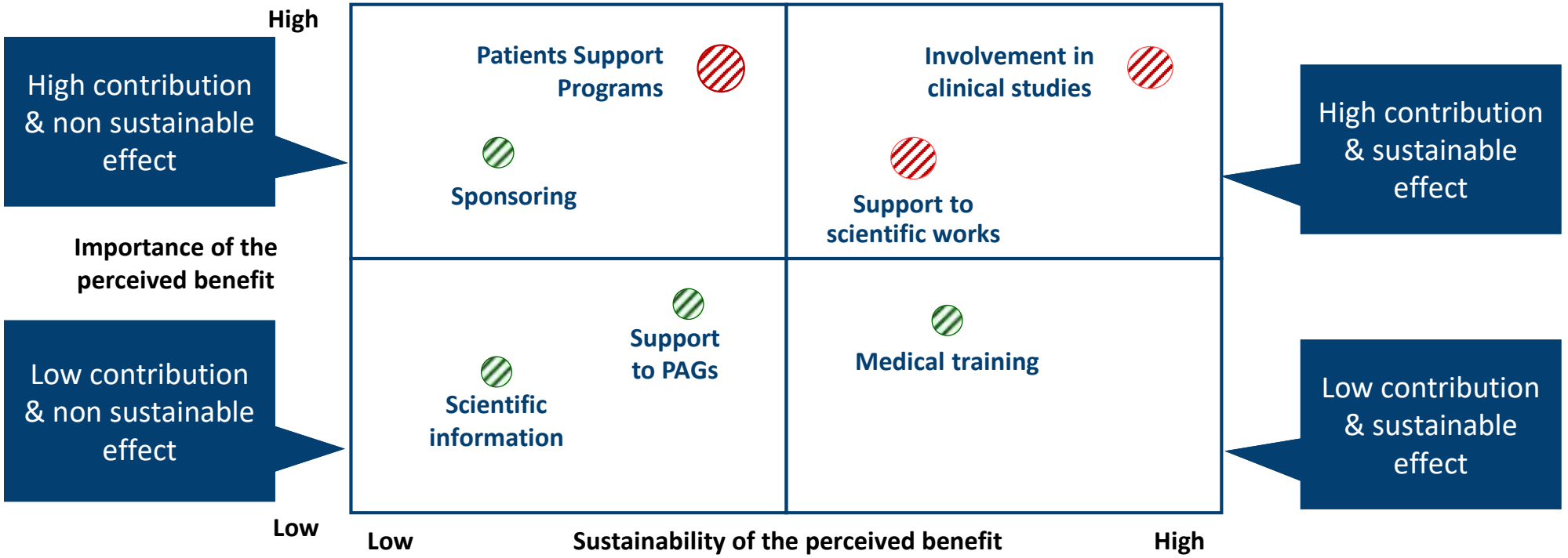
- A highly valued service, even if unique, will help strengthening the preference for a product brand provided:
  - It is linked to the related product...
  - ... and that this link is sustainable

Sources: Smart Pharma Consulting

The importance and sustainability of the perceived benefits of services are relevant indicators of their contribution to enhance brand preference

Mapping of services contribution to preference

Illustrative



The **benefits of services**, as perceived by physicians depend on four key criteria

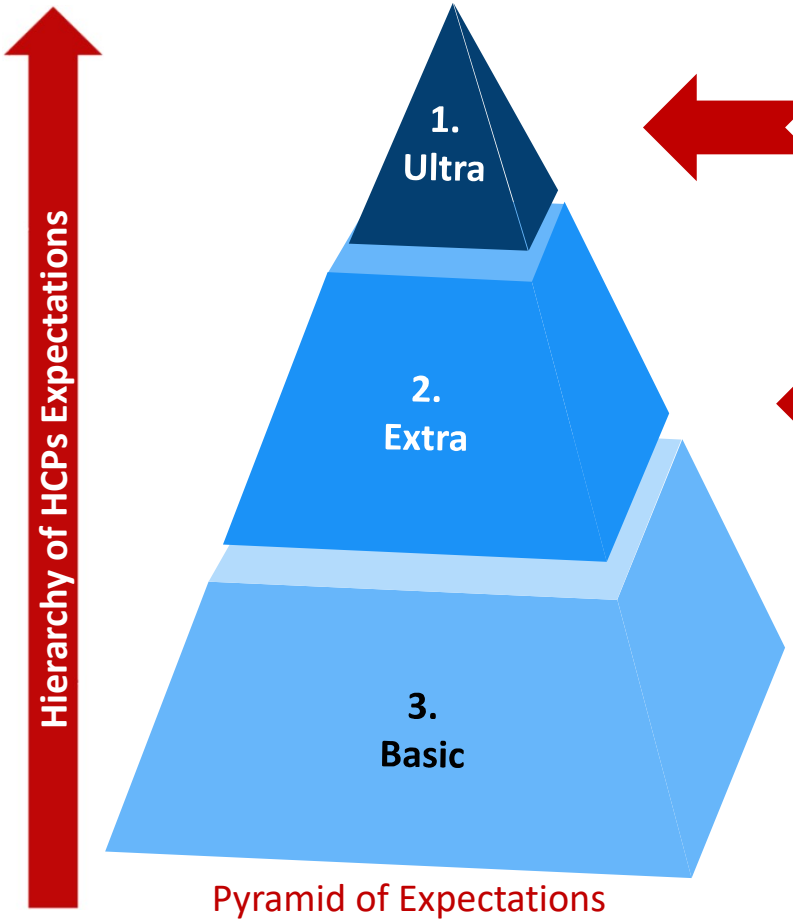
1. **Usefulness**
2. **Interest**
3. **Convenience**
4. **Quality of execution**

Sources: Smart Pharma Consulting

Level of investment: High Moderate

To drive HCPs' preference, pharma companies should strive to fulfill their "Extra Expectations" back offering each of them services that are interesting, useful, convenience and well executed

How to create Service-led medical calls? (1/2)



Pyramid of Expectations

1. Ultra Expectations

- They are not consciously expected and thus can create a surprise, and hopefully a "wow effect"
- They can have a strong positive and differentiating effect on physicians' opinion and possibly on their behavior

2. Extra Expectations

- Fulfill physicians' additional needs
- They are a "plus" which may help differentiate positively the med rep interactions from competitors

3. Basic Expectations

- Fulfill physicians' basic expectations regarding calls, medical meetings or invitations to congresses / symposiums

Sources: Smart Pharma Consulting

To drive HCPs' preference, pharma companies should strive to fulfill their "Extra Expectations" back offering each of them services that are interesting, useful, convenience and well executed

How to create Service-led medical calls? (2/2)

Illustrative

Commitments for high quality detailing

Objectives

- Increase the perception of a superior quality of detailing, vis-à-vis competitors

Principles

- Commitments are formalized and proactively communicated to physicians
- Med reps must systematically comply with those commitments
- Commitments may be as follows:
  1. Exhaustive information will be presented, incl. side effects (as per the current regulation)
  2. Detailing will be adapted to physicians' availability/convenience
  3. Physicians' questions/requests will be addressed within 5 working days
  4. Competitive information will always be supported by scientific proofs (evidence-based medicine)

Benefits	Complexity of change	Risk
▪ Perceived efforts by physicians of the company attempts to improve detailing quality / value for them ▪ Referential to measure Sales Representatives performance	▪ Organization ▪ Tools ▪ Processes: – Clear and rigid enough to fulfill commitments (e.g., Reprint delivery within 5 days) – Compliant with the content of "Medical call charter" but med reps' behavior needs to be adapted	▪ Over promises leading to physicians' disappointment ▪ Non strict respect of commitments by Sales Representatives

Sources: Smart Pharma Consulting

Evaluation: High Medium Low

It is key to make sure that the proposed services will significantly contribute to reinforce the brand preference with the help of specifically designed tools

Pre-assessment of a service contribution to brand preference

Illustrative

Description		Objective		Target (HCPs, patients, etc.)	

Expected Value by the Target			Perceived Exclusivity			Expected Link to the Brand		
Evaluation*		Rationale	Evaluation		Rationale	Evaluation		Rationale
Interest	1 2 **3** 4 5	•	Total	✓	•	Magnitude	●	•
Usefulness	1 2 3 **4** 5		Partial	✓	•			
Convenience	1 **2** 3 4 5		None	✓	•	Sustainability	●	•
Execution	1 2 **3** 4 5							
Total	1 2 **3** 4 5							

Barriers		Rationale	KPIs (Key performance indicators)	KEIs (Key execution indicators)	Decision	
Technical	●	• Implementation	•	Benefit of the service for: ▪ The stakeholders (i.e., HCPs, patients, health authorities, payers, etc.) and ▪ The company and its product	**GO**	
Regulatory	●	• Compliance			**No GO**	
Economic	●	• Estimated cost and return				

Sources: Smart Pharma Consulting

● High ● Medium ● Low

** 1 & 2 below competitors – 3 as competitors – 4 & 5 above competitors*

Once the service has been delivered, a careful analysis of its quality of execution and of its impact are essential to keep on progressing in terms of resource allocation and efficiency

Post-assessment of a service contribution to brand preference

Illustrative

Description		Objective		Target (HCPs, patients, etc.)	

Perceived Value by the Target			Perceived Exclusivity			Link to the Brand		
Evaluation*		Rationale	Evaluation		Rationale	Evaluation		Rationale
Interest	1 2 **3** 4 5	•	Total	✓	•	Magnitude	●	•
Usefulness	1 2 3 **4** 5		Partial	✓	•			
Convenience	1 **2** 3 4 5					Sustainability	●	•
Execution	1 2 **3** 4 5		None	✓	•			
Total	1 2 **3** 4 5							

Positive Impact on the Brand		Rationale	KPIs (Key performance indicators)	KEIs (Key execution indicators)	Decision	Rationale / Suggestions
High	**x**	•	•	•	**Stop**	•
Moderate					**Renew as such**	
Low/None					**Adjust**	

Sources: Smart Pharma Consulting

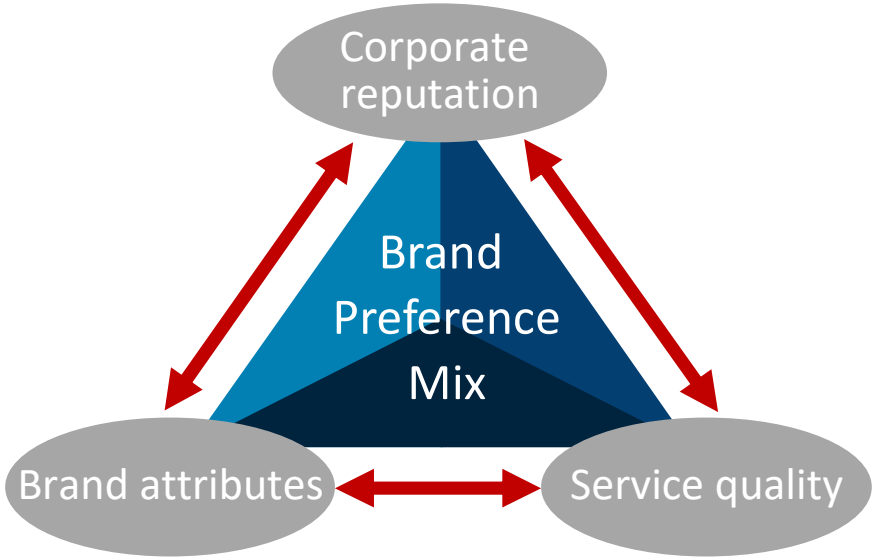
● High ● Medium ● Low

** 1 & 2 below competitors – 3 as competitors – 4 & 5 above competitors*

It is essential that stakeholders correctly connect the company and the proposed services to its products in order to enhance the preference for the latter

Links between the three components of the Brand Preference Mix

➔ Reinforce the links between the BPM components



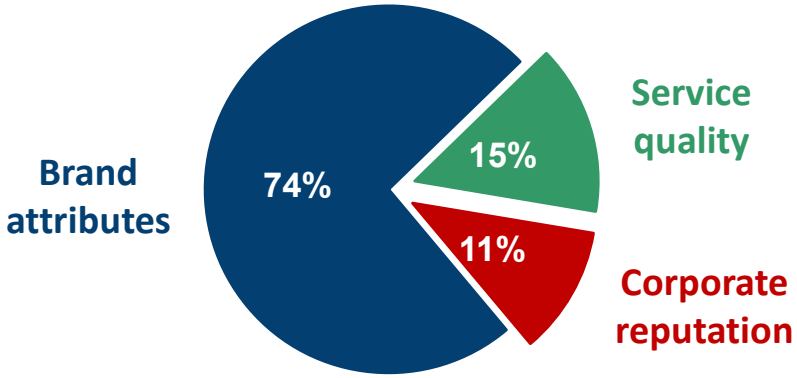
"Pharma companies must always ensure that their actions to strengthen their reputation and the services they propose contribute to improve the perceived value of their brands"

Sources: Smart Pharma Consulting

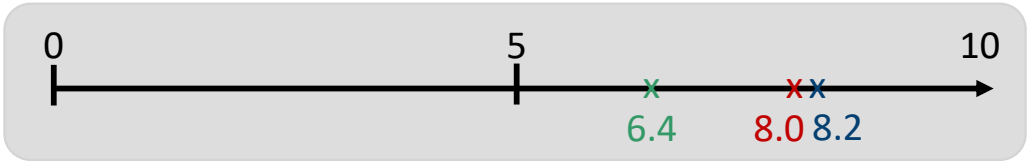
The Brand Preference Mix Index makes it possible to measure the evolution of stakeholders' preference for brands compared to their competitors, overtime

Brand Preference Mix Index (1/3)

Illustrative



Visual Analog Scale



BPM Index calculation: (74% x 8.2) + (15% x 6.4) + (11% x 8.0) = 7.9

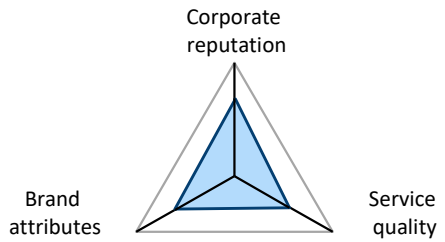
- The Brand Preference Mix Index (BPM Index) can measure, by stakeholder:
  - The importance of the three components of the BPM
  - The perceived image on a scale of 0 to 10
- Thus, the BPM Index measures:
  - Stakeholders' perception at one point
  - Its evolution overtime
  - Its value compared to competitors
- The BPM also enables to:
  - Understand the root-causes underlying the commitment of stakeholders to brands and...
  - ... define actions / messages to modify this attachment to brands

Sources: Smart Pharma Consulting

The Brand Preference Mix Index can be assessed at national level by market research agencies, at hospital and individual levels through interviews by field forces

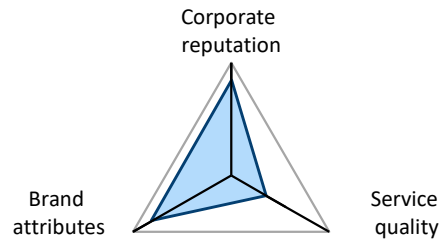
Brand Preference Mix Index (2/3)

National level



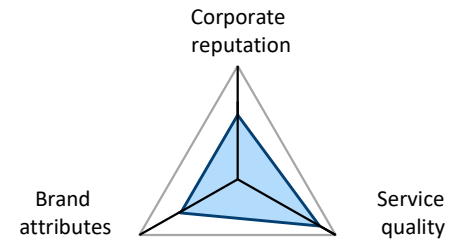
- The BPM Index should be measured, at national level through face-to-face or phone interviews by an agency
- The number of interviewees should be ~50 for specialists and ~100 for GPs, in medium to large markets such as France, Germany, UK, Italy
- The rationale behind the marks obtained for each dimension of the BPM Index must be investigated

Hospital department level



- The BPM Index can also be measured at hospital department level through interviews carried out by medical reps, KAM, etc.
- Interviews can be either concentrated on key institutions and/or departments or carried out on all those that have been targeted
- The reasons that support the evaluation should be captured

Prescriber level



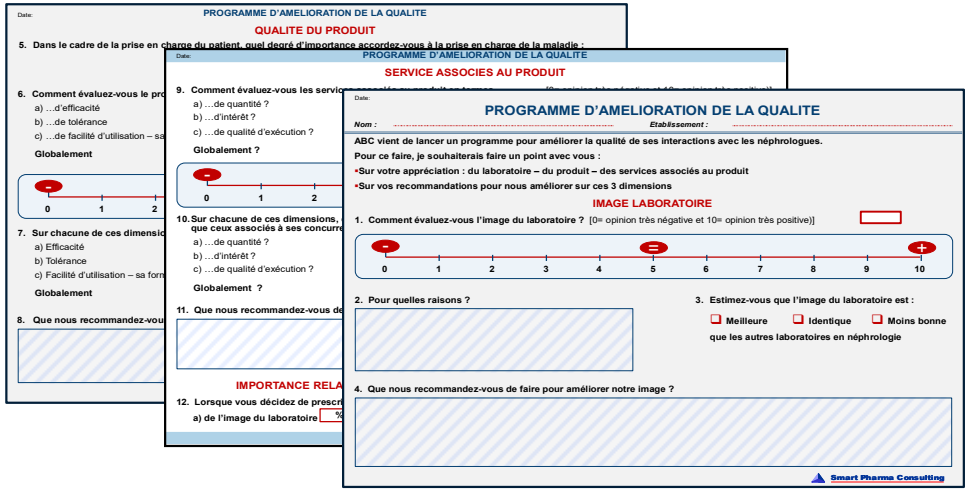
- The BPM Index should be measured for each targeted prescriber through face-to-face interviews carried out by medical reps or other collaborators
- Prescribers should be interviewed, once or twice a year
- Medical reps should identify the reasons motivating the marks granted by the prescribers for their brands

Sources: Smart Pharma Consulting

Med reps can apply the "Brand Preference Mix Index" when they call upon their targeted physicians and thus fine tune their activities

Brand Preference Mix Index (3/3)

Assessment guide for Med Reps



From observation to decision: The 4 Ws approach

WHAT?	WHY?	SO WHAT?	WHAT TO DO?
What is the rating of the brand by the physician?	Why did the physician give these marks?	What are the implications for the brand?	What should be done to reinforce the preference to the brand?

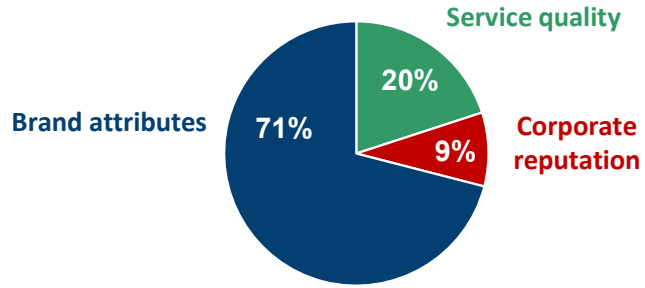
- Recent experiences have shown that:
  - >96% of physicians accept to be questioned on the three components of the BPM
  - >80% of physicians consider that the BPM approach conveys a positive image
  - >85% of med reps say that the BPM helps improving their insight of physicians
- Once physicians have evaluated the BPM, med reps will ask them:
  - Why did they give these marks?
  - What should be done to raise their preference to this brand?
- Then, med reps can fine-tune their messages and actions, physician by physician, based on his feed-back
- The collected information can be shared with marketing people who will define specific initiatives to reinforce prescribers' preference to the brand

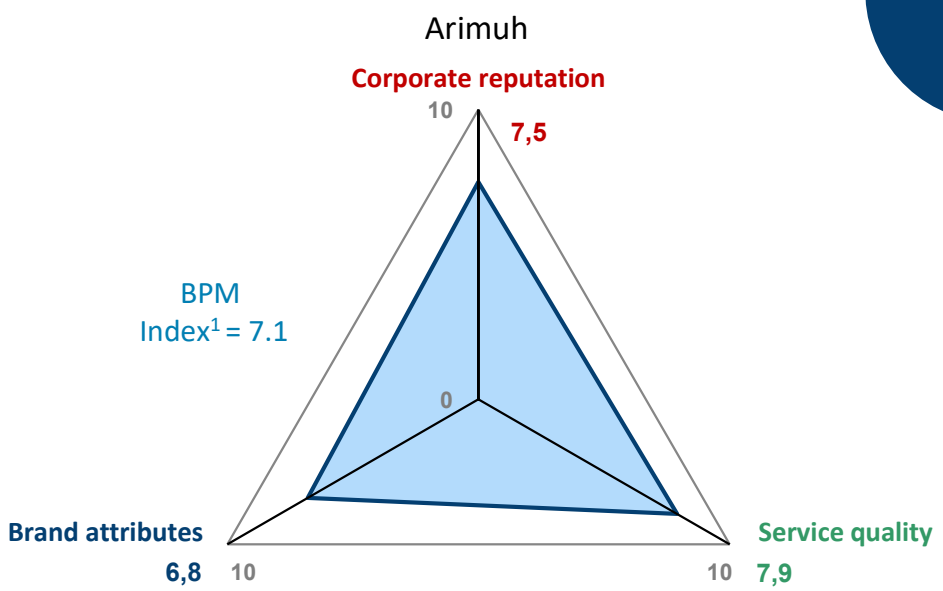
Sources: Smart Pharma Consulting

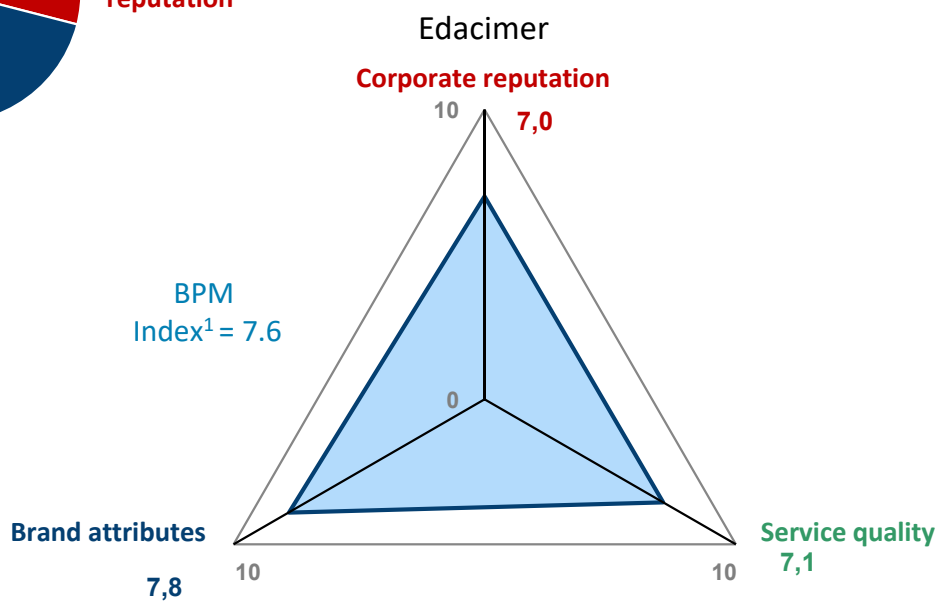
The Brand Preference Mix Index allows to assess the attachment of physicians to brands, to define the actions to implement to optimize their impact on preference

Brand Preference Map: Case study

Illustrative







BPM Index calculation

(71% x 6.8) + (20% x 7.9) + (9% x 7.5) = 7.1

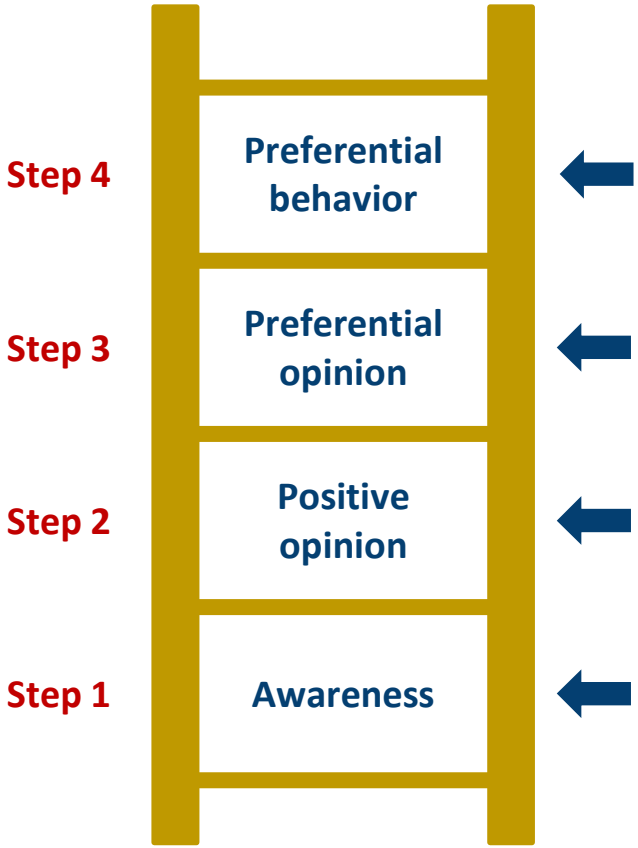
(71% x 7.8) + (20% x 7.1) + (9% x 7.0) = 7.6

The higher the customers' preference, the higher the probability to gain market share

Sources: Phone interviews conducted with 31 hospital gastroenterologists (November 2013) – Smart Pharma Consulting analysis

The Preference Ladder is a tool helping pharma companies identify, where do their customers stand and how to make them move up to the preferential behavior step

The Preference Ladder



Leverage points

- Be highly desirable
- Offer attractive experiences
- Induce unmatchable perception of higher benefits

- Offer higher benefits
- Be significantly distinctive
- Ensure superior execution

- Be relevant (what are the benefits?)
- Be credible and legitimate
- Ensure high quality of execution

- Communicate
- Create experience
- Stimulate / sustain memorization

- To build a **strong preferential** (prescribing – purchasing) **behavior** in favor of a brand, the company must **make customers climb** the **Preference Ladder** from step 1 to step 4
- While defining:
  - Activities to be implemented
  - Implementation standards
  - Communication priorities

at targeted customers, it is key to **monitor where each of them stands** on the Preference Ladder and fine tune **how to make them move up**

Sources: Smart Pharma Consulting

To optimize the performance of their brands, pharma companies must strengthen the preference of their customers which will boost their market share dynamics

Brand Preference optimization in practice (1/3)

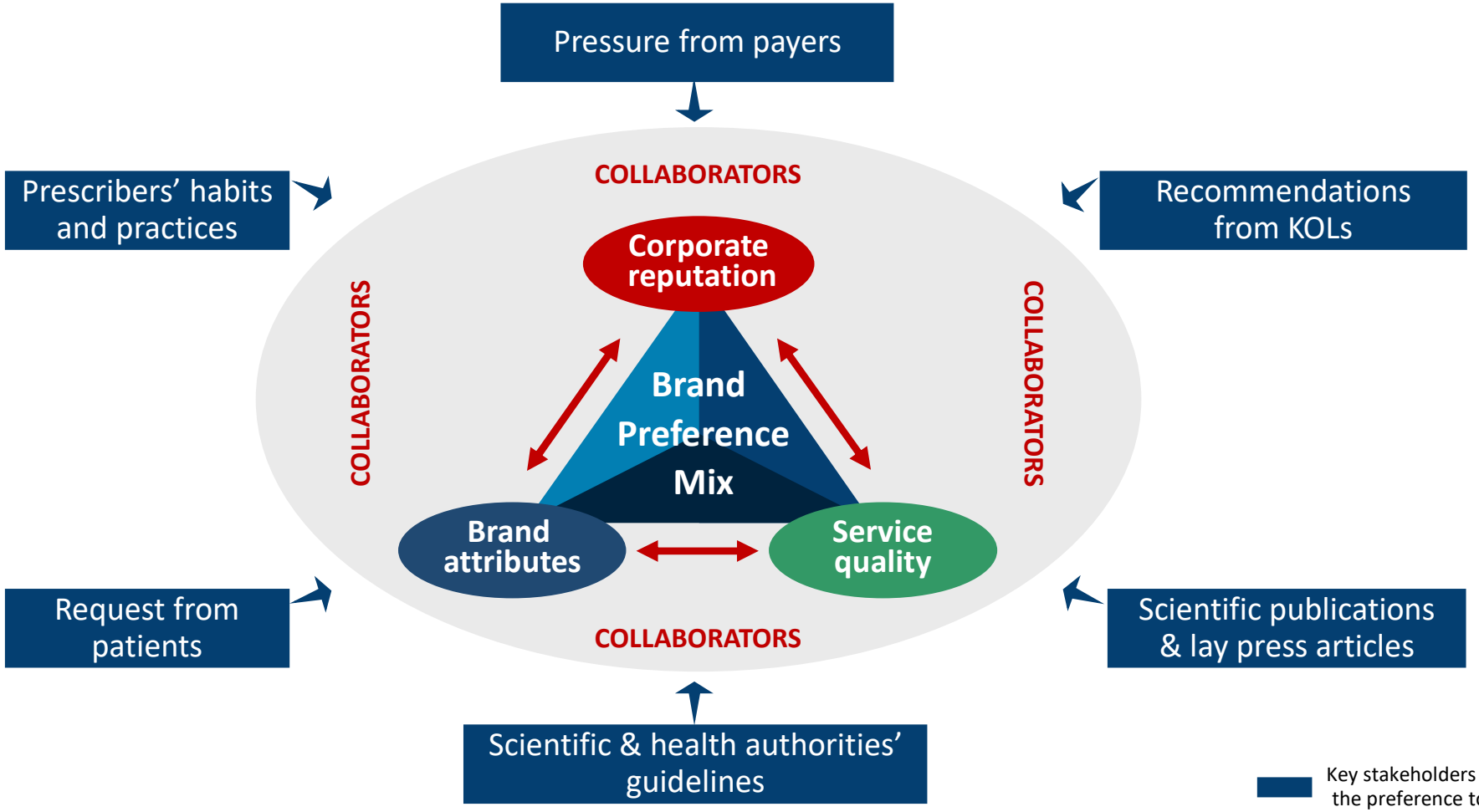
- Customer preference for brands is not limited to product features (tangible and intangible)
- Customer preference for drugs is determined by the "Brand Preference Mix" (BPM):
  1. The perceived value of the product (efficacy, safety, acceptability, convenience, price, etc.)
  2. The perceived quality of the associated services
  3. The reputation of the pharma company which markets the product
- The relative importance of these three components of the BPM differs across therapeutic areas
- Skills and behaviors of collaborators responsible for:
  - Promoting the brand
  - Proposing and/or implementing associated services
  - Communicating about the pharma company

  play a key role to strengthen the brand preference
- The higher the customers' preference for a brand, relative to its competitors, the higher the probability of market share gain

Sources: Smart Pharma Consulting

To strengthen preference to their brands, pharma companies must consider multiple external factors which have a strong impact on their " Brand Preference Mix"

Brand Preference optimization in practice (2/3)



Sources: Smart Pharma Consulting

The Brand Preference Mix approach lies on best-in-class value creation for customers, through deeper customer insight and sustainable positive experience

Brand Preference optimization in practice (3/3)

- By measuring the performance of their brands vs. competitors on the 3 dimensions of the BPM, with the BPM Index, marketers will be able to:
  - Determine their strategic priorities to leverage their strengths and address their weaknesses
  - Evaluate the impact of their strategies and tactics on the different dimensions of the BPM
- The BPM Index should be ideally measured for each targeted customer (e.g., GPs, specialists, KOLs, etc.), once or twice a year, by a market research company, or the company sales force
- Based on the analyzed results, a series of customized actions will be defined and implemented customer by customer, following the Behavioral Prescriber Segmentation (BPS) principles
- The Brands Value Proposition should align the benefits associated to the 3 components of the BPM and the customers Needs and Wants to gain/strengthen their preference
- Any planned and carried out initiative to contribute to reinforce brand preference should be:
  - Differentiated – perfectly executed – properly marketed – systematically measures
- When ROI (return on investment) of initiatives cannot be objectively and meaningfully evaluated, which is frequent, surrogates such as assessment of: customer interest, quality of execution, etc., should be used

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Outstanding Physician Experience

Boosting Brand Preference

POSITION PAPER

October 2019

Offering outstanding Physician Experience is a source of competitive differentiation likely to boost their brand preference

1. Introduction

Forward

- The search of outstanding customer experience should be the overarching priority of R&D-based pharmaceutical companies
- Indeed, numerous studies, in various industrial sectors, have shown that delightful customer experience is a powerful means to create and maintain privileged relationships and induce customer preference for their related products (or services), leading to market share growth
- By offering outstanding experiences to physicians, pharma companies are more likely to:
  - Keep on interacting with them
  - Differentiate positively their products from competition
  - Optimize their market share evolution
- In this position paper, we have adapted the concept of "customer experience" to physicians[1], and we propose a methodology and tools to help pharma companies offer outstanding physician experience

"Managing customer experience bolsters your brand" – Stan Phelps

Sources: Smart Pharma Consulting

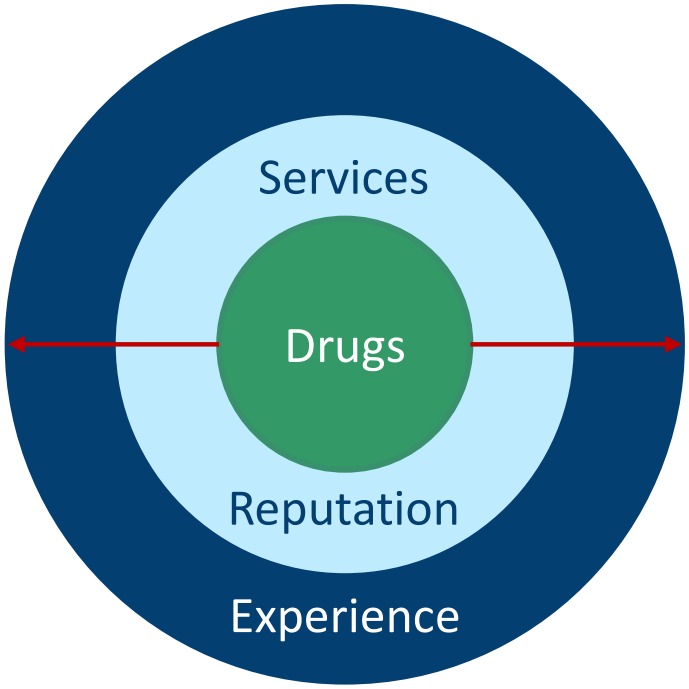
[1] Pharmaceutical companies must deal with other customers such as regulators, payers, distributors, patients, patient advocacy groups who will not be covered in this position paper

The purpose of Physician Experience is to urge pharma companies to provide physicians not only with products and customized services but to enrich their life with memorable events

1. Introduction

Physician Experience (PX) – Definition (1/2)

Evolution of the drug prescribing model



- Innovative drugs and related services are key to success, but too quickly copied to create a sustainable competitive advantage
- Delivering experiences, delighting physicians, is a powerful means to cope with product and service commoditization
- Physician Experience is the perception (physical, rational, emotional, sensorial, etc.) resulting from interactions with a product, its associated services and the people of the companies involved in selling and/or delivering them
- Thus, experiences may be different from one physician to another
- Experience-related events either before, during or after a drug prescription, a service delivery, an exchange with the company[1] determine the degree of physician delight
- Remarkable Physician Experience enables to differentiate positively drugs from competition by enriching physicians' life

Sources: Adapted by Smart Pharma Consulting from "Welcome to the Experience Economy" by B. Joseph Pine II and James H. Gilmore, HBR (1998)

[1] Its collaborators or representatives

Physician Experience must be defined as the physician end-to-end journey, not just at key touchpoints

1. Introduction

Physician Experience (PX) – Definition (2/2)

- Physician Experience should not be limited to key touchpoints or critical moments – also called moments of truth – when physicians interact with a brand (drug), its related services and/or the company marketing it
- Physician Experience is the accumulated effect of multiple touchpoints over time, which can lead, if positive and consistent, to a strong relationship feeling and intimacy between physicians and brands
- Physician Experience needs to be extraordinary, memorable and compelling in order to generate a competitive advantage
- Physician Experience is not fully under the control of the pharma company marketing a brand; it is also impacted by various indirect elements and stakeholders (i.e., bad buzz on social media, word-of-mouth, advocates, detractors, distributors, etc.)

"People will forget what you said, what you did, but not forget how you made them feel" – Maya Angelou

Sources: Adapted by Smart Pharma Consulting from "The Truth about Customer Experience" by A. Rawson et al., HBR (2013)

Zappos key strategy to retain its customers consists to create a "wow" effect on every call so that customers feel delighted of their interaction with the employees

1. Introduction

Zappos

Case Study

Zappos Customer Excellence Strategy

Delivering wow customer service	Designing enabling organization & tools	Selecting the right service metrics
1	2	3
▪ It can be defined as a service going beyond fulfilling basic expectations in a creative and unexpected way ▪ Employees attempt to distinguish the service experience for every customer each time they interact with them ▪ For so doing, they connect over the details of the order, a question or a difficulty, and create a special emotion by using the right words, transcending the transaction	▪ Zappos has set up a decentralized management model[1], called holacracy, to help staff remain focused on delivering wow customer services ▪ Personalization of services, requiring to know and understand what customers want and need, is supported by AI[2] ▪ Call center employees are trained for four weeks on how to make customers happy, by creating Personal Emotional Connections	▪ Customer-facing staff is expected to spend 80% of their time interacting with clients, whatever the number of clients ▪ Zappos measures the quality of contacts with a 100-point scale: – Did the agent try twice to make a PEC[3]? – Did he keep the rapport going after the customer responded to its attempt? – Did he address unstated needs? – Did he provide a "wow experience"?[4]

If Zappos sells average products at average prices, it delivers unique services, second to none

Sources: Forbes.com (09/2018) – CMO.com (05/2018) – Smart Pharma Consulting

[1] This model is of interest in situations requiring flexibility, adaptability, responsiveness and empowerment. Responsibilities are distributed throughout self-organizing teams – [2] Artificial Intelligence, especially to better predict the best size of shoes and clothes for customers – [3] Personal Emotional Connection – [4] Those having less than 50-point average at the end of the month, will receive extra training

The key lesson to learn from Amazon.com is their continuous experience improvement strategy with a special focus at making the customer life as easy as possible

1. Introduction

amazon

Case Study

Amazon Customer Excellence Strategy

Understanding customer needs	Anticipating customer needs	Simplifying the customer journey
1	2	3
▪ Amazon is a customer-centric company whose priority is to keep on improving its understanding of customers needs ▪ Due to its size, Amazon can capture a huge amount of data and uses it to deliver personalized offers and recommendations based on previous purchase history ▪ Amazon believes that the key dimensions defining customer experience are right sellers and products, price and convenience	▪ Amazon tends to listen to its customers and meet them where they are at, developing for instance: – The "Customers who bought this item also bought" functionality to anticipate clients needs – The "Being given as a gift" functionality to know who will be the end user, and thus propose more relevant personalized offers or recommendations	▪ The objective of Amazon is to turn a client into a lifetime customer by developing functionalities that ease its journey such as: – One Click, ensuring a fast and simple purchase without customers having to re-enter credit card and address details – Prime is a subscription service that gives access to free 1- or 2-day delivery[1] – Searching, adding to cart or returning items process have been made easy

Amazon was one of the first companies to invest in technology and infrastructure, and to leverage data collection to enhance the customer experience

Sources: Joe Coleman CRM Magazine (2018) – Smart Pharma Consulting

[1] The annual subscription which costed €49 in France and $119 in the USA in 2019, gives members access to a variety of additional perks such as: exclusive deals, streaming titles on Amazon Video, 2 million titles on Amazon Prime Music, etc.

Air France customer experience strategy is supported by an integrated CRM system enabling the delivery of excellent human interactions, along the customer journey

1. Introduction

AIRFRANCE

Case Study

Air France Customer Excellence Strategy

Understanding customer needs	Delivering personalized experiences	Simplifying the customer journey
1	2	3
▪ By better knowing its customers, Air France expects to better serve them ▪ Air France has invested in technology to concentrate all customers data on a common platform to ensure the staff has an accurate real-time view on: – Customers' history (incl. possible issues) – Servicing needs – Commercial opportunities	▪ Air France has developed, over the years, tools to propose personalized services to its customers, such as: – Algorithms to offer promotional fares to their next favorite destinations, according to the pages they have consulted on Air France website – iPad for its front-line staff to enhance its face-to-face service	▪ Air France aims at simplifying customers lives by developing tools such as: – Electronic bag tags and tracking devices as well as bag drops in order to facilitate customers travels – Geolocation and chatbots tools are also explored to let Air France be present where its clients are (e.g.,clients can receive their boarding cards on Facebook Messenger)

Air France uses technology and innovation to develop customer intimacy[1] to create superior customer experience

Sources: Future Travel Experience.com (2017) – L'Usine Digitale.com (2016) – Smart Pharma Consulting

[1] Consists in getting closer to customers to better know and understand their needs and wants to better fulfil or anticipate them

Offering outstanding Physician Experience is a strong driver to generate positive memories in highly competitive markets where products and services are most often undifferentiated

2. Why is Physician Experience so Important?

Physician Experience Objective – Part 1

- To grow, it is not anymore enough for pharma companies to:
  - Market effective, safe and convenient drugs
  - Deliver good quality associated services
- To modify the opinion and then the behavior of physicians in favor of their marketed drugs, pharma companies must go beyond product and service functionalities
- Thus, pharma companies must offer, along with drugs and services, consistent, intentional, differentiated and valuable experiences, that physicians will positively remember

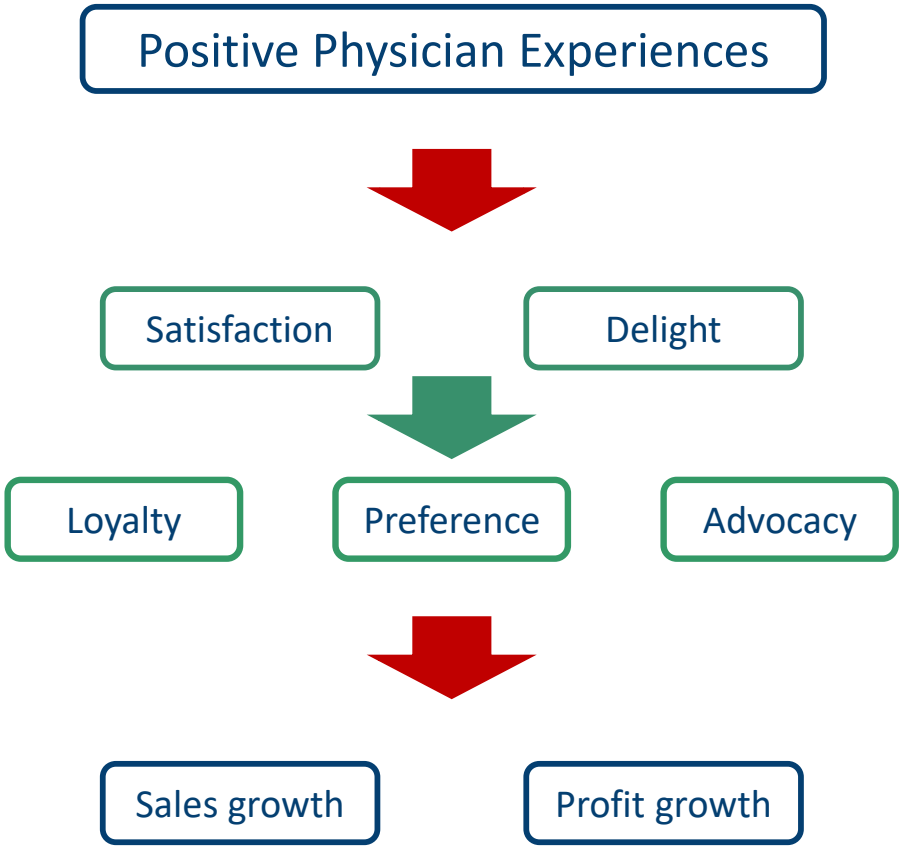
"It is no longer enough to satisfy your customers; you must delight them" – *Philip Kotler*

Sources: Smart Pharma Consulting

Providing positive experiences to physicians will increase their loyalty and preference for the brand, while turning them into advocates, which will drive sales and profit growths

2. Why is Physician Experience so Important?

Physician Experience Objective – Part 2



- Positive Physician Experience will lead to:
  - Satisfaction and positivity
  - Delight and happiness
- Physicians that are satisfied and delighted by experiences with a brand (drug), the associated services and/or the interactions with the company marketing that brand, will:
  - Be more loyal, increasing the retention rate
  - Show a stronger preference
  - Be inclined to recommend
- Thus, positive Physician Experience will drive:
  - Sales growth mainly through the impact on brand preference and advocacy
  - Profit growth mainly through higher retention

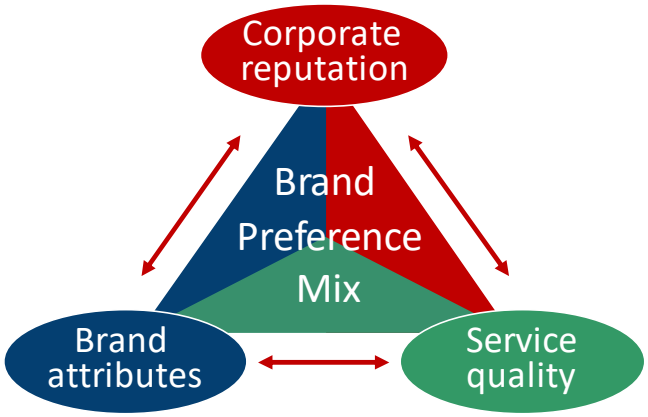
Sources: Smart Pharma Consulting

The features of the Brand Preference Mix components should offer meaningful benefits and delightful experiences to physicians to strengthen their preference

3. The Smart Physician Experience Model – Concept

Introduction

Brand Preference Mix → Value Drivers → Individual Physician Portrait



Features – Benefits Experiences

- The features of the three components of the Brand Preference Mix must be activated in a way…
- … that brings **superior benefits** and **experiences** to physicians than competitors do
- Pharma companies must **promote** these **benefits** and **offer experiences** to physicians to **convince** them to **prescribe** more and to **recommend** the **brand**

Physicians' **preference** is **driven by**:

- **Needs**: "I need a treatment for this disease that is effective and safe" [rational-based]
- **Wants**: "I want to prescribe this treatment because I feel more secure" [emotional-based]

But **limited by**:

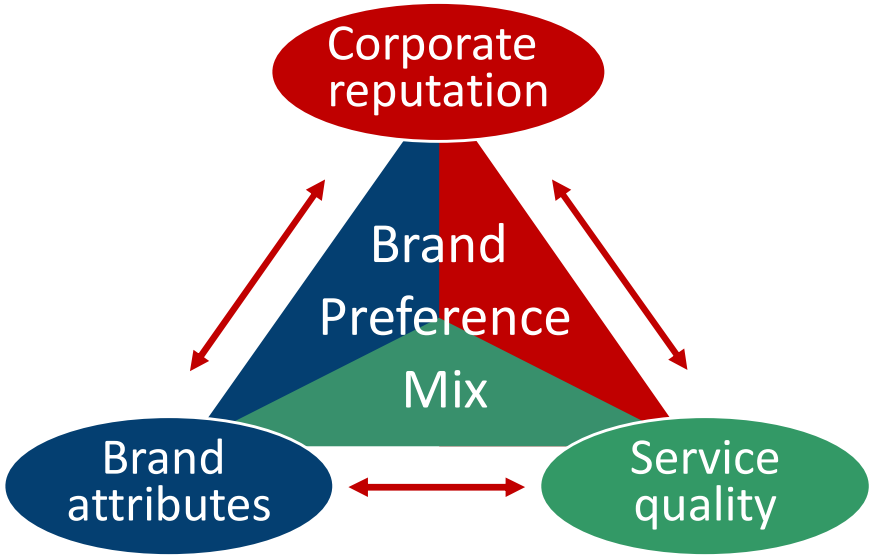
- **Fears**: "I am used to another treatment and do not wish to change my habits" [rational- and emotional-based]

Sources: Smart Pharma Consulting adapted from "Value Proposition Canvas" by Peter J. Thomson (2013)

The Brand Preference Mix determines the key drivers that can be activated to enhance prescriber preference and thus optimize market share

3. The Smart Physician Experience Model – Concept

The Brand Preference Mix



- One of the pharma companies biggest challenge is to increase physician preference for their brands (drugs) to gain prescription share with each of them
- To reinforce the preference of physicians, pharma companies must optimize their Brand Preference Mix:
  - The perceived value of their brand attributes
  - The perceived quality of the services they offer and deliver to physicians
  - Their corporate reputation
- The links between the three components of the Brand Preference Mix should be well-established in the mind of the prescribers

Sources: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

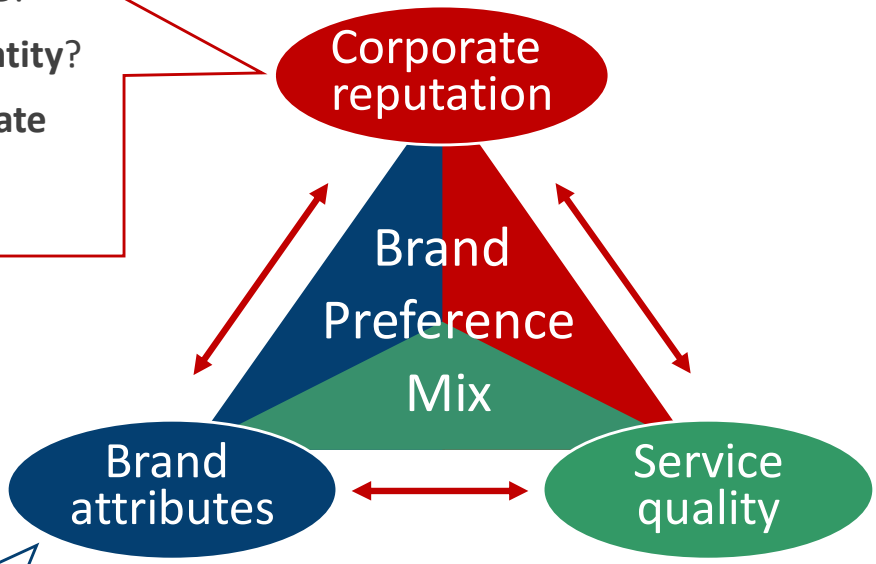
To activate the Brand Preference Mix components of their drugs, pharma companies should address the following key issues

3. The Smart Physician Experience Model – Approach

The Brand Preference Mix levers

- How to create a **superior image**?
- How to build an **appealing identity**?
- How to maintain a good **corporate reputation** that induces the preference of physicians?

- How to install a perception of drug **uniqueness**?
- How to generate "preference" of physicians by highlighting specific drug **attributes**?
- How to **leverage** corporate **reputation** and **service** offering?



- What **services** to offer to physicians which will lead to a **stronger corporate reputation** and/or **brand preference**?
- How to ensure a sustainable **excellence** in the **execution**[1] of these services?
- How to make sure the proposed services are associated with the right **pharma company** and the right **brand**?

Sources: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

[1] See the position paper "Excellence in Execution Applied to Pharma Companies " on Smart Pharma Consulting website

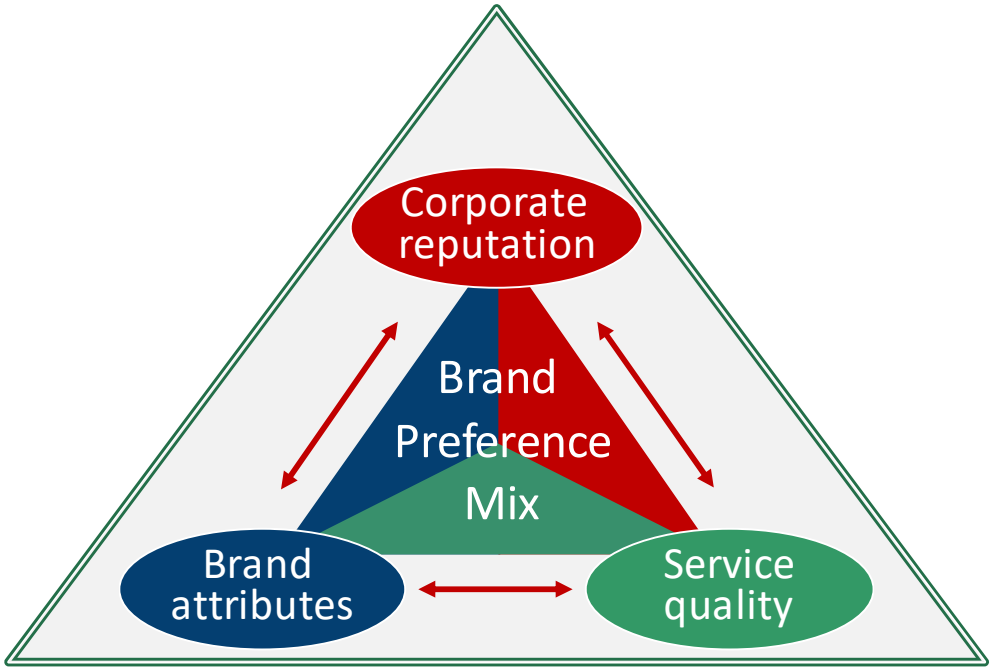
The Brand Preference Mix determines the key drivers that can be activated to enhance prescriber preference and thus optimize market share

3. The Smart Physician Experience Model – Concept

The Physician Experience Level

- To deliver an outstanding Physician Experience, Pharma companies must have a clear value proposition based on the three components of the Brand Preference Mix and an intimate understanding of individual physicians' "needs", "wants" and "fears"
- Physician Experience strategy should be holistic, considering the:
  - Cognitive (the fact to know, to be exposed)
  - Affective (the fact to appreciate, to prefer)
  - Conative (the fact to prescribe, to recommend)

  perspectives of the experience



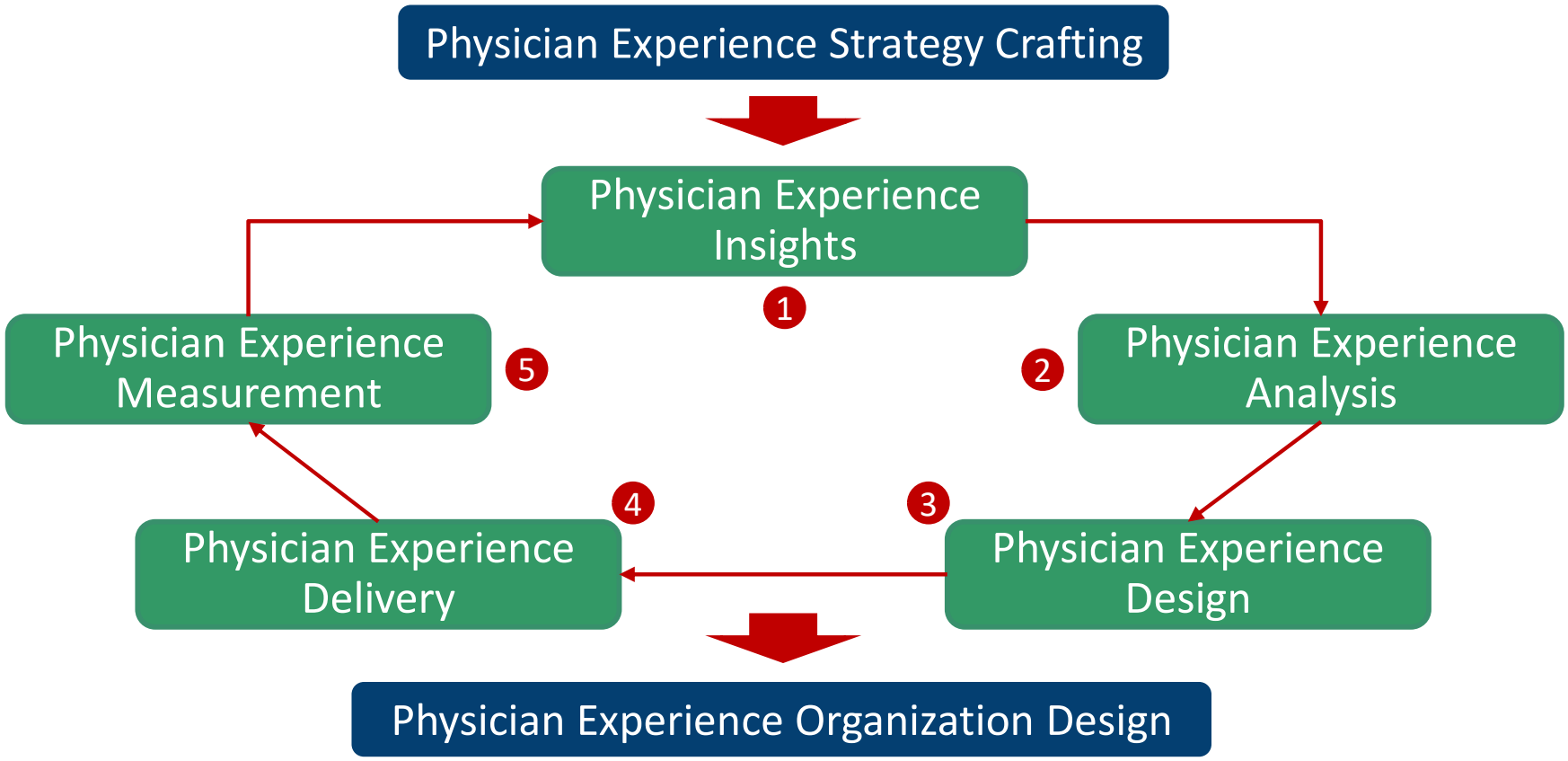
Physician Experience

Sources: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

The following 5-step approach will help pharma companies deliver a consistently outstanding experience to physicians whose expectations keep on rising

4. The Smart Physician Experience Model – Approach

Introduction



Sources: Smart Pharma Consulting

Physician Experience must move to the strategic agenda of pharma companies as patient-centricity did for most organizations

4. The Smart Physician Experience Model – Approach

Physician Experience Strategy Crafting

Step 1

- Experience strategy crafting should start by defining a clear vision, formalized, communicated and bought in by collaborators

Step 2

- Strategy and tactics should be based on co-creation, involving physicians and collaborators across the company

Step 3

- Experience strategy should be integrated into the brand strategy, considering the brand preference mix

- Physician Experience strategy crafting should consider the following key factors:
  - PERSONALIZATION: apply individual insights gathered at each touchpoint to create delighting interactions
  - CONVENIENCE: offer services that are convenient from the physicians' perspective
  - ACCESSIBILITY: ensure that physicians have an easy and quick access to pharma companies' collaborators to fulfill their needs (e.g., information, pharmacovigilance, issues to be addressed)

"Physician Experience Strategy needs to be aligned with the strategic square[1] of the company "

Sources: Smart Pharma Consulting, S. Lotz et al. McKinsey on Customer Care (2018)

[1] The Strategic Square corresponds to the Vision, Purpose, Mission and Values of the company or of the departments involved in Physician Experience initiatives. See the position paper "Excellence in Execution" published in June 2019, available on Smart Pharma Consulting website

One should understand why each physician is disappointed, satisfied or delighted by each moment of truth between him, the company, its marketed brands and offered services

4. The Smart Physician Experience Model – Approach

1 Physician Experience Insights (1/2)

Why to gather data?

- To hone their strategy, Pharma companies must engage with physicians to understand what are their expectations, motivations, frustrations, pain points[1]
- The ultimate objective is to maintain a continuous updating of data
- The value of these data depends on the insights (knowledge and understanding) they will bring
- Specific data, from every physician touchpoint, should be captured to understand which interactions increase engagement and which hurt it; and why
- Then, Pharma companies will define the actions to be carried out to drive a positive change in physician opinion and behavior

What data to gather? – Small data

- Highly specific and individualized data – small data – are the starting point to improve Physician Experience
- They enable to choose a specific initiative to be implemented for a specific physician

What data to gather? – Big data

- Big data have more to do with strategic decisions and can be useful to define strategic directions
- At tactical level, when small data are missing, big data can be used to feed algorithms to predict Physician Experience issues or the type of solutions to propose

"Physicians' expectations are also set by their experience in other sectors which are far ahead[2]"

Sources: Smart Pharma Consulting

[1] Pain points are specific problems that physicians experience – [2] Such as banking, retails, etc.

The challenge is to transform data into an enhanced Physician Experience by investing in understanding what drives physicians' opinion, emotion and behavior

4. The Smart Physician Experience Model – Approach

1 Physician Experience Insights (2/2)

How to gather data?

- Amongst the broad range of data to be collected to develop insights, the following ones are important:
  - Medical specialties
  - Fields of interest
  - Opinion and emotion on various subjects
  - Behaviors re. diagnosis, prescriptions, patients follow up, etc.
  - Unmet needs
  - Specific wants
  - Major fears
  - Key habits
  - Interaction histories
  - Etc.

- To devise the actions to be carried out to enhance individual Physician Experience, data should be continuously updated
- Multiple sources of information can be used to keep an updated and precise portrait of physicians
- In-fields collaborators (e.g., MSLs, med reps, area managers, etc.) are the best positioned to do so
- Harvesting feedbacks from C-suite to physician-facing employees; and analyzing this information can help create superior experiences for physicians

"The emotional component of experiences is essential when products and services are undifferentiated"

Sources: Smart Pharma Consulting

Personas or individual ID cards are commonly used to help design an optimal experience model to meet/exceed individual expectations and thus achieve a sustainable competitive advantage

4. The Smart Physician Experience Model – Approach

2 Physician Experience Analysis (1/10)

Personas & Physician ID Cards

- The Physician Experience should be analyzed from the outside in
- For so doing, it is possible to create personas which represent models (archetypes) of physicians, including their characteristics and their emotional needs
- However, individual portraits (ID cards) of physicians, based on real data, would be preferable to personas, because they enable to determine, for each physician:
  - Who are they?
  - What are their opinions, emotions, behaviors?
  - What is their historical experience with the company, its products and services?
  - What do they want, need, fear?
  - Etc.

Physician ID Cards *Illustrative*

- Name:----------
- Medical degree:----------
- Workplace:----------
- Medical position :----------

Expertise / Field of Interest	Awareness
Key priorities	Key challenges
Opinion / Emotion / Behavioral re. company, its products and services	Expectations from company, its products and services
Preferred communication channels	

Sources: Smart Pharma Consulting

Physician journey mapping will complete personas or individual ID cards to evaluate physician practical and emotional degree of satisfaction at each touchpoint

4. The Smart Physician Experience Model – Approach

2 Physician Experience Analysis (2/10)

Physician journey mapping – Introduction

- The experience of individual physicians is so complex that its analysis requires its deconstruction into journeys which are visualized in a flow of interactions, called “touchpoints”
- Physicians journey mapping enables to understand:
  - What are their touchpoints?
  - How do they interact with the company, its brands and associated services at these touchpoints?
  - The emotional connection they feel at each interaction across all touchpoints,

  so that to explore how to eliminate current “pain points” and reinforce “delight points” to create an emotional attachment to the brands
- Thus, it is possible to find solutions, and enable an end-to-end redesign of the physician journey
- The audit of current practices and capabilities, as well as a mapping of existing Physician Experience, will raise important questions, such as:
  - Where are the current pain and delight points?
  - Is there a clear understanding of how physicians feel about existing processes?
  - What ideas do in-field collaborators have to enhance experience of physicians?
  - What key learnings can be applied?
  - Which channels do physicians prefer?

Sources: Smart Pharma Consulting

In practice, the most important journeys should be selected, and their respective pain points addressed, physician by physician, through a cross-functional contribution of collaborators

4. The Smart Physician Experience Model – Approach

2 Physician Experience Analysis (3/10)

Physician journey mapping – In practice (1/2)

- The 1st step will consist in identifying the most important[1] journeys and the associated pain points through a dual approach:
  - Top-down, judgement-driven evaluations
  - Bottom-up, data-driven analyses
- During the 2nd step, the selected journeys will be examined in detail to pinpoint the touchpoints between the physician, the brand, the company which markets it and the services it proposes
- A 3rd step will evaluate the positive or negative perceptions of the physician at each touchpoint and their root causes; and the likely impact on its behavior, knowing that certain poor experiences do not necessarily lead to a negative behavioral change
- Ideally, the physician journey mapping should be carried out, physician by physician, so that to obtain a precise diagnosis of the situation from which a redesign of physician interactions will start
- The production of a robust physician journey mapping requires:
  - The contribution of different departments of the company (i.e., physician-facing collaborators as well as collaborators from support functions having a direct or indirect impact on physician experience)
  - The input of physicians (through interviews, focus groups, etc.) to make sure all key touchpoints have been selected, the internal performance assessment and their related causes are valid

Sources: Smart Pharma Consulting, "The Truth about Customer Experience" by A. Rawson et al., HBR (2013)

[1] The most important journeys are those having the greatest impact on physician positive or negative opinion and behavior vis-à-vis the brand. They can vary according to the physician, the country, etc.

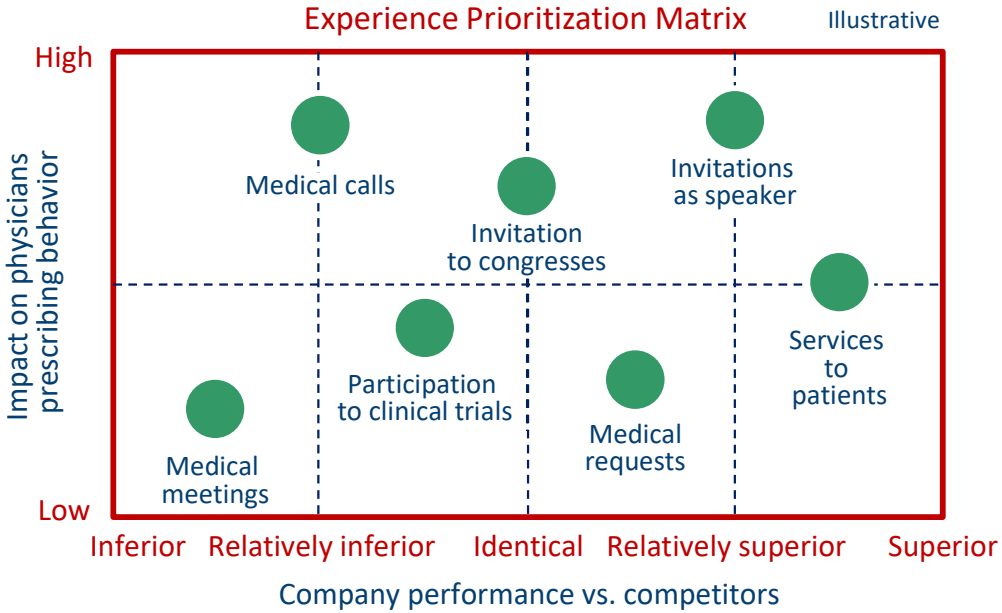
The redesign of journeys should have an important impact on the physician's prescription and offer opportunities for significant improvements

4. The Smart Physician Experience Model – Approach

2 Physician Experience Analysis (4/10)

Physician journey mapping – In practice (2/2)

- The following matrix can be used to select the journeys that should be redesigned – in priority – to improve physicians' experience



- The two recommended criteria to be considered are:
  - The journeys having most impact on physician's prescription, beyond the attributes of the product
  - The performance of the pharma company
- The performance should be evaluated in comparison with competitors, because the objective is to offer physicians a greater experience than competitors do
- The feasibility (organizational, technical, financial, legal, etc.) should also be considered for prioritization
- The matrix can be used by physician or groups of physicians, knowing that results can vary significantly by individual, by therapeutic area, by country, etc.
- In this illustrative case, "medical calls" and "invitations to congresses" are priorities for redesigning

Sources: Smart Pharma Consulting

Medical call experiences are generally considered by physicians as having a limited value, which explains their dissatisfaction and their reluctance to meet medical reps

4. The Smart Physician Experience Model – Approach

2 Physician Experience Analysis (5/10)

Physician journey mapping – Medical call experience (1/2)

Current situation

- Access of medical reps to physicians is declining and calling time reducing
- Physicians do not want to waste time for medical calls (51% say they already know the information shown)[1]
- Digital alternatives (i.e., e-mails, text messages, phone calls, webinars) are in general ignored by physicians
- Physicians are ready to give medical reps some time, provided the interaction during the medical call is:
  - Interesting
  - Useful
  - Well-executed
- Physicians want to have a good time

Objective of the journey mapping

- If face-to-face contacts with physicians are expensive[2] they are also the most effective promotional means to influence the physician's prescription
- In this context, physician medical call experiences should be analyzed to identify the pain points and find solutions to maintain a regular access with them
- These solutions should ensure that during medical calls, physicians:
  - Receive relevant, trustworthy and up-to-date information
  - Are offered useful services (for them or their patients)
  - Have enjoyable interactions

Sources: Smart Pharma Consulting

[1] Based on a survey of 1,814 US practicing physicians across 25 specialties, carried out in 2017 by Decision Resources Group - [2] Estimated cost per contact: from €130 to €200 in western countries

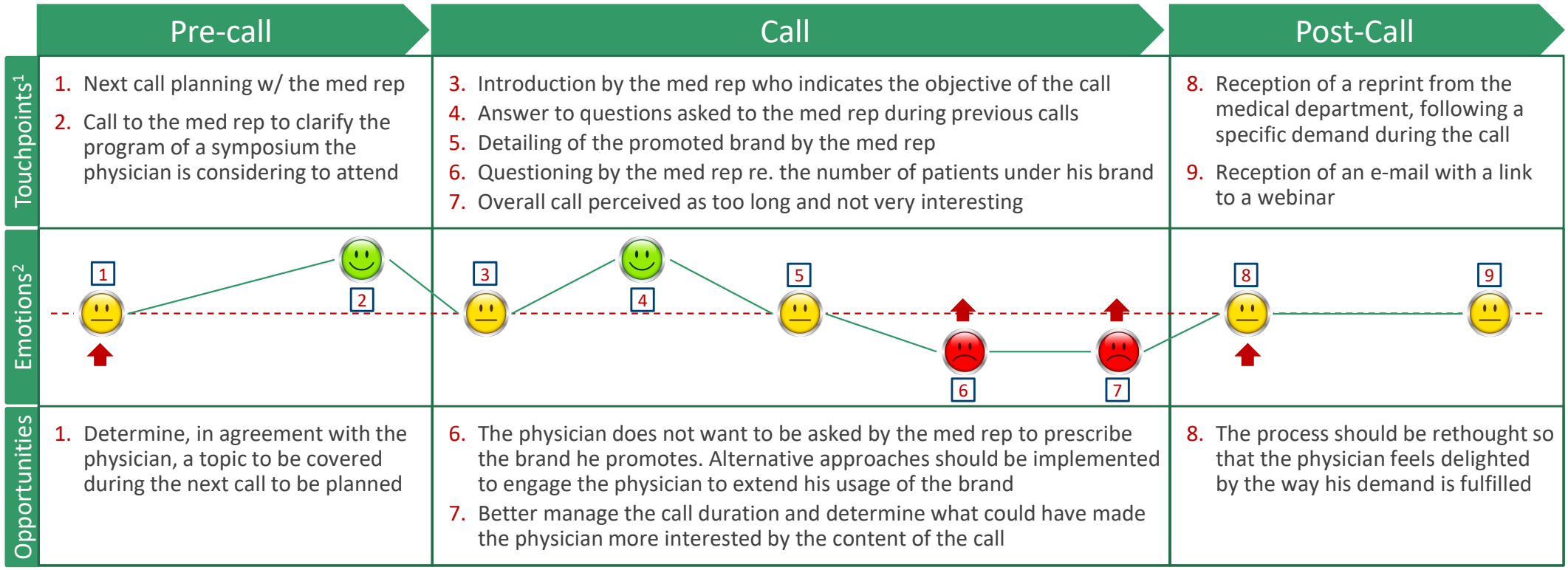
This journey map depicts the medical call made to a physician to identify the pain points and neutral points that represent opportunities of transformation into delight points

4. The Smart Physician Experience Model – Approach

2 Physician Experience Analysis (6/10)

Simplified illustration

Physician journey mapping – Medical call experience (2/2)



Sources: Smart Pharma Consulting

[1] Interactions of the physician – [2] What does the physician feel and think?

Invitations to congresses are generally viewed by invited physicians as a commodity and therefore, they do not represent a preference driver for the brands, despite the high cost

4. The Smart Physician Experience Model – Approach

2 Physician Experience Analysis (7/10)

Physician journey mapping – Invitation to congress experience (1/2)

Current situation

- The great majority of physicians is interested to attend medical congresses to remain informed about the latest medical progresses and to meet their peers
- For key opinion leaders (KOLs), congresses are an opportunity to present the outputs of their researches
- Their registration, transportation and accommodation costs are in general subsidized by pharma companies
- Most physicians are satisfied to have been invited, but rarely delighted
- They consider this "service" as a commodity; having no preference regarding the company inviting them, and it is not rare that, after a few months, they do not remember by whom they have been invited

Objective of the journey mapping

- Invitations of physicians to congresses represent a significant cost[1] for pharma companies
- Pharma companies inviting physicians to congresses should analyze the overall invitation journey to identify the ways to offer them a positive experience that will be memorable over time
- Physicians want not only a service of quality but also a peace of mind
- The analysis of key touchpoints should enable to identify where to make improvements so that the overall invitation to congress experience is considered as unique and become a source of positive differentiation vs. competitors

Sources: Smart Pharma Consulting

[1] Invitations of physicians practicing in Europe to national, European and American congresses cost per physician in the range of € 1,500, € 2,500 and € 7,000 respectively

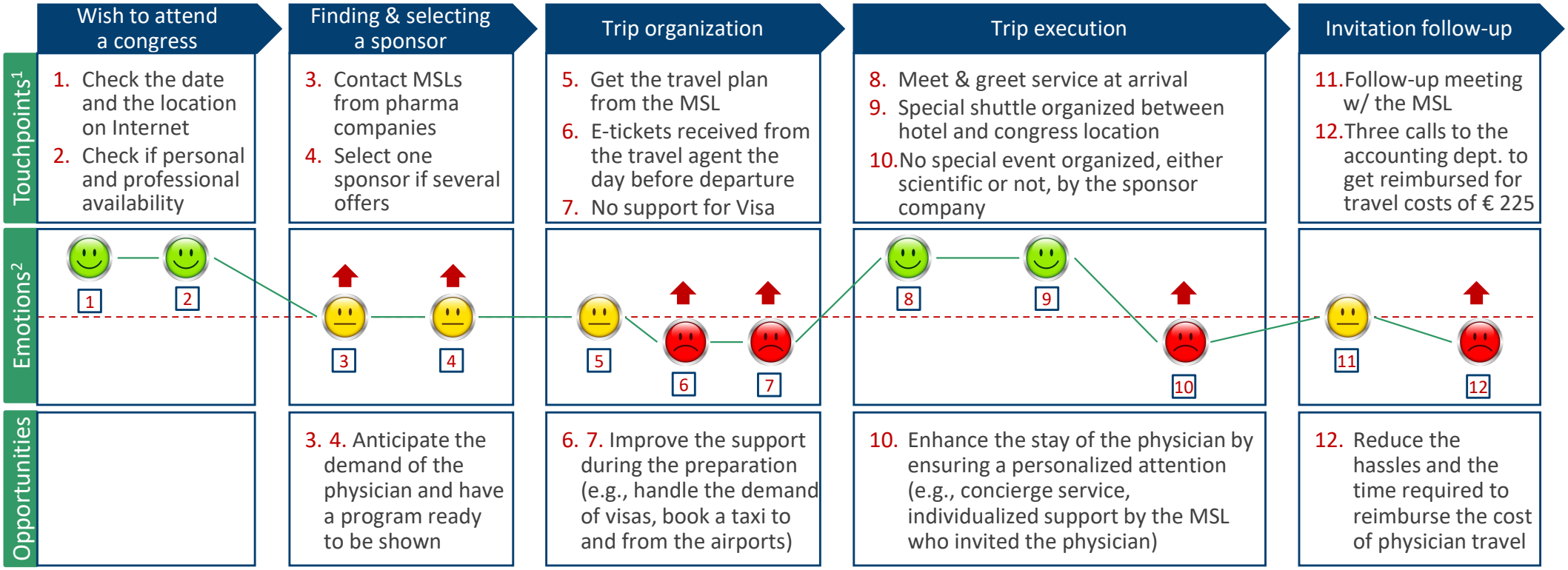
This example of a journey map relative to the invitation of a physician to a congress highlights the key touchpoints that should be redesigned to offer him a unique experience

4. The Smart Physician Experience Model – Approach

2 Physician Experience Analysis (8/10)

Simplified illustration

Physician journey mapping – Invitation to congress experience (2/2)



Sources: Smart Pharma Consulting

[1] Interactions of the physician – [2] What does the physician feel and think?

There is no regular interactions between physicians and pharma companies before, during and after the prescription of their brands to a given patient

4. The Smart Physician Experience Model – Approach

2 Physician Experience Analysis (9/10)

Physician journey mapping – Brand experience (1/2)

Current situation

- Physicians looking for information about a brand prefer company-sponsored websites and to a lesser extend face-to-face meetings with medical reps or MSLs
- However, they often complain about the difficulty to have access to the right medical information…
- … and about the information they consider as:
  - Incomplete
  - Irrelevant
  - Skewed
- Physicians are not in a regular contact with pharma companies before, during and after they have prescribed their brand

Objective of the journey mapping

- Determine the information physicians need to get to feel comfortable prescribing the marketed brand
- Facilitate access of physicians to reliable and well-structured information about the brand attributes and its prescribing conditions (i.e., indications, patient profile, contra-indications, side effects, dosage and treatment duration)
- Encourage physicians to share with medical departments of pharma companies the experience of patients treated by the brand
- Thus, the company marketing the brand will be able to send information and/or give advice to physicians to enhance their patient experience under the brand

Sources: Smart Pharma Consulting – Tim van Tongeren et al. from DT Associates (April 2019) – Matthias Evers et al. from McKinsey (2018)

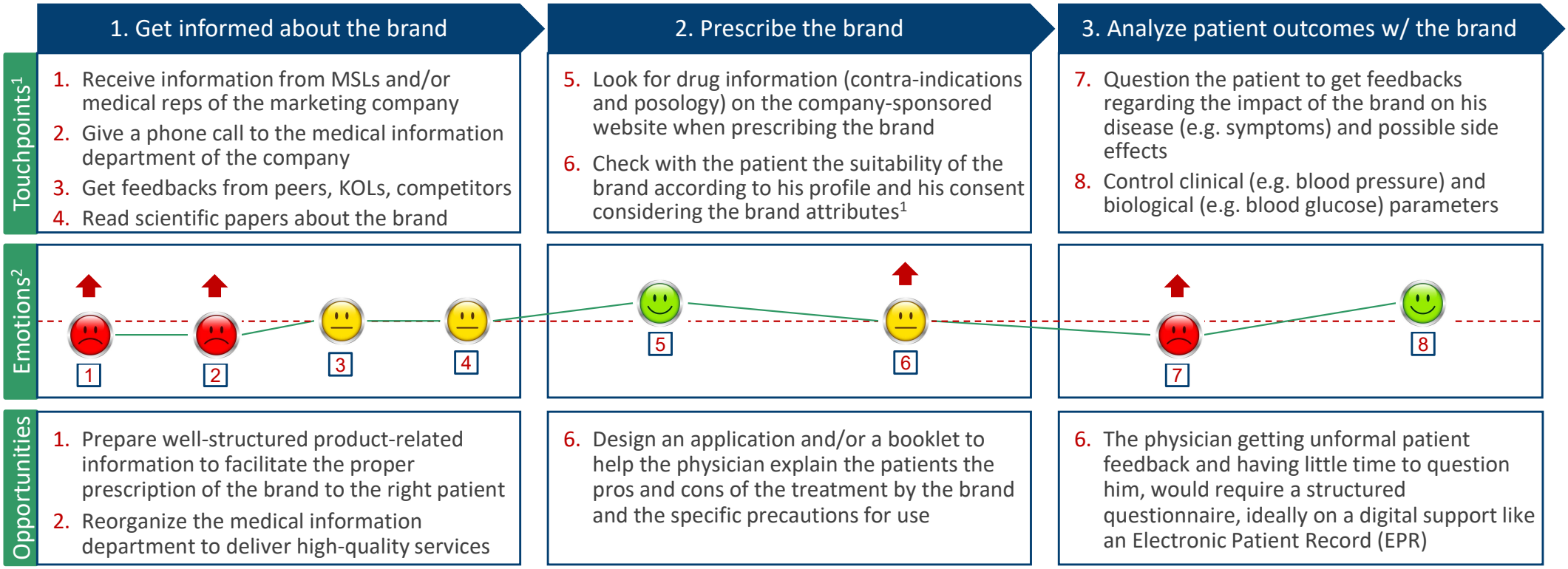
The journey map of a Physician Experience relative to the prescription of a brand may help discover touchpoints for which improvements could be proposed

4. The Smart Physician Experience Model – Approach

2 Physician Experience Analysis (10/10)

Simplified illustration

Physician journey mapping – Brand experience (2/2)



Sources: Smart Pharma Consulting

[1] Such as the most serious and common side effects, the mode of administration (injectable), the frequency of administration

The way services are delivered is more important than the service itself, knowing that emotions shape the attitudes which drive decisions

4. The Smart Physician Experience Model – Approach

3 Physician Experience Design (1/2)

Physician Experience design to leave an enjoyable footprint

- The design of Physician Experience refers to the creation of a sequence of touchpoints which are concrete and controllable elements that can be identified, crafted and integrated
- While designing or redesigning a Physician Experience journey, pharma companies should aim to deliver at each touchpoint:
  - Better interactions
  - Integrated and coherent experiences
- The level of customization and the breath of offering should be defined and adjusted by individual physician
- A Physician Experience plan should be elaborated and integrated to each brand plan, ensuring it supports the brand, efficiently
- The challenge is to create an emotional connection with physicians at touchpoints by:
  - Addressing pain points
  - Creating good content that will meet their needs and lead to positive feelings about the brand
  - Empowering physician-facing collaborators

Zappos story

A customer was late on returning a pair of shoes due to her mother passing away. When Zappos found out what happened, it took care of the return shipping and had a courier pick up the shoes without cost. The next day, the customer received at home a bouquet of flowers with a note from the Zappos customer service team who sent their condolences

Sources: Smart Pharma Consulting

The initiatives designed to enhance the experience of individual physician should remove hassles and offer delightful interactions

4. The Smart Physician Experience Model – Approach

3 Physician Experience Design (2/2)

Physician Experience Card

- The Physician Experience Card formalizes a specific action plan, for each individual physician, to enhance his experience with the company, its products and services
- To do so, the key learnings from individual Physician[1] and from the mapping of his journeys will be used
- To select the touchpoints of the journeys that should be redesigned, it is important to categorize each of them:
  - The "musts" are essential to meet physician basic expectations
  - The "pluses" lead to physician preference because there are particularly useful and well executed
  - The "minuses" lead to physician negative feelings and possibly behavior due to poor experience
- It is recommended to focus on touchpoints having the most important impact on the physician experience and that are the easiest to enhance

Physician Experience Card *Illustrative*

- Name:----------
- Medical degree:----------
- Workplace:----------
- Medical position :----------

Physician journey mapping – Medical call experience[2]

Pre-call → Call → Post-Call

1. Define for each medical call a preset agenda likely to interest to physician and thus offering him a better experience
6. Train the med rep to probe the physician about his practice and to engage him in a more subtle manner to avoid to annoy him

Physician journey mapping – Invitation to Congress Experience[3]

Wish to attend a congress → Finding & selecting a sponsor → Trip organization → Trip execution → Invitation follow-up

6. 7. Agree with a travel agent to deliver "VIP-like" personalized services, while complying with regulations and internal rules
10. Propose the physician to participate to a unique event (e.g., meeting with the top international KOL) during the congress
12. The MSL will inform the physician that it takes, on average, two months to get his travel expenses reimbursed, but that he does not have to worry and that will do the follow up himself

Sources: Smart Pharma Consulting

[1] As gathered in the Physician ID Card – [2] See illustration p.24 – [3] See illustration p.26

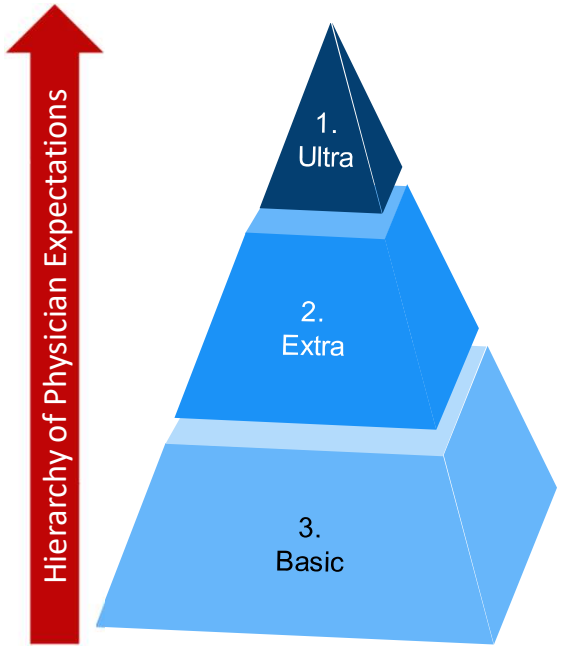
Physician Experience delivery must attempt to create delight by adding positive and memorable emotions at each touchpoint to strengthen physician preference

4. The Smart Physician Experience Model – Approach

4 Physician Experience Delivery (1/2)

Excellence in execution (1/2)

- Outstanding Physician Experience requires to define the best way to manage each touchpoint with the company, its brands and services to exceed physician expectations, and even to delight him



1. Ultra Expectations

- Are not consciously expected but when fulfilled they can create a "wow effect" and thus have a strong and memorable positive effect on physicians

2. Extra Expectations

- Correspond to the extra miles carried out in terms of Physician Experience which may help differentiate positively from competitors

3. Basic Expectations

- Fulfil basic expectations at touchpoints, but may be insufficient to create a competitive advantage, if competitors do the same

Sources: Smart Pharma Consulting

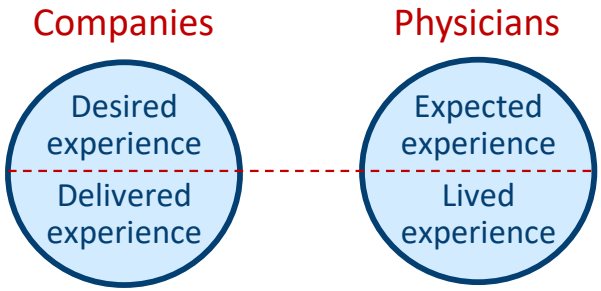
Delivering outstanding experience requires to meet or exceed physician expectation, the promised value proposition and a particularly positive emotion

4. The Smart Physician Experience Model – Approach

4 Physician Experience Delivery (2/2)

Excellence in execution (2/2)

- To deliver excellent Physician Experience, pharma companies must develop an intimate understanding of physician journeys and mindsets; and craft accordingly an adjusted value proposition
- The challenge is to deliver consistently a great experience, as Apple or Virgin companies do
- In a study carried out by Bain & Company, 80% of companies think they deliver a customer experience while 8% of customers feel they live a customer experience[1]



- The experience designed and delivered by pharma companies should be as close as possible to the experience expected and lived by each physician
- To guarantee the excellence in the experience delivery[2], pharma companies should comply with the following key principles:
  - Offering unmatched Physician Experience should be a core value and …
  - Integrated in the brand strategy and its corresponding tactics
  - The entire organization should be designed to ensure an optimal delivery of Physician Experience
  - All employees should be engaged and passionate to deliver superior Physician Experience

Sources: Smart Pharma Consulting

[1] "What it takes to win with customer experience" by T. Springer, Bain & Company (2011) –
[2] See our position paper "Excellence in Execution" published in 2019 and available on our website

Measuring Physician Experience is essential to evaluate the pharma company, its brands and related services; and fill potential gaps

4. The Smart Physician Experience Model – Approach

5 Physician Experience Measurement (1/4)

Key points

- Measuring Physician Experience is essential to evaluate the pharma company, its brands and related services proposed, compared to competitors
- Physicians' feedback should be captured in real time, or at least soon after the moment of truth
- These information being evolutive, it is essential to organize permanent data gathering…
- … and to regularly control their quality (reliability and specificity)
- Surveys and focus groups can be carried out, but will give a surface view of the opinion, emotion and behavior of physicians
- To uncover deeper insights, ethnographic[1] methods will be more appropriate to identify the pain points of the key physician journeys that should be addressed
- One should focus on measuring data that will give insights on Physician Experience with metrics such as:
  - The Brand Preference Mix Index (BPMI)
  - The Net Promoter Score (NPS)
  - The Customer Satisfaction Score (CSAT)
  - The Customer Effort Score (CES)
- These different metrics can be combined to measure the quality of execution of the different interactions / experiences between the physician and the company

"If you cannot measure it, you cannot improve it"

Sources: Smart Pharma Consulting

[1] *Ethnographic market researches such as on-site study, help understand cultural trends, lifestyle factors, attitudes and social context which influence brand selection and usage*

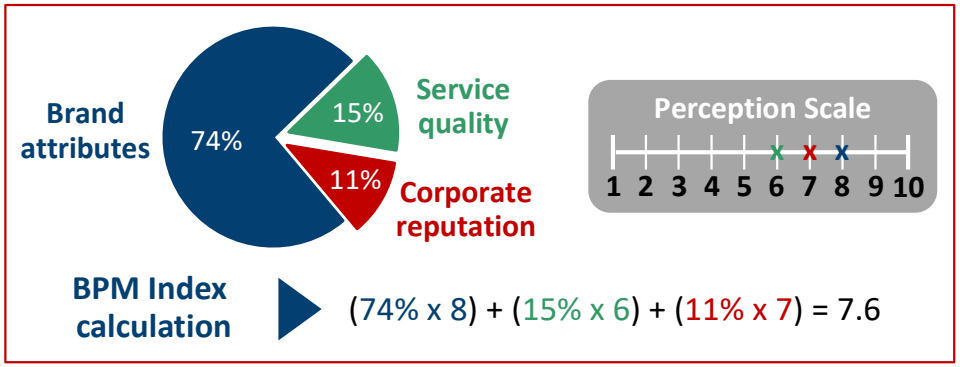
The Brand Preference Mix Index makes it possible to measure the evolution of individual Physician Experience compared to competitors at a given point of time and overtime

4. The Smart Physician Experience Model – Approach

5 Physician Experience Measurement (2/4)

Brand Preference Mix Index (BPMI)

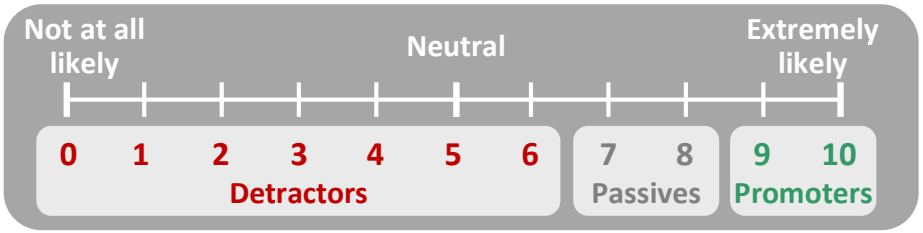
- The BPMI measures, physician by physician:
  - The importance of the 3 components of the BPM
  - His perception of each of them on a 10-point scale



- The BPMI enables to determine:
  - The root-causes underlying the commitment of physicians for a brand
  - Actions to strengthen his attachment to the brand

Net Promoter Score (NPS)

- The NPS measures the degree to which physicians will recommend a brand, a service or a company to another healthcare professional
- The NPS can be used to evaluate a touchpoint at a given moment or the overall physician experience
- The NPS is the % of promoters minus the % of detractors



- By asking customers why they would be likely or not to make a recommendation, it is possible to identify solutions to convert detractors into promoters

Sources: Smart Pharma Consulting – "The One Number You Need to Grow", F. F. Reichheld, HBR, December 2003

The main advantage of the CSAT is to be easy-to-implement and of the CES is to be predictive of the customer loyalty behavior

4. The Smart Physician Experience Model – Approach

5 Physician Experience Measurement (3/4)

Customer Satisfaction Score (CSAT)

- The Customer Satisfaction Score measures how satisfied a physician is with a recent interaction on a rating scale
- This experience metric is used to measure directly the physician satisfaction level by asking him how was his experience on a 5-, 7- or 10-point scale

- CSAT surveys can be carried out to evaluate the perception of a physician regarding a global experience (e.g., attendance to a congress) or a specific touchpoint (e.g., invitation proposed by the MSL)

Customer Effort Score (CES)

- The Customer Effort Score (CES) measures the ease of interactions with a product, a service, a company
- It helps uncover and address concrete pain points
- The CES has shown to outperform CSAT and NPS in predicting loyalty behavior
- The CES is measured by asking questions like:

  "How easy was it to handle your request?"

- It can be scored on a 5-, 7- or 10-point scale, using:

Emojis

Likert's scale

Numbers

Sources: Smart Pharma Consulting – https://www.retently.com/blog/customer-satisfaction-metrics/ – "Stop Trying to Delight your Customers" by Mattew Dixon et al., HBR (2010)

The BPMI, specifically designed to measure physician opinion, is the most complete indicator but it could be advantageously complemented by the NPS

4. The Smart Physician Experience Model – Approach

5 Physician Experience Measurement (4/4)

	BPMI (Brand Preference Mix Index)	*NPS* (Net Promoter Score)	*CSAT* (Customer Satisfaction Score)	*CES* (Customer Effort Score)
Pros	▪ It measures overall and specific experiences… ▪ … including rationale and suggestions of improvement ▪ It enables comparisons vs. competitors	▪ The NPS focuses on overall experiences ▪ It is a long-term satisfaction metric ▪ It measures how many physicians are likely to advocate the brand	▪ The CSAT is adaptable[2] to the context of the survey ▪ It is easy to implement ▪ CSAT results can be compared to competitors ones	▪ The CES focuses on specific interactions ▪ It gives actionable data to reduce the efforts ▪ The "effort" is a strong predictor of future physician behavior
Cons	▪ BPMI being a holistic metric (incl. brands, companies, services), it may be perceived as complex to implement ▪ Not yet broadly known and used, unlike NPS, CSAT and CES	▪ Promoters, detractors and passives segments are theoretical[1] ▪ The single question asked does not enable to define the actions to be taken to correct or reinforce the situation	▪ It reflects short-term physician sentiment ▪ "Satisfaction" is a very subjective and evolving feeling ▪ Satisfaction does not correlate with loyalty	▪ CES does not give the reasons why efforts are either high or low ▪ It misses information about overall physician satisfaction re. the brand, the company and the services

Sources: Smart Pharma Consulting

[1] They do not necessarily reflect the really of the customers behavior. One customer can evaluate a brand with a "8" and talk positively about a product and another one with a "10" may not talk about the brand, either positively or negatively – [2] Type and number of questions, indicators like scales, stars or emojis

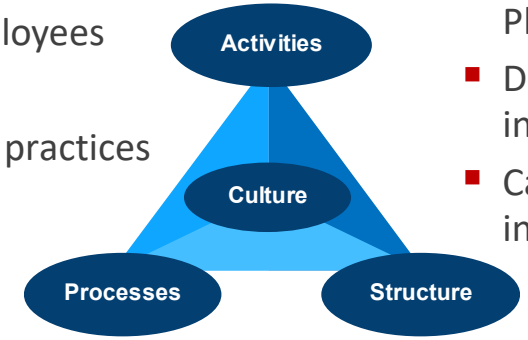
The organization should be designed based on an "outside-in" view of Physician Experience to ensure a consistency in the quality of interactions along the key journeys

4. The Smart Physician Experience Model – Approach

Physician Experience Organization Design

Culture

- Nurture a culture of superior Physician Experience
- Develop a powerful vision to connect[1] employees
- Install a participative culture[2]
- Encourage creativity, experiment and best practices sharing to enhance Physician Experience



Activities

- Focus on activities that best support the Physician Experience strategy
- Develop the hard and soft skills of collaborators involved in delivering high quality experiences
- Carefully plan and monitor the execution of key interactions with Physicians

Processes

- Put in place a continuous and cross-department feedback system to capture physician emotions at touchpoints during their key journeys
- Physician journeys being cross-functional, all functions need to work together[3] to collect insights and redesign enhanced interactions to delight physicians
- Design simple and easy processes for physicians to benefit from services offered by the company

Structure

- Design an agile structure that can be adjusted to better fulfil or exceed physician expectations
- Set up flat and lean organizational chart, around physicians, to favor reactivity and pro-activity
- Having a shared platform with qualitative and quantitative insights, regarding physicians' opinion, behavior and emotion is a must to deliver unique –second to none - experience

Sources: Smart Pharma Consulting

[1] Set clear performance expectations, hold them accountable, give them regular feedbacks, reward their performance, share outcomes, etc. – [2] Solicit ideas and inputs, listen to people, select and implement their most appropriate suggestions to improve Physician Experiences – [3] Medical affairs, marketing, sales, market access, digital, compliance, etc.

A superior value-added experience leads to physicians' preference over competitors offer but requires to recruit talented and passionate people to offer moments of exception

5. Conclusion

Key Success Factors to Deliver Awesome Physician Experience

Vision & Ambition

Vision and ambition regarding Physician Experience should be set by the CEO and shared with all collaborators

Strategy

- The strategy should be crafted to consistently meet or even exceed physicians' expectations across their journeys
- Greater Physician Experience creates stronger engagement, positive opinion and thus enhance brand preference
- To get preferred by physicians, compelling stories and experiences must be delivered with strong contents through conventional and digital channels, in a coordinated manner

Tactics

- Mapping journeys helps select the most important ones, i.e., those influencing the most physician's prescription
- Journey maps are essential to develop actions based on individual physician emotion, opinion and behavior
- Physician Experience is not limited to one-to-one interactions with in-field collaborators, it includes also office-based collaborators, and digital interactions

Organization

- Physician Experience is a holistic approach requiring the engagement of everyone from the company
- An integrated approach should be designed to ensure the congruence in the messages conveyed and the consistency in the quality of interactions, while making access to proposed services as easy as possible for physicians
- A continuous system should capture Physician Experiences and collaborators be empowered to improve these experiences

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Engaging HCPs in Post-Covid-19 Era

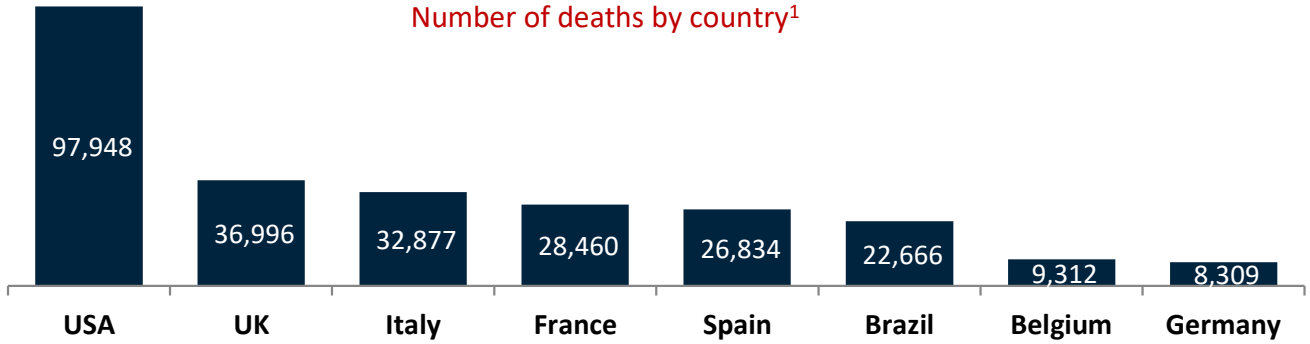
Priorities for Pharma Affiliates

POSITION PAPER May 2020

The Covid-19 crisis is likely to leave permanent after-effects that Pharma Affiliates should seize to rethink their business priorities

Introduction

- The Coronavirus disease 2019 (Covid-19) has spread in 227 countries and led to 344,503 deaths[1], of which 76% are concentrated in 8 countries
- Half of the global population has been asked or ordered to stay at home by their government, with varying stringencies, to slow the spread of the outbreak



- However, considering that most countries are starting to lift, step by step, lockdown restrictions, at this stage of the pandemic, Pharma Affiliates should:
  - Imagine how the Post-Covid-19 Era is going to change HCPs behavior
  - Anticipate the impact of these changes on engaging HCPs
  - Adapt the strategy, tactics and/or organization to these HCP behavioral changes

"The Covid-19 may offer a real opportunity for Pharma Affiliates to rethink their commercial operations"

Sources: Smart Pharma Consulting after Johns Hopkins University data

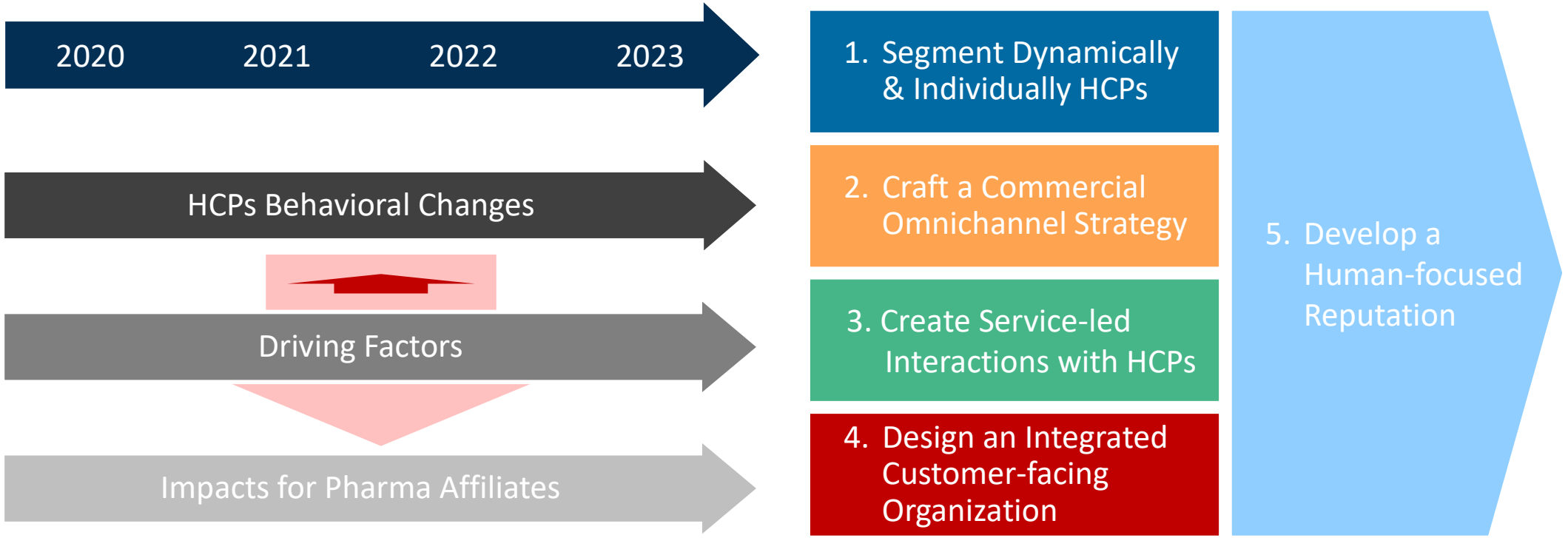
[1] *As of May 25, 2020*

To optimize HCPs engagement in the Post-Covid-19 Era, Smart Pharma Consulting proposes a method and selected tools, while pre-defining five essential business priorities

Introduction

– Part 1 –
HCPs Behavioral Changes & Impacts

– Part 2 –
Pre-defined Priorities



Sources: Smart Pharma Consulting

At this stage of the crisis, it is impossible to figure out to which extent HCPs behavior with Pharma Affiliates is going to change, but it is the right time to start investigating

Part 1 – HCPs Behavioral Changes & Implications

Issues to be addressed

- Regarding HCPs behavioral changes induced by the Covid-19 outbreak and relevant to Pharma Affiliates, the following key issues should be addressed:

What are the most likely changes?

What will be the magnitude of these changes?

Will these changes be temporary or enduring?

→ What are the driving factors explaining these changes?

→ How these changes will impact Pharma Affiliates?

(Strategically – Tactically Organizationally)

How to answer these questions?

Sources: Smart Pharma Consulting

The most relevant method to prefigure the Post-Covid-19 behavior of HCPs is to collect data from each individual HCP, by in-field collaborators of Pharma Affiliates

Part 1 – HCPs Behavioral Changes & Implications

HCPs Behavioral Changes → Key Individual Data Collection ← Driving Factors

Changes in HCP Medical Practice

- Will the HCP change his practice regarding:
  - Disease diagnosis?
  - Treatment strategy (initiations, renewals, switches)?
  - Patient care (hospital day-care vs. home-care)?
  - Disease monitoring?
  - Follow up of patient adherence to treatment?
- How will the use of telemedicine evolve vs. the Pre-Covid-19 Era?
- Will the institution (e.g., hospitals, healthcare centers) in which the HCP practices limit or forbid the visits by med reps, MSLs and KAMs?

Changes in HCP Engagement with Pharma Affiliates

- Will the HCP reduce in-person and remote calls with med reps, MSLs, KAMs?
- Will the importance of in-person vs. remote calls evolve?
- Will the HCP modify his habits regarding attendance to medical meetings and participation to congresses?
- Will HCP expectations regarding the content of interactions with pharma companies significantly change?
- Will the relative importance of product features, related services and corporate reputation be modified?
- What does the HCP expect from Pharma Affiliates and their in-field collaborators following the Covid-19 crisis?

Each question should be completed by the question “WHY?” to identify the corresponding driving factors

Sources: Smart Pharma Consulting

Changes in medical practices and engagement with Pharma Affiliates will vary in duration and magnitude according to each HCP and will have specific impacts at Pharma Affiliates

Part 1 – HCPs Behavioral Changes & Implications

Impacts for Pharma Affiliates

Data Analysis (1/2)

Changes in HCP Medical Practice

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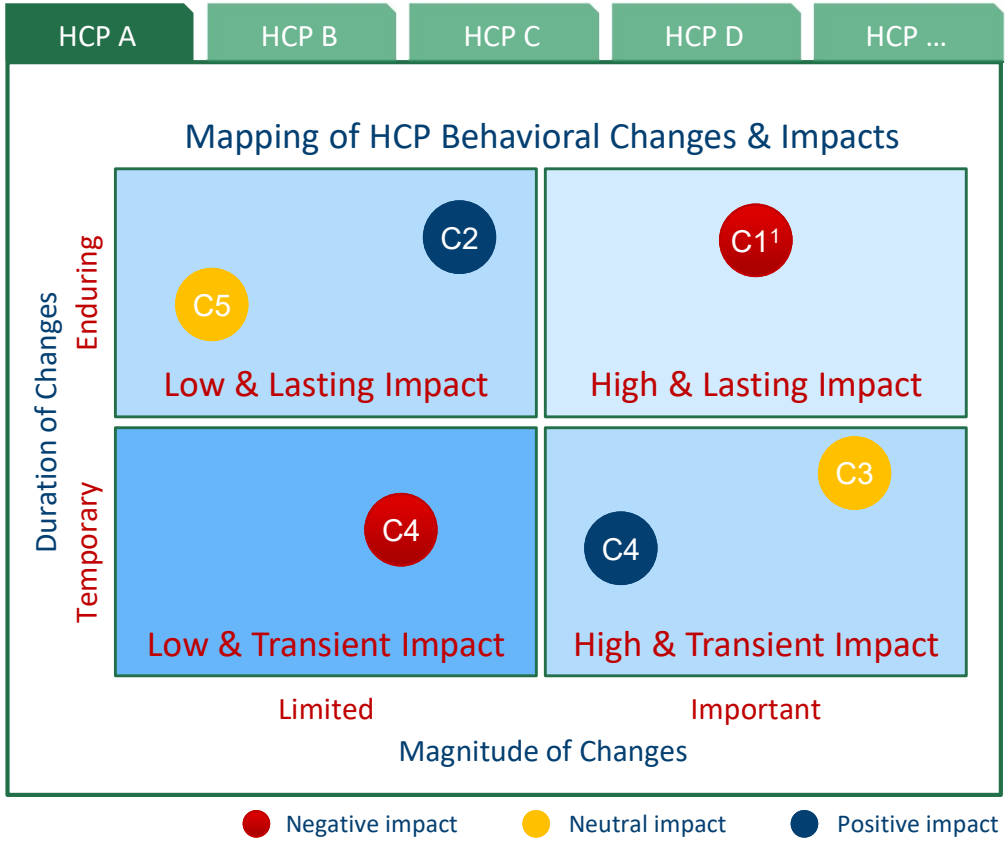


Sources: Smart Pharma Consulting

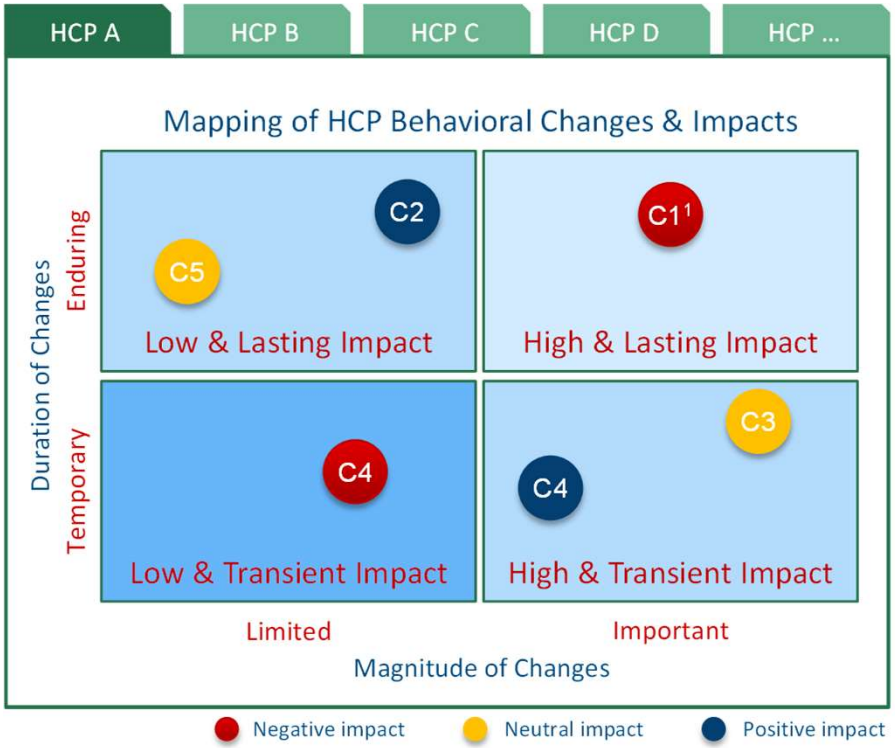
[1] *C1: means behavioral change #1*

The identification of each HCP behavioral changes will help Pharma Affiliates figure out the strategic, tactical and organizational adjustments to be made to optimize their performance

Part 1 – HCPs Behavioral Changes & Implications

Impacts for Pharma Affiliates

Data Analysis (2/2)



Strategic Impact

- Which HCPs should be targeted by in-field collaborators?
- How to reinforce the brand value by strengthening the three components of the "Brand Preference Mix":
  - Product attributes?
  - Associated services?
  - Corporate reputation?

Tactical Impact

- Which interaction channels should be used per HCP?
- Who, from the pharma affiliate, should preferably engage with each of the targeted HCPs?
- How to adapt the content of interactions to each HCP?
- What is the optimal level of interaction per HCP?

Organizational Impact

- How to design / redesign the pharma affiliate organization re.:
  - Activities and competencies of in-field collaborators?
  - Structure[2] of medico-marketing and sales departments?
  - Key processes associated to interactions with HCPs?
  - Cultural aspects of HCPs engagement management?

to best support the revised strategy and the tactics

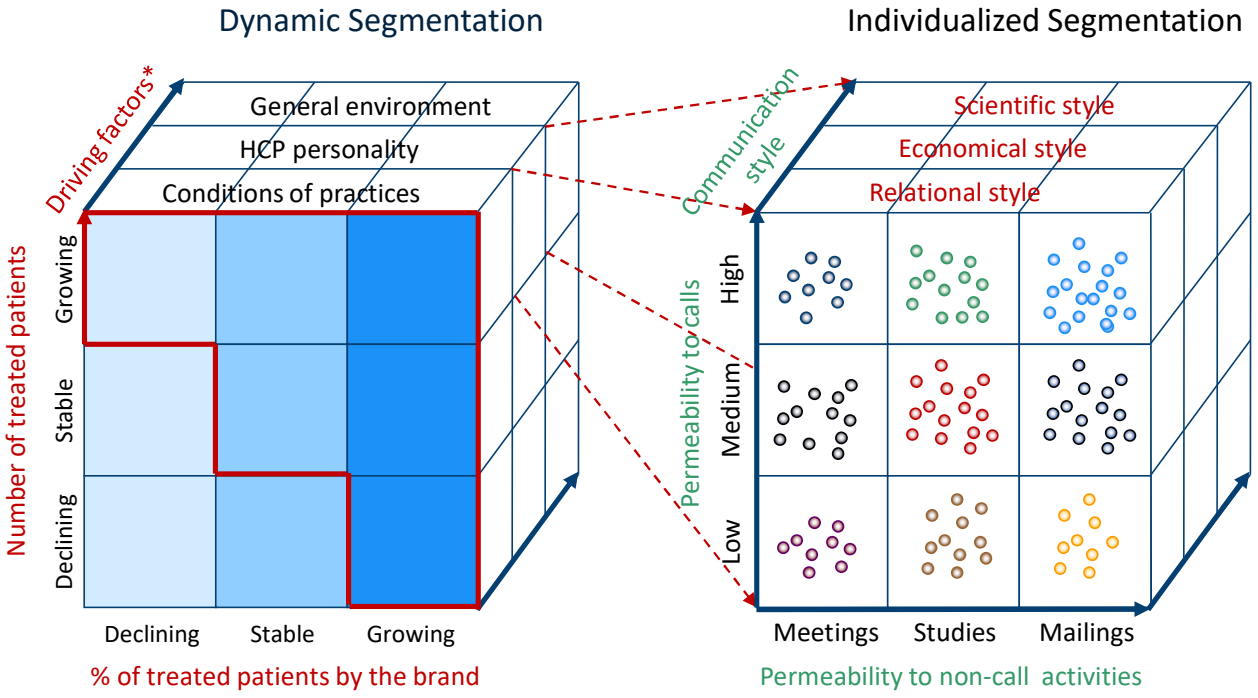
Sources: Smart Pharma Consulting

[1] C1: means behavioral change #1 – [2] FTEs and organization chart

The individual and dynamic segmentation of HCPs enables to optimize their targeting and to define the most efficient level and nature of interactions to modify favorably their behavior

Part 2 – Pre-defined Priorities

1. Segment Dynamically & Individually HCPs



- The dynamic and individual segmentation is based on behavioral criteria and designed to optimize the efficacy and efficiency of medico-marketing and sales interactions per HCP
- This approach has been formalized by Smart Pharma Consulting under the name of BPS[1] and consists in:
  - Segmenting dynamically each HCP, based on the evolution of its number of treated patients and of the weight of the pharma affiliate brand used
  - Determining the key factors driving each HCP behavior (environment, personality and practice)*
  - Evaluating the degree of permeability (accessibility and sensitivity) to medico-marketing and sales activities and channels (e.g., calls, meetings, studies)
  - Adapting the activity and channel mix, as well as the communication style to the personality dominance of each HCP (relational, economic, scientific)

* Environment (e.g., patient flow, regulations, public health initiatives, reimbursement, drug prices, influencers)
Personality (e.g., early adopter, laggards, price-sensitive, science-driven)
Medical practice (e.g., hospital vs. office-based practice, prescribing habits, involvement in clinical studies)

Sources: Smart Pharma Consulting

[1] *Behavioral Prescriber Segmentation. See the position paper "Best-in-class Pharma Marketers" – https://smart-pharma.com/wp-content/uploads/2019/07/Best-in-class-Marketers-2017-VF.pdf*

The Individual HCP Portrait keeps a track record of each HCP behavior regarding the marketed brands and his permeability[1] to medico-marketing and sales interactions, and his personality traits

Part 2 – Pre-defined Priorities

1. Segment Dynamically & Individually HCPs

Individual HCP Portrait

HCPs	Total patients / Brand MS[2]	Permeability to Calls / Non-calls	Personality dominance
A	Growing / Stable	High / Mailings	Relational
B	Stable / Growing	High / Meetings	Scientific
C	Stable / Stable	Medium / Meetings	Economic

Individual Resource Allocation per HCP

HCPs	Calls #	Meetings #	Studies #	Mailing #	Messages / Style
A	10	2	0	3	Dialogue / Services
B	6	3	0	0	Scientific
C	4	3	0	2	Economic

- It is necessary to collect, store, analyze and retrieve for each HCP:
  - The impact of his behavior re. the number of treated patients and the market share of the pharma affiliate brands
  - His permeability to medical calls and other non-call activities
  - His personality traits
- In-field collaborators should be involved in the collection of those data, which should be updated on an ongoing basis

- The "Individual HCP Portrait" is used to set, per HCP:
  - The optimal level and mix of medico-marketing and sales activities
  - The appropriate message content and style of communication
  - This proposed approach helps to acquire a better understanding of factors driving HCPs behavior, and especially their brand preference

Sources: Smart Pharma Consulting

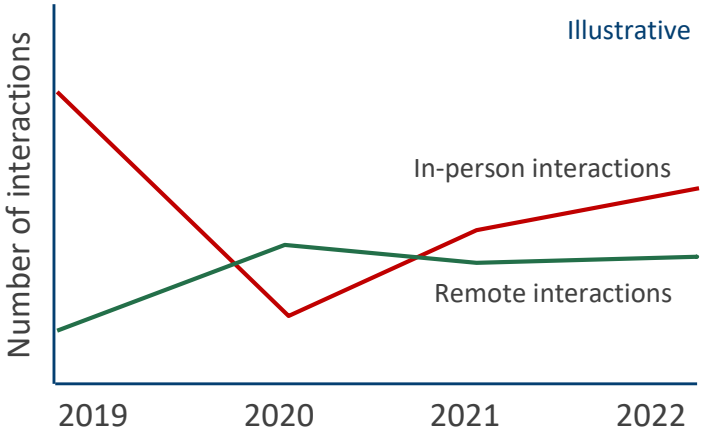
[1] Accessibility and sensitivity – [2] MS stands for Market Share or if the HCP is a prescribing physician, it can be replaced by Prescription Share (PS)

The absolute priority for Pharma Affiliates is to maintain regular contacts with each targeted HCP by offering the content he wants through the coordinated combination of channels he prefers

Part 2 – Pre-defined Priorities

2. Craft a Commercial Omnichannel Strategy

Evolution of in-person vs. remote interactions between Pharma Affiliates & HCPs



- In the Covid-19 outbreak context, in-person interactions between pharma affiliates and HCPs have fallen and been partially offset by remote contacts
- Until the Covid-19 crisis occurred, ~70% of medico-marketing and sales total interactions were coming from in-person contacts
- If most HCPs expect in-person interactions to resume after the crisis, they will reduce the overall number of interactions with in-field collaborators[1], while increasing the weight of remote interactions in their contact mix[2]
- Therefore, to keep regular contacts with HCPs, Pharma Affiliates can craft an omni-channel strategy which consists in using multiple channels (media) in an integrated approach to optimize their impact
- For so doing, every channel must inter-relate to provide HCPs with consistent and high-value content provided by multiple sources

Sources: Smart Pharma Consulting

[1] Mainly due to the necessity to grant more time to treat patients and to the low value brought by most of in-field interactions –
[2] The number of HCPs becoming familiar with digital tools has strongly increased, especially by experiencing teleconsultations during the Covid-19 crisis

Digital channels are not the panacea to cope with the Post-Covid-19 Era but, if well-executed and integrated into an individualized omni-channel strategy, they can help engage HCPs

Part 2 – Pre-defined Priorities

2. Craft a Commercial Omnichannel Strategy

Five Rules for an Effective Omnichannel Strategy per Individual HCP

Rule #1	Identify each HCP preferred channels and usage patterns (e.g., frequency, time of the day, duration)
Rule #2	Select one or several channels (in-person and/or remote, non-digital and/or digital) to be combined, according to the sought objective (e.g., message to convey, partnership to propose, service to offer)
Rule #3	Adapt the content and the format to the channel specificities
Rule #4	Plan carefully the execution of the omnichannel strategy while defining the right sequence of channels and the right timing
Rule #5	Monitor the quality of execution with KEIs[1] and the impact of the omnichannel strategy with KPIs[2]

Sources: Smart Pharma Consulting

[1] Key Execution Indicators – [2] Key Performance Indicators. See the position paper: https://smart-pharma.com/wp-content/uploads/2019/07/Smart-Management-Series-KPIs-KEIs-VW.pdf

The purpose of service-led interactions is to secure access to stakeholders, and especially to HCPs, while boosting their preference for the company's product portfolio

Part 2 – Pre-defined Priorities

3. Create Service-led Interactions with HCPs[1]

- In the case of physicians, an interaction (e.g., medical call, medical meeting) perceived as a service will lead to more regular contacts and…
- … to a better memorization of the interaction content, a higher probability to convince them and an increased preference to the company's product portfolio

- A service-led interaction is characterized from the…

… Physician perspective…

… Med Rep perspective…

… by an interaction which is…

– … Interesting
– … Useful
– … Well executed

– … Memorable
– … Convincing
– … Preferential

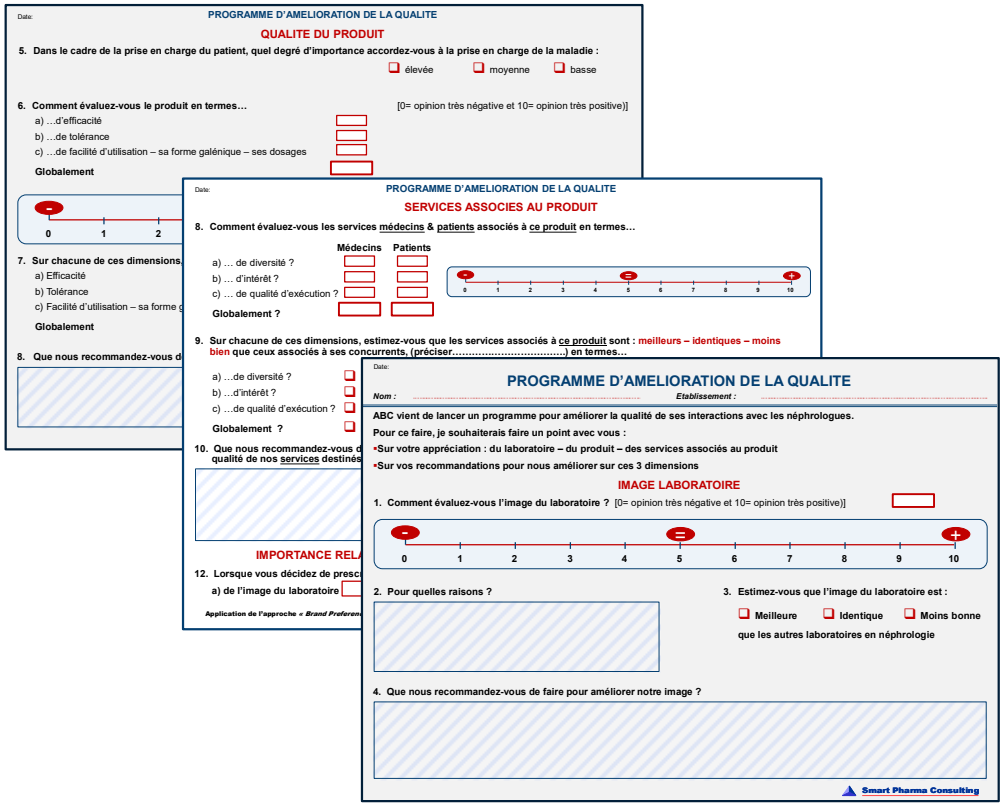
Sources: Smart Pharma Consulting

[1] *After the Smart Pharma Consulting position paper "Service-led medical Calls to secure Access to Physicians & boost Brand Preference https://smart-pharma.com/wp-content/uploads/2019/12/Service-led-Medical-Calls-VW.pdf*

The medical reps should measure once a year, during a face-to-face meeting, the opinion of each physician, and its evolution, regarding the quality of their interactions

Part 2 – Pre-defined Priorities

3. Create Service-led Interactions with HCPs[1]



- The evaluation of the quality of the medical calls, as perceived by each physician, can be integrated in the measurement of the three components of the Brand Preference Mix:
  1. The perception of the promoted brand (efficacy, safety, convenience)
  2. The quality of the services proposed, amongst which the content of the medical calls
  3. The reputation of the Pharma Affiliate
- This measurement provides the medical reps with:
  - A better knowledge and understanding of the physician
  - A more robust identification of the specific actions and messages the most likely to strengthen the brand preference

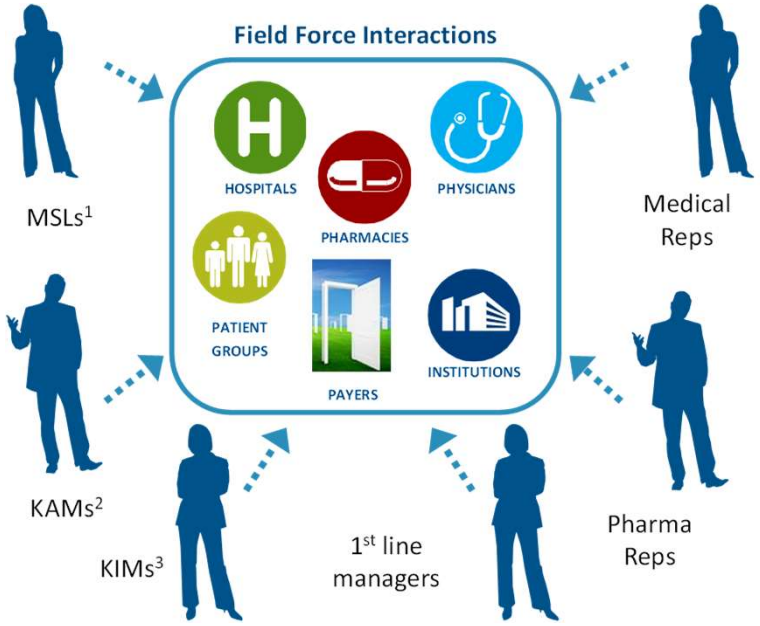
Sources: Smart Pharma Consulting

[1] *After the Smart Pharma Consulting position paper "Service-led medical Calls to secure Access to Physicians & boost Brand Preference https://smart-pharma.com/wp-content/uploads/2019/12/Service-led-Medical-Calls-VW.pdf*

To achieve Excellence in Execution, companies must design a holistic organizational system that will foster the search for excellence by all their collaborators, front line and back-office ones

Part 2 – Pre-defined Priorities

4. Design an Integrated Customer-facing Organization



- Field Force Activities:
  - Stop activities having no significant impact to raise / maintain brands' value
  - Acquire a high level of market insights[4]
  - Propose and deliver highly valued services, and leverage the corporate image[5]
- Field Force Structure:
  - Set up a flat organizational chart to favor accountability and empowerment
  - Design an adaptative structure that can be easily modified to environment changes
  - Co-position functions (e.g., MSLs and medical reps) that share the same customers
- Field Force Processes:
  - Foster / impose cross-functional collaboration and cohesion to leverage synergies
  - Carefully plan key activities and monitor the quality of their execution and their impact with key execution indicators (KEIs) and key performance indicators (KPIs)
- Field Force Culture:
  - Develop a culture of customer preference to increase brand market share
  - Encourage pro-activity, agility and experiment to find solutions to excel in execution

Sources: Smart Pharma Consulting

[1] Medical Science Liaisons – [2] Key Account Managers – [3] Key Institution Managers – [4] Meaning: have an excellent knowledge and a good understanding of the healthcare system, the key market stakeholders (health authorities, competitors, customers) – [5] See Smart Pharma Consulting position paper "How to create a superior Pharma Corporate reputation" https://smart-pharma.com/wp-content/uploads/2019/07/Pharma-Corporate-Reputation-VF.pdf

The Covid-19 crisis has shown the fragility of our overall society and led many citizens, including HCPs, to reflect on the meaning of their life and to refocus their priorities on human values

Part 2 – Pre-defined Priorities

5. Develop a Human-focused Reputation

Pharma Industry Reputation & Covid-19 Crisis

- Most pharma companies have been exemplary in managing their collaborators and their customers since the beginning of the Covid-19 outbreak:
  - They have shown kindness to their employees for whom the lockdown has been a challenge
  - They have secured the supply of drugs on the hospital and retail pharma markets
  - They put themselves at disposal of stakeholders, especially HCPs in case of specific needs
- They have a great opportunity to strengthen ties with their collaborators – even if these ties remain fragile considering the upcoming economic crisis and increasing price pressure expected on drugs

Implications for Pharma Affiliates Reputation

- If the pharma industry reputation is unlikely to change dramatically, as a result of the Covid-19 crisis, there is, however, a window of opportunity for individual affiliates
- Corporate reputation is particularly important to enhance HCPs brand preference when products are little differentiated, which is the great majority of cases
- Pharma corporate reputation, from HCPs perspective, is mainly driven by:
  - The quality of their product pipeline and portfolio
  - The quality of their relationships
  - The quality of services offered to HCPs and patients
  - Their societal commitments and their “HUMANITY”

“The general feeling is that so far, pharma companies did the job”

Sources: Smart Pharma Consulting

Pharma Affiliates should craft and implement a strategy to do "business with more humanity" and communicate regularly on the corresponding benefits for its stakeholders

Part 2 – Pre-defined Priorities

5. Develop a Human-focused Reputation

Why Pharma Affiliates should be Human-focused?

- During the Covid-19 crisis, pharma companies and their affiliates have shown their humanity by giving priority to the security of their employees and by supporting their customers
- It is probably the right time for pharma CEOs to manage their company for the benefits of all stakeholders (i.e., employees, customers, suppliers, communities, shareholders)
- Customers, including HCPs, want – more than ever – to interact and collaborate with companies having put human relationships at the heart of their corporate purpose

5 Imperatives Pharma Affiliates should put in Practice[1]

1. Meet or exceed HCPs and other customers (e.g., patients, PAGs, payers, health authorities) expectations
2. Invest in employees by offering fair compensation, supporting their development while respecting them
3. Deal fairly and ethically with suppliers
4. Implement corporate social responsibility (CSR) programs likely to have a significant benefit for the society on economic, social and environmental aspects
5. Generate long-term value for shareholders by being a human-focused company and proving it on a day-to-day basis

"In the Post-Covid-19 Era, customers will favor companies with a deep human purpose"

Sources: Smart Pharma Consulting

[1] *Inspired by the "Business Roundtable Statement on the Purpose of a Corporation" signed and committed by 181 CEOs of American companies, in September 2019*

These five pre-defined priorities should help Pharma Affiliates adjust to the change of the HCPs expectations, so that to keep them engaged in the Post-Covid-19 Era

3. Key takeaways

5 Pre-defined Priorities

1. Segment Dynamically & Individually HCPs

- The individual and dynamic segmentation of HCPs enables to optimize their targeting…
- … and to define the most efficient level and nature of interactions to modify favorably their behavior

2. Craft a Commercial Omnichannel Strategy

- Digital channels are not the panacea to cope with the Post-Covid-19 Era…
- … but, if well-executed and integrated into an individualized omni-channel strategy, they can help engage HCPs

3. Create Service-led Interactions with HCPs

- The purpose of service-led interactions is to secure access to stakeholders, and especially to HCPs…
- … while boosting their preference for the company's product portfolio

4. Design an Integrated Customer-facing Organization

- To achieve Excellence in Execution, companies must design a holistic organizational system that will foster the search for excellence by all their collaborators, front line and back-office ones

5. Develop a Human-focused Reputation

- Pharma Affiliates should craft and implement a strategy to do "business with more humanity"…
- … and communicate regularly on the corresponding benefits for its stakeholders

Sources: Smart Pharma Consulting

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Omnichannel Strategy

in Pharma Marketing

“Digital channels are just a means – not an objective – to interact with customers”

POSITION PAPER October 2020

The Covid-19 crisis has led pharma companies to rethink their marketing mix and look for an optimized multichannel approach to interact with HCPs

Introduction

- While multichannel strategy consists in using multiple media (channels) to convey information and messages to customers, omnichannel strategy goes one step further by ensuring an integrated approach
- For so doing, the omnichannel approach inter-relates every channel (unlike multichannel) to provide customers with consistent and integrated messages through multiple sources
- Thus, pharma companies' departments (medical, marketing, sales, etc.) interacting directly or indirectly with HCPs and other customers should be aligned with information conveyed and services proposed
- Omni-channel strategy has shown to create stronger relationships with customers and higher loyalty
- In the Covid-19 crisis context, marked by a drop of in-person interactions, pharma companies have reinforced their remote communication as a compensatory measure to ensure a higher level of interactions with HCPs
- This position paper, based on Smart Pharma Consulting experience and a benchmarking study, shares some best practices in implementing omnichannel strategy in pharma marketing

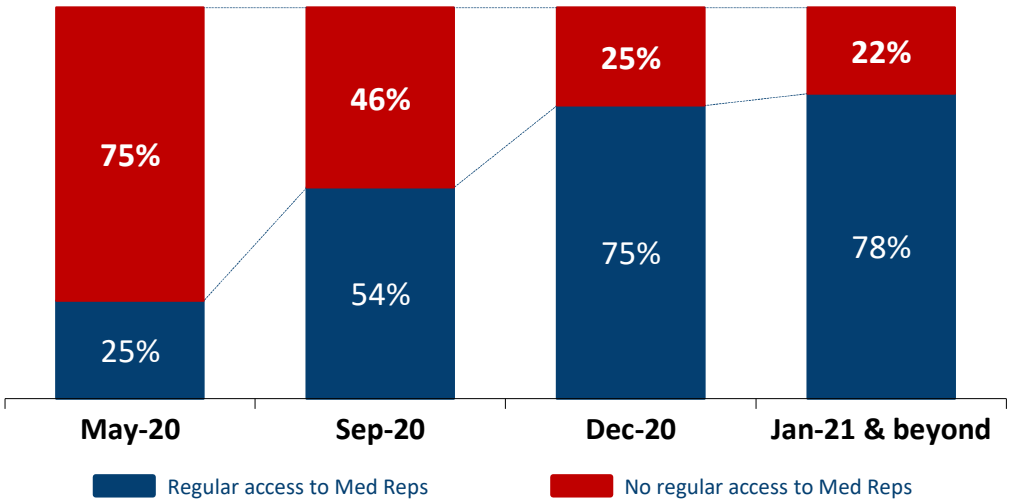
Sources: Smart Pharma Consulting

In-person calls by Med Reps will resume progressively, but ~12% of physicians will not accept to meet them anymore, and those accepting may further reduce the number of contacts p.a.

Access to HCPs

One-year Perspective

% of physicians anticipating to accept regular in-person calls by Med Reps following the lockdown[1]
(% of total)



185 French physicians (GPs, cardiologists, neurologists, oncologists) interviewed from May 21 to 26, 2020 (McKinsey)

Comments

- 10% of interviewed physicians were not accepting in-person calls from Med Reps before the lockdown and 12% more will not accept after the lockdown
- The physicians anticipate a progressive re-opening of access to Med Reps
- However, the situation varies significantly, depending on the:
  - Physician specialty (e.g., GPs, cardiologists)
  - Conditions of practices (e.g., hospitals vs. private practices)
  - Quality of relations between HCPs and Med Reps

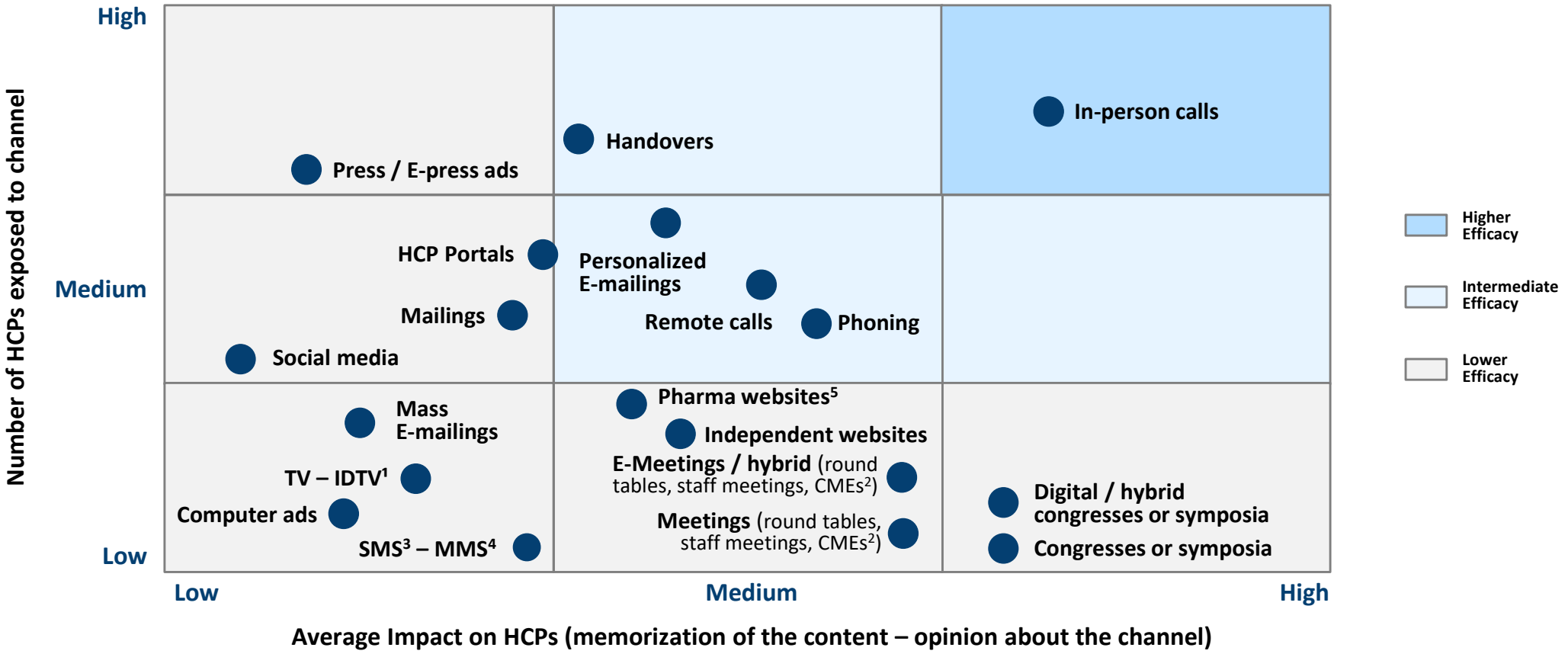
Sources: Survey by McKinsey – Benchmarking study (7 French Affiliates of Pharma companies) and analysis carried out by Smart Pharma Consulting in August and September 2020

[1] *The lockdown was imposed in France from March 17 to May 11, 2020*

Despite the Covid-19 crisis, in-person calls by Med Reps will remain the most effective channel to interact with HCPs, followed by phoning, remote calls and personalized e-mails

Communication Channel Efficacy

Assessment Matrix



Sources: Benchmarking study (7 French Affiliates of Pharma companies) and analysis carried out by Smart Pharma Consulting in August and September 2020

[1] Interactive digital television – [2] Continuous medical education – [3] Short message service – [4] Multimedia message service – [5] Including blogs

In-person calls have the highest impact on prescriptions, and can be reinforced by other complementary communication channels, either conventional or digital

Communication Channel Efficacy

Assessment per Channel (1/2)

Channels	Reach	Impact	Efficacy	Feasibility	Comments
In-person calls	●	●	●	◑	▪ The content must be meaningful for each HCP
Phoning	◑	◑	◑	◑	▪ Favor communication about environment / services
Remote calls	◑	◑	◑	◑	▪ Favor communication about environment / services
Personalized E-mails	◑	◑	◑	●	▪ Should be related to the content of the in-person calls
Digital / hybrid congresses or symposia	○	●	○	◑	▪ Development of hybrid (in-person and remote) meetings, especially in the context of the Covid-19 crisis
Congresses or symposia	○	●	○	◑	▪ Less and less people attending congresses or symposia but well appreciated, in general
Pharma websites	○	◑	○	○	▪ The perceived quality by HCPs is good
Independent websites	○	◑	○	●	▪ The content is perceived as reliable

Sources: Benchmarking study (7 French Affiliates of Pharma companies) and analysis carried out by Smart Pharma Consulting in August and September 2020

● *High* ◑ *Medium* ○ *Low*

Considering the low efficacy of digital channels, it is recommended to use them preferably as an add-on to conventional channels, in a pre-determined sequence, depending on HCPs preference

Communication Channel Efficacy

Assessment per Channel (2/2)

Channels	Reach	Impact	Efficacy	Feasibility	Comments
E-meetings / hybrid	○	◑	○	◑	▪ Peer-to-peer meetings are particularly well appreciated
Meetings	○	◑	○	◑	▪ Peer-to-peer meetings are particularly well appreciated
Press / E-press	●	○	○	●	▪ Ads to maintain the presence of the brands
HCP Portals	◑	○	○	●	▪ Ads or content to maintain the presence of the brands
Mailings	◑	○	○	●	▪ More effective than mass e-mailings
Social media	◑	○	○	●	▪ Ads or content to maintain the presence of the brands
Mass E-mailings	○	○	○	●	▪ Not attractive for HCPs
TV-IDTV	○	○	○	◑	▪ Very limited use
Computer ads	○	○	○	●	▪ Ads to maintain the presence of the brands (banners)
SMS – MMS	○	○	○	●	▪ Very limited use

Sources: Benchmarking study (7 French Affiliates of Pharma companies) and analysis carried out by Smart Pharma Consulting in August and September 2020

● *High* ◑ *Medium* ○ *Low*

Remote calls are potentially attractive to HCPs and likely to engage them provided the technology is well mastered, the content is non-promotional or focused on new products or indications

Communication Channel Efficacy

Focus on Remote Calls

Pros

- Economic and time saving by reducing travels
- Personal relationship is kept, to a certain extent
- Optimization of calls:
  - Higher attention span
  - Med Reps more focused on promotional activity
- Flexibility of scheduling
- Reutilization of digital contents on other channels

Cons

- Problems of online access due to firewalls or low bandwidth, especially in hospitals
- All HCPs are not familiar with remote calls
- Less than 10% of HCPs accepting in-person calls will accept, in addition, remote calls
- A phenomenon of rejection by HCPs is growing as a result of several disappointing experiences through this channel

Golden rules to succeed

- Make sure the content is attractive enough
- Specifically train Med Reps
- Use remote calls as a complement of in-person calls
- Perform remote calls by internal Med Reps, only
- Keep the call short and crispy to maintain attention
- Include short videos and animations[1]

Sources: Benchmarking study (7 French Affiliates of Pharma companies) and analysis carried out by Smart Pharma Consulting in August and September 2020

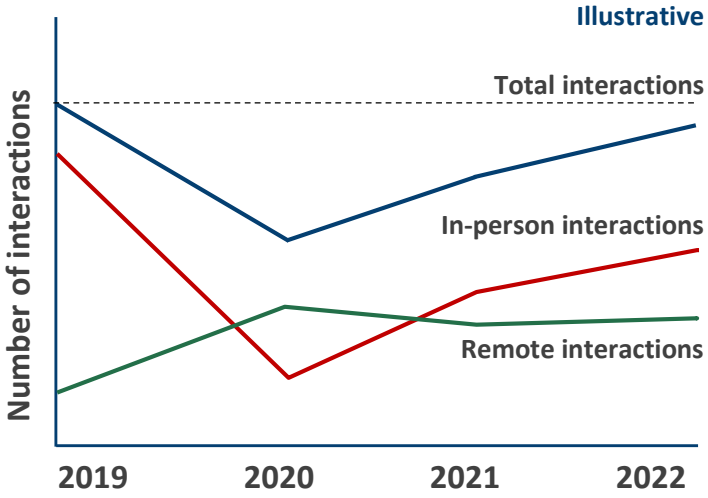
[1] *20 to 30 seconds*

The absolute priority for pharma companies is to maintain regular contacts with targeted HCPs by offering the content they want through the coordinated combination of channels they prefer

Best Practices

Introduction (1/2)

Evolution of in-person vs. remote interactions between Pharma Affiliates & HCPs



- In the Covid-19 crisis context, in-person interactions between pharma companies and HCPs have fallen and been partially offset by remote contacts
- Until the Covid-19 crisis occurred, ~70% of medico-marketing and sales total interactions were coming from in-person contacts
- If most HCPs expect in-person interactions to resume after the crisis, they will reduce the overall number of interactions with in-field collaborators[1], while increasing the weight of remote interactions in their contact mix[2]
- Therefore, to keep regular contacts with HCPs, pharma companies should carry out omni-channel initiatives, consisting in using multiple channels (media) in an integrated approach to optimize their impact
- For so doing, every channel should be inter-related to provide HCPs with consistent and high-value content through multiple sources

Sources: Benchmarking study (7 French Affiliates of Pharma companies) and analysis carried out by Smart Pharma Consulting in August and September 2020

[1] Mainly due to the necessity to grant more time to treat patients and to the low value brought by most of in-field interactions – [2] The number of HCPs becoming familiar with digital tools has strongly increased, especially by experiencing teleconsultations during the Covid-19 crisis

Digital channels are not the panacea to cope with the Covid-19 crisis but, if well-executed and integrated into an individualized omnichannel strategy, they can help engage HCPs

Best Practices

Introduction (2/2)

Five Rules for an Effective Omnichannel Strategy per Individual HCP

Rule #1 Identify each HCP preferred channels and usage patterns (e.g., frequency, time of the day, duration)

Rule #2 Select one or several channels (in-person and/or remote, non-digital and/or digital) to be combined, according to the sought objective (e.g., message to convey, partnership to propose, service to offer)

Rule #3 Adapt the content and the format to the channel specificities

Rule #4 Plan carefully the execution of the omnichannel strategy while defining the right sequence of channels and the right timing

Rule #5 Monitor the quality of execution (the IT should be flawless) with KEIs[1] and the impact of the omnichannel strategy with KPIs[2]

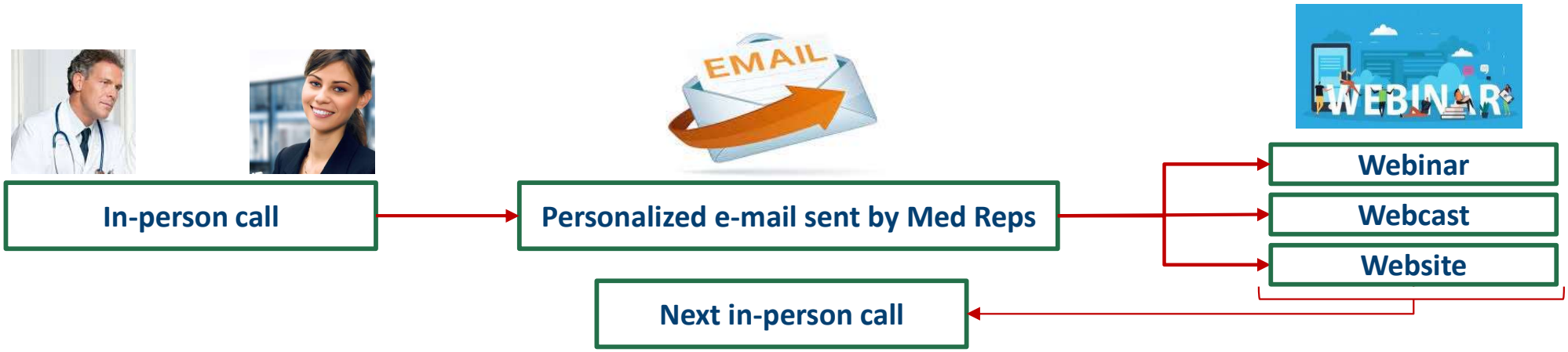
Sources: Benchmarking study (7 French Affiliates of Pharma companies) and analysis carried out by Smart Pharma Consulting in August and September 2020

[1] Key Execution Indicators – [2] Key Performance Indicators. See the position paper: https://smart-pharma.com/wp-content/uploads/2019/07/Smart-Management-Series-KPIs-KEIs-VW.pdf

The most common sequencing used combines personalized e-mails sent just after in-person calls in which HCPs can be invited to use other digital channels to get information or services

Best Practices

Channel Sequencing



- The opening rate of personalized e-mails, following an in-person call can reach 20% to 25% according to:
  - The interest of the HCPs for the content
  - The quality of the presentation
  - The day and the time of sending
- The e-mail sent can invite HCPs to:
  - Attend a webinar
  - View a webcast
  - Visit a website (with product and/or non-product contents)
  - Use other digital channels to get information or services

The right sequence across different channels, physical, digital or hybrid, will mainly depend on the content to communicate and the preference of HCPs

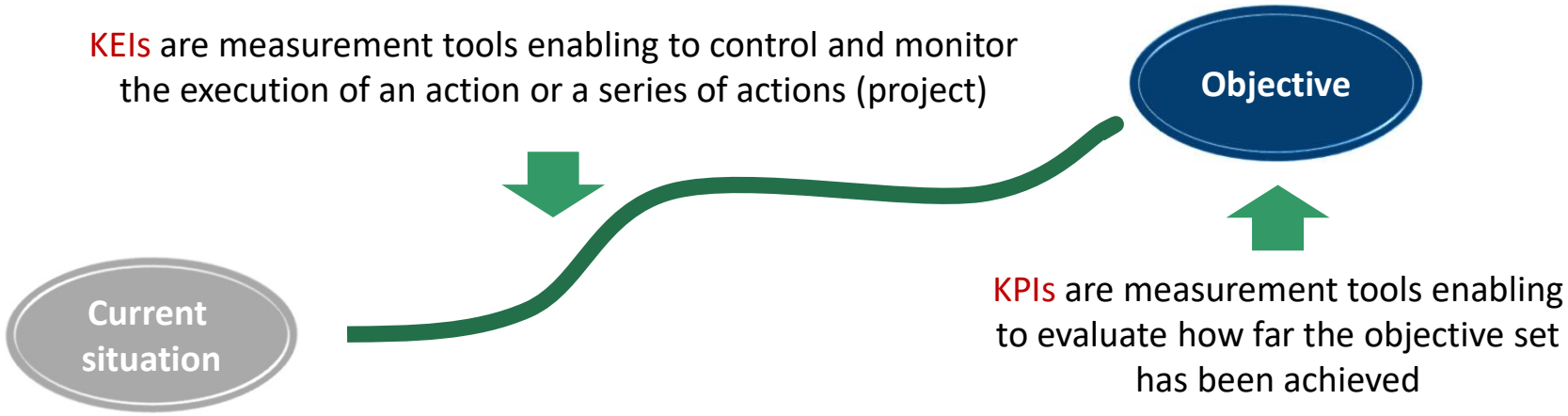
Sources: Benchmarking study (7 French Affiliates of Pharma companies) and analysis carried out by Smart Pharma Consulting in August and September 2020

To measure the efficacy and efficiency of communication channels, it is essential to use key execution indicators (KEIs) and key performance indicators (KPIs)

Best Practices

Execution & Performance Monitoring: Definition

- For purposes of clarity and efficacy, monitoring metrics should be of two kinds:
  - Key Execution Indicators (KEIs) which measure the quality of execution of an activity or of a project
  - Key Performance Indicators (KPIs) which measure the outcome of an activity or a project



"If you cannot measure it, you cannot improve it"

Sources: Smart Pharma Consulting

Key execution indicators and key performance indicators, which can be quantitative and/or qualitative, must be carefully selected to monitor the use and impact of different channels

Introduction

Execution & Performance Monitoring: Tools (1/3)

Illustrative

	Key Execution Indicators	Key Performance Indicators
Quantitative	▪ % of targeted HCPs contacted in-person by Med Reps ▪ Number of interactions with HCPs ▪ Bounce rate of a website ▪ Opening rate of e-mailings, webcasts, etc.	▪ Number of new prescribers ▪ Average # of prescriptions per HCP ▪ Prescription dynamics per HCP ▪ Sales dynamics ▪ Return on investment
Qualitative	▪ Quality of interactions with HCPs ▪ Interest and usefulness of the content conveyed through different channels ▪ Convenience of proposed / used channels ▪ Proper organization of e-meetings	▪ Corporate reputation improvement ▪ Perceived quality of products / portfolio ▪ Perceived value of services offered ▪ Brand Preference Mix Index (BMPi)[1] ▪ Net Promoter Score (NPS)

Sources: Smart Pharma Consulting

[1] Corporate reputation x products image x perceived service quality: see Smart Pharma Consulting website

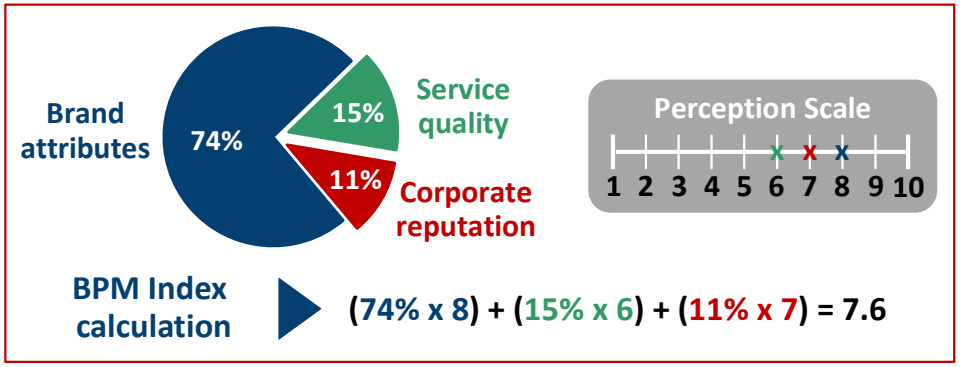
The Brand Preference Mix Index makes it possible to measure the evolution of individual HCPs Experience compared to competitors at a given point of time and overtime

Best Practices

Execution & Performance Monitoring: Tools (2/3)

Brand Preference Mix Index (BPMi)

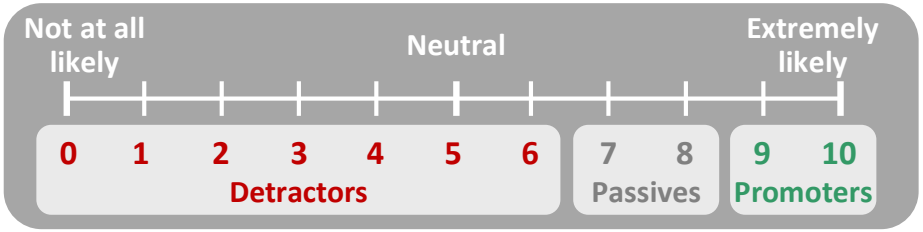
- The BPMI measures, HCP by HCP:
  - The importance of the 3 components of the BPM
  - His perception of each of them on a 10-point scale



- The BPMI enables to determine:
  - The root-causes underlying the commitment of each HCP for a brand
  - Actions to strengthen his attachment to the brand

Net Promoter Score (NPS)

- The NPS measures the degree to which HCPs will recommend a brand, a service or a company to another healthcare professional
- The NPS can be used to evaluate a touchpoint at a given moment or the overall HCP experience
- The NPS is the % of promoters minus the % of detractors



- By asking customers why they would be likely or not to make a recommendation, it is possible to identify solutions to convert detractors into promoters

Sources: Smart Pharma Consulting – "The One Number You Need to Grow", F. F. Reichheld, HBR, December 2003

The BPMi, specifically designed to measure HCPs opinion, is the most complete indicator but it could be advantageously complemented by the NPS

Best Practices

Execution & Performance Monitoring: Tools (3/3)

	Brand Preference Mix Index (BPMI)	*Net Promoter Score (NPS)*
Pros	▪ It measures overall and specific experiences… ▪ … including rationale and suggestions of improvement ▪ It enables comparisons vs. competitors	▪ The NPS focuses on overall experiences ▪ It is a long-term satisfaction metric ▪ It measures how many HCPs are likely to advocate the brand
Cons	▪ BPMi being a holistic metric (incl. brands, companies, services), it may be perceived as complex to implement ▪ Not yet broadly known and used, unlike NPS	▪ Promoters, detractors and passives segments are theoretical[1] ▪ The single question asked does not enable to define the actions to be taken to correct or reinforce the situation

Sources: Smart Pharma Consulting

[1] They do not necessarily reflect the reality of the customers behavior. One customer can evaluate a brand with a "8" and talk positively about a product and another one with a "10" may not talk about the brand, either positively or negatively

If it is difficult to measure the impact on performance of one isolated channel at one point of time, it is however easier to measure the quality of execution so that to keep on improving

Best Practices

Execution & Performance Monitoring: Application (1/2)

Illustrative

Channels	Key Execution Indicators		Key Performance Indicators
In-person calls	▪ Call duration ▪ # of calls p.a. ▪ Memorization rate ▪ Satisfaction score		The impact of the different channels will strongly depend on: – The objective sought – The quality and … – … the relevance of content conveyed by the channel Irrespective of the considered channel, the following KPIs could be selected: ▪ Change in opinion (e.g. Brand Preference Mix Index, Net Promoter Score) ▪ Change in behavior (e.g. prescription share) ▪ Impact on the # of treated patients, the prescription share, the market share, the sales dynamics, etc.
Phoning			
Remote calls			
TV-IDTV			
Personalized E-mails	▪ Opening rate ▪ Time to opening	▪ Churn rate ▪ Satisfaction score	
Mass E-mailings			
Mailings	▪ Memorization rate	▪ Satisfaction score	
Digital / hybrid congresses or symposia	▪ # of invitees ▪ # of registered invitees ▪ Satisfaction score	▪ # of connected invitees ▪ # remaining connected	
E-meetings / hybrid			
Congresses or symposia		▪ # of attending invitees	
Meetings			

Sources: Benchmarking study (7 French Affiliates of Pharma companies) and analysis carried out by Smart Pharma Consulting in August and September 2020

If it is difficult to measure the impact on performance of one isolated channel at one point of time, it is however easier to measure the quality of execution so that to keep on improving

Best Practices

Execution & Performance Monitoring: Application (2/2)

Illustrative

Channels	Key Execution Indicators		Key Performance Indicators
Pharma websites	▪ # of visits ▪ Frequency of visits ▪ Duration of visits ▪ Click rate		The impact of the different channels will strongly depend on: – The objective sought – The quality and … – … the relevance of content conveyed by the channel Irrespective of the considered channel, the following KPIs could be selected: ▪ Change in opinion (e.g. Brand Preference Mix Index, Net Promoter Score) ▪ Change in behavior (e.g. prescription share) ▪ Impact on the # of treated patients, the prescription share, the market share, the sales dynamics, etc.
Independent websites			
Social media			
HCP Portals			
Computer ads			
E-press	▪ Reach (# of HCPs exposed to the ad) ▪ Frequency (# of times each HCP is exposed) ▪ Gross Rating Points (GRP) = Reach x Frequency		
Press			
SMS – MMS	▪ Response rate	▪ Time to response	

Sources: Benchmarking study (7 French Affiliates of Pharma companies) and analysis carried out by Smart Pharma Consulting in August and September 2020

In the Covid-19 context, the omnichannel strategy should be designed to secure an effective level of interactions with HCPs to keep on strengthening their preference for the promoted brands

Best Practices

Recommendations

Long-Term Objective
Strengthen HCPs Preference for brands[1]

Short-Term Objective
Maintain an effective level of interactions with HCPs

1. Develop an interaction content fulfilling expectations of each HCP

2. Use in priority channels that are preferred by each HCP

3. Favor most effective channel sequencings per HCP

4. Define the optimal level of resources allocated[2]

Omnichannel strategy

5. Systematically measure the quality of execution and the impact of various communication channels

Sources: Benchmarking study (7 French Affiliates of Pharma companies) and analysis carried out by Smart Pharma Consulting in August and September 2020

[1] In the best interest of patients, HCPs and payers – [2] Human and financial resources

Smart Pharma
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Mature Brands Management

Guidelines to optimize Performance

POSITION PAPER May 2016

Smart Pharma Consulting has developed its methodology based on desk research, benchmarking studies and own experience to optimize mature brands management

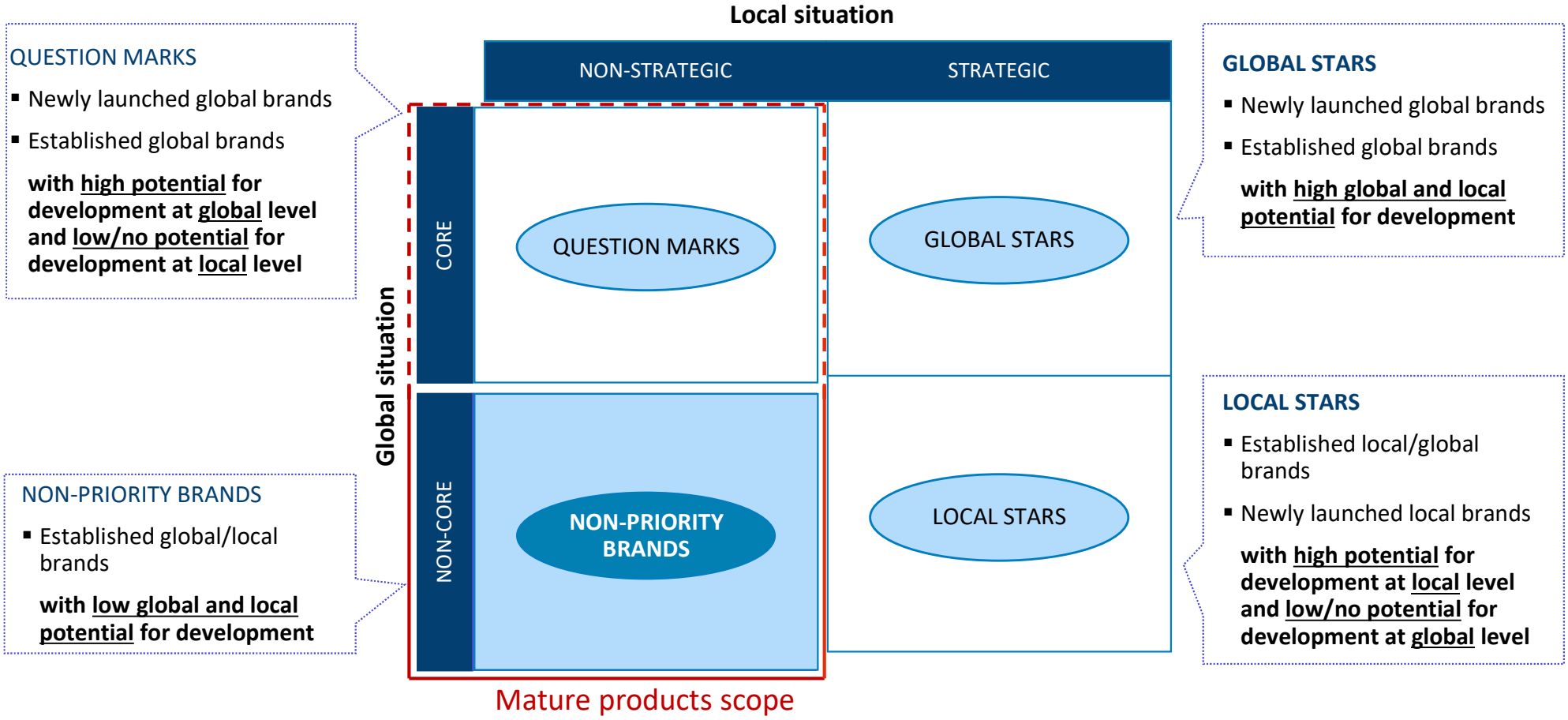
Objective & Approach

- Mature brands play an ambiguous role within the portfolio of pharma companies:
  - They show in general low or negative growths while…
  - … providing high profit contribution
- Performance optimization of mature brands requires to answer the two following questions:
  - What is the sensitivity of the brands to promotional investments?
  - If sensitive, what are the optimal investment level and mix?
- To help pharma companies optimize the performance of their mature brands, Smart Pharma Consulting has formalized a methodology based on:
  1. Review of expert reports, articles, position papers on mature brands management
  2. Benchmarking studies
  3. Its own consulting expertise and experience

Sources: Smart Pharma Consulting

Most companies currently limit strategic thinking on mature products to brands with limited local potential, with a special focus on corporate non-core brands

Portfolio strategic matrix



QUESTION MARKS

- Newly launched global brands
- Established global brands

with high potential for development at global level and low/no potential for development at local level

GLOBAL STARS

- Newly launched global brands
- Established global brands

with high global and local potential for development

NON-PRIORITY BRANDS

- Established global/local brands

with low global and local potential for development

LOCAL STARS

- Established local/global brands
- Newly launched local brands

with high potential for development at local level and low/no potential for development at global level

Sources: Smart Pharma Consulting

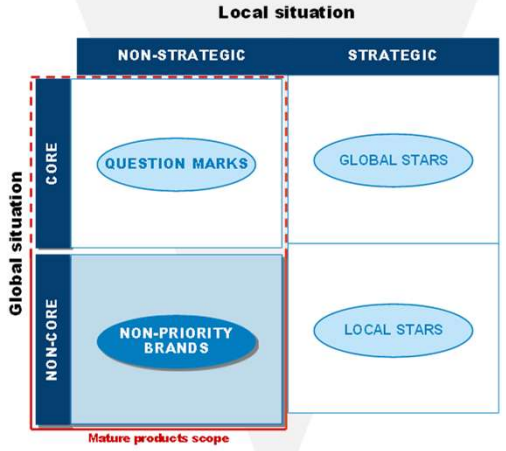
Before selecting "activable" products within mature products portfolio, the screening scope needs to be clearly defined through portfolio segmentation

Portfolio analysis & mature brands optimization process

Portfolio strategic segmentation

Marketed products classification and identification of mature portfolio current and future scope

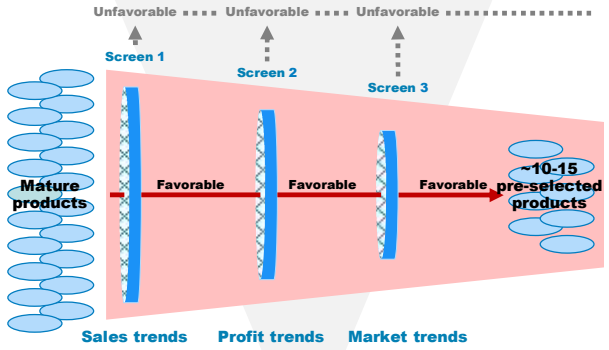
1



Selection of "activable" products

Mature products screening, in order to select products eligible for support, to be further analyzed

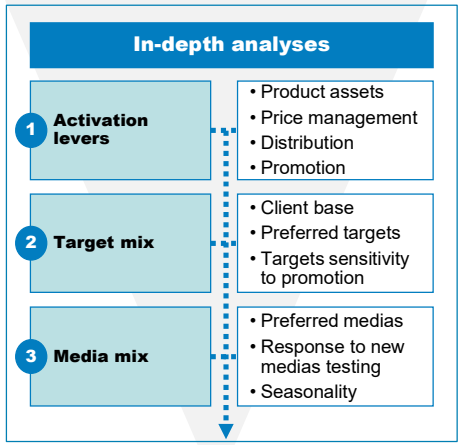
2



"Activable" products assessment

In-depth analyses to determine most efficient levers to be activated for the short-listed mature products

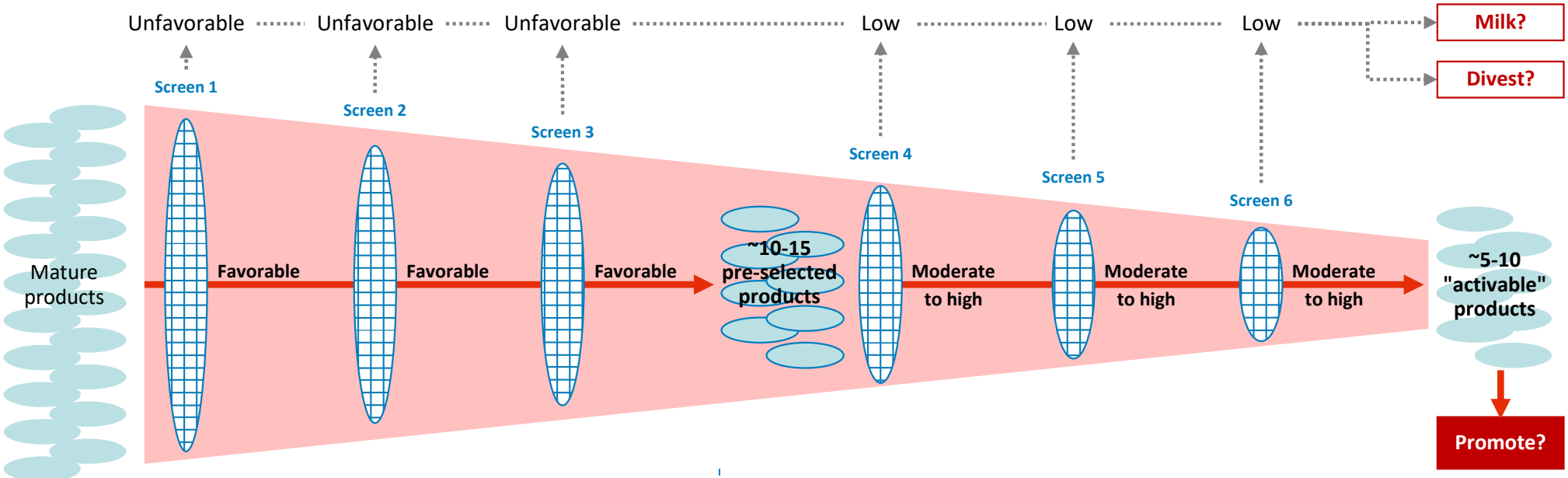
3



Sources: Smart Pharma Consulting

The selection of "activable" mature products within marketed marketing authorizations (MAs) and “sleeping” MAs of interest can be made through a 2-step screening process

Selection of "activable" mature products



MA = Marketing authorizationSmPC = Summary of product characteristics

Sources: Smart Pharma Consulting

An in-depth analysis of "activable" mature products is then required to determine most efficient levers to activate selected products

"Activable" products assessment

~10 "activable" products

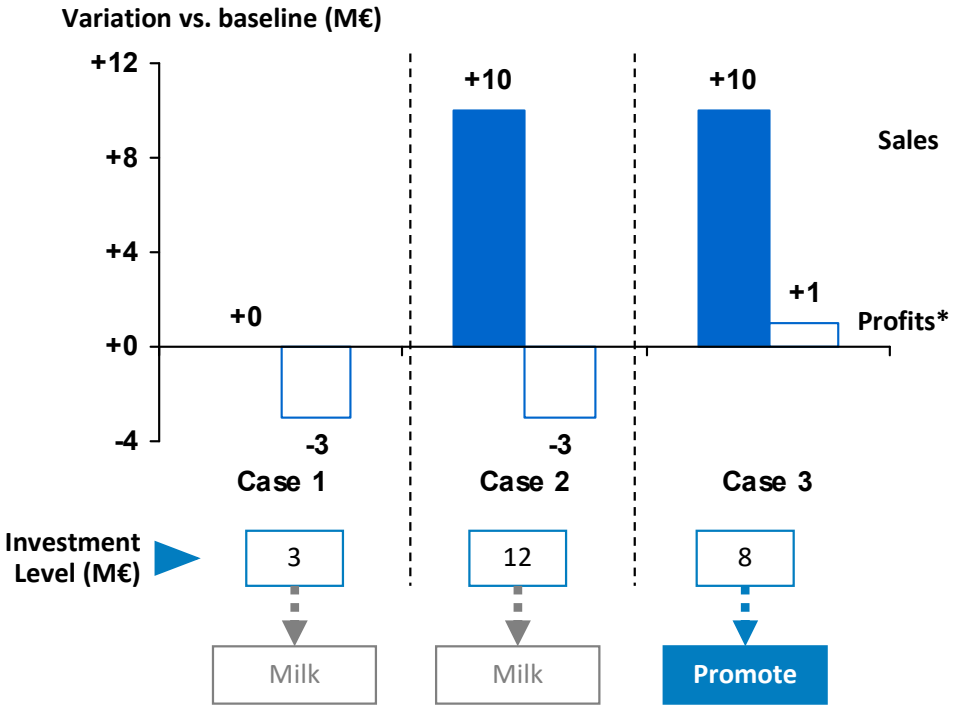
In-depth analyses

1. Activation levers
   - Product assets
   - Price management
   - Distribution
   - Promotion
2. Target mix
   - Client base
   - Preferred targets
   - Targets sensitivity to promotion
3. Media mix
   - Preferred medias
   - Response to new medias testing
   - Seasonality

12 to 24 months projections assuming activation

Illustrative

Estimated impact of an activation on sales and profits



** Assumption: gross profit = 90% of sales. Thus, +€ 10M for an investment of € 8M will lead to a profit variation of: (€ 10M x90%) – € 8M = +€ 1M)*

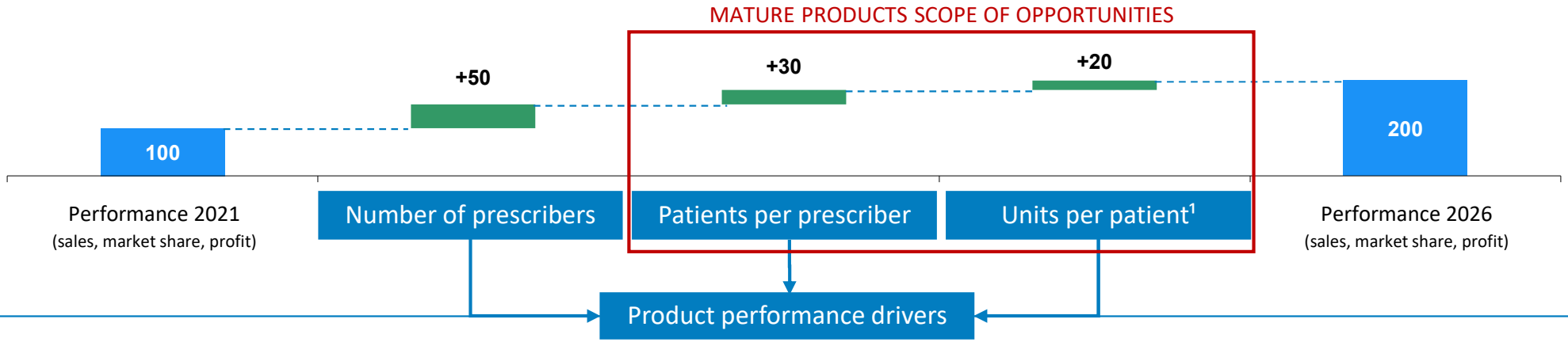
Sources: Smart Pharma Consulting

[1] Products with low/no potential at global level and high potential at local level

Opportunities usually considered to enhance sales trends at mature products level merely consist in maximizing the prescriptions per prescriber ratio

Product growth levers

Illustrative



1	Product attributes	How could product leverage indications, clinical outcome and positioning to enhance performance?
2	Price and reimbursement	Can price be optimized and/or reimbursement conditions and listing be improved across portfolio?
3	Distribution	Does the company properly leverage all relevant distribution channels?
4	Targeting	What are the right prescribers to focus on to optimize portfolio sales trends?
5	Promotional investment	What promotional mix (channels) should be required to facilitate portfolio promotion to selected targets?

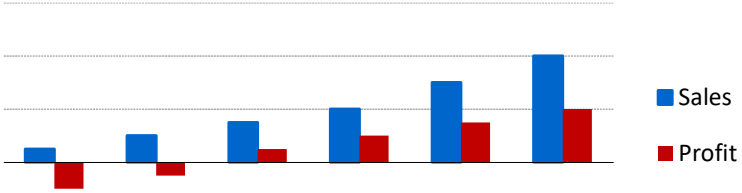
Sources: Smart Pharma Consulting

[1] Inclusive of the dosage, forms, persistency and waste issues

The primary goal of mature products management is to maximize profits, while sales optimization may come as an immediate second-line objective

Portfolio management objectives

Growing products



Objectives

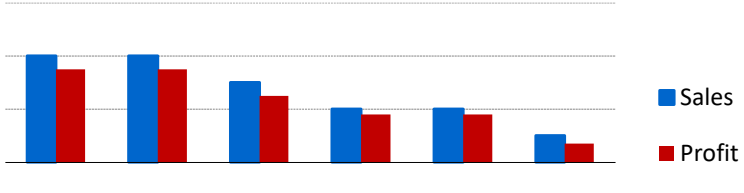
1. Maximize sales
2. Develop profits

Maximizing investment
may be the obvious response

However, some products sales may not soar with an excessive promotional support thus, inducing a rapid drop in profits

Investment should be regarded first in the light of sales enhancement magnitude

Mature products



Objectives

1. Maximize profits[1]
2. Optimize sales

Milking
may be the obvious response

However,

some products sales may slump dramatically in the absence of promotional support thus, inducing a rapid drop in profits

Investment should be regarded first in the light of profit erosion magnitude

Sources: Smart Pharma Consulting

[1] *Maximizing profit does not necessarily mean maximizing profitability*

Preferred product strategies currently range from limiting generics competition to developing product prescriptions

Mature portfolio strategies

	Challenges	Eligible actions
Genericized products	▪ Limit generics penetration ▪ Minimize sales eligible for substitution	1. Immediately align prices if a reference price is enforced 2. Convince pharmacists not to increase product substitution[1] 3. Foster prescriptions transfer to non-genericized forms
De-reimbursed products	▪ Preserve product prescriptions ▪ Ensure product is properly delivered in pharmacies	1. Foster prescriptions transfer to non-genericized forms 2. Maintain prescriptions of de-reimbursed forms with valid MA 3. Prevent delivery switch to high-margin non-listed products
Other products	▪ Limit sales erosion ▪ Develop sales of positive-trend forms	1. Control and/or enlarge prescriber basis 2. Control and/or develop prescriptions per prescriber 3. Maximize spill-over effect

Sources: Smart Pharma Consulting

[1] In certain countries, such a practice may be considered as illegal

Promotional decisions on selected "activable" mature products should be made in compliance with precise objectives and management guidelines

Mature products' management – Investment decisions

Option 1

Promote

- Objectives and guidelines should be set to frame promotional decisions on "activable" mature products:

1. Continuous support over time
   - Short-term/iterative support
2. Sales force investment
   - No sales force investment[1]
3. Stand-alone management
   - Management with core products[2]
4. Internal management
   - External management[3]

Option 2

Milk

- Before considering any stop in promotion, affiliates should carefully analyze the risk of creating major discontinuations in brands' trends over time
- Corporate ambition with the brand may also be a major constraint to milking it
- Prior to make any decision, the affiliate needs thus to carefully analyze brands' potential and sensitivity to promotional investment

Option 3

Divest

- Depending on their sales potential over time and their impact on the affiliate's overall performance, it may be better to renounce retaining some mature brands in the affiliate's portfolio
- There may be three ways of abandoning a brand:
  1. Market withdrawal
  2. Licensing-out to 3rd party company
  3. Selling
- Licensing-out activities can be a source of short-term profit, to be weighed with the loss in sales and contribution over time
- Before abandoning brands, the affiliate should also consider potential impact on Franchise image and activity

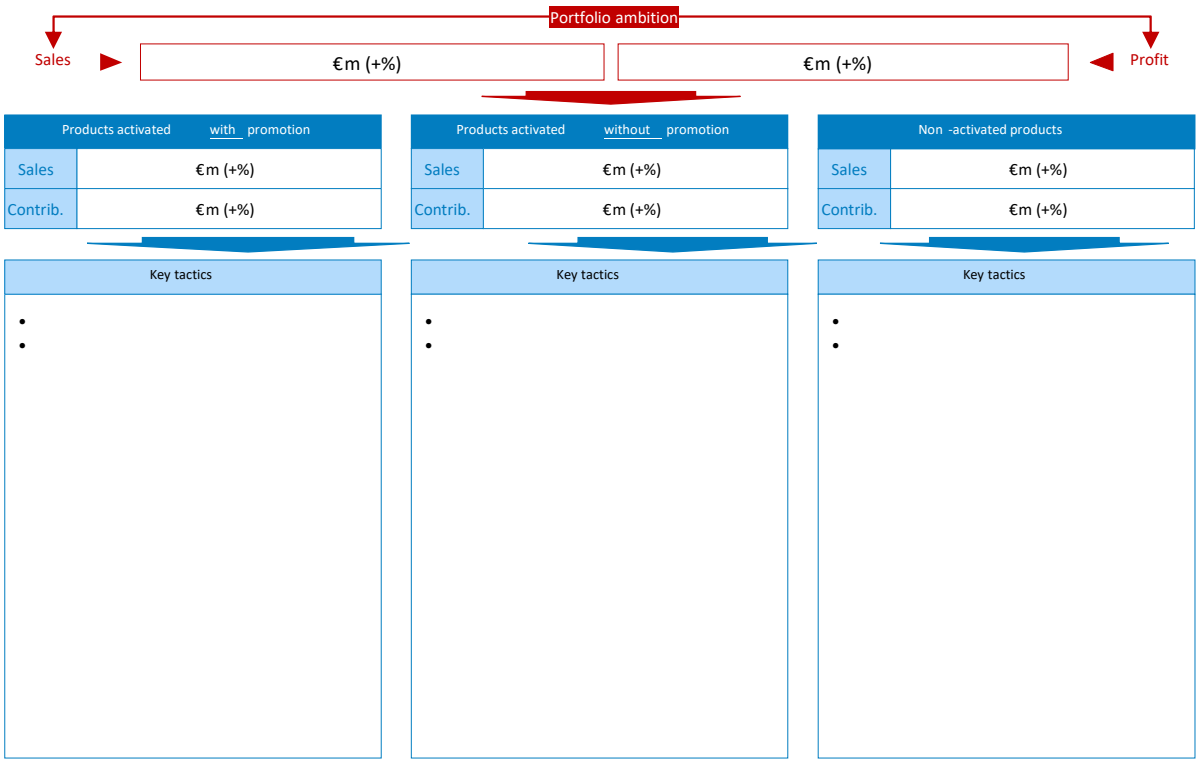
Sources: Smart Pharma Consulting

[1] E.g., PR, press, mailing, etc. – [2] E.g.,. franchise strategy – [3] E.g., risk sharing

The Portfolio Strategy Card has been designed to summarize investment decisions for the different mature product segments, in one page

"Portfolio Strategy Card"

Format



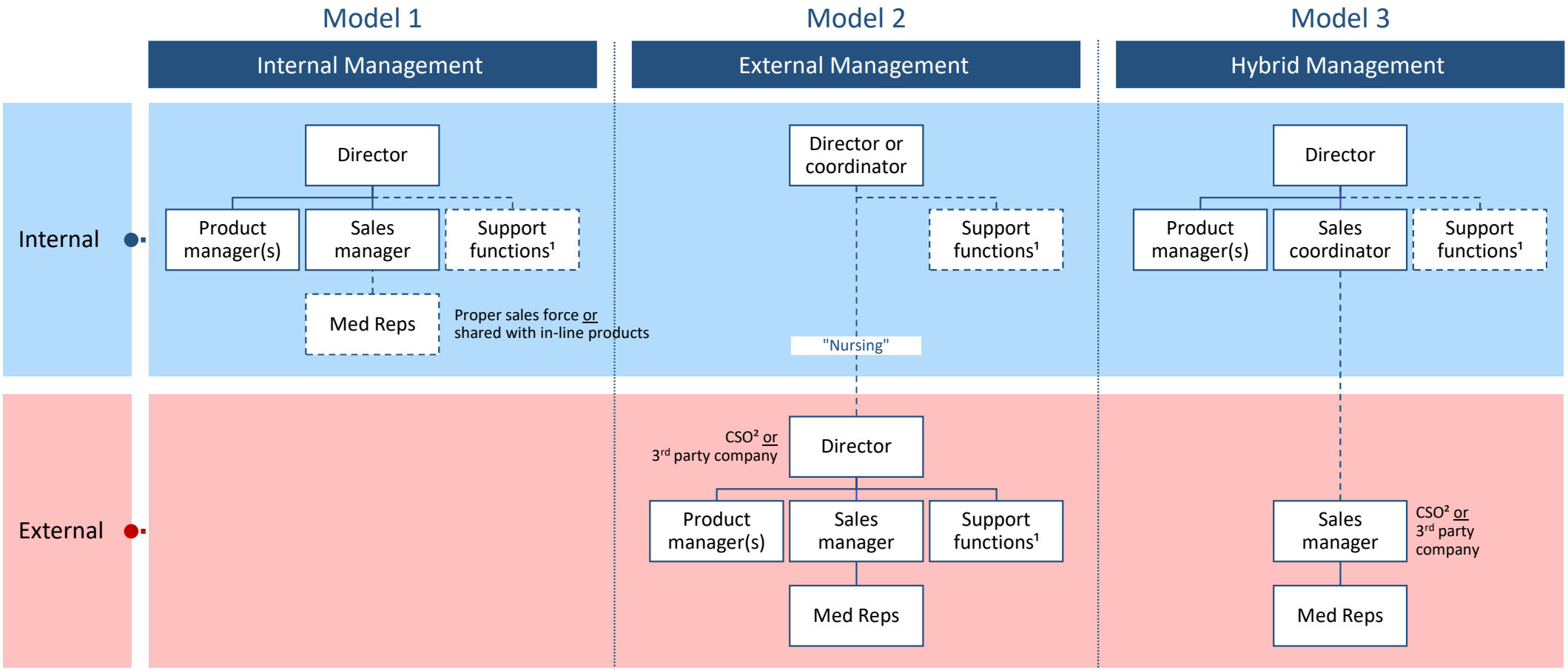
Comments

- Products can be classified into three categories:
  - Products activated with promotion
  - Products activated without promotion
  - Non-activated products
- Sales and profit objectives are set for the entire portfolio and for each category
- Decisions re. activation levers are summarized per product or product group (incl. packs, if any)
- Targeting and multi-channel approaches are considered transversally (sales force support can also be split between external and internal, if relevant)
- Non-activated products are split into three subgroups:
  - Milked products
  - Products not launched but for which MA is maintained
  - Pruned products (licensing-out, cession)

Sources: Smart Pharma Consulting

Three different organizations are usually considered to manage mature products at country level

Organizational models to manage mature products



Doted line boxes = shared functions within internal organization

Sources: Smart Pharma Consulting

¹ Medical, Regulatory, Human Resources, Administrative and Financial support – ² Contract sales organization

Physicians' saturation vis-à-vis face-to-face calls and the emergence of "new players" pushed companies to investigate alternative promotional channels

Multi-channel approach – Changes in the environment

- Strengthening of CRM[1] tools allowing for a more precise profiling of customers

- Strong detailing pressure of companies on the same targets of high potential physicians
- Evolution of product portfolios (increasing weight of specialist-oriented products requiring less reps)
- Increasing role of other market players (patient advocacy groups, regional sickness funds, etc.) influencing physician prescriptions

Implications for pharma companies

- Higher proportion of physicians refusing face-to-face calls from sales reps
- Tighter control of medical calls by health authorities which aims at:
  - Reinforcing detailing of products' good usage as set in SmPCs[2]
  - Limiting the number of calls to contain the number of physicians' prescriptions
- Need to adapt communication (contents and channels) to multiple targets (prescribers, influencers, payers)
- Reduced marketing and sales force budgets

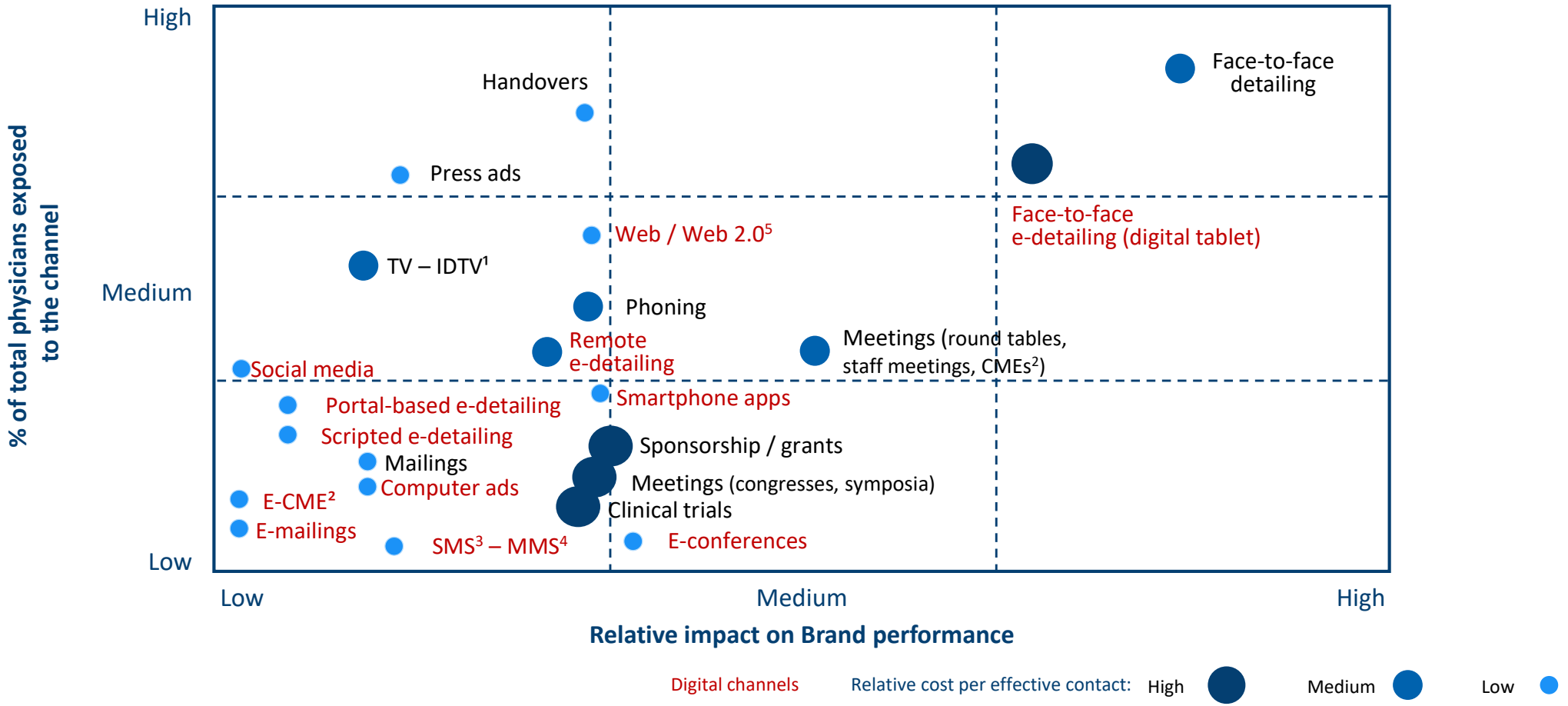
- Reduction in the number of new active substances with high sales potential, leads companies to try to:
  - Improve the level of return on investment of each promotional activity
  - Maximize the profits of mature products by using more efficient promotional channels
- Less favorable economical context

Sources: Smart Pharma Consulting

[1] Custormer Relationship Management – [2] Summary of Product Characteristics

If the impact of an action may be high on an individual basis, the global result may be limited, as the number of clients exposed to the promotional initiative may be too low

Multi-channel approach – Evaluation mix



Sources: Smart Pharma Consulting

[1] Interactive digital television – [2] Continuous medical education – [3] Short message service – [4] Multimedia message service – [5] Including websites and blogs

Two different approaches can be considered to measure out the benefit/risk of an investment variation on “activable” products…

Assessment of product sensitivity to promotion

Approach n°1

Anticipate expected impact in view of:

- Past experience
- Benchmarking
- Ambitions

Propose best guess evaluation
(e.g., expected sales and/or market share variations)
+/- pilot test / monitoring method

Approach n°2

Evaluation of required impact to:

- Cover investment
- Maintain sales levels
- Maintain profit levels / ratio

Determine minimal impact
(e.g., required sales and/or market share variations)
to break even

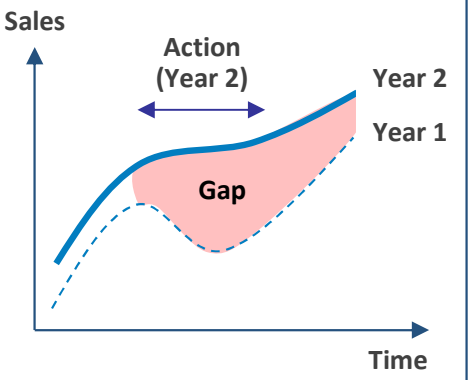
Sources: Smart Pharma Consulting

… and up to 4 different methods can be used to quantify the impact of promotional investment decisions on products sales and profit trends

Methods to evaluate the impact of promotional investment decisions

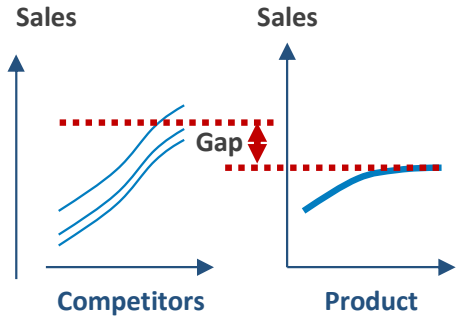
Method 1

Historical data analyses



Method 2

Analogical models



Method 3

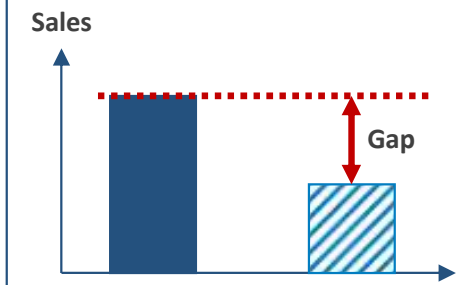
Deductive reasoning

Impact measurement grids

- Geographies
- Nature of physicians addressed
- Nbr. of physicians addressed
- Nbr. of patients per physician
- Etc.

Method 4

Testing



Sources: Smart Pharma Consulting

Statistical methods should be considered in view of data availability and the capacity to isolate a specific action from the overall investment

Statistical methods to measure investment impact

	Vs. control group (geography)	Vs. baseline (time)	Vs. benchmark (experience)
Description	• **Analyses comparing product performance in a group / area with the action and a group / area without the action** • **Product usually compares to itself in both groups / areas, simultaneously**	• **Analyses comparing product overall performance with and without the action** (no control group)**, in a sequential way** (Y Vs. Y-1, Q Vs. Q-1) • **Product usually compares to itself** (intrinsic approach) **or to competitors** (extrinsic approach)	• **Analyses comparing a product performance with a specific action to another product performance in the absence of this action** (investment levels and marketing mixes need to be quite homogeneous, exclusive of this specific action)
Methods	• **Ad hoc surveys monitoring Rx changes in pre-determined sub-populations** • **Panel-based/P&L analyses comparing areas with and without selected action with standard parameters** (e.g., sales, sales growth, market share, etc.)	• **Ad-hoc surveys monitoring Rx before and after the action** • **Panel-based/P&L analyses measuring variations Vs. baseline trends with standard parameters** (e.g., sales, sales growth, market share, etc.)	• **Ad hoc surveys monitoring Rx changes of both products** • **Panel-based analyses measuring performance trends of both products with standard parameters** (e.g., sales, sales growth, market share, etc.)
Examples	Measuring the impact of a congress on invitees' prescription behaviors	Measuring product sensitivity to sales force variations	Comparing the performance of products with two different promotional mixes
Applications	• Analyses usually enable to identify an impact (either neutral or positive)… • … though without allowing any direct mathematical transposition to product overall sales	• Analyses enable to identify an impact (either neutral or positive), on a marginal or general basis (entire investment considered) • Direct mathematical transposition to product overall sales usually possible	• Analyses enable to say that the performance could have been equal or better with the action • The direct mathematical transposition to product overall sales may be possible, though with much caution

Sources: Smart Pharma Consulting

Logical grids' objective is to anticipate the likelihood of a breakeven / significant positive impact of an action, through a step-by-step approach

Impact evaluation grids

Volume modeling grid - 1

Assumptions

Investment decision	Increase investment by +20%
Starting year	2008
Starting month	February

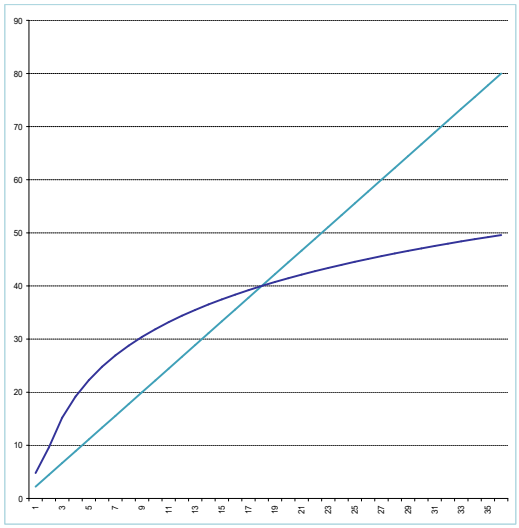
Selected customers		500
Total customers		3 500
Total annual volume before action (year trend)		2 000 000
Average volume per customer and per year	Selected customers	800
	Other customers	457

	% customers changing behaviour	Peak volume gain / loss per customer	Time to peak impact (number of months)
Expected impact	80%	50	18

Rationale to investment decision impact on sales	
Product events considered beyond promotion	
Market events considered beyond promotion	

Results

Months	Linear projection	Logarithmic projection	Adjusted projection
1	2	5	
2	4	10	
3	7	15	
4	9	19	
5	11	22	
6	13	25	
7	16	27	
8	18	29	
9	20	30	
10	22	32	
11	24	33	
12	27	34	
13	29	35	
14	31	37	
15	33	37	
16	36	38	
17	38	39	
18	40	40	
19	42	41	
20	44	41	
21	47	42	
22	49	43	
23	51	43	
24	53	44	
25	56	45	
26	58	45	
27	60	46	
28	62	46	
29	64	47	
30	67	47	
31	69	48	
32	71	48	
33	73	48	
34	76	49	
35	78	49	
36	80	50	

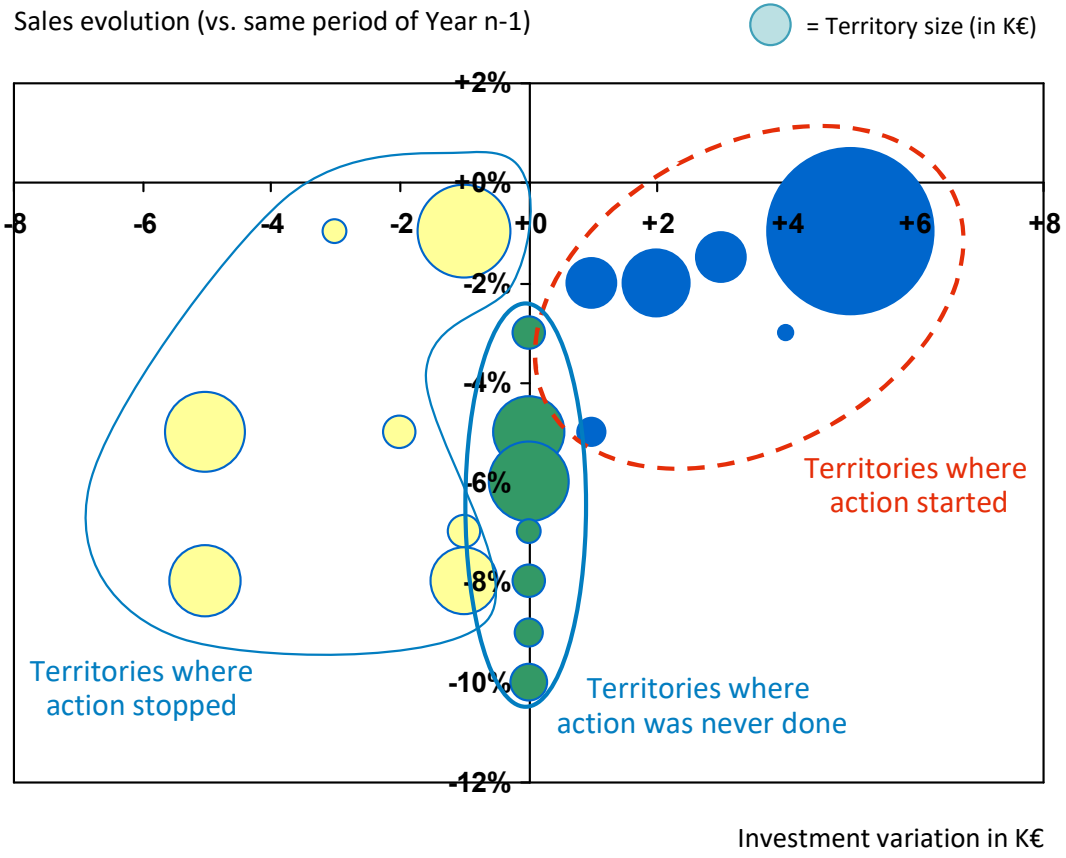


- Impact evaluation grids aim at measuring the impact of an action, while going through logical steps, e.g.,:
  - % of physicians to be accessed with the action
  - % of physicians accepting to participate into the action
  - % of physicians convinced by the action
  - Physicians weight in total product sales before action
  - Performance trends change among physicians changing their behavior (gain either in terms of market share or sales growth)
  - Related sales gain after action at local / national level
  - Action cost
  - Net result
- Most parameters would need to be populated via ad hoc surveys, however, the beforehand evaluation of expected impact without those ad hoc surveys can also be an excellent means to properly calibrate an action
- Impact evaluation grids should be used for major actions only

Sources: Smart Pharma Consulting

Logical reasoning should ideally be complemented with testing, when *a priori* evaluation seems to be favorable, to verify action efficiency

Testing of the impact of invitations to congresses in selected territories

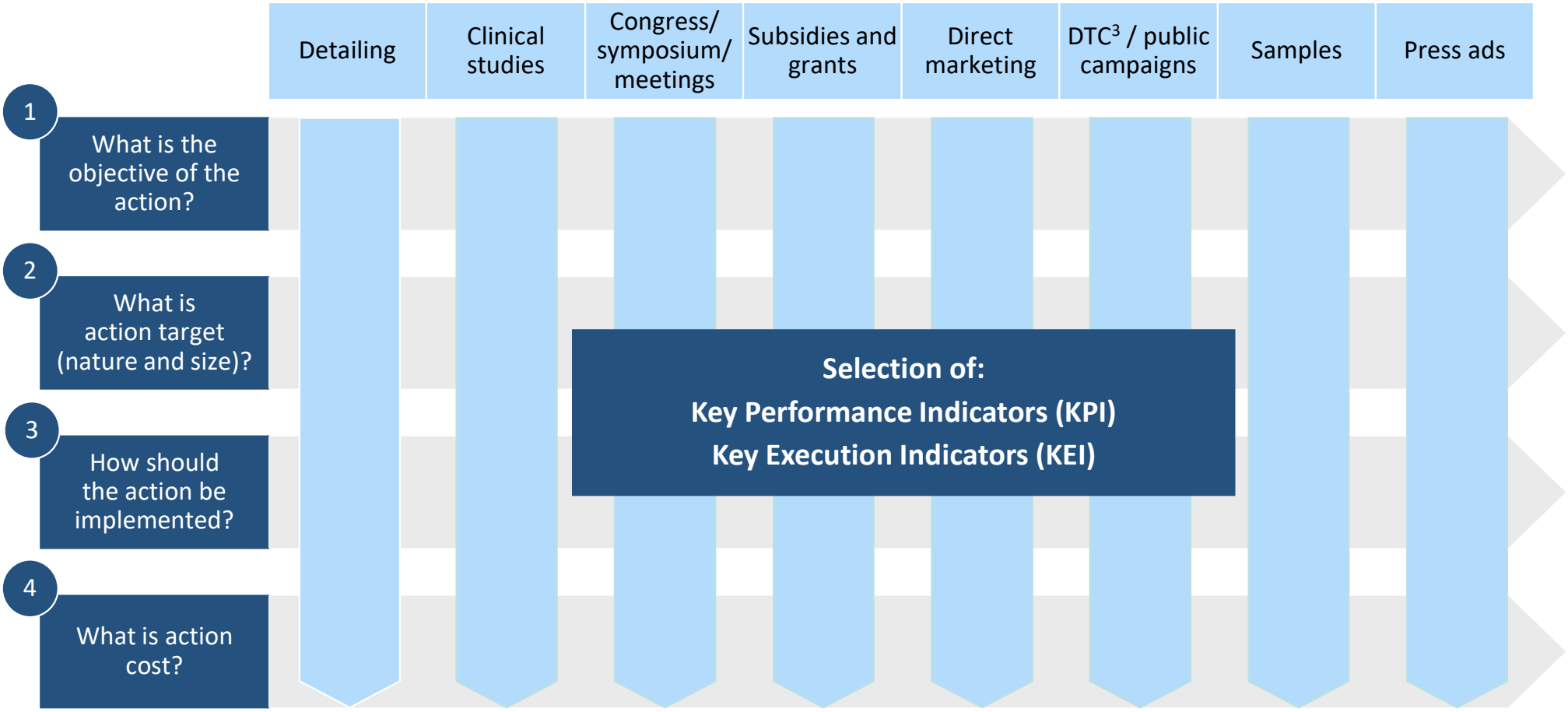


- Sales evolution should be measured for a specific period
- Period calibration is the most difficult part of the exercise, and should consider:
  - Action pre-launch (e.g., formal invitation by Reps for a congress)
  - Action own time (e.g., congress date)
  - Action monitoring (e.g., Reps visit to get physicians feedback)
- Action impact is usually measured either instantly or up to 3 months after action initiation, for mature products
- There is no need to measure out systematically the impact of stopping the action; however, if territories are vacant or action did stop for any reason, it might also be interesting to consider them into the analysis

Sources: Smart Pharma Consulting

Four questions would need to be answered before implementing any action and monitoring it with KPI[1] and KEI[2]

Investment implementation – Key questions to be answered before acting



Sources: Smart Pharma Consulting

[1] Key performance indicators – [2] Key execution indicators – [3] Direct to consumer

General recommendations

- Mature brands representing as much as 30% to 50% of certain big pharma total sales and 60% to 70% of their profits, performance optimization should be one of their strategic priorities
- The opportunity of optimization should be assessed brand by brand and country by country *(e.g., Branded generics competition like in Eastern European countries have a totally different impact on original brands compared with the one observed with unbranded generics like in Western European countries)*
- Decision to invest in promotion should be supported by cost-efficient market studies and analyses, rather than intuitive considerations, as it is often the case
- When mature brands have shown to be sensitive to promotion, the level of effort should demonstrate an impact on performance, at national level
- Targeted physicians should include only moderate and high prescribers of the mature brand *(The primary objective being to remind them about the brand and not to convince them. After 15 to 20 years in the market, it is too late to convince non- and low-prescribers)*
- If HCPs are increasingly embracing digital technology, it is far to be a panacea

Sources: Smart Pharma Consulting

Four Key Success Factors

1. Mature products should be recognized by the corporate management committee as a key strategic lever

2. Mature products franchises or BUs should be set-up at national level (to better address local specificities), while remaining lean and agile, capitalizing as much as possible on shared support functions (i.e., finance, manufacturing, supply, regulatory, legal, BD, medical, commercial, etc.)

3. Collaborators in charge of managing mature products should: be experienced, have no preconceived ideas, have an entrepreneurial mindset and be able to mobilize support functions throughout the company

4. Decision-making processes should be fact-based with a permanent double valuation at global and local levels so that trade-off analysis can be carried-out

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Value of Established Pharma Brands

How to get the Best of it?

POSITION PAPER November 2022

Smart Pharma Consulting has recently conducted a study re. best management practices of established brands, based on desk research, its own expertise and senior executive interviews

Context, objectives & approach

Context and objectives

- Established brands play different roles, depending on the structure of pharma companies' portfolio
- For big pharma companies having a dynamic pipeline of innovative products, they represent an essential source of cash
- For less innovative companies, established brands are vital since they constitute their core business
- In this context, Smart Pharma Consulting proposes to review the best practices to optimize the value of the established brands

Approach

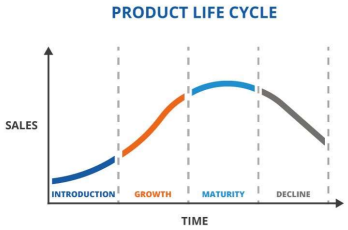
- To do so, Smart Pharma Consulting has:
  - Reviewed the literature re. established brands with a special focus on drugs[1] and…
  - … its previous publication released on Mature Brand Management (2016)
  - Capitalized on insights shared, and recommendations made during its consulting missions
  - Interviewed 16 senior executives from six pharma companies with various profiles and strategies re. the management of established brands
  - Analyzed the collected information
  - Formulated recommendations

Sources: Smart Pharma Consulting

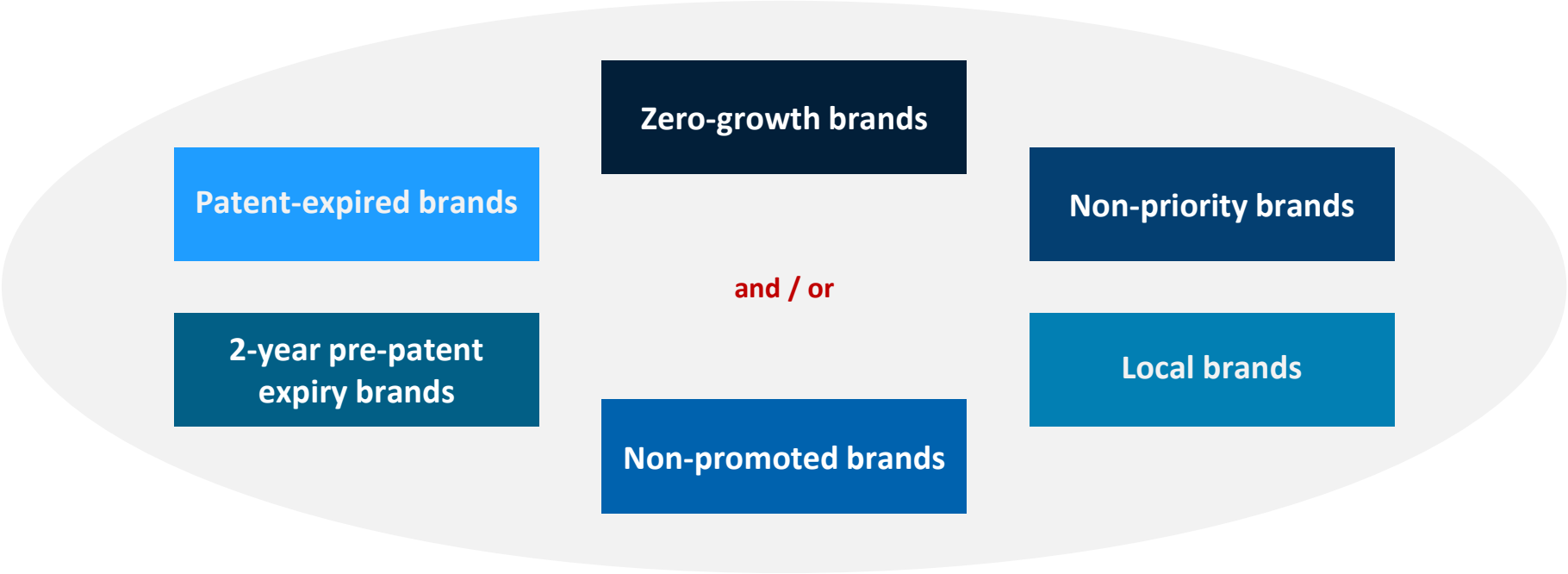
[1] The book written by Tony Ellerly & Nel Hansen "Pharmaceutical Lifecycle Management" has been particularly inspiring

Established brands are more often mature, having lost their marketing exclusivity, requiring or not investment, and contributing significantly to the profits of pharma companies

Definition



- Different names and definitions are used by different pharma companies to describe late-stage brands
- Whatever the name used (e.g., established, legacy, mature brands), it is important to agree on a common and clear definition throughout the company to avoid misunderstanding



Sources: Interviews and analyses by Smart Pharma Consulting

Amongst the external factors influencing the performance of established brands, pricing is the most important one to drive customers behavior and preference

Market attractiveness determinants

Health authorities

- Limited regulatory hurdles to get MA[1] for branded generics because the clinical value of the active ingredients is yet well-established (bioequivalence required)

Suppliers

- Original and generic established brands production are most often outsourced
- It is essential to ensure a good control of manufacturing costs which account for 30-50% of sales prices[2]

Established brand portfolio performance

Customers

- Payers: increasing price sensitivity
- Prescribers: prescribing by brand name or by INN[3]
- Pharmacists: switching or not
- Patients: accepting the brand or not

Competitors

- Low entry barriers (limited development costs)
- High probability to obtain a MA
- Competition mainly on price (strong competitive advantage for lean and agile organizations with high economies of scale)
- Branded generics markets (e.g., USA, Western Europe) vs. non-branded generics markets (e.g., BRIC[4] countries, CEE[5] countries
- Branded generics trying not to compete on price but on value by offering customer services and capitalizing on corporate reputation

Sources: Interviews and analyses by Smart Pharma Consulting

[1] Marketing Authorization – [2] Before discounts – [3] International non-proprietary name – [4] Brazil, Russia, India, China – [5] Central Eastern European

The performance of established brands, in terms of sales and profits, strongly depends on the dynamism of the portfolio management and on the relevance and level of allocated resources

Brand performance determinants

Portfolio management

- Promotion:
  - Internal
  - External[1]
- Out-licensing
- Milking

Original brand entry

or

Branded generic entry

- Original brands becoming established
- Branded generics[2] (e.g., basic version, improved formulation, fixed-dose combination, etc.)

Inbound

Established brand portfolio performance

Outbound

Original brand exit

or

Branded generic exit

- Market withdrawal:
  - Authoritative decision (e.g., safety issues)
  - Strategic decision (e.g., marketing cessation due to manufacturing, profitability issues, etc.)
- Selling of the brand (cash opportunity)

Operational support

- Market access (national, regional, local levels)
- Medical affairs (medical meeting, data generation, etc.)
- Marketing:
  - Positioning (brand, associated services, corporate reputation)
  - Targeting (physicians, pharmacists, patients, PAGs[3], etc.)
  - Promotion: conventional and/or digital (medical calls, medical meetings, phoning, webinars, e-mailing, etc.)

Sources: Interviews and analyses by Smart Pharma Consulting

[1] Through a distributor, a pharma company, a CSO, etc. – [2] Developed in-house, subcontracted or in-licensed – [3] Patient advocacy groups

Depending on each company history and vision, three primary objectives have been identified regarding the management of established brands

Objectives and Strategic options

Primary objectives / Strategic options

Generate cash to fund innovation

- Established brands being often milked or supported by limited investments, they generate high profitability levels and…
- … contribute significantly to the company profits

"At Sanofi, our established brands represent a significant part of our business operating income"

Generate cash to survive

- For certain companies (e.g., Recordati, Menarini, Organon), established brands are their core business
- In this case, the sustainability of their business depends on their established brand portfolio

"Organon primary objective is to create as much value as possible from its established brands"

Contribute to sales

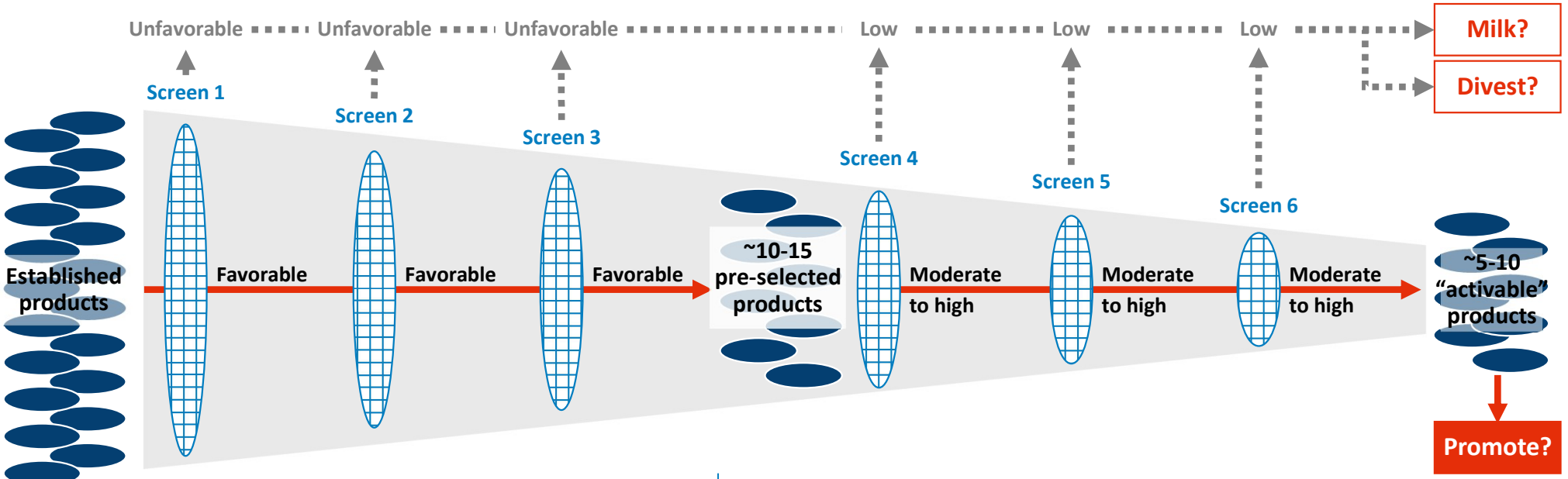
- Some other companies do not actively manage their established brands…
- … which are mainly kept in the market for their contribution to their sales

"Companies like AstraZeneca, GSK or Roche allocate a minimum level of resources – if any – once generics / biosimilars enter the market"

Sources: Interviews and analyses by Smart Pharma Consulting

The selection of "activable" established brands should be based on tangible regulatory and business criteria

Selection of established brands to promote (1/2)



Parameter examples	Sales trends	Profit trends	Market trends	Regulatory risk	Competitive risk	Strategic fit with core products
	• Level • Growth *Contribution to portfolio trends*	• Level • Growth *Contribution to portfolio trends* • Price variations	• Size • Growth • % generics	• Patent • SmPC • Guidelines • Reimbursement	• Market position • Differentiation • Newcomers • Entry ticket	• Door opening • Scientific legitimacy • Prescribers overlap • Company image and responsibility

Step 1: Quantitative screening

Step 2: Qualitative screening

SmPC = Summary of product characteristics

Sources: Smart Pharma Consulting

Decisions to support an established brand with promotional investments are often based on intuitive feeling of managers and rarely on the results of rigorous analyses

Selection of established brands to promote (2/2)

- The level of the brand sales should be high enough to expect a significant impact at local level

"If the brand sales are too low, the expected promotional impact will not be meaningful – GSK"

- In-person or remote interactions with physicians should be possible to promote the brand

"At Recordati, decisions are made at local level considering the competitive environment and the brand potential"

"Due to budget constraints, we do not carry out in-depth sensitivity studies – Pfizer / Upjohn"

- The profit impact should be positive in the short term…
- … and significant enough

"With established brands, all promotional investments should deliver results within a year – Pfizer / Upjohn"

"More than for innovative brands, return on promotional investments for established brands should be objectified "

Sources: Interviews and analyses by Smart Pharma Consulting

For successful brand value optimization, developments must comply with four principles and decisions must be made long enough before patent expiry

Life-cycle management: Prerequisite

Provide clinical improvement

- LCM development should bring additional value vs. existing solutions
- The added value should be relevant and significant for stakeholders (i.e., prescribers, patients, pharmacists, payers)

Increase patient base

- Additional patients could be "captured" through:
  - New indications, formulations and/or combinations
  - Launching of own generic drug
- Probability of expansion should outweigh the risk to cannibalize existing SKUs

Generate significant ROI

- Four factors to consider:
  1. When to invest?
  2. How much to invest?
  3. When to stop investing?
  4. What alternatives might generate a better ROI?
- Market attractiveness should be evaluated and…
- … shaped to optimize ROI

Extent market exclusivity

- Market exclusivity can be extended through:
  - Patent protection
  - Prolonged exclusivity
- Timing is key to benefit from exclusivities for new indications (e.g., pediatric), formulations, combinations

"LCM initiatives such as new dosages, formulations, FDCs, etc. should be implemented 24 months prior to LOE"

- Successful launch by Merck & Co of Fosamax 70, once-weekly to replace Fosamax 10, once-daily, increasing the franchise sales by 80% within 2 years in the USA and Europe as a result of a significantly improved convenience for patients[1]
- Lilly launched a once-weekly version of Prozac – completing its once-daily formulation – which failed because it was not fulfilling a real need and it was significantly more expansive than the once-daily generics, launched one year later

Sources: Adapted from T. Ellerly et al. – Interviews and analyses by Smart Pharma Consulting

[1] *Fosamax must be taken in the morning, standing up for between 30 minutes and 1 hour before food. Switching from once-daily to once-weekly was perceived by patients as a very important improvement in terms of convenience, which resulted in a strong acceleration of the product sales. At that time, Fosamax 10 was not yet genericized but considered as obsolete vs. once-a-week formulations proposed by competitors*

Launching new indications can be an effective life cycle management initiative, provided they are medical relevant, offer a significant business potential and appropriate resources will be available

New indications: Decision-making factors

What is the medical benefit?

- Strength of rationale and/or track record of the mechanism of action
- Existing proof-of-concept (POC)
- Robustness of dose selection
- Safety signals in pre-clinical studies
- Position in the treatment strategy
- Etc.

What is the commercial potential?

- Importance of unmet needs
- Patent expiry date of the original brand, or of the combined product, in case of FDC
- Potential exclusivity related to the new indication
- Competitive intensity
- Likely acceptability of target pricing
- Likely reimbursement
- Depth of knowledge re. the targeted market
- Etc.

What are the available resources?

- Internal competition for resources vs. other products in development
- Company priority for the targeted indication
- Willingness and ability to co-develop a new indication with partners
- Etc.

A new indication is not very effective to defend a brand franchise after patent expiry because one cannot prevent physicians prescribing and pharmacists dispensing generic versions, even if the indication is protected

Sources: Adapted from T. Ellerly et al. – Interviews and analyses by Smart Pharma Consulting

Combining a new dosage strength or a new dosage regimen with a new indication can be an effective life-cycle management strategy

New dosage strengths and regimens

New dosage strengths

- Adding dosage strengths can be a useful strategy at different phases of the brand life cycle
- This can enable physicians to customize dosage according to the needs of individual patients and…
- … may help to gain market share from alternative original brands or generics that do not offer the same flexibility
- The benefit of providing a wide range of dosage strengths must be weighed against the extra cost of multiple SKUs, by quantifying the upside provided by each dosage strength
- Example: Lovenox (enoxaparin) is marketed in 8 different SKUs in the USA and 11 in France

New dosage regimens

- New dosage regimens are usually the result of reformulations, as when a twice-daily form is replaced by a once-daily form, in a controlled release formulation
- The objective of a new dosage regimen can be to:
  - Differentiate from competition:
    Schering-Plough launched Intron-A[1] (interferon alfa-2b) for hepatitis B followed by PEGIntron[2] (peginterferon alfa-2b)
  - Close a gap:
    Actonel 75 mg, taken once-monthly, was developed to replace Actonel 35 mg once-weekly to compete with Bonviva 150 mg from Roche/GSK which was used on a monthly basis
  - Increase cost-effectiveness:
    By spacing drugs injections from weekly to bi-monthly, one can reduce the cost of treatment, especially if done by a nurse
  - Get a patented SKU:
    Genentech obtained a patent in Europe on a new dosage regimen for an IGF-1[3] injected discontinuously in a cyclic "on/off" fashion

Sources: Adapted from T. Ellerly et al. – Interviews and analyses by Smart Pharma Consulting

[1] Also named Rebif and injected 3 times a week – [2] Also named Viraferonpeg, a pegylated formulation, injected once-weekly – [3] Insulin-like-Growth Factor-1

Drug reformulations, which mostly aim at reducing the dosage frequency or changing the route of administration, have become rarely recognized as a valuable differentiating factor

New formulations

- Improving efficacy, safety and/or convenience through reformulation can lead to a significant uptake amongst stakeholders[1]

Key Success Factors

- Launch early, prior to patent expiry to switch patients before generic entry
- Lower investment required compared to new product development and launch
- Maintain sales of brand franchise when patients switched to the reformulated version, ahead of patent expiry
- Capitalize on the brand equity established for the original product

Key Barriers

- Increasing use of tiered and/or restrictive drug plan formularies may limit uptake
- Withdraw and switch strategies blocked by EU regulations
- Reformulated products risk of being included in jumbo reference pricing system like in Germany
- Increasing bad perception of physicians and payers viewing reformulations as a generic defense strategy
- No additional data exclusivity periods under EU regulations, even for patented reformulations

Drug delivery devices

- In certain TAs like respiratory diseases[2], inhalers (i.e., vaporizer, dry powder, nebulizer) or in diabetes (insulin syringe and vial, prefilled syringe, pen, connected pen, “artificial pancreas”[3]) have participated to drive competitive differentiation and to raise a certain level of protection against generic and biosimilar competition

Sources: Adapted from T. Ellerly et al. – Interviews and analyses by Smart Pharma Consulting

[1] Physicians, patients, pharmacists and payers – [2] Asthma and chronic obstructive pulmonary disease (COPD) – [3] Combination of a blood glucose meter and a drug delivery system that are interconnected

Before developing and launching FDCs, clinical relevance and business opportunities should be carefully assessed because the cases of success have significantly decreased over the recent years

Fixed-Dose Combinations: Single & multiple indications

Example
Arterial hypertension

Calcium channel blocker + Angiotensin II receptor blockers

Exforge (amlodipine + valsartan)

Example
Arterial hypertension + Hypercholesterolemia

Calcium channel blocker + Statin

Caduet (amlodipine + atorvastatin)

Key points to be assessed

- Medical value of the combination:
  - What is the clinical outcome (efficacy and safety)?
  - What is the convenience level of the FDC from physicians' (position in the therapeutic armamentarium, titration) and patients' perspectives (drug intake and regimen)?
  - Does it require a change in treatment practice, and what are, in this case, the requirements to do so?
- Commercial value of the combination:
  - What is the importance of the comorbidity in terms of treated patients (if multiple indications like for Caduet)?
  - What is the reservoir of growth for the FDC (i.e., main competitors, either original brands or generics)?
  - Is there a risk of cannibalization and how important is it?
  - What is the price level that can be expected from the FDC?

"In the USA and Europe, the benefits of FDCs in terms of adherence to treatment is under-valued by payers"

Sources: Adapted from T. Ellerly et al. – Interviews and analyses by Smart Pharma Consulting

The marketing of own generics or of competitors' ones may contribute to extent the established brand portfolio offering and to improve the generated profits

Generic strategy

Own generics strategy

- Developing and marketing its own generics makes sense in price-sensitive markets like the USA, Germany, the UK, France, etc., in which established brands cannot compete head-to-head and remain profitable[1]
- This strategy has not shown to be very effective when calls for tenders are the dominant process of purchase
- The risk of cannibalization should be evaluated
- Once the decision has been made, the pharma company can market its own generics:
  - In-house, in a dedicated business unit (e.g., Pfizer with Greenstone[2] in the USA, Sanofi with Zentiva[3] in France)
  - Through a third-party, specialized in the generic business (e.g., Pfizer has signed a deal with the generic company Zentiva to market its own generic of Lipitor in France)
- This strategy requires to contain manufacturing costs at a level comparable to generic companies to offer competitive prices to be listed by retail pharmacists

Competitors generics strategy

- Pharma companies can develop or in-license and market generics from other pharma companies as:
  - Non-branded generics (e.g., Novartis markets the established brand Diovan (valsartan), its own generic through its subsidiary Sandoz, which markets also a generic of Cozaar (losartan) of Merck & Co)
  - Branded generics (e.g., Liporosa, FDC of rosuvastatin and ezetimibe, marketed by Servier)
- The choice between non-branded and branded generics will depend on the market considered
- Non-branded generics should preferably be included in a dedicated generic business unit with the right expertise
- Branded generics, promoted in priority to physicians can advantageously help to manage dynamically and in a more profitable way a portfolio of established brands

Sources: Adapted from T. Ellerly et al. – Interviews and analyses by Smart Pharma Consulting

[1] In these markets, generics can take 80% to 90% of the original brand in few weeks with price cuts by 50% to 80% – [2] Before the spin-off of Greenstone, part of Upjohn, in 2021, which is now part of Viatris – [3] Before it was sold to the private equity firm Advent in 2018

The optimization of manufacturing processes and costs are particularly important for established products which must compete on price

Manufacturing strategies

Enhanced protection

- Development of new, patent-protected manufacturing processes eliminating impurities, using different excipients and adjuvants…
- … can provide secondary protection and…
- … raise the technical hurdles to competition, and especially generics manufacturers

Improved differentiation

- It is possible, in certain cases, to delay generic entry by tightening the specifications on the original brands, late in their life cycle
- The objective is to prevent generics companies to meet the more stringent quality or the bioequivalence standards…
- … or at least, to delay their entry if they were developing their generics in comparison with earlier and looser specifications

Enhanced profitability

- Established brands are particularly subject to price competition from competitors and price pressure from payers
- Minimization of manufacturing costs by improving processes is a priority to maximize the profitability of established brands
- To do so, relocation of production to lower cost countries or outsourcing can be considered

Optimizing the cost of goods sold is a key driver of successful management of established brands

Sources: Adapted from T. Ellerly et al. – Interviews and analyses by Smart Pharma Consulting

In general, pharma companies expect from commercial activities dedicated to established brands quick, cheap and high return on medical-marketing and sales investment

Commercial strategies

Drive global access to patients

- The larger the number of countries where the brand is available, the higher the probability of sales
- Thus, it is important to get and/or maintain the drug approved by national health authorities for its different indications
- The pricing policy should be adapted to the competitive environment to be:
  - Reimbursed by public / private payers
  - Listed on formularies
  - Prescribed by physicians
  - Dispensed by pharmacists
  - Bought by patients (if out-of-pocket)

Optimize profitability

- The lifetime profitability is a critical performance indicator throughout the brand life cycle
- The commercial tactics play a great role to optimize profitability
- The following key questions should be addressed:
  - Where and when to invest?
  - Where and when to cut investment?
  - Where and when to drop or raise prices?
  - How to invest in an efficient manner?
  - Can digital channels replace in-person interactions?
  - Etc.
- In non-branded generic markets, the most profitable strategy is, in general, to harvest the brand, by cutting medico-marketing and sales expenses

The diversity of competitive environments from one country to another requires to adopt flexible strategies to optimize the performance of established brands

Sources: Adapted from T. Ellerly et al. – Interviews and analyses by Smart Pharma Consulting

An active support of established brands in branded generic markets may pay off, depending on each specific situation

Geographical optimization

Non-branded generic markets

(USA, Germany, France, UK, northern European countries, etc.)

- The established brands, once genericized, or even once their close competitors are genericized, see their sales drop in volume and furthermore in value due to authoritative price cut and/or price discounts
- In these markets, in general, substitution right[3] is granted to retail pharmacists who have more financial interest to deliver generics than the original brands
- Few weeks or months after their market entry, generics capture up to 70% to 80% of the original brand sales

- The best strategy is, most often, not to do anything since the prescription of physicians is substituted by retail pharmacists in favor of generics, while it is rare that patients ask to be delivered the original brand

Branded generic markets

(Italy, Spain, China, India, Russia, CEE[1] countries, CIS[2], Latin America, etc.)

- In countries where the generic market is dominated by branded generics, the latter are viewed by stakeholder and promoted by pharma companies as me-too products
- Physicians, influenced by pharma companies, develop a certain degree of brand loyalty
- Substitution is either not widely applied or permitted
- It is not rare for generics to have a penetration rate limited to 40% or 50% on these markets

- Depending on branded generic market specificities, the optimization of established brand performance may require an active support in terms of market access, medical affairs, marketing and sales activities

Sources: Interviews and analyses by Smart Pharma Consulting

[1] Central and Eastern Europe – [2] Commonwealth of Independent States – [3] Not the case in the UK

Pricing strategies should be adapted to competitive position of each brand at the level of each local market, so that to optimize the brand value

Pricing strategies

Price alignment

- The decision to align the price of established brands at the level of or close to the cheapest competitors depends on:
  - Local regulations (e.g., price cuts imposed by health authorities / public health insurers in countries like France, after LOE; reference pricing system like in France, Italy, Germany, Spain)
  - Existence of national (e.g., Nordic countries) or regional (Germany) tenders
  - The opinion and behavior of:
    - Payers who set a maximum reimbursed price
    - Retail pharmacists who can substitute
    - Physicians who can “impose” a brand
    - Patients who may not accept to pay out of their pocket

Premium price

- The premium price strategy can be the preferred choice if the established brand is perceived as superior to generics and/or other me-too products in terms of:
  - Product features (e.g., number of dosages, device for injection, packaging, narrow therapeutic range)
  - Services (e.g., patient support programs, CME[1] programs, medical information)
  - Corporate reputation (e.g., in terms of innovation, quality of execution, Corporate Social Responsibility)
- Thus, in these conditions, a higher price can be offset by the value of the established brand for a proportion of stakeholders

Sources: Adapted from T. Ellerly et al. – Interviews and analyses by Smart Pharma Consulting

[1] Continuous medical education

Exit strategies are part of a dynamic management of an established brand portfolio and contribute to optimize its profitability

Exit strategies

Patient safety

- The exit of established brands for safety reasons is either permanent or temporary (e.g., withdrawal of Zantac from USA and Canada in 2019 contaminated by impurities, potentially carcinogens)
- Withdrawals can be either imposed by healthcare authorities or decided by the manufacturer if the cases of pharmacovigilance are judged as too frequent

Change in strategy

- Pharma companies can decide that a brand or a complete TA is not anymore strategic and decide to exit the market to refocus its efforts (e.g., Novo Nordisk withdrawn its older porcine insulin range from the UK market, to bolster the transition onto its recombinant insulins – decision of Sanofi to sell its USA dermatology business in 2011, considered as too small)

Failing profitability

- The less profitable formulations and dosage forms can be removed from all or certain markets, according to local competitive situations
- The decrease of profitability can result from price cuts, volume drops, increase of manufacturing costs, investments required to maintain registration dossiers up-to-date, or higher medico-marketing expenses

Opportunity cash

- The selling of an established brand will generate one-off cash injection vs. long-term declining revenues
- The selling of established brands is mainly driven by the wish to streamline a portfolio of too many SKUs (e.g., in 2020, AstraZeneca sold the commercial rights of established hypertension drugs[1] for an upfront payment of $350M to Atnahs Pharma to reinvest in main therapeutic areas)

Sources: Adapted from T. Ellerly et al. – Interviews and analyses by Smart Pharma Consulting

[1] Inderal (propranolol), Tenormin (atenolol), Tenoretic (atenolol, chlorthalidone fixed-dose combination), Zestril (lisinopril) and Zestoretic (lisinopril, hydrochlorothiazide fixed-dose combination)

Pharma companies for which established brands are their core business tend to adopt a locally-driven organization which provides more flexibility and better adaptation to the environment

Organization

Global vs. Local management

Model A: Globally-driven management

- Regulatory, Life-cycle management, and medico-marketing support concentrated at global level
- Acquisitions and divestments decisions driven by global department in charge of established brands
- Regular interactions between global and national teams, fostering best practice sharing

(e.g., Sanofi for global brands with potential)

Model B: Locally-driven management

- Broad autonomy given to affiliates which decide to support or not established brands with promotion…
- … and to carry out BD&L initiatives to develop the local business
- Investment decisions are submitted to the company HQ

(e.g., Recordati, Sanofi non-core assets with various potential at local levels)

"General Medicines division includes core assets brands(e.g., Toujeo, Lovenox, Plavix) and non-core assets brands (e.g., Lantus, Aprovel), on which investments are more limited but adapted to local market attractiveness – Sanofi"

"The management of established brands requires a lean and agile structure with highly skilled collaborators"

Sources: Interviews and analyses by Smart Pharma Consulting

Established brands are mainly promoted in branded generic markets where exist opportunities to grow, maintain or slow down the decrease of revenues and attached profits

Established brand value optimization: Recommendations (1/3)

Market / Established Brand Matrix

	Non promoted brands	Promoted brands
Branded generic markets (e.g., Italy, Spain, China, Russia, CEE, CIS, Latin America, etc.)	When the sales and profit contributions of established brands are too low, they are milked	Brand heritage being highly valued, established brands are often promoted after LOE
Non-branded generic markets (e.g., USA, Germany, France, UK, northern European countries)	The great majority of established brands are not promoted	Certain therapeutic areas (e.g., dermatology, ophthalmology, women's health) are less sensitive to non-branded generics

- Depending on companies' profile, the priority of established brands can be to:
  - Generate cash to fund innovation
  - Generate cash to survive
  - Contribute to sales
- Pricing is the most important factor driving customers behavior and preference
- The performance of established brands requires:
  - A dynamic management of the portfolio[1]
  - An efficient level of allocated resources (market access, medico-marketing)
  - A good control of manufacturing costs
- Decision to maintain and promote established brands will strongly depends on:
  - Market attractiveness[2]
  - Intrinsic value of brand attributes[3]

Sources: Smart Pharma Consulting

[1] New indications, new dosage strengths and regimens, new formulations, fixed-dose combinations, generic strategy, exit strategies – [2] Level of price capping, reference price, substitution right, level of substitution by pharmacists, competitive intensity, sensitivity of physicians to promotion, price sensitivity of patients if co-payment – [3] Efficacy, safety, convenience vs. competition, value of the brand heritage

The optimal management of established brands requires highly experienced collaborators focusing on short-term efficiency and supported by a lean and agile organization

Established brand value optimization: Recommendations (2/3)

- Collaborators managing established brands should:
  - Be experienced
  - Have an entrepreneurial mindset
- Decision-making processes should be:
  - Fact-based with a permanent double valuation at global and local levels
  - Supported by cost-efficient market studies and analyses…
  - … rather than intuitive considerations, as it is often the case by lack of resources
- When established brands have shown to be sensitive to promotion, the level of effort should demonstrate a quick impact on performance, at national level
- Mature products franchises or BUs should:
  - Be set-up at national level to better address local specificities…
  - … while remaining lean and agile…
  - … capitalizing as much as possible on shared support functions (i.e., finance, manufacturing, supply, regulatory, legal, BD, medical, commercial, etc.)

Sources: Smart Pharma Consulting

To get the best of their established brands, pharma companies should determine why and where to play, and how to win, considering their corporate vision and their own capabilities and assets

Established brand value optimization: Recommendations (3/3)

Why to Play?

1. Craft clear objectives:
   - Priority given to revenue vs. profit optimization
   - Priority given to short vs. mid vs. long term performance

Where to Play?

2. Define the scope of the established brand portfolio:
   - In-house original brands only with or without FDCs[1]
   - Branded and/or non-branded generics of own original brands and/or of competitors brands
   - Established brands of competitors (in-licensing and/or acquisition)
3. Select the most attractive markets (i.e., offering the best match with the brand values)

How to win?

1. Set rules and methods to select "activable" established brands by markets
2. Implement a dynamic brand and portfolio management:
   - Regular entries of new established brands (e.g., own or competitors', incl. generic versions) or extensions (e.g., FDCs, new dosages or formulations) of existing brands to boost the portfolio value
   - Exit of less profitable or at-risk[2] brands
3. Define a clear governance (global – local – glocal) re. BD&L initiatives (in-licensing, acquisition, out-licensing)
4. Allocate carefully operational resources – looking for short term efficiency – and with a special attention to manufacturing costs and the quality of the supply chain
5. Evaluate the quality of execution and impact of decisions made with relevant Key Execution Indicators (KEIs)

Sources: Smart Pharma Consulting

[1] Fixed-dose combinations – [2] In terms of safety

Smart Pharma
CONSULTING

High-Performance
Pharma Brand Plans

The 5 Pitfalls to avoid

February 2024

1. Introduction

Brand Plans are often inefficient and of little use due to insufficient brand teams' involvement, lack of market insights and of coordination across pharma companies' departments

- Smart Pharma consultants have helped 35 pharma companies develop brand plans on more than 80 products belonging to 18 different therapeutic areas:

1. Allergy
2. Cardiology
3. Dermatology
4. Gastroenterology
5. Gynecology
6. Hematology
7. Immunology
8. Infectiology / Virology
9. Metabolism / Diabetes
10. Nephrology
11. Neurology
12. Ophthalmology
13. Oncology
14. Pulmonology
15. Psychiatry
16. Rare diseases (various)
17. Rheumatology
18. Urology

- From this experience, we have identified several common pitfalls that should be avoided to craft brand plans likely to optimize brand performance

"At affiliate level, the Brand Planning process is often viewed as a window-dressing exercise"

Sources: Smart Pharma Consulting

1. Introduction

For each of these five pitfalls, we propose practical and easy-to-implement solutions so that pharma companies can transform useless brand plans into high-performance ones

Pitfall #1

Describing and not analyzing the market situation

Pitfall #2

Carrying out a sub-optimal SWOT analysis

Pitfall #3

Crafting an inconsistent strategy

Pitfall #4

Selecting tactics which do not support the strategy

Pitfall #5

Not integrating monitoring indicators

"The purpose of Brand Plans is to allocate the right resources to reach the performance objective set, in an effective and efficient way"

Sources: Smart Pharma Consulting

2. Pitfalls to avoid

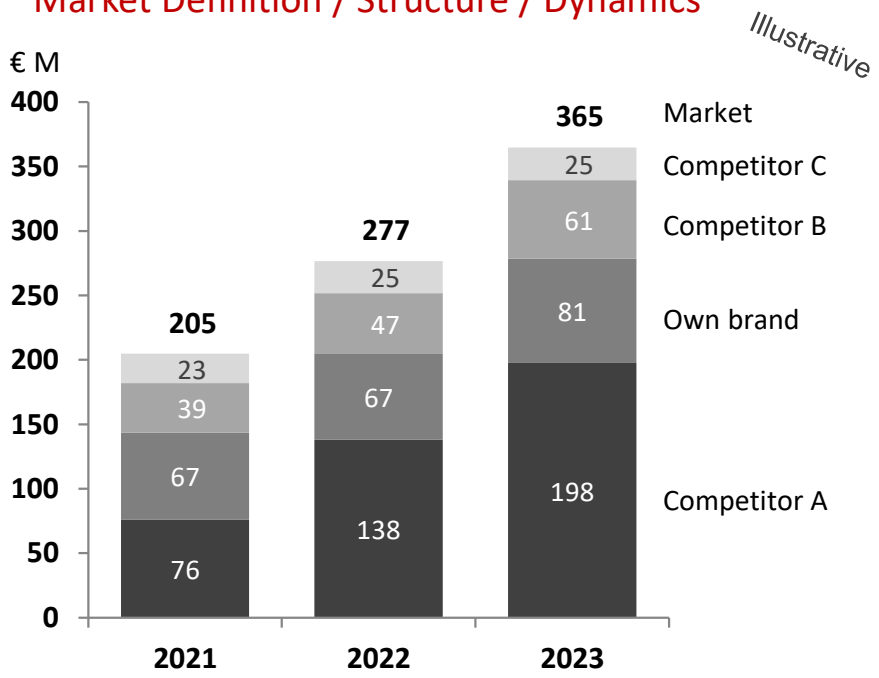
Market situation is too often superficially analyzed and therefore poorly understood, preventing a proper identification of market opportunities and threats

Pitfall #1

Describing and not analyzing the market situation

What do we observe?

Market Definition / Structure / Dynamics



- The situation analysis section is most often just a description of the market facts with no or poor analyses
- Despite a large quantity of available data, the knowledge and the understanding of key market stakeholders are too often partial and not accurate
- The main reasons for these weaknesses in the brand planning process come from:
  - Affiliate brand teams considering it is just a constraint, imposed by the regional or global teams, having little, if any, value for them
  - Insufficient time spent to carry out in-depth analyses to enhance market insights (knowledge and understanding)

Sources: Smart Pharma Consulting

2. Pitfalls to avoid

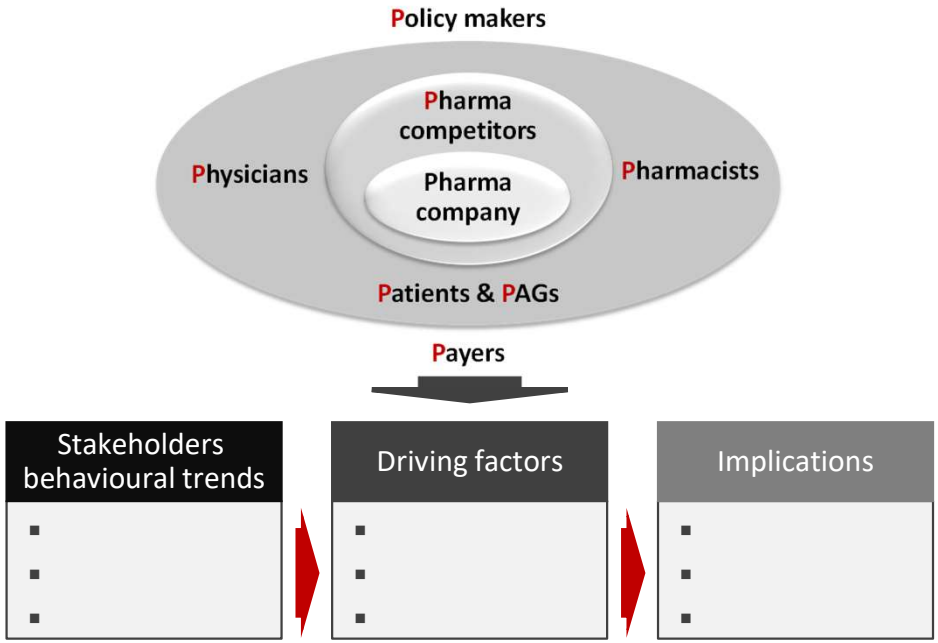
The situation analysis should focus on identifying and analyzing current and future key market events from which implications for the brand will be deducted

Pitfall #1

Describing and not analyzing the market situation

What do we recommend?

The 7 Ps – Market stakeholders' analysis



- A robust analysis of the market situation requires to identify key market features, by gathering precise and reliable information regarding:
  - Sales data trends (historical and forecasted data)
  - Opinion and behavioral trends of key stakeholders (policy makers, payers, physicians, pharmacists[1], patients, patient advocacy groups (PAGs), pharma competitors)[2] who are likely to impact the market attractiveness and the competitive position
- Then, it is essential to understand the factors that drive stakeholders' opinion and behavior, and market attractiveness
- An in-depth market knowledge and understanding will enable to identify the major market opportunities and threats and to assess the brand strengths and weaknesses

Sources: Smart Pharma Consulting

[1] Retail and hospital pharmacists – [2] In certain therapeutic areas, other stakeholders such as nurses may be considered

2. Pitfalls to avoid

The SWOT analysis is rarely properly structured, preventing from deducting the most relevant key strategic drivers to optimize the brand performance

Pitfall #2

Carrying out a sub-optimal SWOT analysis

What do we observe?

Conventional SWOT analytical tool

- The SWOT analysis constitutes a structured summary of the situation analysis from which the key strategic drivers (also called: key business drivers, key strategic imperatives, strategic priorities, etc.) should be drawn
- However, the conventional SWOT framework is not well conceived, leading to misuses:
  - It is frequent to see a long list of items, not always relevant, and considered to be of equal importance
  - Opportunities are often confused with strengths, and threats with weaknesses
  - It is not rare for an item to be mixed-up with its cause, leading to wrong strategic decisions[1]
- The frequent inappropriate use of the SWOT framework has led detractors to rename it *"Silly Way Of Thinking"*

Sources: Smart Pharma Consulting

[1] For instance, the fact that a brand has a leading position on a therapeutic area is not necessarily a strength per se. It may just be the result of a factor which is the strength, such as its superior efficacy, acceptability or convenience

2. Pitfalls to avoid

The "Advanced SWOT" helps brand teams carry out a more specific and relevant assessment of the market situation and of the brand competitive position

Pitfall #2

Carrying out a sub-optimal SWOT analysis

What do we recommend?

Advanced SWOT analytical tool

Market Opportunities	RI[1]
▪ Authorities[2] ▪ Customers[3] ▪ Competitors	

Market Threats	RI
▪ Authorities ▪ Customers ▪ Competitors	

Brand Strengths	RI
▪ Product (4 Ps[4]) ▪ Services ▪ Corporate reputation	

Brand Weaknesses	RI
▪ Product (4 Ps) ▪ Services ▪ Corporate reputation	

- To facilitate the definition of the brand strategic drivers, it is recommended to use the "Advanced SWOT framework" which structures:
  - Market opportunities and threats into stakeholders' opinions and behaviors
  - Brand strengths and weaknesses into the product, the associated services and the reputation of the marketing company
- It is also essential to prioritize the items listed in each of the four components of the SWOT framework by evaluating their RI (relative importance) by using, for instance, a five-point scale
- These proposed adjustments of the SWOT framework have shown to be very helpful to transform it into a practical tool

Sources: Smart Pharma Consulting

[1] Relative Importance of each item, rated from 5, high importance to 1, low importance – [2] Policy makers – [3] Payers, physicians, pharmacists, patients, patient advocacy groups – [4] Product features, price, distribution, promotion

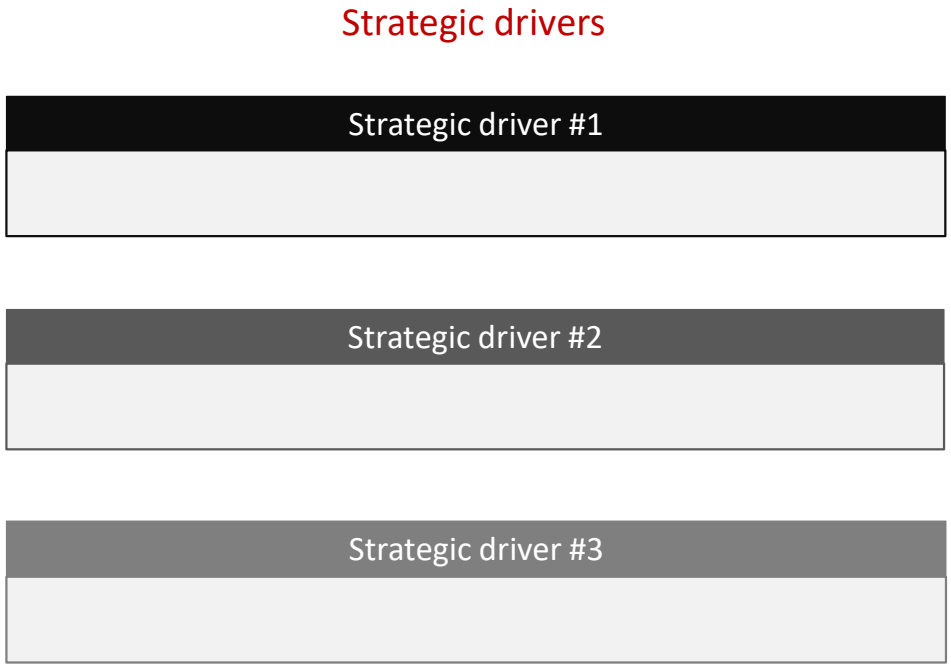
2. Pitfalls to avoid

The brand strategy is too often crafted irrespective of the market reality and is not structured so that to foster the synergy of the supporting activities across departments

Pitfall #3

Crafting an inconsistent strategy

What do we observe?



- The strategic drivers, which are the priorities on which the company concentrates its resources and capabilities to achieve the performance objective set for its brand, should derive from the SWOT analysis
- The links between the situation analysis, summarized in a SWOT, and the selected strategic drivers, are not always clearly established and sometimes may even not exist
- In addition, if not properly put into perspective with the set objective, the selected strategic drivers may not be the most relevant ones and lead to a suboptimal brand performance
- When the activities corresponding to each strategic driver are not well-defined, across key different operational functions (i.e. market access, medical, marketing, sales), the quality of execution is in general poor

Sources: Smart Pharma Consulting

2. Pitfalls to avoid

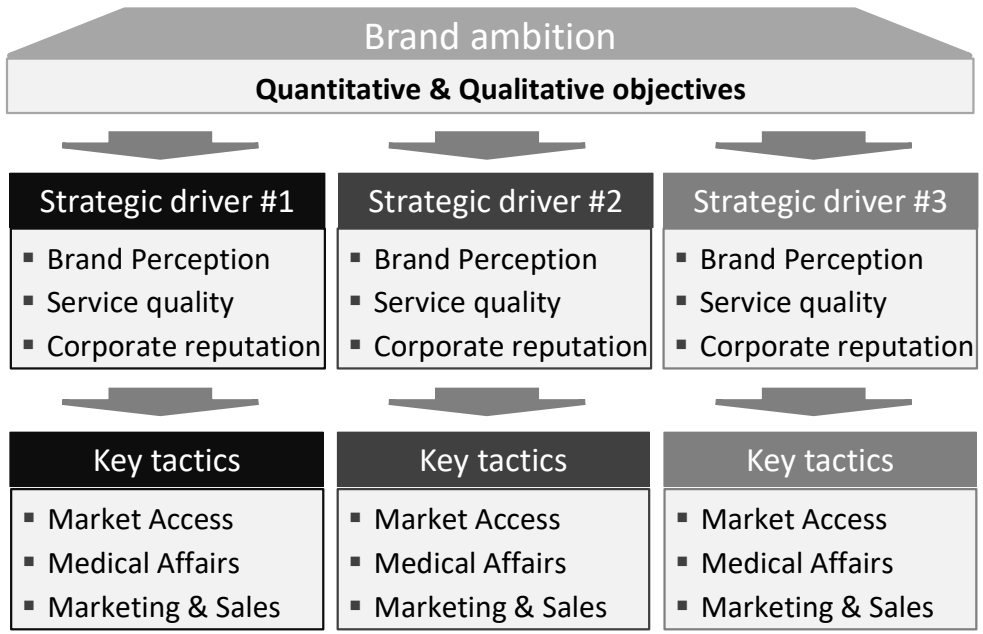
The Brand Strategy Card has shown to be a useful tool to align the brand ambition, the strategic drivers and the corresponding tactics

Pitfall #3

Crafting an inconsistent strategy

What do we recommend?

The Brand Strategy Card



- The Brand Strategy Card shows the brand ambition, the strategic drivers selected to achieve that ambition and the key tactics to support the strategic drivers
- Thus, this one-page Brand Strategy Card helps to ensure the consistency between the three building blocks of the brand strategy: the ambition – the strategic drivers – the key tactics
- The trickiest part is to select the most relevant strategic drivers, as derived from the Advanced SWOT, which are…
- … opportunities to seize, threats to fight again, strengths to capitalize on, and/or weaknesses to address
- The preferred strategic drivers are those which are the most likely to have an impact on the brand performance so that to achieve the set ambition for the brand

Sources: Smart Pharma Consulting

2. Pitfalls to avoid

The tactics do not always support the strategic drivers and are too often limited to marketing and sales activities

Pitfall #4

Selecting tactics which do not support the strategy

What do we observe?

Table of key tactics

Tactic	Target	Timing	Responsible	Budget

- It is not rare to see, in brand plans, key tactics which do not formerly support the strategic drivers
- However, key tactics are the actions which are selected to support the strategy
- In other words, these actions are the operational expression of the strategic drivers
- Key tactics are too often described as a series of activities carried out by the marketing and sales departments…
- … which are a renewal of past activities and for which objectives have not been clearly set and the impact formerly measured
- Being rarely based on the assessment of past experience, the process to prioritize these tactics is in general weak

Sources: Smart Pharma Consulting

2. Pitfalls to avoid

Each tactic should be carefully selected to best support the strategic drivers to enhance the probability to achieve the brand ambition

Pitfall #4

Selecting tactics which do not support the strategy

What do we recommend?

Table of key tactics related to the strategic drivers

Strategic Driver		Department[1]	

Tactic	Target	Objective	Timing	Responsible	Budget

- Tactics should be carefully selected to best support each strategic driver
- These tactics may concern not only marketing and sales departments, but also market access and medical affairs departments
- If the medical affairs department is not supposed to promote brands, it can/should however contribute to optimize the use of the brands in the best interest of the patients, by generating and disseminating to healthcare professional relevant medical data
- It is important, for each tactic, to precise the target concerned, to set a precise objective, to plan it, to name a responsible and estimate a budget
- Before selecting a tactic, it may be needed to test the idea[2]

Sources: Smart Pharma Consulting

[1] Market access, medical, marketing, sales, etc. – [2] By using a specific assessment tool as the one shown in our position paper "Excellence in Execution" p. 31 – https://smart-pharma.com/wp-content/uploads/2019/07/Smart-Management-Series-Excellence-in-Execution-VWF.pdf

2. Pitfalls to avoid

It is rare to see brand plans with integrated monitoring tools and associated monitoring process, which therefore prevents from measuring the efficacy and efficiency of the selected tactics

Pitfall #5

Not integrating monitoring indicators

What do we observe?

Monitoring indicators

Tactic	Target	Objective	Timing	Responsible	Budget	KEIs[1]	KPIs[2]

- A brand plan without indicators to measure the quality of execution and the – direct or indirect – impact of the selected tactics on the business is of little use
- Rare are the companies which integrate, in their brand plan, indicators to measure the quality of execution (Key Execution Indicators) and/or the impact (Key Performance Indicators) of tactics
- Without these indicators and the implementation of a monitoring process, it is impossible to evaluate the efficacy and efficiency of the tactics planned in the brand plan
- Thus, a brand plan with no systematic monitoring can be viewed as a window-dressing exercise

"If you can't measure it, you can't manage it!" – Peter Drucker

Sources: Smart Pharma Consulting

[1] Key Execution Indicators – [2] Key Performance Indicators

2. Pitfalls to avoid

KEIs[1] and KPIs[2] are both essential, the first type of indicators measuring the quality of execution and the second one the degree of objective achievement

Pitfall #5

Not integrating monitoring indicators

What do we recommend?

Monitoring indicators

KEIs	KPIs
Quantitative	
▪ % of customer target covered ▪ Number of interactions with customers ▪ Number of projects carried out ▪ Level of resources allocated to customers	▪ Number of new customers ▪ Average # of prescriptions per customer ▪ Sales dynamics ▪ Return on investment
Qualitative	
▪ Quality of interactions with customers ▪ Level of market insights ▪ Proper management of projects, from the customer perspective	▪ Brand Preference Mix Index ▪ Corporate reputation improvement ▪ Perceived quality of products ▪ Perceived value of services

- All brand plans should include monitoring tools and a monitoring process related to each selected tactic
- We recommend to use:
  - Key Execution Indicators (KEIs) which measure the quality of execution of tactics
  - Key Performance Indicators (KPIs) which measure the business outcome of tactics
- By measuring carefully, the quality of execution and the impact of tactics, it is possible to adjust the brand plans (during the year or from the previous year) to make them more efficient and effective

"KEIs check that you are on the right track and
KPIs check that you arrive at destination"

Sources: Smart Pharma Consulting

[1] Key Execution Indicators – [2] Key Performance Indicators

3. Key takeaways

"High-Performance Pharma Brand Plans require method, rigor and pragmatism"

Recommendations

- Design brand plans with the intent of helping allocating the right resources to achieve brand performance ambition, and not just as a formality to be reported at corporate level
- Adopt the 4Ws[1] (What? – Why? – so What? – What to do?) approach to improve the relevance, the consistency and the robustness of the brand plans
- Use the "Advanced SWOT" to facilitate the analysis of the market situation and of the brand competitive position, identifying market opportunities and threats and prioritizing brand strengths and weaknesses
- Seek customer preference rather than customer satisfaction by improving customers perception of the brand attributes, the quality of the proposed services and the corporate reputation
- Make the best use of the "Brand Strategy Card" to formalize clearly and precisely the brand ambition, the strategic drivers and the corresponding key tactics
- Define Key Execution Indicators and Key Performance Indicators to monitor respectively the quality of execution and the impact of tactics

Sources: Smart Pharma Consulting

[1] What: gathering of data regarding market sales and stakeholders' opinion and behavior. Why: understanding of the factors triggering market and stakeholders' data. So What: implications for the brand. What to do: strategic and tactical decisions to be made to achieve the brand ambition, based on the situation analysis

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6. Sales Forces Effectiveness

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Boosting Med Reps Effectiveness

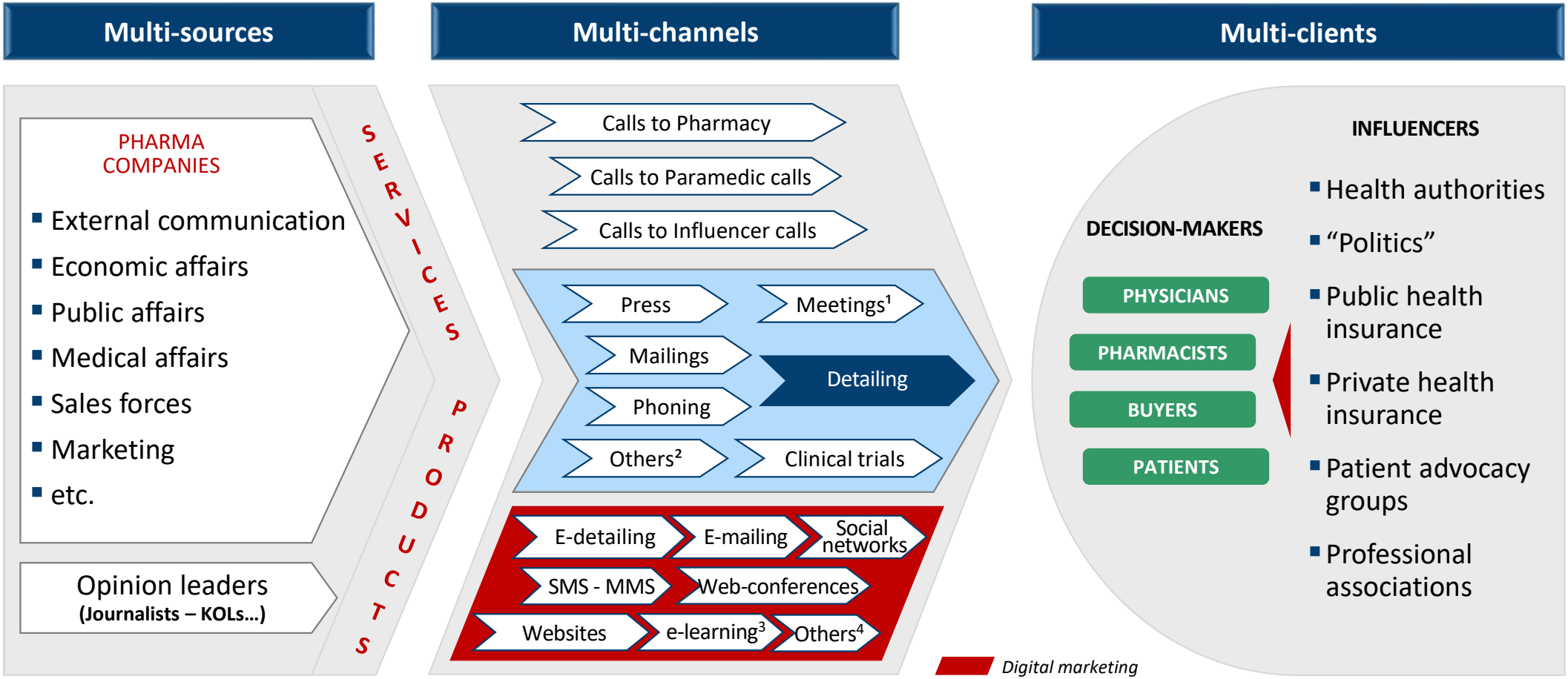
Implementation of the ELITE Program

"Best-in-class med reps make each physician feel unique"

POSITION PAPER April 2017

As prescription decisions increasingly depend upon multiple clients, pharma companies need to adopt a more complex and coordinated promotional approach

New pharma marketing & sales model (1/2)



Sources: Smart Pharma Consulting

[1] Round tables, symposiums, congresses, etc. – [2] Sampling, gimmicks, grants, prescription pads, etc. – [3] Continuous medical education through a digital interface – [4] Screen savers, popup windows…

Prescribers should be offered exceptional experiences during interactions with med reps to ease access and increase the preference to the brands they promote

New pharma marketing & sales model (2/2)

- **Lower** number of breakthrough **innovative products** with **high sales potential**
- **Increasing price pressure** and **narrowing** of the **target patient** population **by payers**

- **Tighter control** of marketing activities (incl. medical calls) by authorities
- Higher proportion of **physicians refusing to be called upon**
- Portfolio evolution from **primary to secondary care** products
- Increasing **role** of **other stakeholders**[1] influencing physician prescriptions

Implications for pharma companies

- **Redefine** the level of marketing and sales **investments**
- Switch **priority** from efficacy to **efficiency** (better return on investment)
- **Adapt communication**…
  - … content to **regulatory constraints**
  - … channels to **other stakeholders**[1]

- Development of **CRM**[2] and **CLM**[3] **tools** enabling a more precise profiling of physicians

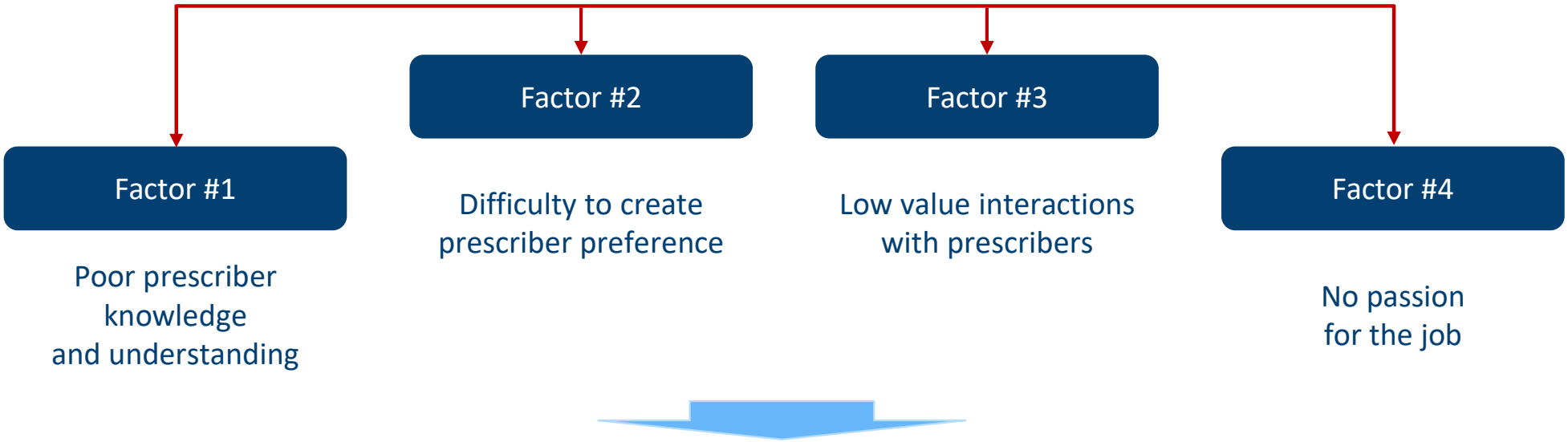
Sources: Smart Pharma Consulting

[1] Policy-markers, payers, purchasers, physicians, pharmacists, patients, patient advocacy groups – [2] Customer Relationship Management – [3] Closed Loop Marketing

Smart Pharma Consulting has identified four main reasons explaining the limited impact of med reps on the opinion and behavior of the prescribers they interact with

Med reps' performance limiters

- Smart Pharma Consulting has identified four main factors responsible for med reps' underperformance:

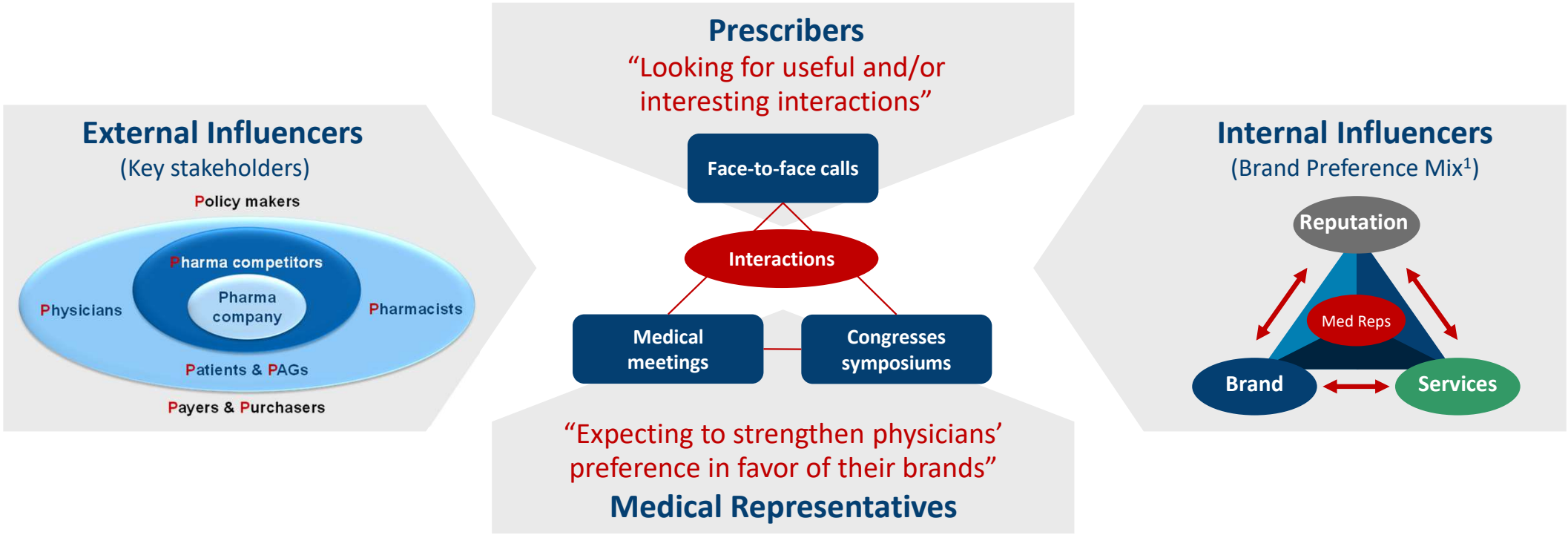


- To remove these limiting factors, we have recently developed the ELITE Program which helps med reps reinforce the preference of prescribers for the brands they promote

Sources: Smart Pharma Consulting

The ELITE Program can help med reps create interactions that are better valued by their customers and thus contribute to strengthen the preference for their promoted brands

Objective of the ELITE Program



The ELITE Program assumes that prescribers' opinion and corresponding prescribing behavior depend on:

- **External influencers** (key stakeholders)
- **Internal influencers** (Brand Preference Mix)
- **Their willingness to interact with med reps**
- **Med reps' ability to create highly valued interactions**

Sources: Smart Pharma Consulting

[1] Corresponds to the three levers (i.e., product attributes, corporate reputation and quality of services) that can be activated by med reps to influence the prescribers

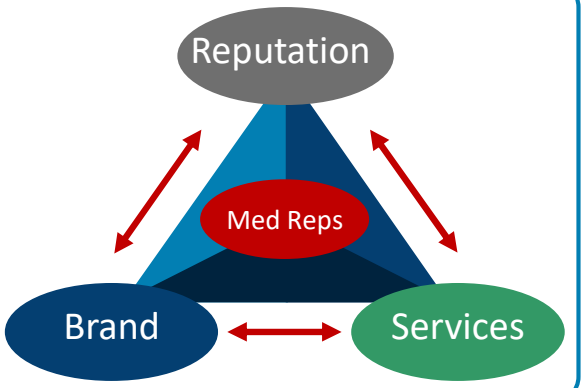
The ELITE Program is based on 4 pillars enabling med reps to interact more efficiently with prescribers and to optimize the prescription share of the brands they promote

The Four Pillars of the ELITE Program

1. Prescriber Insight

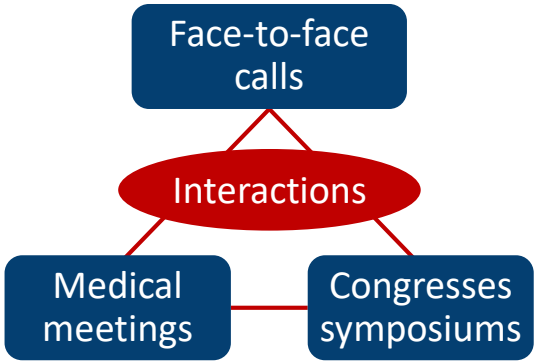
Better Knowledge & Better Understanding → TO → Better Convince

2. Brand Preference Tactic



ELITE Program

3. High Impact Interactions



4. Job Passion

Job Passion → More & Better Work → Higher Performance

Sources: Smart Pharma Consulting

The in-depth knowledge and understanding of individual customer opinion and behavior are essential to set the optimal mix and level of activities to be devoted to each of them

How to build In-depth Prescriber Insight?

Insight = Knowing + Understanding

Better Knowledge

- Med reps must regularly collect key facts and figures related to each individual prescriber:
  - What are the profile of his patients?
  - What is the evolution of the number of his patients?
  - What are his prescribing habits?
  - What does influence him (externally and internally)?
  - What does he expect from interactions with med reps?
  - Which communication channels does he prefer?
  - What are his personality traits?
  - Etc.

Better Understanding

- For each of these collected facts and figures, med reps must systematically probe their prescribers to discover the underlying reasons
- Thus, they must identify – prescriber by prescriber – and better than their competitors – what drives their opinion and behavior
- The accuracy of insight will help med reps determine the actions which will raise the prescriber preference to their brands

TO

Decision-making

Better Convince

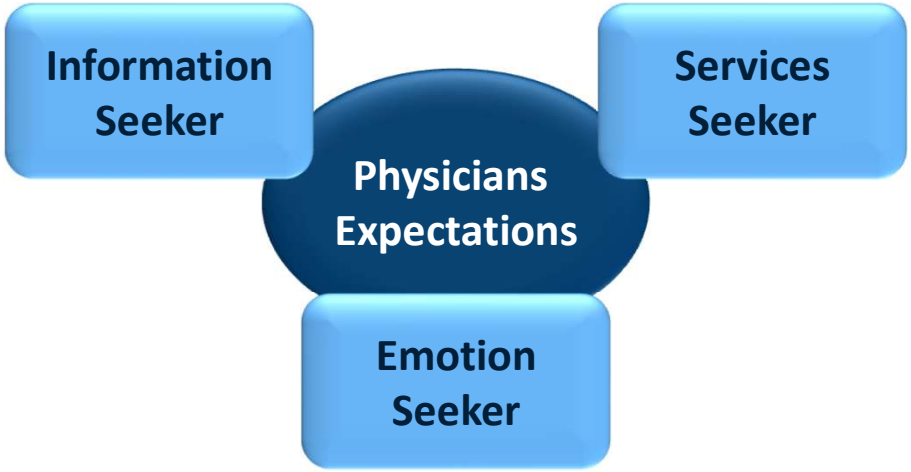
- Based on their prescribers' insight, med reps will be able to define, prescriber by prescriber:
  - The **most convincing messages** regarding their brands, the associated services and their company
  - The **preferred** and most effective communication **channels** to convey these messages
  - The **right behavior** to have while interacting with them
  - The **optimal level of effort** (investment) to make

Sources: Smart Pharma Consulting

While interacting with med reps, physicians look for: information, services, and/or emotion, knowing that one of these expectations is generally predominant

The "Seeker Portrait" Model – Principle

- Physicians' expectations vis-a-vis med reps depend on:
  - External influencers[1]
  - Internal influencers (i.e., the history of their interactions with med reps and other collaborators[2] of their company)
  - Their personality
- The "Seeker Portrait" model can help med reps characterize what physicians will predominantly expect while interacting with them: Information – Services – Emotion
- If physicians' expectations are in fact a mix of these three types, one will be dominant, reflecting their personality, their influences and their specific needs at a point of time
- Physician dominant expectations may vary:
  - Over time
  - With the brand status (innovative or me-too, new or established)
  - With med reps (according to their past interactions)



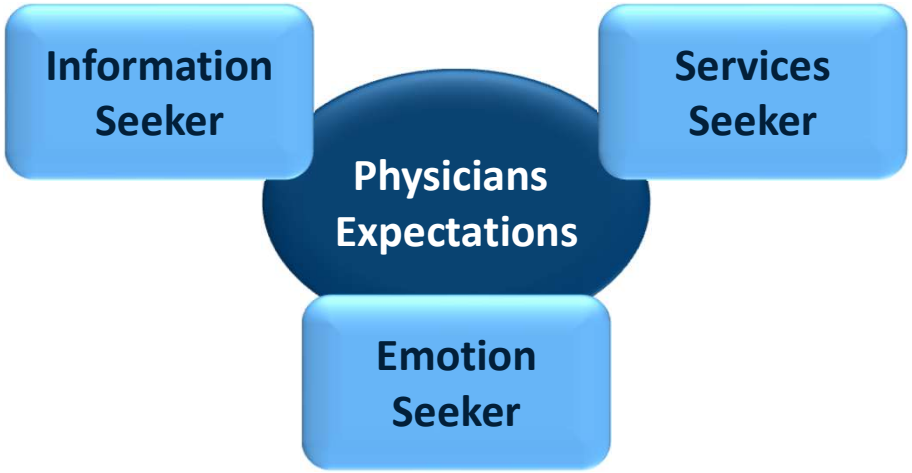
Sources: Smart Pharma Consulting

[1] Policy-markers, payers, purchasers, physicians, pharmacists, patients, patient advocacy groups and pharma competitors –
[2] From pharmaceutical companies, like MSLs (Medical Science Liaisons), KIMs (Key Institution Managers), KAMs (Key Account Managers) may also have a direct or indirect impact on physicians' opinion and behavior

To increase the probability of influencing favorably the opinion and behavior of each physician, med reps must define their dominant type of expectations

The "Seeker Portrait" Model – Features

- **"Information-Seekers"** expect from med reps information based on clinical studies and evidence-based medicines (EBM)
- They want to be kept informed about the latest disease-related news *(i.e., new clinical studies about the promoted product and its competitors, new medical guidelines, scientific events, new regulations from health authorities, or new conditions of co-payment by payers, etc.)*



- **"Emotion-Seekers"** expect to have a good time, a pleasant exchange while interacting with med reps *(e.g., about its medical practice, its hobbies, the Med Reps experience, the company he works for, etc.)*
- They expect med reps to be trusted advisors, delivering unbiased information, demonstrating empathy, respect, etc.

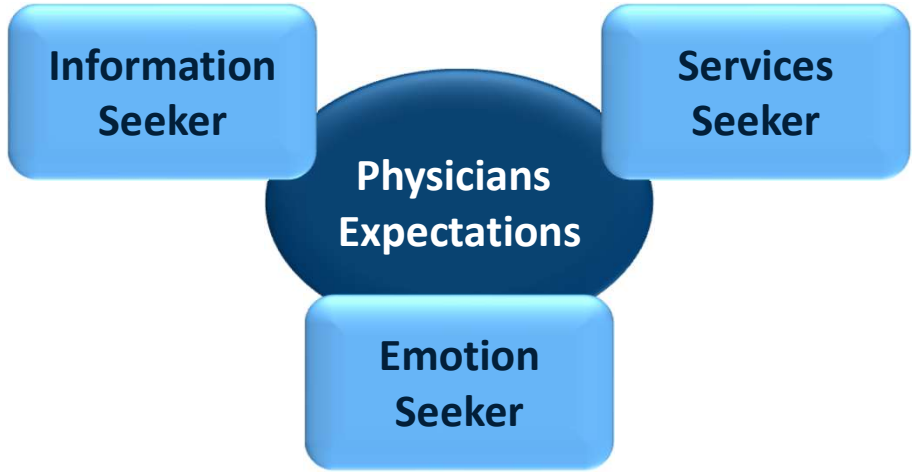
- **"Service-Seekers"** expect from med reps service delivery such as:
  - Invitation to enroll their patients in adherence programs
  - Completion of patient registries
  - Compilation of scientific information
  - Invitations to CME[1] programs
  - Invitations to congresses / symposiums

Sources: Smart Pharma Consulting

[1] Continuous medical education

The different types of dominant expectations require from med reps' different sets of skills and an adjustment of their behavior while interacting with physicians

The "Seeker Portrait" Model – Implications for med reps



- Med reps must have a solid expertise in analyzing and presenting clinical studies
- They should have a strong understanding of science, including disease state, therapeutic options, etc.
- They should deliver up-to-date information that will help physicians make better clinical decisions
- They should also be well-trained regarding the healthcare environment

- Med reps should benefit from a high emotional intelligence to perceive and analyze physicians' emotions and adapt their behavior accordingly
- Thus, they will have to add emotion to their communication about the attributes (efficacy, safety, convenience) of the brands they promote
- Med reps will contribute to make the brands perceived as unique, with their own personality, likely to match physicians' expectations

- Med reps should be clear about what they can deliver or not, in order to satisfy physicians
- They should make sure that the proposed service is valued and then…
- … perfectly executed
- It is easier to differentiate from competitors through a higher quality of execution than through the service itself, because companies generally provide similar services

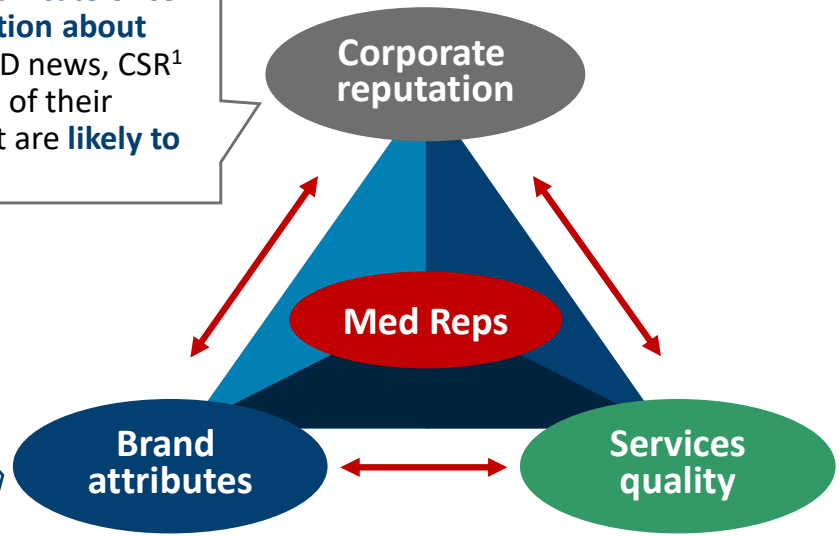
Sources: Smart Pharma Consulting

The Brand Preference Mix determines the key drivers that can be activated by the med reps to enhance the preference of their targeted physicians

The Brand Preference Mix (BPM) – Principle

- Med reps should **communicate once or twice a year information about their company** (e.g., R&D news, CSR[1] initiatives, etc.) to those of their targeted physicians, that are **likely to find it appealing**

- Med reps should **highlight brand attributes**, considering the "**Seeker Portrait**" model…
- … while **leveraging** corporate reputation & service offer



- Med reps should propose and deliver **services** that are highly valued based on their level of: **Interest – Utility – Practicality – Quality of execution**
- These services should **lead to corporate** and / or **brand preference**
- They should make sure they are **related** to the **company** and / or the **brand**

- Prescribers using several brands for a given pathology:
  - The **challenge** for the med reps is to **increase** the **preference** of physicians for their brands
- To do so, med reps must **activate** the components of the Brand Preference Mix:
  - The **perceived value** of their **brand attributes**
  - The **perceived quality** of the **services** they offer and deliver to physicians
  - The **reputation** of their company
- The **links between** these three components should be **well established** in the mind of prescribers
- **Med reps** are **instrumental** in optimizing the Brand Preference Mix

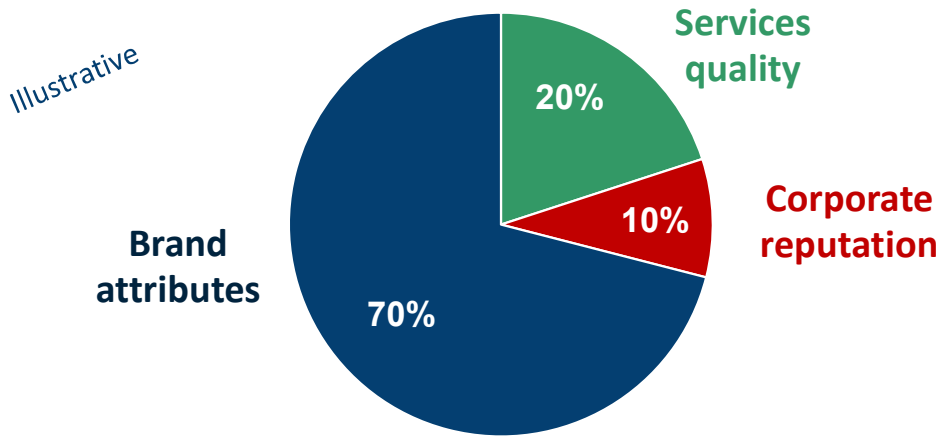
Sources: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

[1] Corporate social responsibility

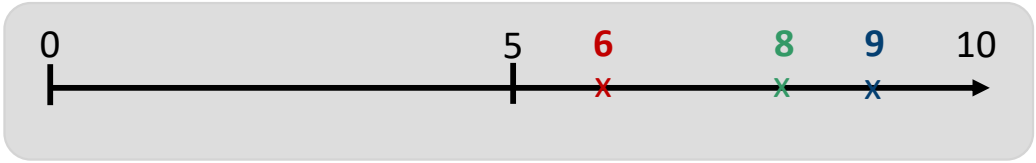
The Brand Preference Mix Index (BPMI) enables to evaluate the brand performance on each of its preference components, over time and compared to its competitors

The Brand Preference Mix (BPM) – Tool #1

Brand Preference Mix Index



Visual Analog Scale



BPMI calculation ▶ **(70% x 9) + (20% x 8) + (10% x 6) = 8.5 / 10**

- The Brand Preference Mix Index (BPMI) is a measurement **tool** that **considers**:
  - The **relative importance of each BPM component** (i.e., corporate reputation, brand attributes and associated service quality) per brand
  - The **score of the brand**, on a 10-point scale, for each of its preference components
- The BPMI can be defined per customer[1], per indication, per form, etc.
- The BPMI **scores the customer perception** at a given point in time, making **possible to track** the **evolution** of this perception over time and to **compare** it **to competitors**, considering:
  - **External events** (i.e., related to health authorities, competitors and customers' behaviors)
  - **Internal events** (i.e., related to operational activities[2], quality of services offered, communication strategy)

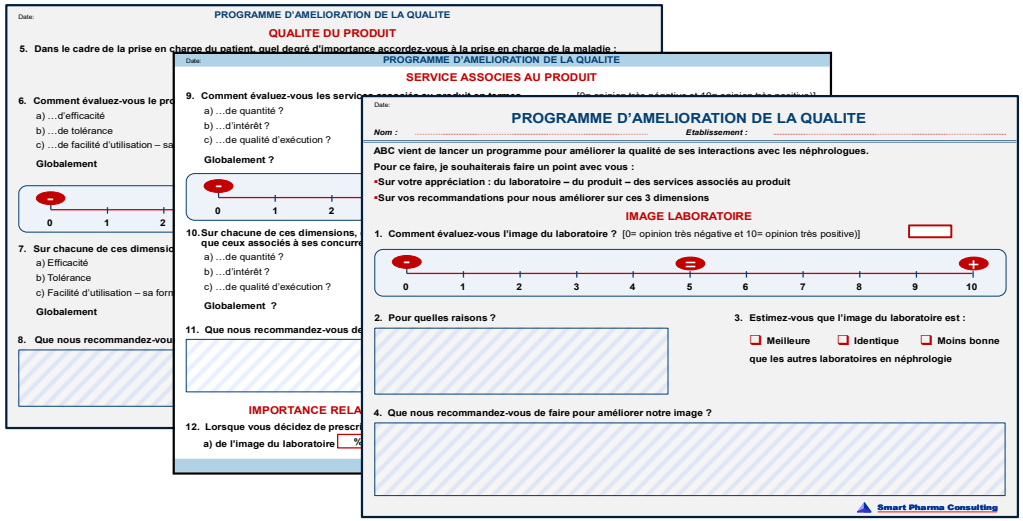
Sources: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

[1] Physicians, patients, pharmacists, nurses, payers, health authorities, etc. – [2] Medico-marketing-sales

Med reps can monitor the brand performance with the "Brand Preference Mix Index" while calling upon their targeted physicians and thus, fine-tune their activities

The Brand Preference Mix (BPM) – Tool #2

Assessment guide for medical reps



From observation to decision: The 4 Ws approach

WHAT?	WHY?	SO WHAT?	WHAT TO DO?
What are the scores of the brand by each physician?	Why did the physician give these scores?	What are the implications of his assessment for the brand?	What should be done to reinforce the preference to the brand?

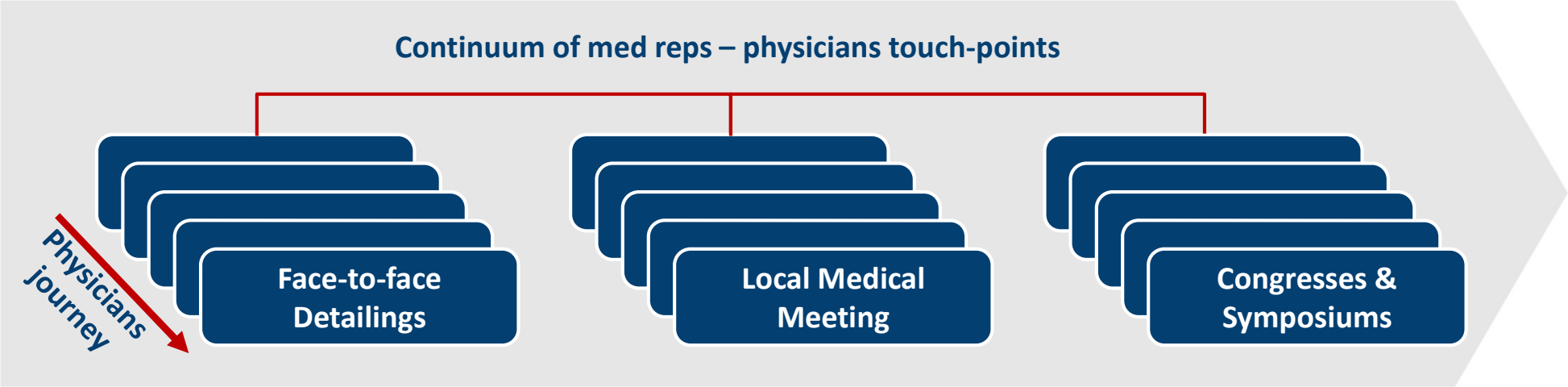
- Recent experiences have shown that:
  - >95% of physicians **accept to be questioned** on the three components of the BPM
  - >80% of physicians consider that the **BPM** approach **conveys a positive image**
  - >85% of medical reps say that the BPM **helps improve** their **insight** into physicians
- Once physicians have evaluated the brand with the BPM, they are asked:
  - What is the **rationale** supporting these **scores**?
  - What **should be done to raise their preference** to the brand?
- Then, **med reps** can **fine-tune** their **messages**, their **activities**, **physician by physician**, based on the feedback
- The collected **information** should be **shared** with **marketers** who will define specific initiatives to reinforce prescribers' preference to the brand

Sources: Smart Pharma Consulting

By offering physicians exceptional experiences while interacting with them, med reps' access will be eased and the preference to the brands they promote increased

Why to create High Impact Interactions?

- Smart Pharma Consulting has developed the "**H2I Program**" (High Impact Interactions Program) to help med reps[1] create a **continuum** of **exceptional interactions** with physicians so that they:
  - **Accept** (or even ask for) **more regular contacts** with med reps
  - **Increase** their **preference** for the brands promoted by the med reps

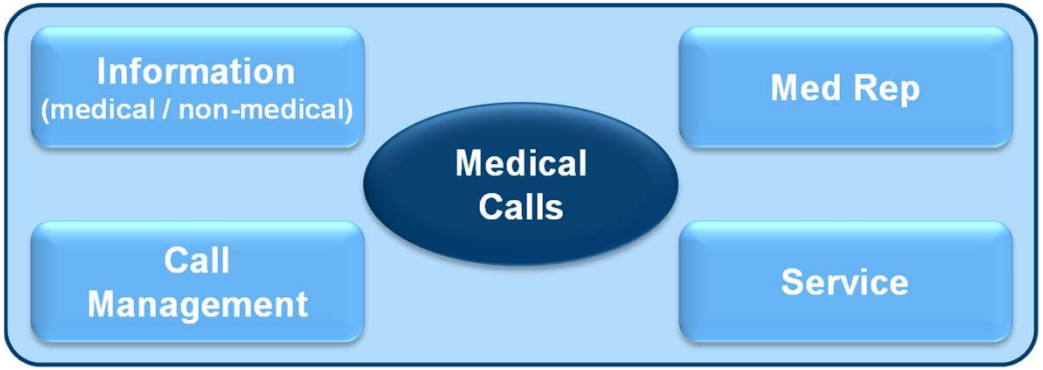


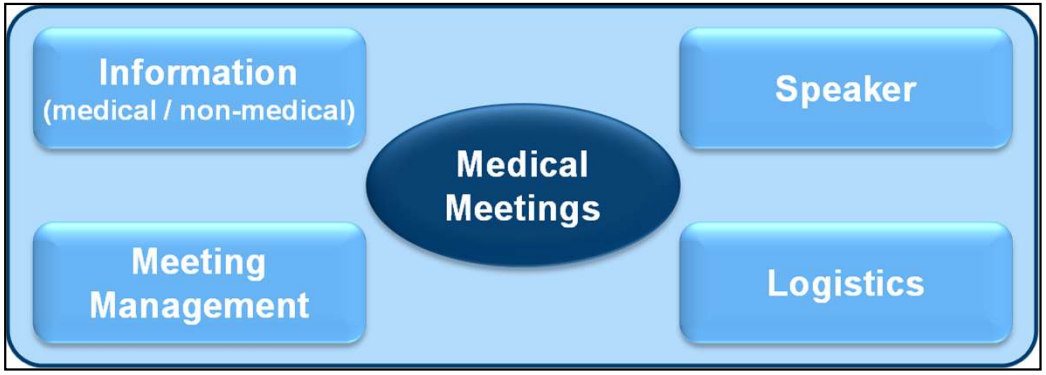
Sources: Smart Pharma Consulting

[1] Other collaborators from pharmaceutical companies, like MSLs (Medical Science Liaisons), KIMs (Key Institution Managers), KAMs (Key Account Managers) may also have a direct or indirect impact on physicians' opinion and behavior

Physicians experience while interacting with med reps will depend on their assessment of the four determinants of the three following types of interactions

High Impact Factors Identification

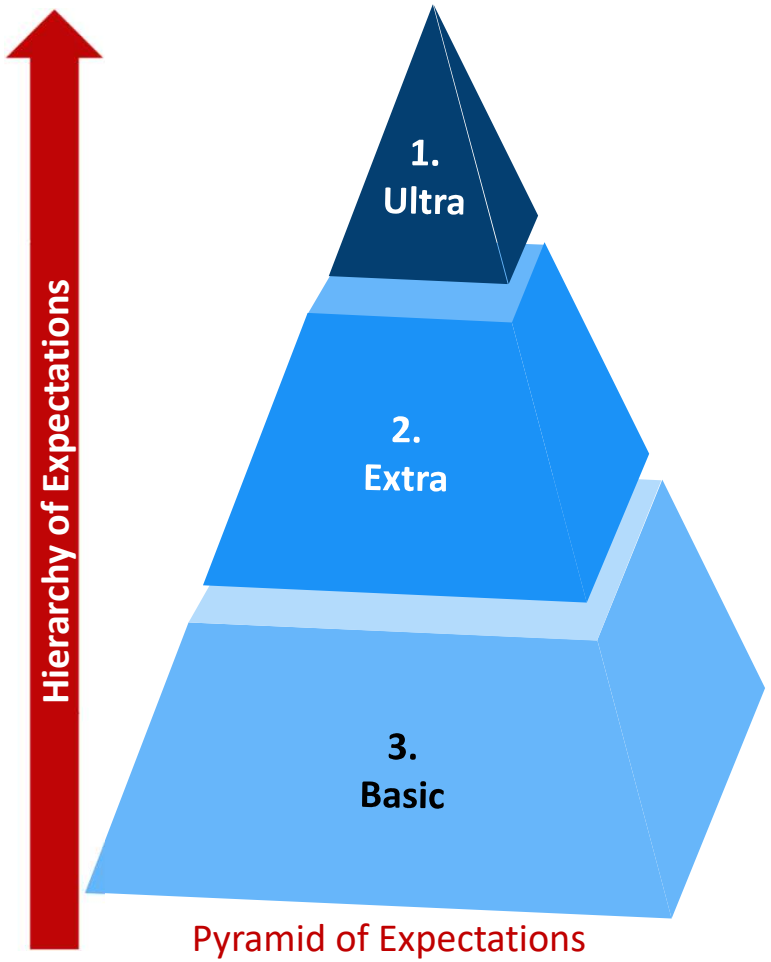




Sources: Smart Pharma Consulting

To create High Impact Interactions (H2I), med reps need to move up the pyramid of expectations to offer physicians a continuum of unique experiences

High Impact Interactions (H2I) Program – Principles



Pyramid of Expectations

1. Ultra Expectations

- They are not consciously expected and thus can create a surprise, and hopefully a "wow effect"
- They can have a strong positive and differentiating effect on physicians' opinion and possibly on their behavior

2. Extra Expectations

- Extra Expectations will fulfill physicians' additional needs
- They are a "plus" which may help differentiate positively the med rep interactions from competitors

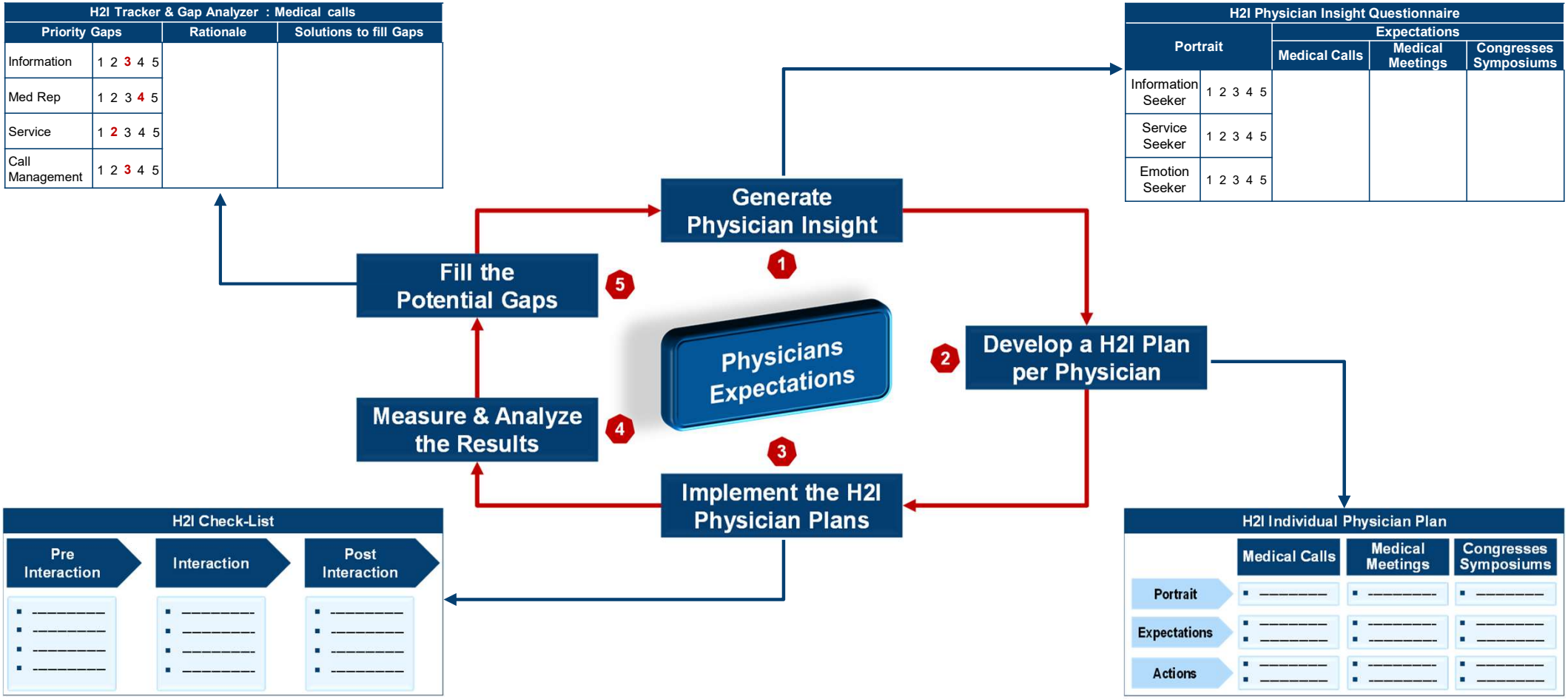
3. Basic Expectations

- While interacting with physicians, med reps need to fulfill physicians' basic expectations regarding calls, medical meetings or invitations to congresses / symposiums

Sources: Smart Pharma Consulting

For each of the five steps of the H2I Program, enabling tools will be designed to facilitate their proper execution by med reps

High Impact Interactions (H2I) Program – Framework & Tools



Sources: Smart Pharma Consulting

Job passion lies on six key drivers that pharma companies may manage carefully if they want their med reps to give their best to achieve their objectives

What is Job Passion?

- Job passion is influenced by **six key drivers**:

- Passion for a job is a **strong inner emotion** which is expressed by:

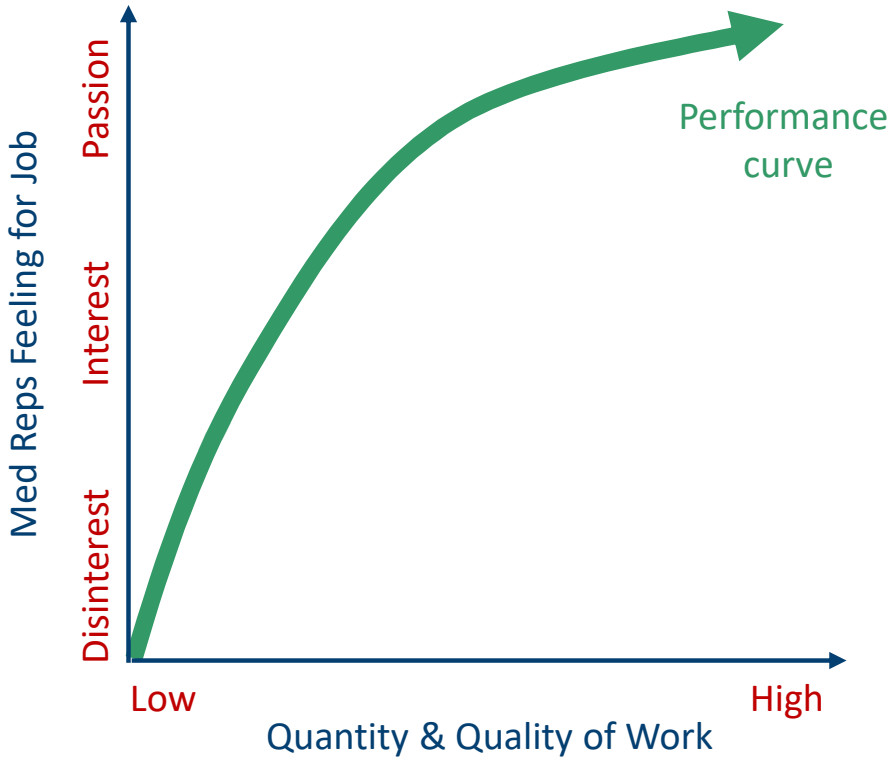
"Passion is the difference between having a job or having a career"

Sources: Smart Pharma Consulting

As passionate med reps deliver better results than those who are not, pharma companies must recruit them, sustain their feeling and secure their loyalty

Why to stimulate Job Passion?

Impact of Passion on Performance



- Passionate employees[1] being **more satisfied** with their job and **more motivated**, they will tend to **work longer hours** and to work **better**
- Therefore, it is of the **utmost importance** for pharma companies to:
  - **Recruit** med reps that are passionate for their job
  - **Create** the working **conditions** to keep their passion up
  - Put in place a plan to **retain** them

"Pleasure in the job puts perfection in the work" – *Aristotle*

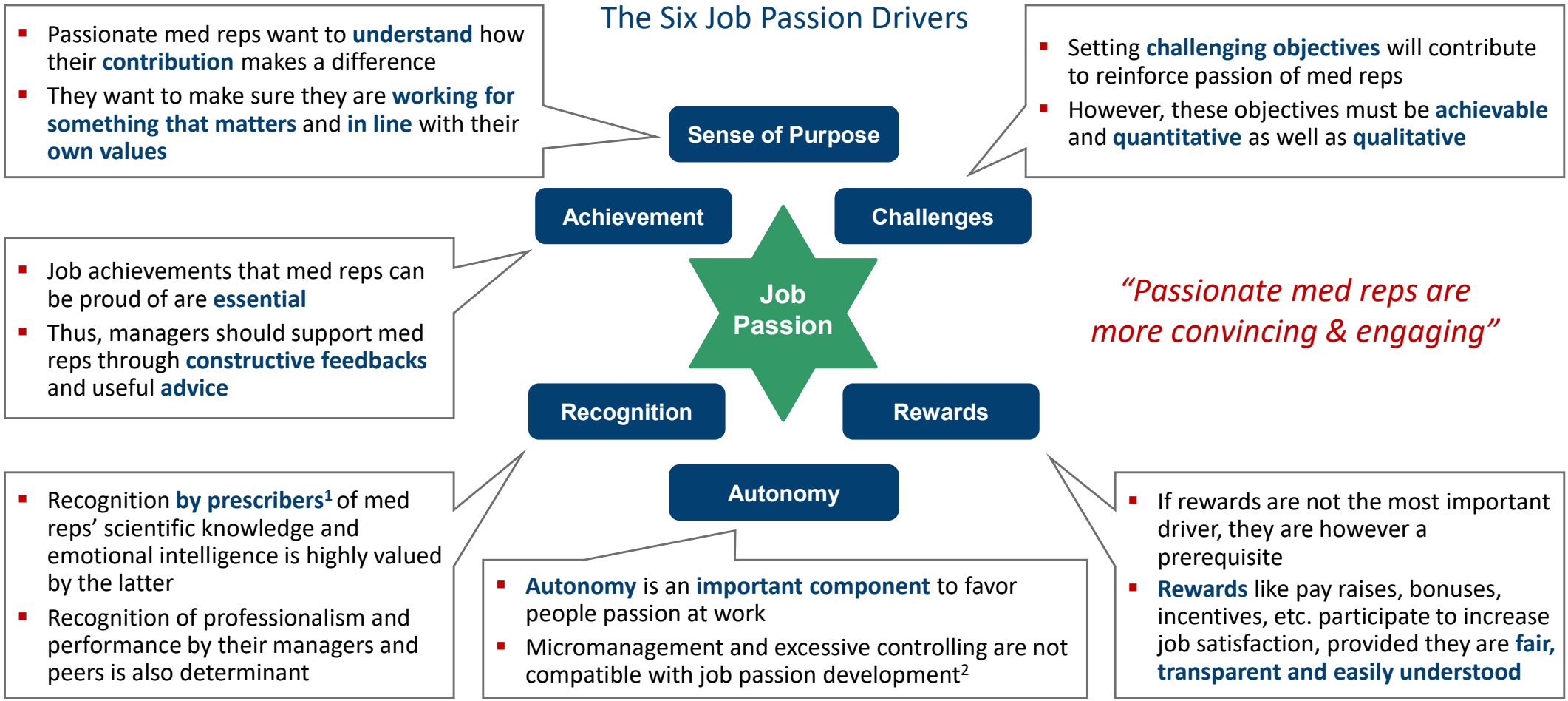
Sources: Smart Pharma Consulting

[1] In a study carried out by Deloitte in 2014, 88% of interviewed people said they are not passionate at work

Pharma companies and especially area managers should keep up or even stimulate the passion of their med reps at work with the help of the six following drivers

How to stimulate Job Passion?

The Six Job Passion Drivers



- Passionate med reps want to **understand** how their **contribution** makes a difference
- They want to make sure they are **working for something that matters** and **in line** with their **own values**

- Setting **challenging objectives** will contribute to reinforce passion of med reps
- However, these objectives must be **achievable** and **quantitative** as well as **qualitative**

- Job achievements that med reps can be proud of are **essential**
- Thus, managers should support med reps through **constructive feedbacks** and useful **advice**

"Passionate med reps are more convincing & engaging"

- Recognition **by prescribers**[1] of med reps' scientific knowledge and emotional intelligence is highly valued by the latter
- Recognition of professionalism and performance by their managers and peers is also determinant

- **Autonomy** is an **important component** to favor people passion at work
- Micromanagement and excessive controlling are not compatible with job passion development[2]

- If rewards are not the most important driver, they are however a prerequisite
- **Rewards** like pay raises, bonuses, incentives, etc. participate to increase job satisfaction, provided they are **fair, transparent and easily understood**

Sources: Smart Pharma Consulting

[1] The ELITE Program, if correctly designed and implemented, will boost the perception of med reps by the prescribers they interact with – [2] However, med reps and their managers should keep in mind that autonomy is earned and not a right

The best performing companies can develop deeper physicians' insight and to create sustainable physicians' experiences that stimulate their desire and preference

Key Success Factors (1/2)

Develop Insight

- **Interactions** should be used to **better know and understand** physicians needs…
- … and to identify what is likely to please, impress, delight, or positively surprise them

Instill a Culture

- The ELITE Program should **come from the top management** and **disseminate** throughout the company **to reach med reps** who need to **understand the benefits** they will draw from such a program

Define a Strategy

- The ELITE Program should be **part of a broader strategy** aiming at strengthening **physicians' preference** to the promoted brands
- Thus, it should be **integrated into the brand marketing** and **sales strategy**

Design a Process

- The ELITE Program should be **implemented**, according to **a well-defined process**, to ensure a consistently **high quality of execution**…
- … and **monitored** with **specific metrics** to fill the gaps, if any, with proper solutions

"Excellence is doing ordinary things extraordinarily well" – John W Gardner

Sources: Smart Pharma Consulting

To obtain quick and tangible results, "ELITE Med Reps" would need to adjust their behavior, certain traits of their personality and improve their technical skills

Key Success Factors (2/2)

1. Personality

- Enthusiastic
- Self-confident
- Curious
- Creative
- Empathic / Emotional
- Organized / Rigorous

4. Behavior

- Adjustment to the context of each interaction and…
- … to each physician profile
- Regular identification of physicians' expectations…
- … and assessment of their level of satisfaction

2. Knowledge

- Healthcare environment
- Disease environment
- Therapeutic approaches
- Promoted brands
- Physicians' profiles, fields of interests, needs, wants, etc.

3. Analytical Skills

- Understanding of physicians' expectations
- Analysis of interactions with physicians
- Definition of actions to carry out

Sources: Smart Pharma Consulting

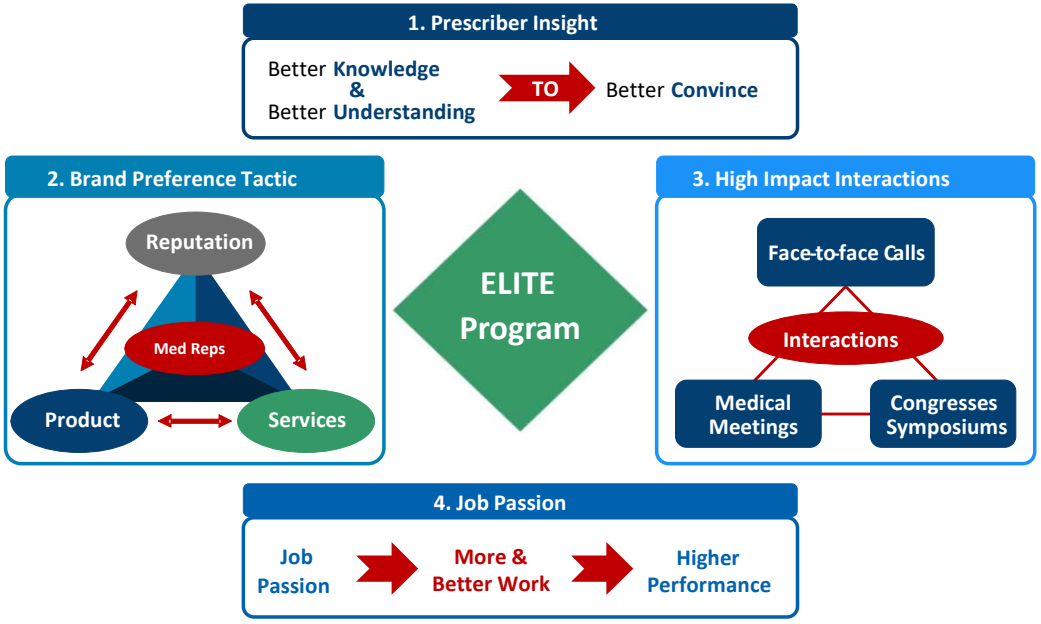
As the author of the ELITE Program and considering their operational experience, Smart Pharma consultants are well positioned to facilitate its implementation

Smart Pharma Consulting Services

ELITE Program Implementation

- Smart Pharma Consulting has an **in-depth expertise** in **improving sales force efficiency** coming from:
  - General management experiences in France and abroad for pharma companies
  - Numerous sales force effectiveness consulting projects carried out
- The ELITE Program which has been developed by Smart Pharma Consulting proposes a **holistic** and **practical** approach to **obtain** a significant **improvement** of **med reps' efficiency** and **efficacy**
- Smart Pharma Consulting can help pharma companies implement the ELITE Program as follows:

1. **Craft** a **communication strategy demonstrating** to **med reps** the benefits they will draw from the **program**
2. **Design** a **framework** that fits the company **ambition** and considers its **current situation**
3. **Create** specific and user-friendly **tools** to **facilitate** the **execution** of the **four pillars** of the **ELITE Program** by the med reps



4. **Develop** specific **training modules**[1] **for med reps** and their **managers** to help them master

   Concepts – Methods – Tools

   related to each of the four pillars that constitute the ELITE Program
5. **Adjust** the **organization** to best support the execution of the ELITE Program

Sources: Smart Pharma Consulting

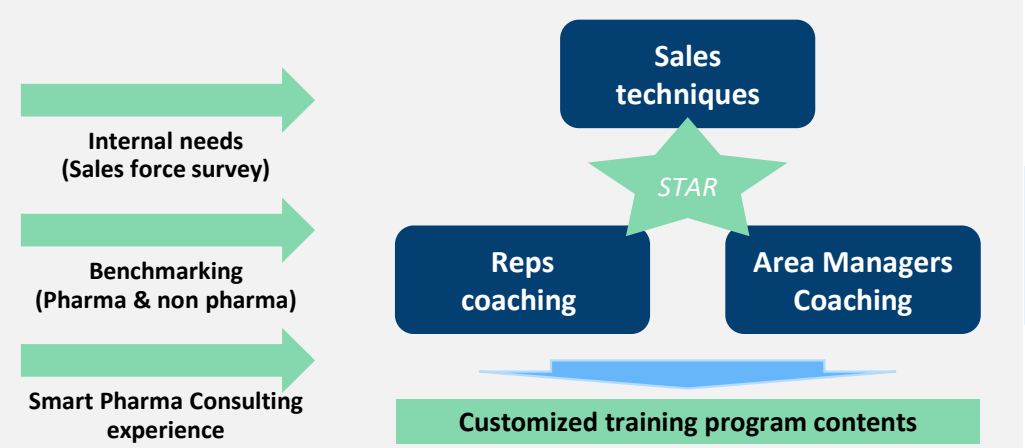
[1] *The Smart Pharma Institute of Management, which is the training department of Smart Pharma Consulting, is registered since 2001*

The STAR (Sales Techniques Application for Results) program can be entirely customized to pharma companies needs and rolled out in a timely manner

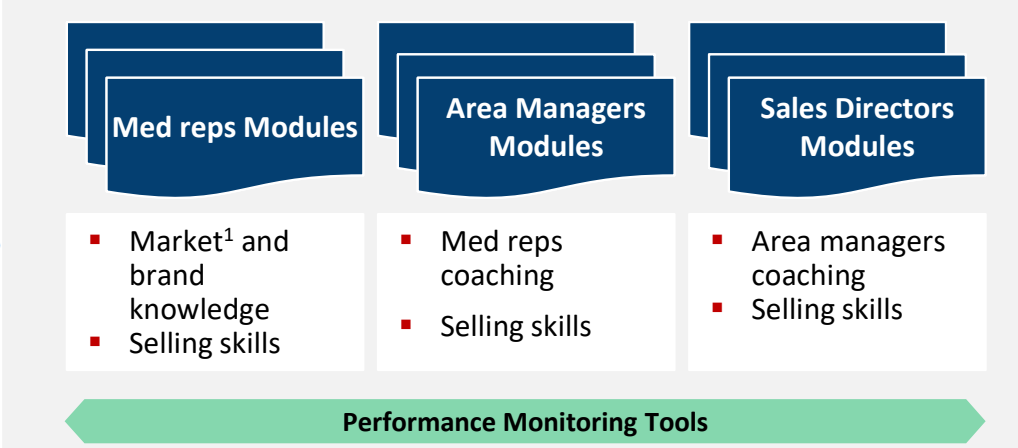
Smart Pharma Consulting Services

ELITE Program Implementation

Identification of sales force needs and expectations



Program roll-out



- Evaluation of sales force teams needs and expectations through an internal survey
- Proposition of adjustments or deep changes matching needs and expectations
- Enrichment of the program with external analyses (benchmarking)
- Finalization of the program in view of company portfolio and culture

- Train the trainers' sessions with area managers and sales force directors
- National launch of the customized *STAR* program (seminar)
- Regional roll-out (regional meetings and dual call days with area managers & med reps)
- On-going program adjustments in view of strategic priorities and sales force needs

Sources: Smart Pharma Consulting

[1] Including the healthcare system, the pathology, the therapeutic alternatives, the physicians called upon, etc.

Smart Pharma
CONSULTING

Med Reps Survival
Post-Covid-19

Vision & Recommendations

"Give people what they need and not what you want"

POSITION PAPER August 2020

The Covid-19 crisis should lead, more than ever, pharma companies to rethink the short-term effectiveness of their sales forces and anticipate, or even participate to, their mid-term evolution

Introduction

- Over the past 15 years, the number of med reps has fallen by 40 to 50%
- The downsizing of pharma companies' sales forces is mainly explained by:
  1. The portfolio structure shift from primary care to secondary care products, mainly prescribed by GPs and by specialist physicians, respectively; the latter being fewer and therefore requiring fewer med reps to be called upon
  2. The increasing number of physicians limiting or forbidding medical calls because they have easily access to high, and even better, quality drug-related information on Internet and are overloaded with an ever-increasing number of patients
- This trend should not only continue but accelerate as a result of the Covid-19 crisis
- In this context, pharma companies should redefine the activity and size of their sales forces and for so doing, Smart Pharma Consulting proposes to answer the two following questions:
  1. How to maintain effective interactions with physicians (2020 – 2021)?
  2. How to anticipate / participate to Med Reps' job evolution (2021 – 2024)?

Sources: Smart Pharma Consulting

In-person interactions are decreasing and more and more complemented by remote interactions and/or non-personal interactions orchestrated by Med Reps

Part 1 – How to Maintain Effective Interactions with Physicians (2020 – 2021)?

Situation Analysis (1/3)

Med-Reps 3-D interactions

In-person interactions

- In 2019, ~50% physicians were estimated to refuse access to Med Reps in person…
- … while they were ~70% restricting this access
- An additional 10-15% of physicians is likely to refuse calls from Med Reps, following the Covid-19 crisis
- This trend will continue, over the coming years, with an expected acceleration

Virtual interactions

- Contrary to common beliefs, less than 10% of physicians have experienced remote calls before the Covid-19 crisis
- The number of remote calls is likely to increase, but slightly, to reach 12 to 15% by end of 2021
- Physicians are not very keen on this communication channel they do not find very convenient and very well executed

Non-personal interactions

- Emails is the non-personal channel preferred by 68% of physicians[1]
- With 70% of physicians using search engines daily, to keep informed about advancements in their field of medical expertise…
- … it is essential for Med Reps to guide their research by sending them links to relevant content[2]
- 52% of physicians use regularly pharma companies' digital resources

"Med Reps are still the best means to engage physicians, but for how long?"

Sources: Smart Pharma Consulting – FirstWord Pharma study carried out in March 2020 in the USA and EU5 countries at 245 physicians – "Why it's hard to reach physicians", BlueNovius, 2018

[1] Pharma companies may use rep-triggered email software (e.g., Veeva), especially following a medical call – [2] Such as patient education content, latest RWE data, etc.

To keep on convincing physicians to prefer the brands they promote, it is essential for Med Reps to maintain effective in-person interactions

Part 1 – How to Maintain Effective Interactions with Physicians (2020 – 2021)?

Situation Analysis (2/3)

Why do Med Reps meet Physicians?

- Ultimately, Med Reps meet physicians to convince them to prescribe, whenever they have an opportunity, the product they promote, but in the best interest of their patients and within the scope of the SmPCs[1]
- Thus, during medical calls, Med Reps:
  - Highlight information regarding the features of their products (i.e., indications, efficacy, safety, dosage forms, dose regimen, price, reimbursement conditions)
  - Propose services facilitating the use of their products (around-the-pill) or related to the disease or the patient care (beyond-the-pill)

Why do Physicians meet Med Reps?

- To get new and useful information regarding the products promoted by Med Reps
- To get information related to the disease addressed by the promoted product
- To get materials (e.g., Apps, leaflets) and services (e.g., website addresses, hotline access) for patients and or to help them better interact with and manage their patients
- Because they have good historical relationship with Med Reps and/or know that their job is at risk, and they do not want to jeopardize their future

Sources: Smart Pharma Consulting

[1] *Summary of Product Characteristics*

Several studies have shown that the number of physicians refusing to meet Med Reps in person is increasing, for multiple reasons, reaching in 2019 an average of more than 50%

Part 1 – How to Maintain Effective Interactions with Physicians (2020 – 2021)?

Situation Analysis (3/3)

Barriers to physicians in-person access

1	Stale information conveyed	▪ Physicians say that Med Reps waste their time by sharing information they already know
2	Product-focused information	▪ Physicians complain that they receive too much product-related data, that is canned and not objective enough
3	Too many patients	▪ Physicians are meeting more and more patients per day, while shortening the consultation time per patient
4	Too many paperwork	▪ 2/3 of physicians' working hours is spent on bureaucratic tasks (e.g., EHR[1], EMR[2], EPR[3], reimbursement form)
5	Hospital / institution policy	▪ Internal rules banning / restricting access to physicians are set to limit distraction and influence by Med Reps

Sources: Smart Pharma Consulting – "Why it's hard to reach physicians", BlueNovius, 2018 – DRG's 2019 ePharma Physician Report

[1] Electronic Health Record – [2] Electronic Medical Record – [3] Electronic Patient Record

It is possible to remove some barriers to in-person access, but the impact is likely to be limited to a small proportion of physicians and for a limited period

Part 1 – How to Maintain Effective Interactions with Physicians (2020 – 2021)?

Recommendations (1/6)

Removal of barriers to physicians in-person access

Barriers	Barrier Removal
1 Stale information conveyed	1 Provide physicians with new proprietary clinical and RWE data that are useful and of interest to them
2 Product-focused information	2 Deliver unbiased product-related information and relevant non-promotional content[1]
3 Too many patients	3 Help physicians better manage their time (e.g., offer a training on time management)[2]
4 Too many paperwork	4 Propose a specific support to manage more efficiently their administrative work (e.g., software and/or training)[2]
5 Hospital / institution policy	5 Develop / co-develop services around- or beyond-the-pill in exchange of a privilege access to physicians[3]

Sources: Smart Pharma Consulting – "Why it's hard to reach physicians", BlueNovius, 2018 – DRG's 2019 ePharma Physician Report

[1] Related to diseases, patient care, etc. – [2] Depending on national regulations, hospital / institution policies and pharma companies' compliance rules – [3] Especially for key account hospitals / institutions. See our position papers: https://smart-pharma.com/wp-content/uploads/2019/07/KAM-KIM-Relationships-in-Regions-VW.pdf and https://smart-pharma.com/wp-content/uploads/2019/07/Best-in-class-KAM-VF.pdf

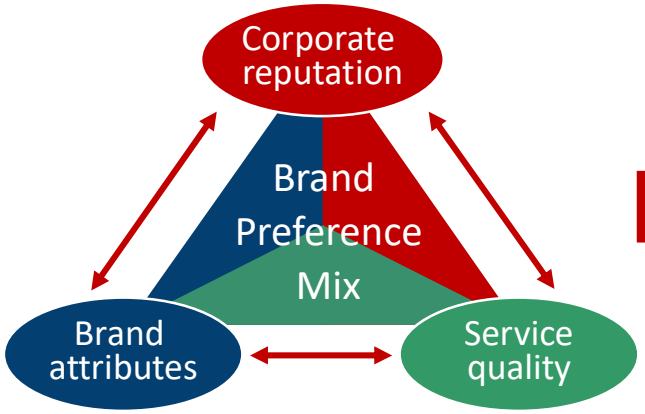
If well designed and executed, medical calls may offer physicians an outstanding experience[1] that will help Med Reps secure regular and impactful interactions

Part 1 – How to Maintain Effective Interactions with Physicians (2020 – 2021)?

Recommendations (2/6)

Creation of service-led medical calls[2]

Ultimate Objective



- Increase physician preference for promoted brands to gain prescription share by leveraging the 3 components of the Brand Preference Mix[3]

Prerequisite

- Secure regular in-person contacts or, failing that, virtual interactions
- Influence – directly or indirectly – physicians' opinion and behavior in favor of the brands

Approach

- Offer physicians service-led medical calls:
  - Relevant, trustworthy and up-to-date information
  - Useful services (for them and/or their patients)
  - Enjoyable interactions

Sources: Smart Pharma Consulting

See our position papers: [1] https://smart-pharma.com/wp-content/uploads/2019/10/Outstanding-Physician-Experience-EV-VW-1.pdf – [2] https://smart-pharma.com/wp-content/uploads/2019/12/Service-led-Medical-Calls-VW.pdf and https://smart-pharma.com/wp-content/uploads/2019/07/Create-impactful-interactions-with-prescribers-Web.pdf – [3] https://smart-pharma.com/wp-content/uploads/2019/10/Outstanding-Physician-Experience-EV-VW-1.pdf

While preparing each call, Med Reps should ask themselves what benefits the physician is likely to get from it

Part 1 – How to Maintain Effective Interactions with Physicians (2020 – 2021)?

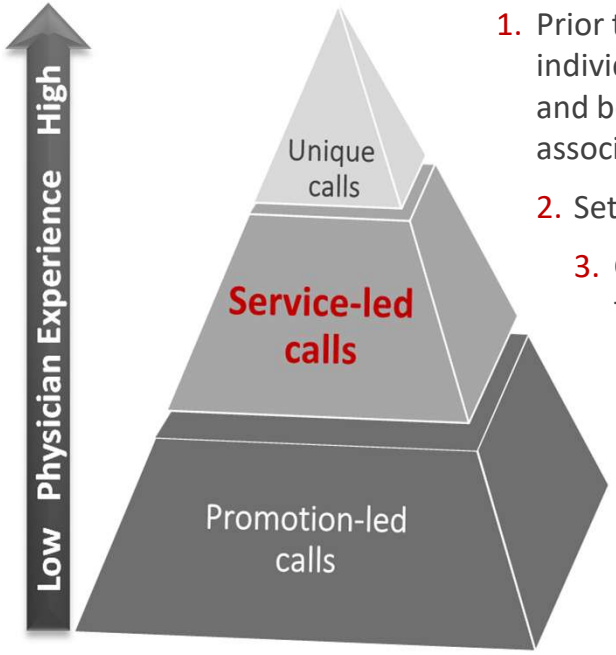
Recommendations (3/6)

Creation of service-led medical calls – Preparation

Physician Insights → **Call objective – Strategy & Tactics**

1. **Better Knowledge**
2. **Better Understanding**
3. **To better Convince**

1. Individual and dynamic qualification of physicians with personas or ID Cards[1]
2. Med Reps should know for each physician:
   - Personality traits
   - Professional / personal fields of interest
   - Major needs and corresponding expectations
   - Score on the "Brand Preference Mix"
   - Prescribing habits and underlying factors



1. Prior to each call, define a specific objective to individual physician according to his opinion and behavior re. the promoted brands, associated services and the pharma company
2. Set a call strategy to meet the set objective
3. Chose the tactics that will best support the strategy:
   - Moving up from a promotion-led to service-led calls, and ideally to unique calls, requires a specific preparation
   - Each call preparation should be based on past interaction key learnings to make the physician live an outstanding experience

Sources: Smart Pharma Consulting

Medical calls should be implemented so that to be perceived by physicians as interesting, useful and well executed to be positively remembered and have a preferential impact on their behavior

Part 1 – How to Maintain Effective Interactions with Physicians (2020 – 2021)?

Recommendations (4/6)

Creation of service-led medical calls – Execution

Hook
Grab attention & Interest

Conditioning time

- Express enthusiasm to meet the physician[1]
- Vary the way of starting the call:
  - Recall of previous interactions and provision of new information
  - Testimonies of colleagues
  - Discussion re. healthcare news, the pipeline of the marketing company, a new service proposed, etc.
  - Start the call by covering a subject of interest or a specific need

Argument
Demonstrate & Convince

Brand contextualization

- Cover a medical topic after checking the physician's interest or…
- … alternatively propose a service for him or his patients
- If appropriate, highlight the benefits of the brand with robust evidence
- Manage questions / objections in a rigorous manner
- Pay attention to what the physician says to enrich the Med Rep's insight[2,3]

Engagement
Persuade

From a preferential opinion to a preferential behavior

- Recall the points of agreement
- Summarize arguments put forwards to convince the physician
- Engage the physician to:
  - Attend a medical meeting
  - Participate to an advisory board
  - Try the brand on a specific patient
  - Share his experience with the brand during the next call
  - Etc.

Sources: Smart Pharma Consulting

[1] Be natural, sincere and genuine – [2] I.e. The Med Rep knowledge and understanding of what the physician says and do – [3] A regular update by questioning the physician is essential

Med Reps should measure once a year, during a face-to-face meeting, the opinion of each physician, and its evolution, regarding the quality of their interactions

Part 1 – How to Maintain Effective Interactions with Physicians (2020 – 2021)?

Recommendations (5/6)

Creation of service-led medical calls – Follow-up

Evaluation of the physician perception

- Auto-evaluation by the Med Rep after each call with a 5-point scale, completed by the rationale supporting the mark
- Evaluation of the calls, by each physician, once a year, on a 10-point scale, completed by the rationale supporting the mark, during a medical call carried out by the Med Rep, completed by the rationale supporting the mark

Analysis and summary of key points of the call

- Evaluate if the objective has been met or not; and why
- Write down the key learnings:
  - New specific information collected re. the physician (e.g., his fields of interest, problems, needs, expectations, opinion, behavior), his patients' profile, the institution where he works
  - Reasons underlying these facts
  - Engagements of the physician and the Med Rep ones (services)

Objective and strategy setting for the next call(s)

- Set the objective(s) of the next call(s) and / or interactions (e.g., follow-on emails) based on the new information collected and analyzed; ideally as soon as the call is over
- Anticipate and plan the searches to be carried out or the material to be gathered to implement – during the next call – the strategy which would have been set

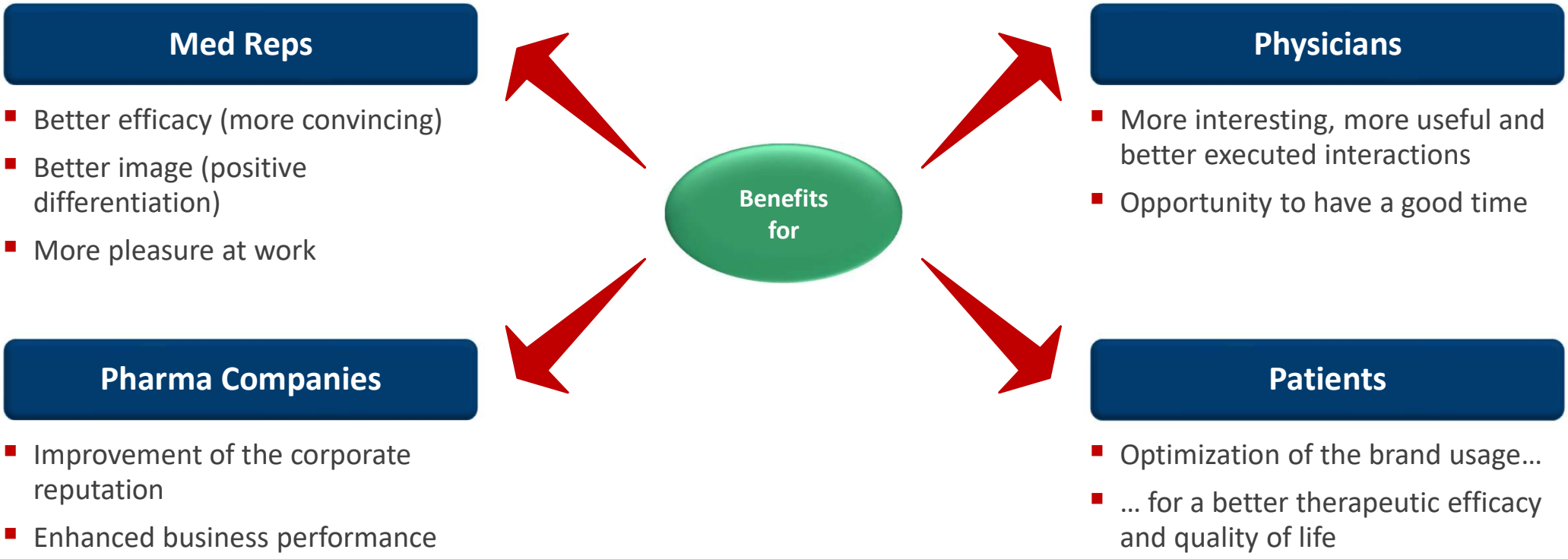
Sources: Smart Pharma Consulting

Service-led medical calls will benefit not only physicians and Med Reps but also patients through services delivered; and the pharma companies by enhancing their reputation

Part 1 – How to Maintain Effective Interactions with Physicians (2020 – 2021)?

Recommendations (6/6)

Creation of service-led medical calls – Expected benefits



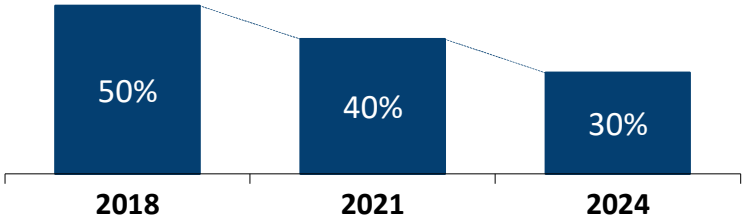
Sources: Smart Pharma Consulting

The drop of physicians accepting in-person calls, along with their more drastic limitation and the shortening of their duration, would lead to the disappearance of Med Reps, unless they evolve

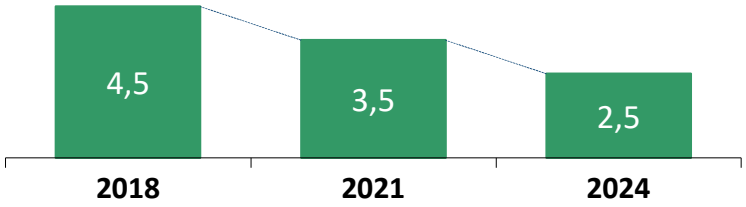
Part 2 – How to Anticipate / Participate to Med Reps' Job Evolution (2021 – 2024)?

Vision (1/3)

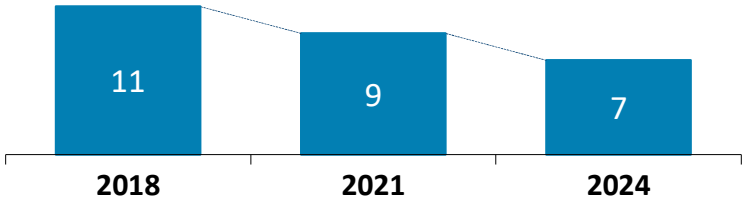
Accessible physicians to Med Reps
(% of total)



Limitation of access to Med Reps
(# of calls per physician p.a.)



In-person call duration per physician
(in minutes)



If the Covid-19 pandemic is not going to disrupt the pharma companies' commercial model, it is going to accelerate the need to downsize sales forces and raise the issue of their efficacy and efficiency

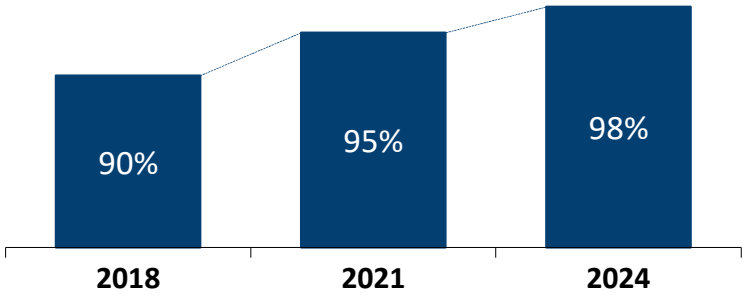
Sources: Smart Pharma Consulting estimates and analyses based on multiple historical studies (e.g., DRGs – ZS – McKinsey)

For scientific data, including those related to products, online websites is the first source of information, while pharma companies' websites are gaining credibility with physicians

Part 2 – How to Anticipate / Participate to Med Reps' Job Evolution (2021 – 2024)?

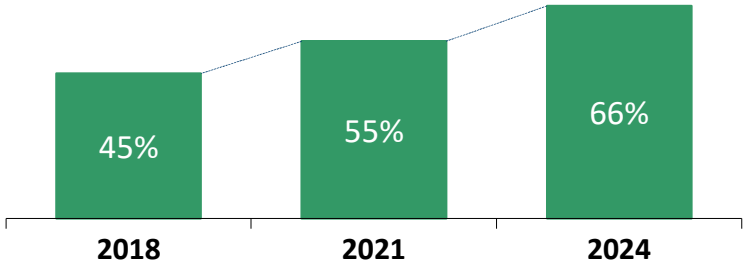
Vision (2/3)

Online scientific search by physicians
(% of total)



- Physicians becoming more familiar with Internet, they are increasingly finding information online, as needed
- The Covid-19 crisis has accelerated the usage of digital channels by physicians to find scientific information
- Product-related is the most accessed website resource

Credit given to pharma websites by physicians
(# of total physicians)



- 50% or more physicians using search engines, rely on pharma companies' digital resources
- Most of pharma companies have designed product-related websites, with objective and well-presented information
- Thus, these websites exert a certain influence on physicians' prescribing decision

➡ Med Reps are not considered by physicians as a robust, updated and convenient source of information re. products, which means that they must bring high-value services to stay connected to them

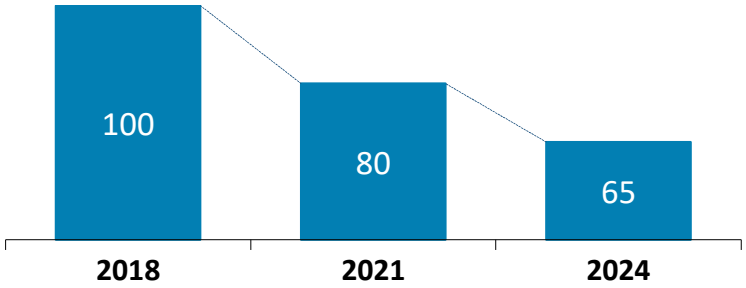
Sources: Smart Pharma Consulting estimates and analyses based on multiple historical studies (e.g., DRGs – ZS – McKinsey)

The number of Med Reps should be reduced by 35% over the 2018 – 2024 period, while remote interactions should account for ~46% of the total interactions carried out by Med Reps in 2024

Part 2 – How to Anticipate / Participate to Med Reps' Job Evolution (2021 – 2024)?

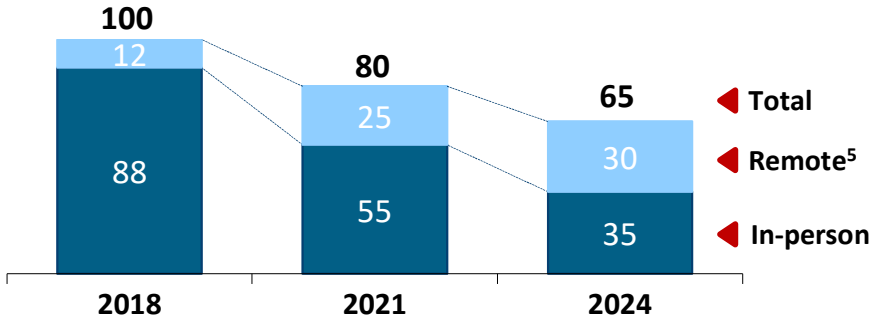
Vision (3/3)

Sales force size
(Index based on 2018 situation)



- The increasing difficulties for Med Reps to carry out in-person calls will force pharma companies to reduce over the 2018-2024 period their sales force size by ~1/3
- The sales force size evolution will vary significantly according to the countries[1], the therapeutic areas[2], the profile of prescribers[3] and their mode of practice[4]

Med Reps interactions
(Index based on 2018 situation)



- We assume that the total number of interactions per Med Rep will remain constant at 750 p.a. over the period
- The number of in-person contacts should be reduced by 60% while remote interactions by Med Reps will grow by 150%
- Remote interactions include phone calls, web / video calls, text messaging, emails, etc., carried out by Med Reps

Med Reps will still play an essential role in 2024, despite their decreased number, provided they take into consideration physicians' preferences in terms of channels and needs in terms of content shared

Sources: Smart Pharma Consulting estimates and analyses based on multiple historical studies (e.g., DRGs – ZS – McKinsey)

[1] The decrease will be more important in the USA and Southern European countries than in Northern European countries – [2] In oncology and hematology where many innovation are expected, the number of Med Reps may increase while in pulmonology or diabetes it will be the opposite – [3] According to their age, to their opinion vis-à-vis pharma companies' sales forces in general – [4] Independent, in a hospital or institution

To survive, Med Reps need to become the special partners of each individual physician by sharing high-quality information[1] and offering essential services[1], fulfilling his needs and expectations

Part 2 – How to Anticipate / Participate to Med Reps' Job Evolution (2021 – 2024)?

Recommendations – Principles (1/4)

#1 Offset the decrease of in-person interactions by an array of remote engagement channels

#2 Apply an individual and dynamic segmentation of physicians based on their opinion and behavior

#3 Define the content of interactions according to individual physician's needs and expectations

#4 Determine the optimal level of resources (time and money) based on each physician sensitivity

#5 Transform Med Rep mindset and develop his skills to create high-value experiences

Sources: Smart Pharma Consulting

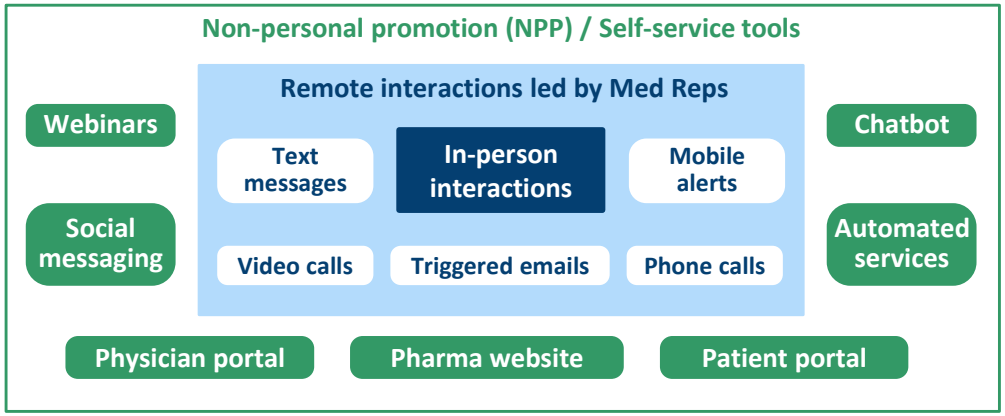
[1] *For the physicians, the patients, the hospitals and other relevant stakeholders (e.g., payers, pharmacists, nurses)*

Med Reps need to shift from physical to digital channels and online platforms to engage with physicians, while maintaining the right balance according to individual physician portrait

Part 2 – How to Anticipate / Participate to Med Reps' Job Evolution (2021 – 2024)?

Recommendations – Principles (2/4)

#1 Offset the decrease of in-person interactions by an array of remote engagement channels



- Remote interactions led by Med Reps can amplify and / or complement the impact of in-person interactions
- Combination of in-person and digital channels lead to more touchpoints and thus ensure a more regular level of interactions
- Med Reps should be able to find the right balance, per physician, between in-person calls, remote interactions and NPP channels

#2 Apply an individual and dynamic segmentation of physicians based on their opinion and behavior

Physicians	Expectations / Priorities / Preferences				
	In-person calls	Information	Services	Digital channel	Frequency of interactions
A	No access	Patient & disease only	HCP-focus	Personalized emails	10 p.a.
B	Limited access	Product & disease	Patient-focus	Remote detailing	12 p.a.
C	Unlimited access	No limitations	Institution-focus	HCPs portals	< 20 p.a.

- Segment each individual physician based on his needs and wants[1] regarding his interactions with Med Reps
- For so doing, pharma companies should collect insights with the help of its in-field collaborators (med reps, MSLs, KAMs, etc.) and if necessary, the external support of a market research company
- A continuous collection of data will enable regular adjustments

Sources: Smart Pharma Consulting

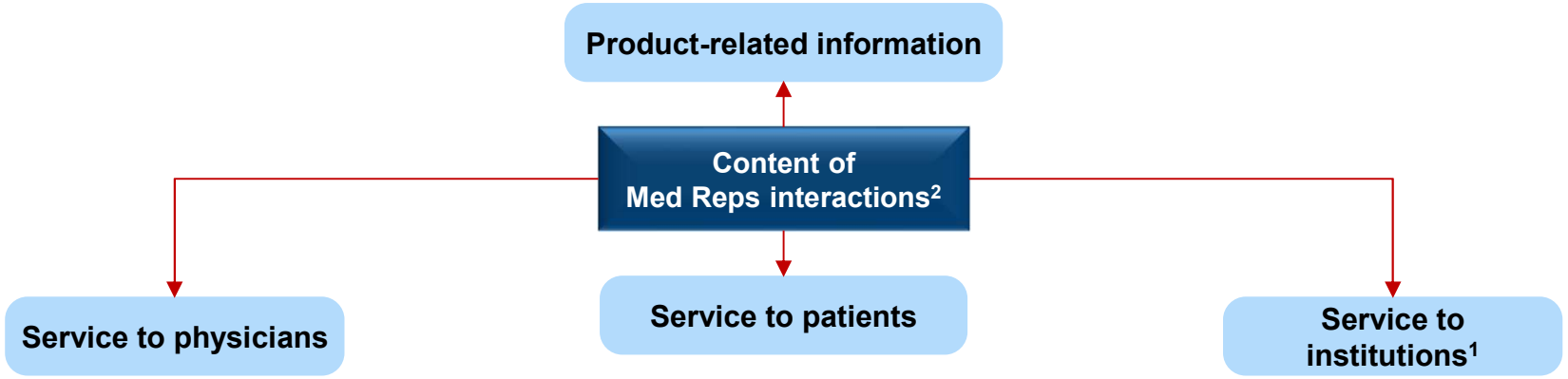
[1] For more details, see our position paper "Outstanding Physician Experience": https://smart-pharma.com/wp-content/uploads/2019/10/Outstanding-Physician-Experience-EV-VW-1.pdf

When interacting with Med Reps, physicians expect a better quality and balance between product-related information and services proposed to them, their patients or their institution[1]

Part 2 – How to Anticipate / Participate to Med Reps' Job Evolution (2021 – 2024)?

Recommendations – Principles (3/4)

#3 Define the content of interactions according to individual physician's needs and expectations



- Product-related information should focus on bringing new clinical or RWE data useful for the physician's practice
- Services to physicians could, for instance, consist of:
  - Helping them manage the huge amount of scientific data available
  - Providing them guidance on telemedicine
  - Inviting them to attend webinars or peer-to-peer virtual meetings
- Services to patients are mainly educational materials (presentations, brochures, Apps, etc.) – that can be downloaded – to improve their adherence, their quality of life, their overall care
- Services to institutions, that are today the responsibility of KAMs[3] should be handled by Med Reps – in their new role of service provider – to help them meet their long-term objectives (e.g., increase the number of patients, simplify processes, reduce costs)

Sources: Smart Pharma Consulting

[1] Hospital, healthcare center, group practice, etc. – [2] Either in-person or remote interactions – [3] Key Account Managers

The judgment of Med Reps, based on rigorous analysis is important to determine the right orchestration of interactions to be executed and evaluated with each physician

Part 2 – How to Anticipate / Participate to Med Reps' Job Evolution (2021 – 2024)?

Recommendations – Principles (4/4)

#4 Determine the optimal level of resources (time and money) based on each physician sensitivity

A | B | C | ------

Assessment card per physician — Illustrative

Med Rep Activities

- Content Mix (product – services)
- Channel Mix (physical – digital)
- Channel sequence
- Interaction frequency

Measurement Tools[1]

Key Execution Indicators

- # of interactions
- Quality of interactions[2]
- Level of resources allocated (man-days and euros)

Key Performance Indicators

- Prescription share gain
- # of new patients on brand

- Resource allocation needs to be optimized – by adjusting content, channels, sequence and frequency of interactions – to lead to a tangible and sustained impact on brand preference
- Coordination with medical and marketing departments is required

#5 Transform Med Rep mindset and develop his skills to create high-value experiences

Mindset

- Self-confident
- Enthusiastic
- Organized / Rigorous
- **Empathic / Emotional**

Knowledge

- Healthcare environment
- Promoted brands
- Disease environment
- Physicians profiles, fields of interest, needs, wants, etc.
- Therapeutic approaches

Competencies

- **P**hysicians' expectations understanding
- Definition of specific actions to execute
- Analysis of interactions with physicians
- **Assessment of the quality of execution**

- Med Reps should have a good knowledge and understanding of the healthcare system, the patient journey and the physician needs
- The evolution of the job will require an adaptation of Med Reps' profile and the set up of specific training programs

Sources: Smart Pharma Consulting

[1] Quality of execution and performance can be measured by Key Execution Indicators (KEIs) and Key Performance Indicators (KPIs), respectively. See our position paper regarding KPIs & KEIs: https://smart-pharma.com/wp-content/uploads/2019/07/Smart-Management-Series-KPIs-KEIs-VW.pdf – [2] Such as the Brand Preference Mix Index (BPMI) or the Net Promoter Score (NPS) as described in the following position paper "Outstanding Physician Experience": https://smart-pharma.com/wp-content/uploads/2019/10/Outstanding-Physician-Experience-EV-VW-1.pdf

To implement the paradigm shift required to maintain, or even boost, the efficacy and efficiency of Med Reps while interacting with physicians, Smart Pharma proposes the following approach

Part 2 – How to Anticipate / Participate to Med Reps' Job Evolution (2021 – 2024)?

Recommendations – Implementation

Proposed approach

Identification of individual physician portrait

- For each physician, the pharma company will collect, store and analyze data on the physician:
  - Position re. current interactions with Med Reps
  - Expectations from Med Reps:
    - Information sharing (product- and/or non-product related)
    - Service offering to him, his patients, his institution, etc.
    - Preferred communication channels (in-person / digital)
    - Frequency of interactions

Development of an interaction plan per physician

- Design an interaction plan per physician to engage them
- Develop a short-term plan (≤ 1 year) per physician, formalizing:
  - The objective set
  - The engagement strategy
  - The tactics expressed in terms of:
    - Information sharing
    - Service offering
    - Channel mix and frequency
  - Metrics to measure the quality of execution and the performance[1]

Execution of an Individual interaction plan

- Execute the individual interaction plan while emphasizing the importance of the quality of execution
- Allocate enough time to prepare and follow up the interactions carried with each physician (either in-person or digital)
- Measure and analyze carefully and regularly the quality of execution and the impact of the interactions[1] to ensure a continuous optimization
- Coordinate Med Reps activities with medical and marketing departments

Sources: Smart Pharma Consulting

[1] Quality of execution and performance can be measured by Key Execution Indicators (KEIs) and Key Performance Indicators (KPIs), respectively. See our position paper regarding KPIs & KEIs: https://smart-pharma.com/wp-content/uploads/2019/07/Smart-Management-Series-KPIs-KEIs-VW.pdf

Smart Pharma
CONSULTING

Accessing & Convincing Physicians

How to set up a High-performance Sales Force

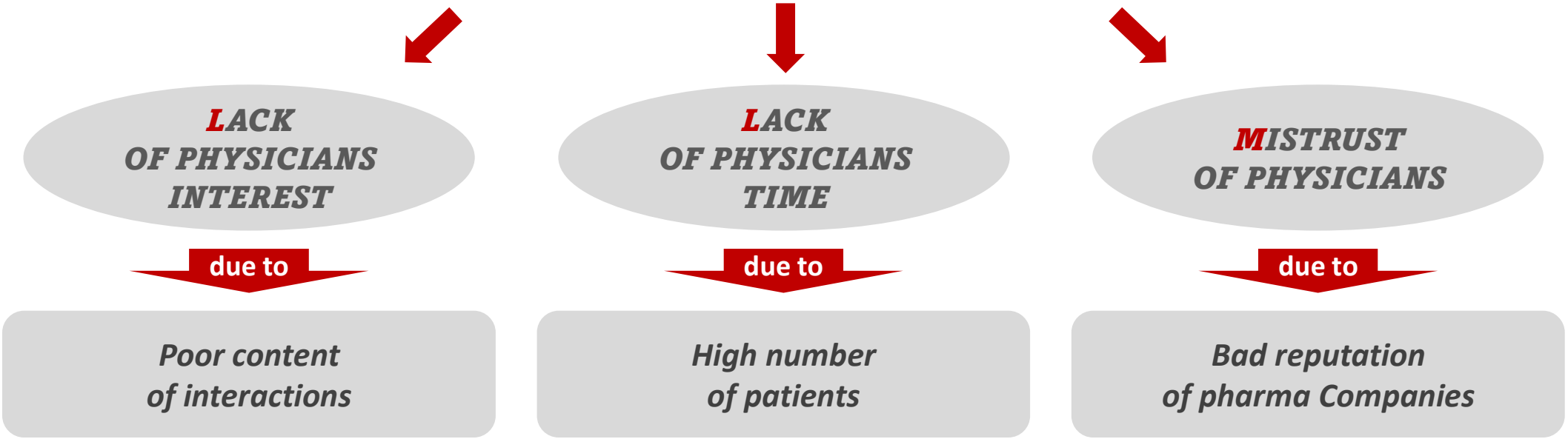
“Give people what they need and not what you want”

January 2024

If pharma companies' Sales Forces are considered as the most effective communication channel to influence physicians, the latter are more and more reluctant to interact with Med Reps

Context

- While it is widely accepted that pharma Sales Forces are the most effective and efficient communication channel to influence physicians, …
- … Med Reps have more and more difficulties to interact directly or indirectly with them
- Three main reasons explain this trend:



Sources: Smart Pharma Consulting

Pharma Companies should reconsider their Med Reps' activities to secure a regular access to targeted physicians and to strengthen the preference for the brands they promote

Objective

- Pharma companies interact with physicians – through their Sales Forces – to convince them to prefer their brands, provided it is in the best interest of patients
- Ensuring a regular and/or a preferential access to physicians is necessary, but not sufficient
- Thus, while interacting with physicians, Med Reps should pursue two objectives:
- To achieve these objectives, Med Reps must address the following challenges:

Sources: Smart Pharma Consulting

To ensure regular access of Med Reps to physicians and to influence them, Smart Pharma Consulting proposes a straightforward and practical approach based on common sense

Method & Tools

- Physicians have different:
  - Centers of interests
  - Needs, wants and expectations from pharma companies
  - Experiences with pharma companies, their brands and their collaborators (particularly Med Reps)
- To access physicians and strengthen their brand preference, we propose the following method and tools:

Sources: Smart Pharma Consulting

The Annual Assessment Call (AAC) is an essential means to help Med Reps evaluate the opinion of each physician regarding the determinant of the brands they promote

1. Annual Assessment Call – Introduction

A A C

WHAT IS THE PROBLEM?

- Med Reps have an insufficient knowledge and understanding of individual physicians they target
- They do not systematically adjust the content of their interactions to each individual physician
- Therefore, most of physicians do not want to interact with Med Reps at all, or as much as in the past

WHAT IS THE SOLUTION?

- Organize once – or maximum twice – a year, a call to evaluate the opinion of each physician regarding:
  - The pharma company reputation
  - The value of the promoted brands
  - The value of the associated services proposed by the pharma company…
- … knowing that these three elements are the drivers of their prescribing preference[1]

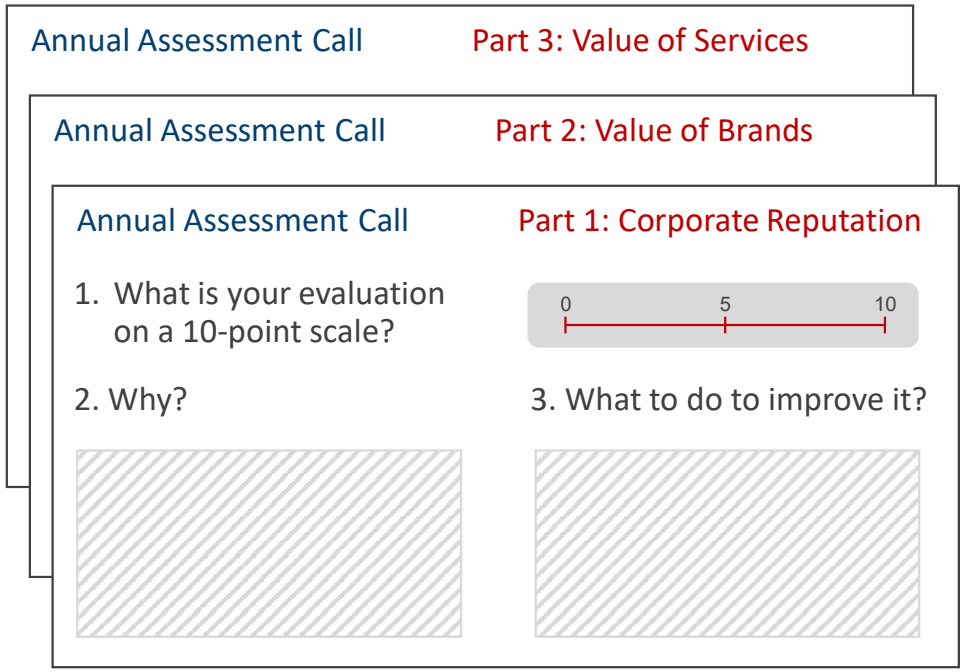
Sources: Smart Pharma Consulting

[1] See the Brand Preference Mix

The interview guide used during the Annual Assessment Call enables to gather insights re. each physician's opinion about the pharma company, its promoted brands and associated services

1. Annual Assessment Call – The Tool

Interview guide (illustrative)



- The Annual Assessment Call should be carried out by each Med Rep – preferably during an in-person interaction – with an individual targeted physician
- The interview guide is structured around the three dimensions of the Brand Preference Mix:
  1. The reputation of the marketing company
  2. The perception of the promoted brands[1]
  3. The quality of the associated services proposed[2]
- In addition, the physician is asked by the Med Rep to indicate the relative importance granted to these three dimensions to chose a brand to prescribe

Sources: Smart Pharma Consulting

[1] Their efficacy, safety and convenience – [2] Including the medical calls that should be designed as a service to physicians (see Service-led Medical Calls)

With the insights gathered during the Annual Assessment Call, Med Reps can develop tailor-made interactions so that to maintain regular and/or a preferential[1] frequency of contacts

1. Annual Assessment Call – The Benefits

- This assessment provides Med Reps with:
  - A better knowledge and…
  - … understanding of each physician
  - A better identification of actions and…
  - … messages most likely to strengthen the brand preference of each physician

  } Insights

- The gathered information will help Med Reps:
  - Define the content to share and…
  - … the services to propose to fulfil each physician's needs, wants, and expectations
  - Combine the communication channels based on each physician habits and preferences

- The Annual Assessment Call – by itself – conveys a positive image to physicians who appreciate the aspiration of pharma companies to propose them – through their Med Reps – higher value interactions

Sources: Smart Pharma Consulting

[1] *In other words, a higher frequency than that of its competitors*

Pharma companies struggling – more and more often – to differentiate their products on their sole clinical attributes, the Brand Preference Mix brings additional differentiating dimensions

2. Brand Preference Mix – Introduction

B **P** **M**

WHAT IS THE PROBLEM?

- The great majority of physicians use several brands that are often little differentiated for a given pathology
- The challenge for pharma companies is to create a difference that is perceived as important enough…
- … to generate the prescribing preference of physicians

WHAT IS THE SOLUTION?

- To increase physicians' preference for their brands, pharma companies should value:
  - Their corporate reputation
  - The attributes of their products
  - The associated services they offer
- Thus, the links between the brands, the associated services and the corporate reputation should be well established

Sources: Smart Pharma Consulting

The Brand Preference Mix Index permits to track the performance of each brand on the three dimensions of the Brand Preference Mix, down to each individual physician

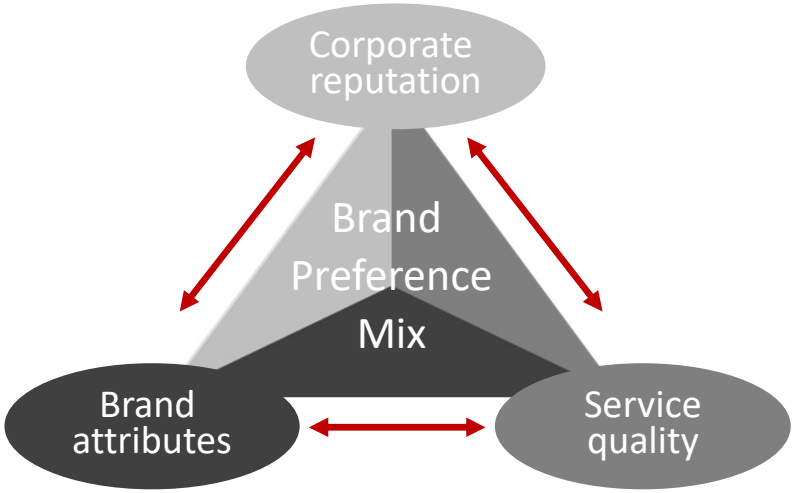
2. Brand Preference Mix – The Tool

Brand Preference Mix (BPM)

B P M

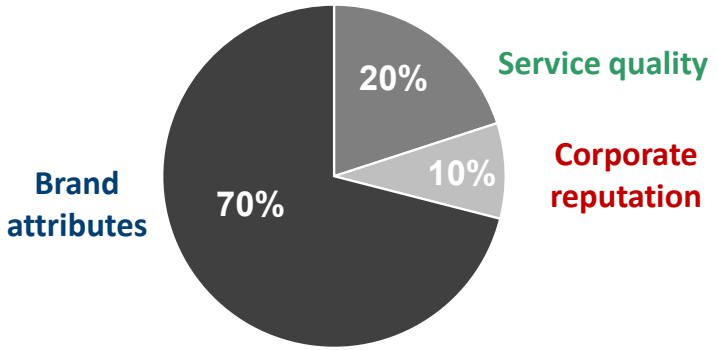
Brand Preference Mix Index (BPMI)

- How to create a superior and appealing identity that enhances the brand value?



- How to highlight products differences so that to generate preference from physicians?
- How to leverage corporate reputation and service offering?
- How to deliver services valued by physicians, institutions they work for, and/or patients?
- How to select services inducing corporate / brand preference?

Illustrative



Visual Analog Scale

BPMI ▶ (70% x 7) + (20% x 8) + (10% x 6) = 7.1

- The BPMI can be measured per physician and per brand
- It scores each individual physician perception over time, considering external[1] and internal[2] events

Sources: Smart Pharma Consulting

[1] Related to health authorities, competitors and customers' opinions and behaviors – [2] Related to medico-marketing and sales activities, quality of services offered, communication strategy, etc.

The Brand Preference Mix, as gathered through Annual Assessment Calls, enables Med Reps to enhance the preference for their brand by customizing their actions at each physician level

2. Brand Preference Mix – The Benefits

- Physicians' preference is more powerful than customer satisfaction to optimize market share
- The Brand Preference Mix should be applied individually to each physician, by Med Reps
- The Brand Preference Mix Index helps to evaluate the impact of activities per physician
- The outcomes of the Brand Preference Mix Index enable to adjust the content of interactions and…
- …. the services to be offered to individual physicians, based on the collected insights
- Physicians perceive the Brand Preference Mix approach as very positive and relevant

By applying the 4 Ws approach, the Brand Preference Mix solution
ensures a robust consistency between the information gathered and the decisions made

WHAT?	WHY?	SO WHAT?	WHAT TO DO?
What are the scores of the brand per physician?	Why did the physician give these scores?	What are the implications of these scores?	How to reinforce the preference to the brand?

Sources: Smart Pharma Consulting

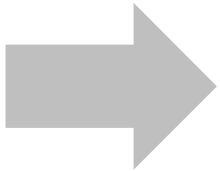
Medical call experiences are generally considered by physicians of limited value, which explains their dissatisfaction and their increasing reluctance to meet Med Reps

3. Service-led Medical Calls – Introduction

S M C

WHAT IS THE PROBLEM?

- Access of Med Reps is declining and calling time reducing because of physicians' lack of:
  - Interest in the content of interactions which are not enough customized
  - Time due to staff shortages and increasing number of patients
  - Trust in pharma companies in general[1] which suffer from a bad reputation



WHAT IS THE SOLUTION?

- Physicians are more inclined to meet Med Reps if they bring them a real benefit
- To achieve this, Service-led Medical Calls are designed to offer each physician:
  - Relevant, trustworthy and up-to-date information
  - Useful services
  - Enjoyable interactions

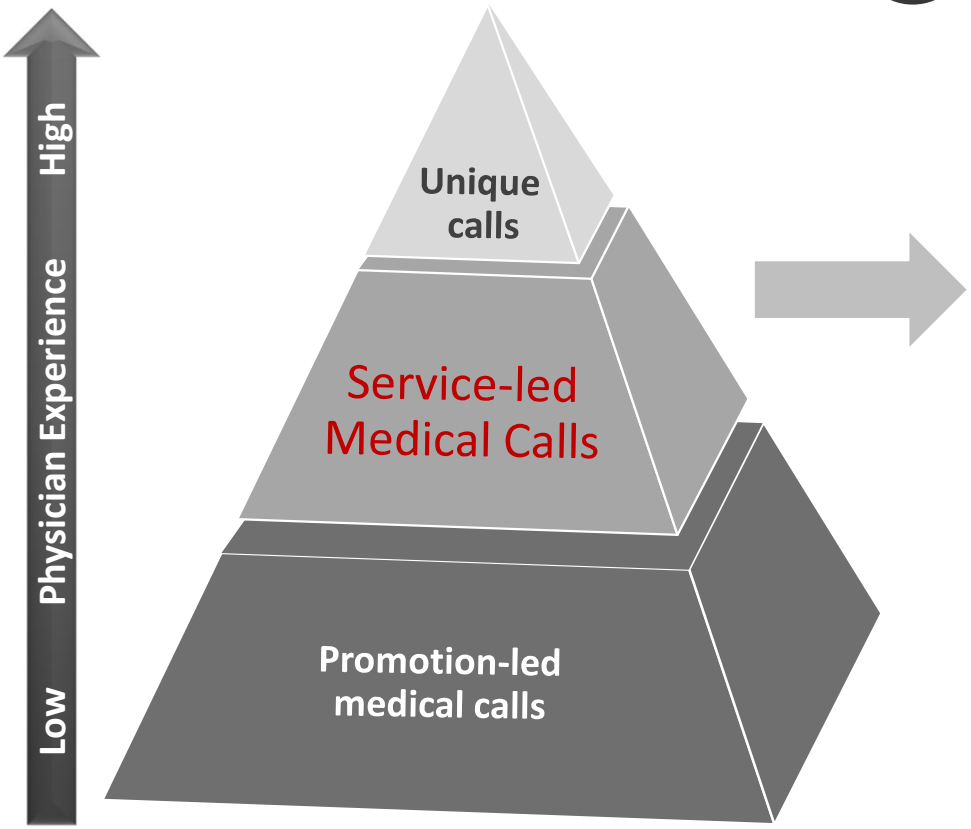
Sources: Smart Pharma Consulting

[1] Especially when it comes to young physicians

If well designed and executed, medical calls may offer physicians an outstanding experience that will help Med Reps secure regular and impactful interactions

3. Service-led Medical Calls – The Tool

S M C



- Service-led Medical Calls require to identify each physician's:
  - Fields of interest so that to develop a minimum knowledge to be able to discuss and share thoughts
  - Professional needs, wants and expectations to select those for which an answer will be proposed
- To ensure a perfect call execution, one should consider the:
  - Context of the call (e.g., planned, collective, office-based)
  - Opinion and behavior of the physician (e.g., convinced, regular prescriber, thoughtful, talkative)
  - Objective of the call (e.g., inform, call for action, offer a service)
- Medical Reps must also strive to impress physicians by their knowledge, thoughts and behavior[1]
- Medical Reps should – during the Annual Assessment Call – ask the opinion of each physician about the quality of the medical calls they have carried out and suggestions for improvement

Sources: Smart Pharma Consulting

[1] Empathy, good mood, enthusiasm, kindness, passion for their job, etc.

Service-led Medical Calls will lead to more regular contacts, better memorization, higher probability to convince physicians, and will increase their preference for marketed brands

3. Service-led Medical Calls – The Benefits

For Medical Reps

- Higher call efficacy (memorable – convincing – enhancing physicians' preference)
- Better personal image (positive differentiation vs. other Med Reps)
- More pleasure at work

For Physicians

- More interesting and…
- … useful interactions
- Better executed interactions
- Opportunity to have a good time

SERVICE-LED MEDICAL CALLS *…*

… objective is to turn each call into a memorable positive experience for each physician

For Pharma Companies

- Improved corporate reputation
- Enhanced business performance

Sources: Smart Pharma Consulting

These three solutions have been developed for and used by pharma companies to ensure an effective level of Med Reps' interactions likely to boost physicians' preference

Key Takeaways

LONG-TERM OBJECTIVE → Strengthen physicians' preference for the brands

Maintain an effective level of interactions ← ***SHORT-TERM OBJECTIVE***

1. Annual Assessment Call

A **A** **C**

Provides insights per physician which enable Med Reps to maintain regular and/or preferrential[1] frequency of contacts vs. competition

2. Brand Preference Mix

B **P** **M**

Helps Med Reps decide which actions to carry out – and how – to best leverage the three determinants of each physician preference to the marketed brands

3. Service-led Medical Calls

S **M** **C**

Lead to more regular contacts, better memorization and increased preference of physicians for marketed brands

Sources: Smart Pharma Consulting

[1] *In other words, a higher frequency than that of its competitors*

Smart Pharma
CONSULTING

Service-led
Medical Calls

Securing Access to Physicians & Boosting Brand Preference

POSITION PAPER December 2019

1. Introduction

Current Situation

Medical call experiences are generally considered by physicians of limited value, which explains their dissatisfaction and their reluctance to meet medical reps

- Access of medical reps with physicians is declining and calling time reducing
- Two main reasons explain this trend:
  - Physicians work overload due to staff shortages in view of the number of patients
  - Perceived waste of time[1] due to the lack of usefulness and/or interest in the content of the medical calls
- Physicians are ready to give medical reps some time, during medical calls, provided they can draw some benefits by:
  - Getting useful information
  - Being proposed valuable services,

    and/or
  - Having a good time

"The great majority of medical calls are perceived by physicians as a pure waste of time"

Sources: Smart Pharma Consulting

[1] 51% of physicians say they already know the information shown to them during medical calls, according to a survey of 1,814 US physicians practicing across 25 specialties, carried out in 2017 by Decision Resources Group

1. Introduction

Desired Situation

If well redesigned and executed, medical calls may offer physicians an outstanding experience[1] that will help med reps secure regular and impactful interactions

- Despite their poor image, and their high cost[2], face-to-face contacts remain the most effective promotional means…
- … knowing that most physicians ignore digital channels[3]
- Medical calls should be reinvented to:
  - Secure regular access with physicians
  - Influence – directly or indirectly – physicians' opinion and behavior in favor of the promoted brands
- For so doing, medical reps should turn each of their medical call into a service, highly valued by each of their targeted physicians
- Thus, these new service-led medical calls should offer physicians:
  - Relevant, trustworthy and up-to-date information
  - Useful services (for them and/or their patients)
  - Enjoyable interactions

"To have a positive impact, medical calls must bring a real benefit to physicians"

Sources: Smart Pharma Consulting

[1] See our position paper "Outstanding Physician Experience" on our company website: https://smart-pharma.com/ – [2] Estimated cost per contact: from €130 to €200 in western countries – [3] Such as: e-mails, text messages, phone calls, webinars

2. Why Transforming Medical Calls into Services?

- A medical call perceived as a service by physicians will lead to more regular contacts and…
- … to a better memorization of the call content, a higher probability to convince them and an increased preference to the marketed brands

- A service-led medical call is characterized from the…

… Physician perspective…

… Med Rep perspective…

… by an interaction which is…

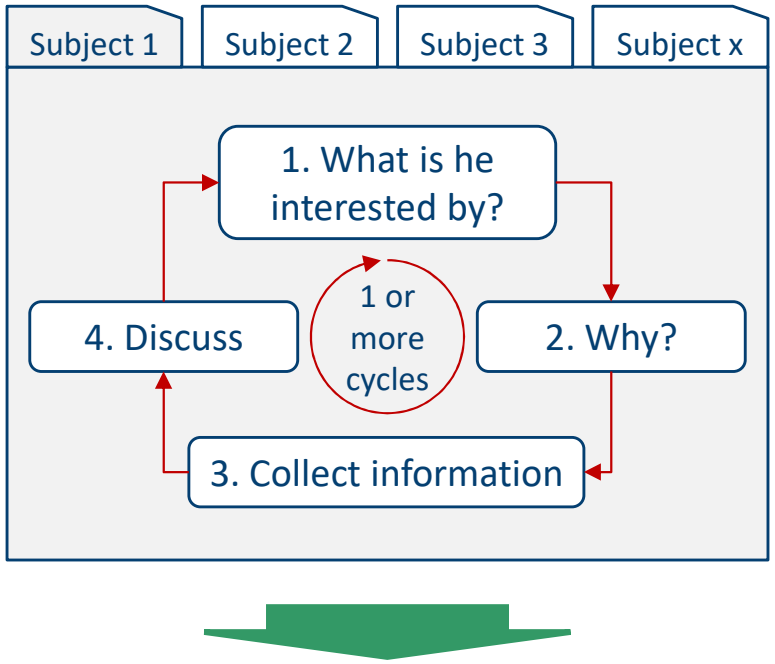
- … Interesting
- … Useful
- … Well executed

- … Memorable
- … Convincing
- … Preferential

Sources: Smart Pharma Consulting

3. How to Transform Medical Calls? – Physician Perspective

1. Fields of Interest



"What I particularly appreciate about this med rep is his inquiring mind. We always have interesting discussions"

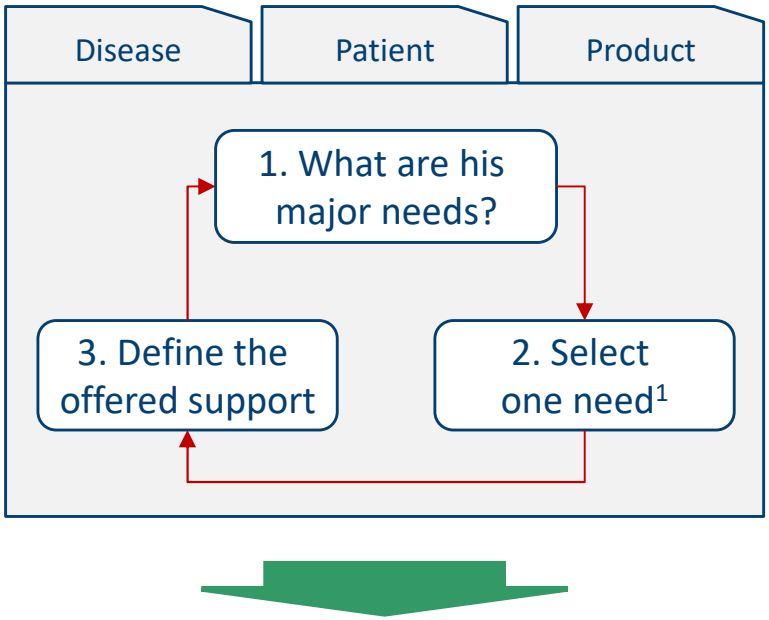
1. Identify the subjects each physician is particularly interested by and for what reasons
   (even if these subjects have no direct implications in his professional practice)
2. Select one or several of these subjects
3. Develop your knowledge and understanding about these subjects so that to be able to:
   - Bring him relevant information
   - Share your thoughts

   and thus, have a discussion of interest, likely to differentiate yourself from your competitors

Sources: Smart Pharma Consulting

3. How to Transform Medical Calls? – Physician Perspective

2. Usefulness



"What I appreciate with this medical rep is that he provides high quality responses to my needs"

1. Identify the most important professional needs of each targeted physician (e.g., management of the patient flow, demonstration of the superior value or safety profile of a product vs. competitors)
2. Select the need for which the medical rep is going to propose an answer, after having assessed the:
   - Feasibility (technical, legal, financial)
   - Impact on the preference for the promoted brand
3. Agree upon with the physician the nature and importance of the support to be offered to fulfill the selected need to limit the risks of disappointment

Sources: Smart Pharma Consulting

[1] *Make sure the pharma company is legitimate to fulfill this need before making any proposal*

3. How to Transform Medical Calls? – Physician Perspective

3. Execution

"With this medical rep I never waste my time. We always have interesting discussions"

1. Excelling in execution is a prerequisite for medical reps who must consider the:
   - Context (e.g., collective calls, calls w/o an appointment)
   - Physician behavior (e.g., thoughtful, talkative, in a hurry)
   - Objective of the call (e.g., inform, invite to a congress, answer a question, engage)

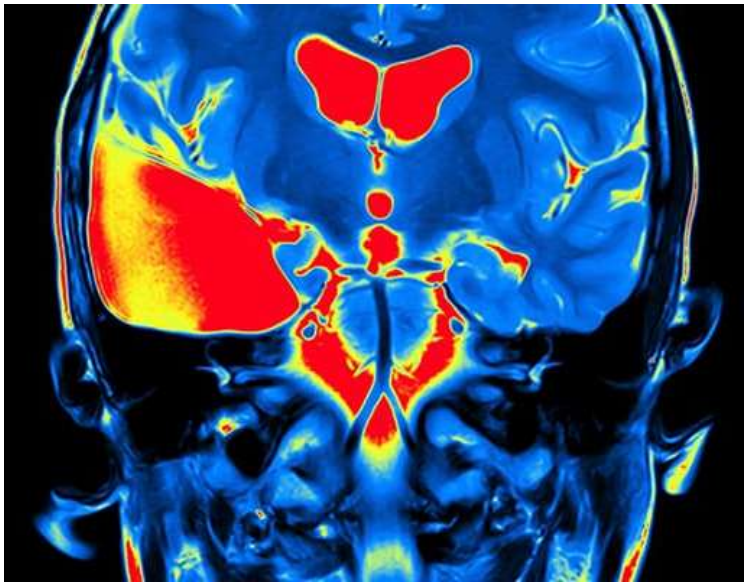
   to define the best way to carry out the call (e.g., structure, duration, rhythm, tone)
2. Medical reps must also strive to impress physicians by:
   - The breadth of their knowledge
   - The soundness of their thoughts
   - Their appropriate behavior[1]

Sources: Smart Pharma Consulting

[1] *Empathy, good mood, enthusiasm, kindness, etc.*

3. How to Transform Medical Calls? – Med Rep Perspective

1. Memorization



Brain MRI Scan

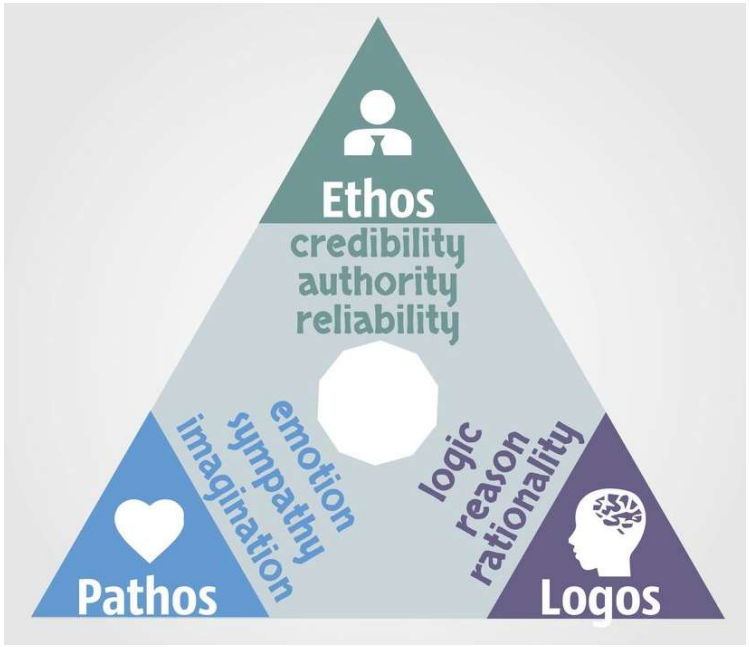
1. Medical reps' arguments should be supported by:
   - "True stories" (e.g., testimonies of colleagues, patient cases, personal experiences) …
   - … with a strong emotive content
2. Neurosciences have shown that "stories":
   - Stimulate attention and memorization
   - Facilitate the persuasion by increasing the oxytocin which favors cooperative behaviors of people

Sources: Smart Pharma Consulting

[1] See our position paper "Storytelling in Business" on our company website: https://smart-pharma.com/

3. How to Transform Medical Calls? – Med Rep Perspective

2. Conviction



The Art of Rhetoric (Aristotle)

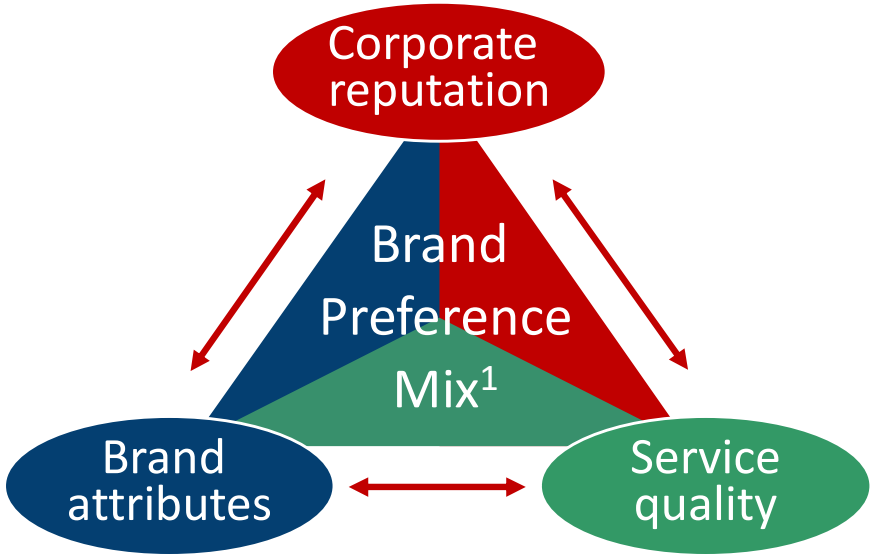
1. To persuade physicians, medical reps should leverage the three levers proposed by Aristotle[1]:
   - The logical argument (Logos)
   - The emotion (Pathos)
   - The credibility (Ethos)
2. In addition, they should adjust to each physician:
   - Their speaking style (clear – precise – concise)
   - Their behavior (posture – voice – look – gesture)

Sources: Smart Pharma Consulting

[1] See our position paper "Storytelling in Business" on our company website: https://smart-pharma.com/

3. How to Transform Medical Calls? – Med Rep Perspective

3. Preference



The Brand Preference

1. To strengthen the brand preference of each physician called upon, medical reps should capitalize on:
   - The product distinctive benefits in terms of efficacy, safety and convenience brought to the physician himself and/or his patients
   - The reputation of the marketing company
   - The quality of the services offered to health care professionals, patients, health institutions, etc.
2. Each medical call should be conceived (i.e., prepared, executed and followed up as a service per se) (what benefit the physician will get from the medical call?)

Sources: Smart Pharma Consulting

[1] See our position paper "Outstanding Physician Experience" on our company website: https://smart-pharma.com/

3. How to Transform Medical Calls? – Before the Call (1/3)

Who is my Physician?

1. Better Knowledge
2. Better Understanding
3. To better Convince

After the "ELITE" Program[1]

1. Each physician should be precisely qualified in a dynamic manner, with tools such as personas or physician ID Cards[2]
2. Medical reps should be able to answer the following questions relative to each targeted physician:
   - What are his personality traits?
   - What are his main professional and personal fields of interest?
   - What are his major needs and corresponding expectations vis-a-vis pharma companies?
   - What is his opinion regarding the three components of the "Brand Preference Mix"?
   - What are his prescribing habits and the underlying factors?
   - What does he think about the quality of the calls carried by the medical reps?

Sources: Smart Pharma Consulting

[1] See our position paper "Best-in-Class Medical Reps apply the ELITE Program" on our company website: https://smart-pharma.com/ –
[2] See our position paper "Outstanding Physician Experience" on our company website: https://smart-pharma.com/

3. How to Transform Medical Calls? – Before the Call (2/3)

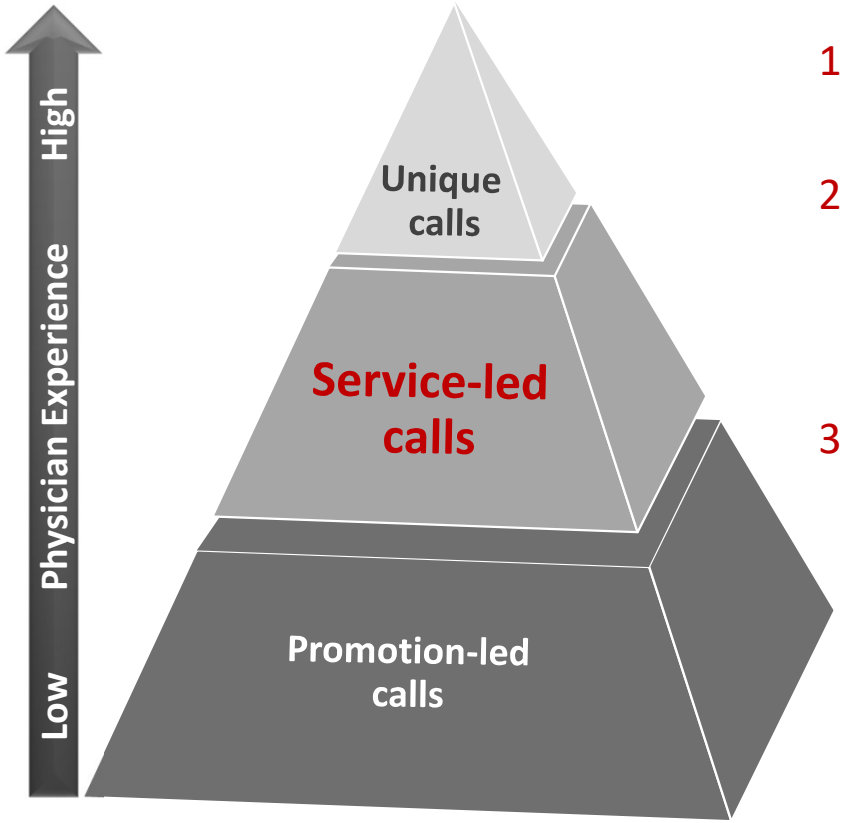
Medical Call Objective – Strategy – Tactics

1. Prior to each call, the objective should be precisely defined and could be:
   - Common to all physicians called upon or to a group of physicians (e.g., those practicing in teaching hospitals only)
   - Specific to each individual physician and defined according to his opinion and behavior regarding the promoted brand, the associated services and the marketing company and/or the content of the previous discussions that have occurred with him
2. Then, a call strategy (e.g., communication messages) should be defined to meet the set objective
3. The chosen tactics should be the ones best supporting the strategy (e.g., a specific clinical study)

Sources: Smart Pharma Consulting

3. How to Transform Medical Calls? – Before the Call (3/3)

Medical Call Objective – Strategy – Tactics



Specific Individual Call Approach

1. Moving up from a promotion-led to a service-led call, and ideally to a unique call, requires a specific preparation
2. This preparation carried out for each physician before each call should be based on lessons learned from past interactions to make him live an outstanding experience, particularly useful and/or interesting and well executed
3. The call can be organized in several customized steps:
   - Introduction (the hook) – requisite step
   - Coverage of a topic of interest previously identified
   - Answer to a physician need, beyond his expectations
   - Positioning of the brand as a solution – amongst others – but with specificities creating value for him and/or his patients

Sources: Smart Pharma Consulting

3. How to Transform Medical Calls? – During the Call

Best Practices

Hook
Grab attention & Interest

Conditioning time

- Show right away (if possible) your good mood and that you are happy to meet the physician[1]
- Vary the way of starting the call:
  - Recall of previous discussions and provision of new information
  - Testimonies of colleagues
  - Discussion re. healthcare news, the pipeline of the marketing company, a new service proposed, etc.
  - Start the call by covering a subject of interest or a specific need

Argument
Demonstrate & Convince

Brand contextualization

- Propose the physician to cover a medical topic after checking his interest for the subject
- Then, highlight the benefits of the promoted brand with the support of robust enough evidence
- Manage questions and objections in a rigorous manner
- The medical rep should pay attention to what the physician says to enrich his insight[2,3]

Engagement
Persuade

From a preferential opinion to a preferential behavior

- Recall all the points of agreement
- Summarize the arguments put forwards to convince
- Engage the physician to:
  - Attend a medical meeting
  - Participate to an advisory board
  - Try the brand on a specific patient
  - Share his experience with the brand during the next call
  - Etc.

Sources: Smart Pharma Consulting

[1] Be natural, sincere and genuine – [2] I.e., his knowledge and understanding of what the physician says and do – [3] A regular update by questioning the physician is essential

3. How to Transform Medical Calls? – After the Call (1/2)

Best Practices

Evaluation of the physician perception

- Estimate what has been the physician opinion about the interaction during the call:
  - Auto-evaluation by the medical rep after each call with the help of a 5-point scale, for instance, completed by the rationale supporting the mark
  - Annual evaluation of the quality of calls on a 10-point scale, by each physician during a medical call carried out by the medical rep, completed by the rationale supporting the mark

Analysis and summary of the key points of the calls

- Evaluate if the objective has been met or not; and why
- Write down the key learnings from the call:
  - New specific information collected relative to the physician (e.g., his fields of interest, problems, needs, expectations, opinion, behavior), his patients, the institution where he works
  - Reasons underlying these facts
  - Engagements of the physician and medical rep ones (services)

Objective and strategy setting for the next call(s)

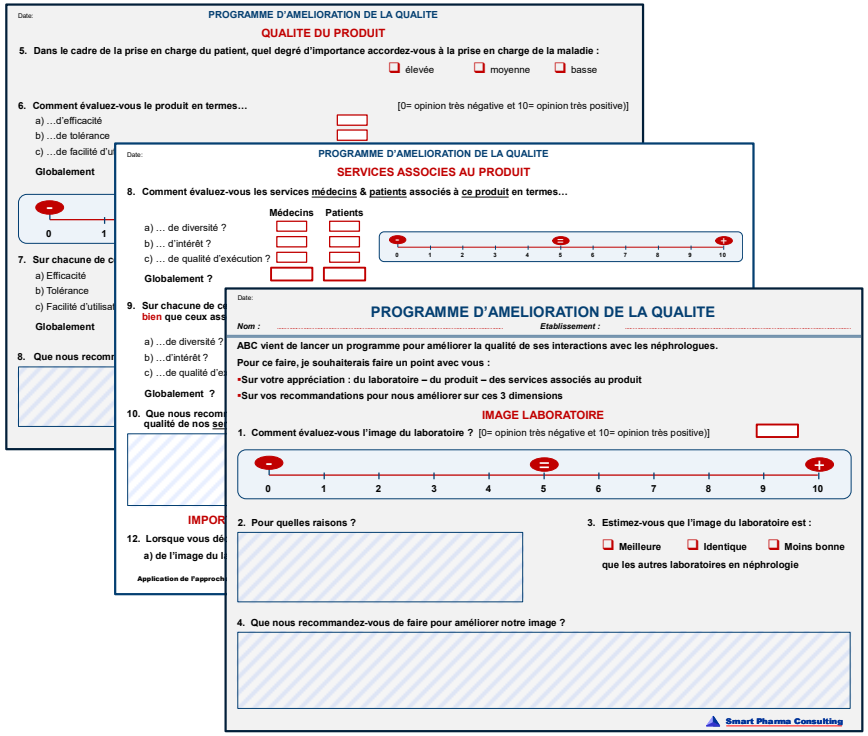
- Set the objective(s) of the next call(s) based on the new information collected and analyzed; ideally as soon as the call is over
- Anticipate and plan the searches to be carried out or the material to be gathered to implement – during the next call – the strategy which would have been set

Sources: Smart Pharma Consulting

3. How to Transform Medical Calls? – After the Call (2/2)

Best Practices

- The medical reps should measure once a year, during a face-to-face meeting, the opinion of each physician, and its evolution, regarding the quality of their interactions



- The evaluation of the quality of the medical calls, as perceived by each physician, can be integrated in the measurement of the three dimensions of the Brand Preference Mix:
  1. The perception of the promoted brand (efficacy, safety, convenience)
  2. The reputation of the marketing company
  3. The quality of the services proposed, amongst which the content of the medical calls
- The measurement provides the medical reps with:
  - A better knowledge and understanding of the physician
  - A more robust identification of the specific actions and messages the more likely to strengthen the brand preference

Sources: Smart Pharma Consulting

Key Success Factors

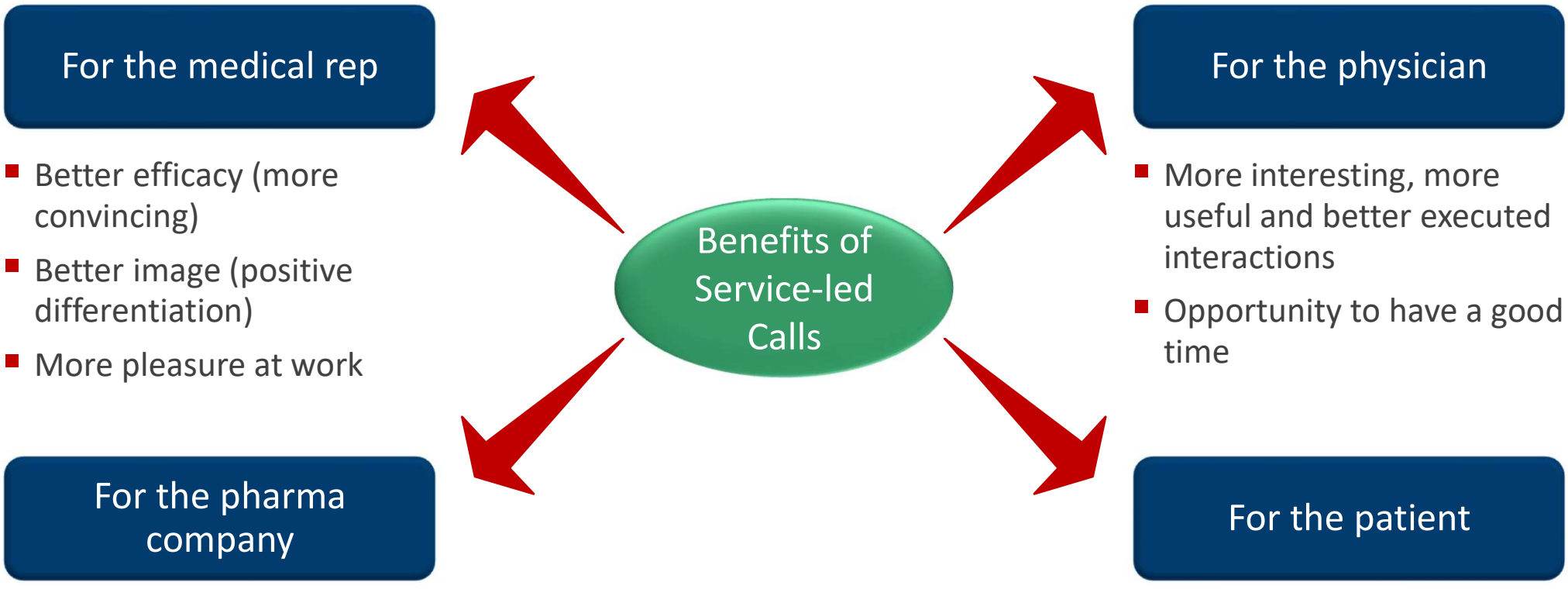
- Get well prepared before each medical call with each individual physician
- Look for innovative[1] approaches to persuade the physician to prescribe more the promoted brand in the best interest of his patients
- Highlight the marketing company and its services to strengthen the preference of each physician for the promoted brand
- Have fun while interacting with physicians

"The challenge is to turn each call into…
… a unique and memorable positive experience for each physician"

Sources: Smart Pharma Consulting

[1] See our position paper "How can Creativity boost your Performance" on our company website: https://smart-pharma.com/

Expected Benefits



Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Best-in-class
Hospital KAM

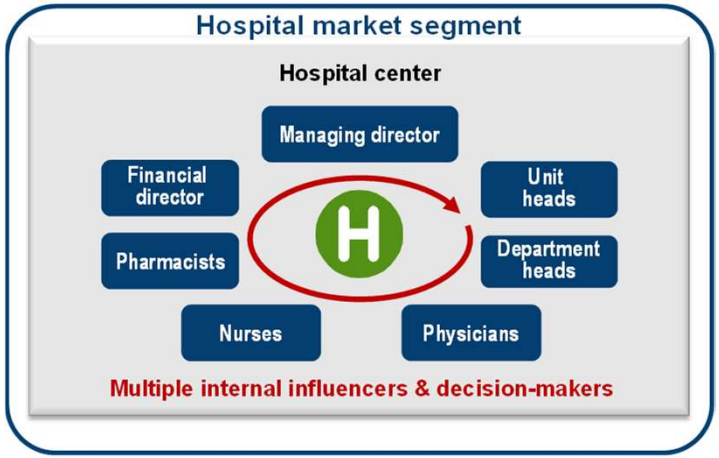
Implementing the
KAM EXPERT Program

POSITION PAPER October 2017

With the consolidation of their customers becoming bigger and more price-sensitive, pharma companies have created KAM positions to better protect their business

Scope & Objective

- Suppliers of the FMCG[1] sector have created, long time ago, the position of Key Account Managers (KAMs) to better negotiate their global offering with the chains of distributors
- KAMs are not new in the pharma industry but their importance has recently increased to better cope with the increasing price-sensitivity, complexity and business importance of key accounts
- The purpose of this position paper is to introduce the KAM EXPERT WHEEL developed by Smart Pharma Consulting to strengthen the competences and performance of KAMs
- If this program, which includes concepts, methods and tools, has been specifically designed for hospital KAMs...
- … most of its content applies to other key accounts such as:
  - Regional health authorities & payers[2]
  - Local health centers[3]
  - Pharmacy chains & VTOs[4]



Sources: Smart Pharma Consulting

[1] Fast-Moving Consumer Goods – [2] Certain pharma companies have created the position of KIM (Key Institution Managers) who are in charge of setting up public health initiatives at regional or local levels – [3] Including several physicians and other healthcare professionals such as: nurses, dental surgeons, retail pharmacists, physiotherapists, etc. – [4] Voluntary Trade Organizations

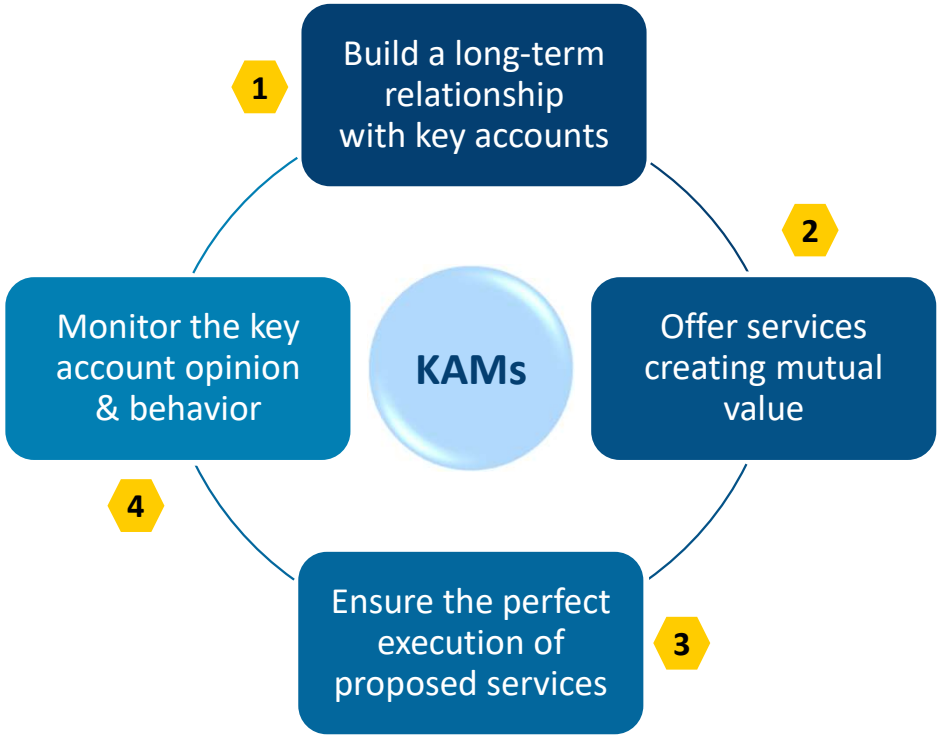
Hospital Key Account Managers role is to influence multiple stakeholders in a complex B-to-B environment by creating long-term mutual benefits

Hospital Key Account Managers role and core activities

Role

- KAMs are one of pharma companies' field teams[1] interacting with hospital centers
- Their role is to develop the business of pharma companies over the long-term by proposing services to hospital influencers and decision-makers to meet some of their needs, such as:
  - Become a reference center in a given pathology
  - Attract more patients
  - Improve hospital organization and efficiency (saving cost and time)
- KAMs have most often a background of first-line manager[2] and are in general affiliated to the commercial department
- Due to their cross-functional responsibilities beyond commercial matters, KAMs should ideally report to the head of the Hospital Division or to the COO[3]

Core activities



Sources: Smart Pharma Consulting

[1] Amongst other field teams we can mention: medical reps, MSLs (Medical Science Liaisons), KIMs (Key Institution Managers) – [2] It is important to note that competent medical reps do not make necessarily competent KAMs. The skill set required for key account management role is much broader – [3] Chief Operating Officer

Hospital KAM is a high-level position requiring in-depth customer insights to determine their evolving needs and wants, and to propose solutions delivering mutual value

Hospital Key Account Managers core competences

Competence = Knowing & Understanding x Deciding & Implementing

Knowing & Understanding

- Set specific objectives per key account such as:
  - Getting listed
  - Modifying purchasing process
  - Minimizing price pressure
  - Gaining market share
  - Being prescribed to discharged patients
- Identify influence and decision paths at hospital level to secure the business of the pharma company
- Gather and analyze the needs and wants of key accounts to propose them services likely to create value to them, bearing in mind they can evolve overtime

Deciding & Implementing

- Develop / co-develop[1] customized services associated (directly or indirectly) to the product portfolio which should deliver mutual value (benefit) for both the hospital and the pharma company
- Build a long-term relationship with key accounts
- Demonstrate leadership and ability to work with cross-functional and multidisciplinary teams
- Manage projects efficiently and effectively
- Monitor carefully the quality of execution and the impact of proposed services

"Any fool can know. The point is to understand" – Albert Einstein

Sources: Smart Pharma Consulting

[1] With the key accounts

The complexity of the Hospital KAM role lies in the fact that they must deal with multiple internal and external stakeholders having different needs and priorities

Cross-functional role of Hospital KAMs

Internal stakeholders

- Market access department (e.g., health economic specialists)
- Public affairs department (KIMs[1])
- Commercial department (in charge of responding to calls for tenders)
- Manufacturing and supply chain departments
- Medical affairs department (Medical manager, MSLs[2], CRAs[3])
- Patient program department
- Marketing department (marketing managers, product managers)
- Sales forces (1st line managers and medical reps)

Integrating role to build an attractive value proposition

KAMs

Orchestrating role to ensure a perfect execution of proposed services

External stakeholders

At regional / local level

- Regional Health Agency (ARS)
- Observatory of Drugs, Medical Devices and Innovation (OMEDIT)
- Primary Fund for Health Insurance (CPAM)
- Regional Directorate of the Medical Service (DRSM)
- Regional Unions of Healthcare Professionals (URPS)

At hospital level

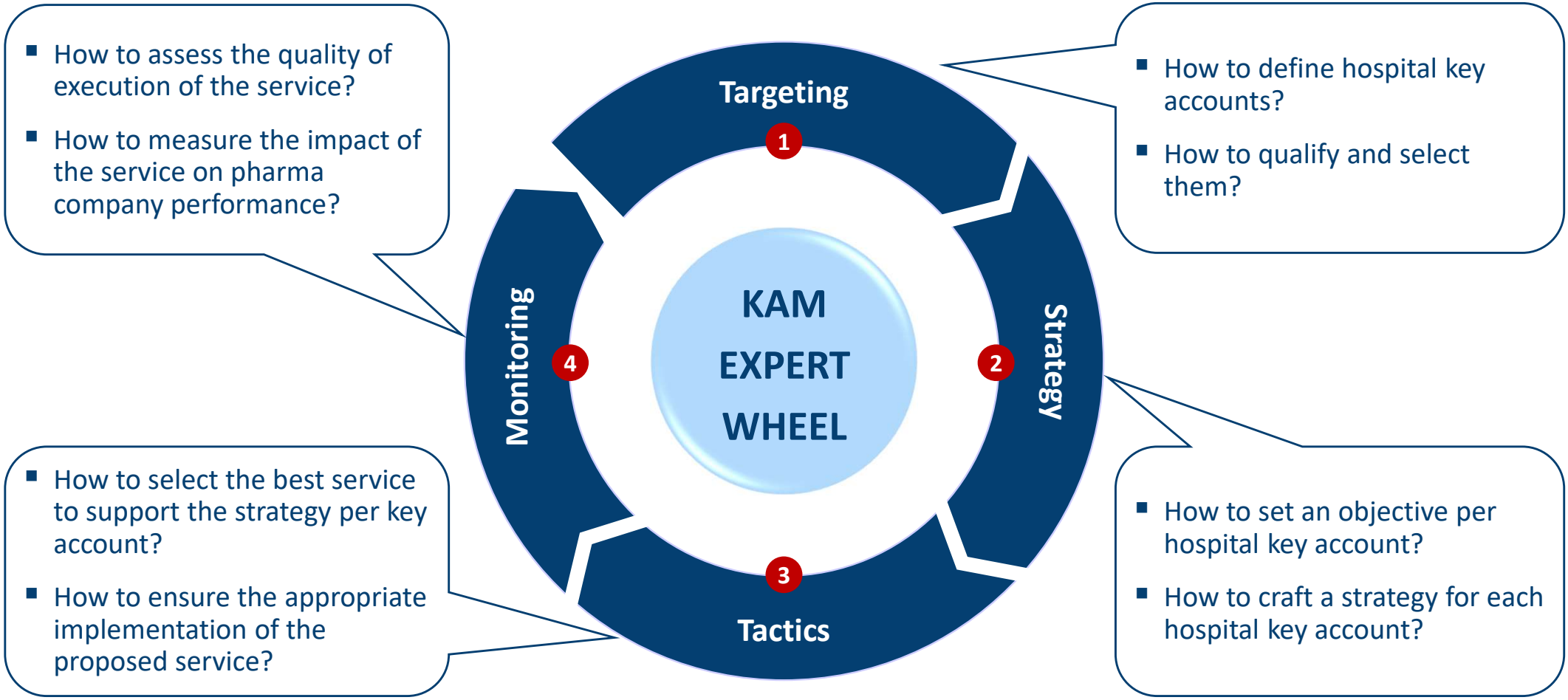
- Managing director
- Finance director
- KOLs and other physicians
- Nurses
- Pharmacists
- Procurement manager

Sources: Smart Pharma Consulting based on a benchmarking studies carried out in 2019

[1] Key Institution Managers in charge of relations with regional health authorities and payers and, in some pharma companies, with local / regional politicians too – [2] Medical Science Liaisons – [3] Clinical Research Assistants

The KAM EXPERT WHEEL has been designed to structure the activities of the KAMs and help them cope with the complexity of their tasks

The four steps of the KAM EXPERT WHEEL



Sources: Smart Pharma Consulting

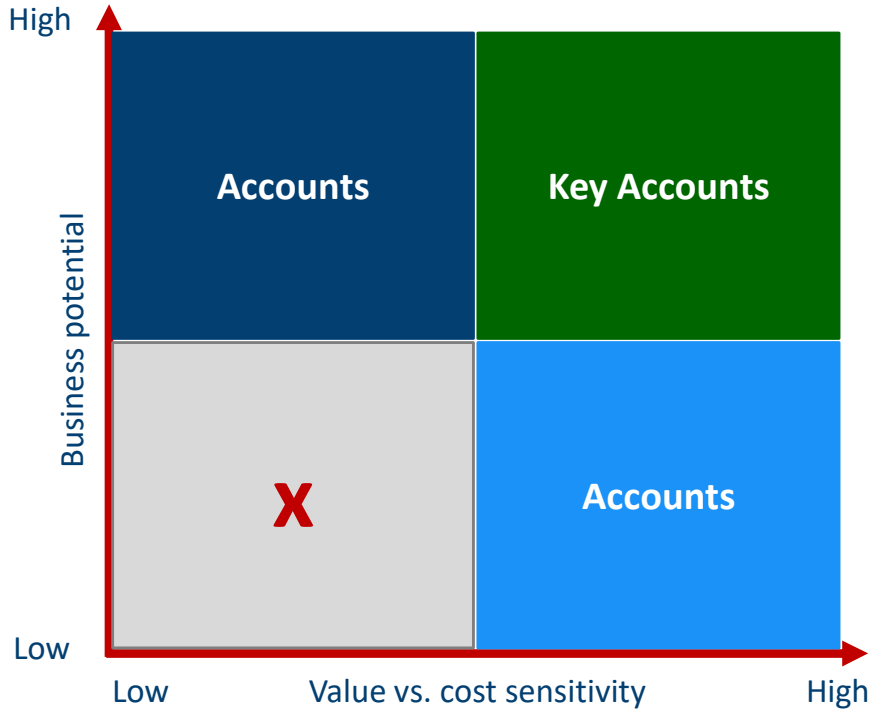
Hospital key accounts should be critical to direct / indirect performance of pharma companies and value specific services associated to drugs, beyond their cost

How to define a hospital key account?

Specificities of Hospital Key Accounts

- To be eligible to the status of key account by a pharma company, hospital centers should:
  - Represent a significant share of its direct and/or indirect[1] sales and profits with favorable perspectives
  - Value solutions / services that could be proposed
- The objective of Key Account Management is to:
  - Optimize the performance (sales and profits) of the pharma company product portfolio (e.g., minimize price pressure, maximize sales level and growth)…
  - … by developing / co-developing services to help hospital centers meet their long-term objectives (e.g., increase the number of patients, become a reference center, reduce management cost of medical procedures, simplify processes, etc.)

Hospital Key Account Targeting Matrix



Sources: Smart Pharma Consulting

[1] *Influence on prescribing habits of other hospital centers and/or on office-based physicians*

Beyond business potential, KAMs must estimate the propensity of hospital centers to "reward" pharma companies having delivered extra value to them through services

How to qualify and select hospital key accounts? (1/2)

- Before deciding to invest in services "around" their product portfolio, KAMs should carefully evaluate the long-term business potential (opportunities and threats) of hospital centers in the therapeutic areas covered by their product portfolio
- The following indicators will be useful to evaluate each account:
  - Five- to ten-year development plan of the hospital activities
  - Number of beds and healthcare professionals
  - Number of patients on the active list
  - Current and forecasted sales in the therapeutic areas covered
  - Level of inpatients and outpatients' prescriptions and sales[1]
  - Influence of hospital prescribing habits on office-based physicians
  - Etc.
- To document these indicators, the KAMs must carry out desk research, interview regional health authorities, hospital managers, etc.; and then analyze the information gathered

Sources: Smart Pharma Consulting

[1] In volume and value

KAMs should carefully analyze each hospital center to determine its long-term business potential for their product portfolio with specific assessment tools

How to qualify and select hospital key accounts? (2/2)

- Once the business potential has been estimated, KAMs should evaluate:
  - Hospital center needs for tailored services
  - Probability they accept to partner with a pharma company to develop and implement solutions
  - Value they will grant to these solutions
  - Rewards they will accept to give to the pharma company
- Developing and implementing solutions likely to create high value for key accounts require, in general, heavy investments for several years
- The relevance of such investments should be determined by their:
  - Suitability with assessment tools (e.g., SWOT chart) to evaluate losses and/or profits opportunities for the pharma company
  - Acceptability with analytical tools measuring their expected benefits (e.g., ROCE[1], DCF[2] / NPV[3], payback, risk sensitivity analysis)
  - Feasibility of the services / solution likely to be proposed on a financial (cash flow), regulatory (compliance) and practical (skills, competence, resources) point of view

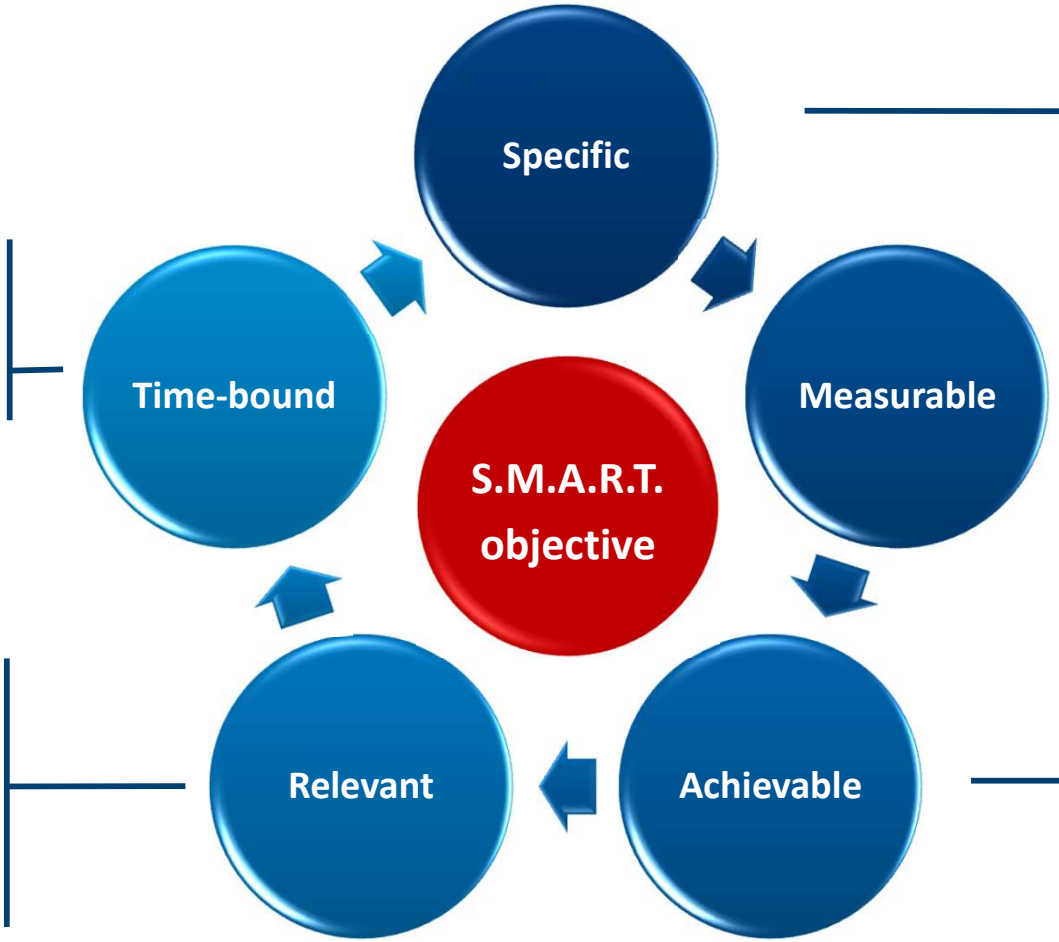
Value vs. cost sensitivity

Sources: Smart Pharma Consulting

[1] Return On Capital Employed – [2] Discounted Cash Flow – [3] Net Present Value

To set an objective per hospital key account, the well-know S.M.A.R.T. rules should be carefully applied to facilitate the proper crafting of the corresponding strategy

How to set an objective per hospital key account?



Clear & Precise
- Get listed
- Limit price erosion
- Gain market share
- Modify the formulary
- Modify therapeutic protocols

Fact-based
- Quantitatively and qualitatively with specific reliable indicators, relevant to the objective

Stretched & Reasonable
- Stretched to get the best of everyone
- Reasonable to keep everyone motivated

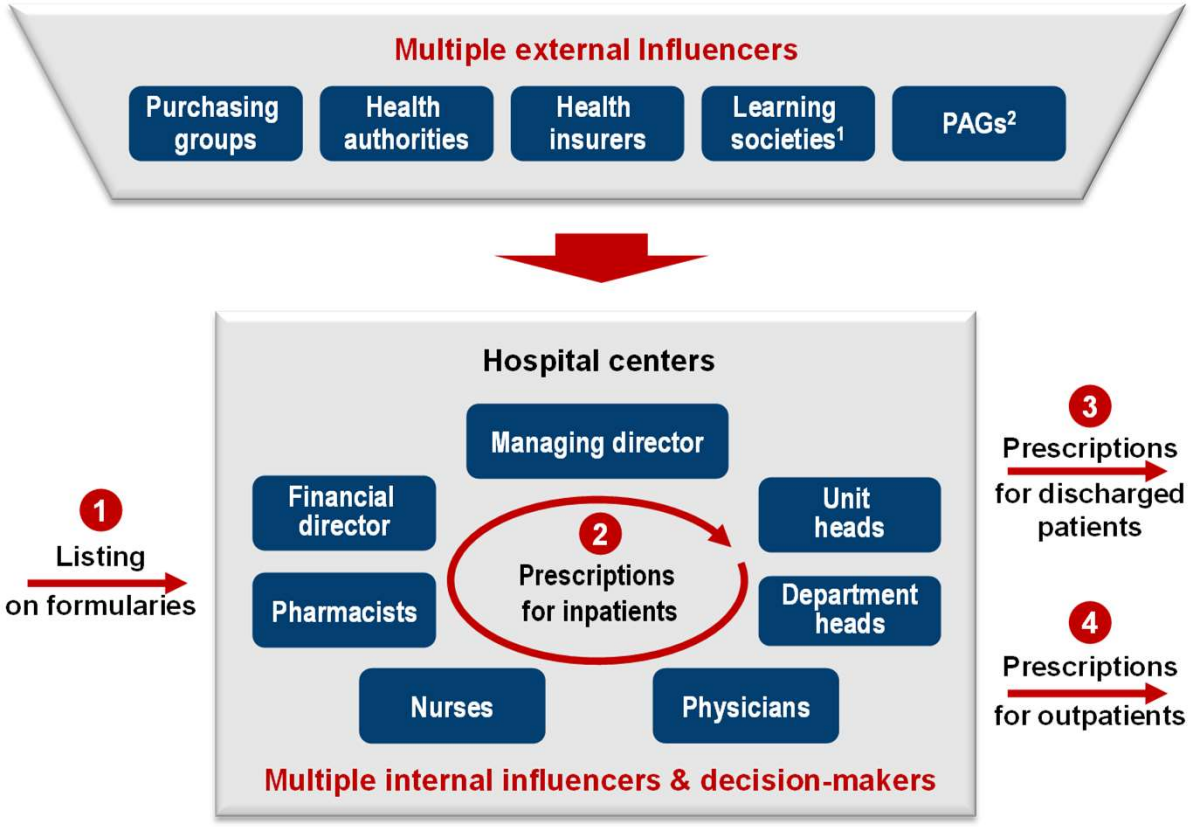
Fact-based
- Set timelines re. the start and the completion of the objective

Worthwhile
- The objective should be in line with the pharma company priorities (regional, national, global)

Sources: Smart Pharma Consulting

Irrespective of the hospital key account, the strategy crafted by the pharma company should have a favorable impact on one or several of its four key performance drivers

How to craft a strategy per hospital key account? – Principles (1/2)



- At hospital center level, to boost their performance, pharma companies should activate one or several of the following key performance drivers:
  1. The listing on formularies[3]
  2. The prescription for inpatients[4]
  3. The prescription for discharged patients[4]
  4. The prescription for outpatients[4]
- These drivers will be selected according to the objective set, and the actions to activate them will depend on:
  - Each hospital specificities (e.g., strategic priorities, procurement process and policy, degree of complexity, power games)
  - Product portfolio competitive position
  - Value of services offered to date
  - Corporate reputation

● *Key performance drivers for pharma companies*

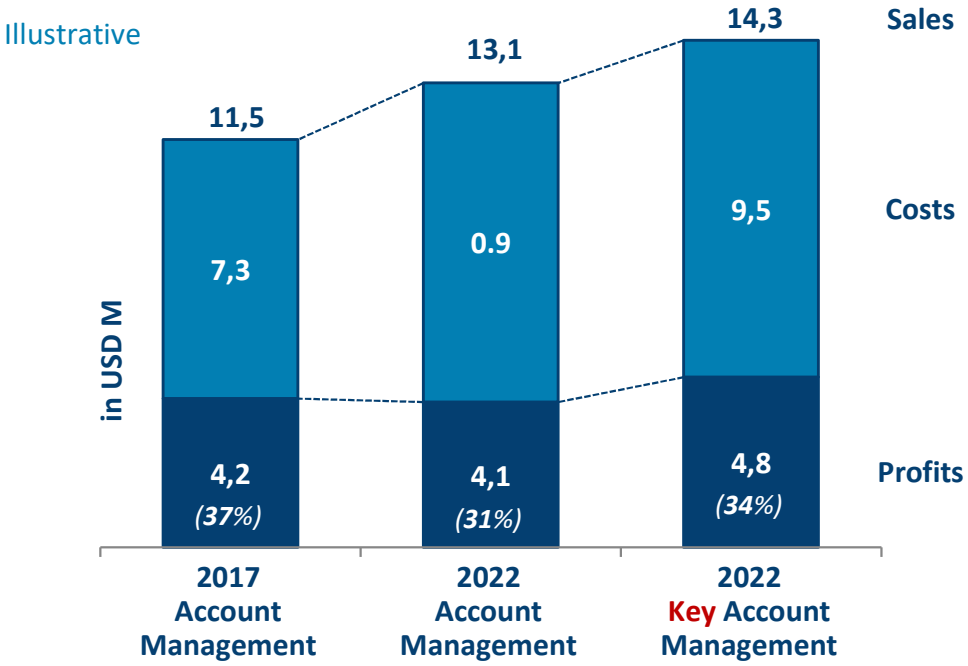
Sources: Smart Pharma Consulting

[1] Through the therapeutic guidelines they may publish – [2] Patient Advocacy Groups – [3] Under the direct responsibility of KAMs – [4] Under the direct responsibility of medical reps

To get the expected return on investment from hospital key account management, pharma companies should focus on five critical success factors

How to craft a strategy per hospital key account? – Principles (2/2)

Expected impact from pharma company perspective



The specific management of hospital key accounts by pharma companies will generate extra costs due to the proposed services but should generate more sales, more profits and possibly higher profitability than a standard account management

Critical success factors

- #1: The services (solutions) proposed should be tailored to important needs / wants of the most influential stakeholders of the hospital center
- #2: The partnership should lead to tangible and long-term "win-win" outcomes for both, the hospital center and the pharma company
- #3: The services should be perfectly planned and executed, while being carefully monitored with specific KEIs[1] and KPIs[2] to deliver the expected joint value
- #4: The services should be clearly communicated by the KAMs and related to the pharma company and its product portfolio
- #5: KAMs should be empowered and able to coordinate cross-functional multidisciplinary internal and external stakeholders

Sources: Smart Pharma Consulting

[1] Key Execution Indicators – [2] Key Performance Indicators

The activities of in-field collaborators interacting with the same hospital center should be integrated in a single key account management plan, including separated sections

How to craft a strategy per hospital key account? – Tools (1/2)

Integrated Key Account Management Plan

MSL[1] Section

- **Key clients:** KOLs
- **Key objectives:** build strong and sustainable relationships to develop advocacy at the hospital level and beyond
- **Key activities:** interactions with KOLs, scientific lectures at congresses, symposia, staff meetings, support of research clinical trials, training of speakers and collaborators from marketing and sales teams, competitive intelligence initiatives, etc.

Marketing & Medical Rep Section

- **Key clients:** physicians and pharmacists
- **Key objectives:** Increase prescription share
- **Key activities:**
  - **Marketers:** brand preference strategy crafting leveraging products attributes, perceived quality of associated services and corporate reputation
  - **Medical reps:** calls, invitations to medical meetings and congresses, and other services to boost preference

Key Account Manager Section

- **Key clients:** health authorities[2], payers[2], hospital directors, hospital purchase managers, etc.
- **Key objectives:** strengthen the sales and profits of the product portfolio per hospital center
- **Key activities:** propose / co-develop specific "win-win" projects (e.g., medico-economic studies to increase the access to the brands, patient support programs to improve adherence to treatment, etc.)[3]

Sources: Smart Pharma Consulting

[1] Medical Science Liaison – [2] At regional or local level – [3] At hospital center level, KAMs may be supported by local Key Institution Managers (KIMs) who have an expertise in market access and public affairs

KAM activities should be formalized in an Integrated Key Account Management Plan per hospital center, in coordination with medical, marketing and sales collaborators

How to craft a strategy per hospital key account? – Tools (2/2)

Integrated Key Account Management Plan

Structure of the KAM section

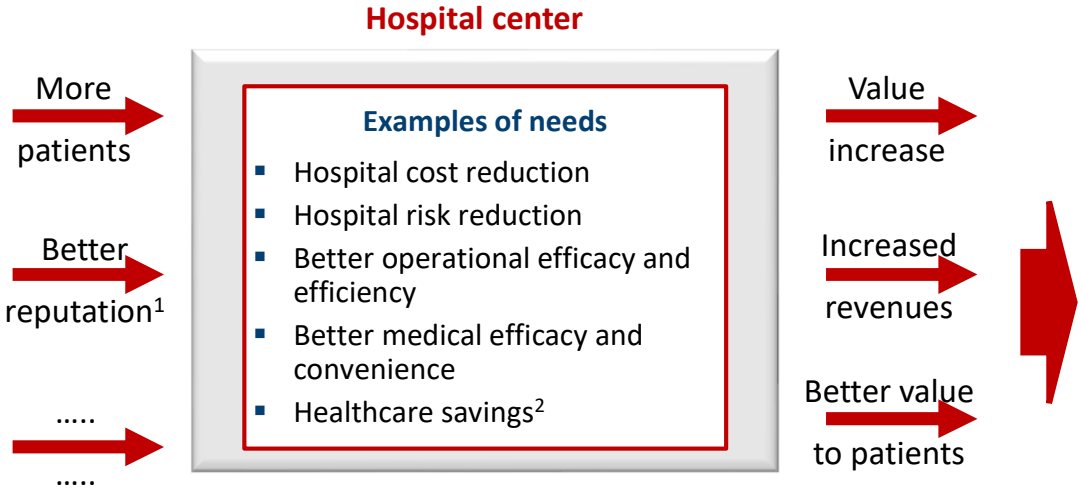
- **Situation analysis** (per hospital center)
  - Mapping of key stakeholders (level of influence – behavior)
  - Activity review (quantitative and qualitative analyses):
    - Relationships with key stakeholders (e.g., managing director, financial director, procurement manager, hospital pharmacists, heads of medical departments) of each hospital center re. services currently in place and the needs for new ones
    - Offering / development of services creating mutual value
    - Ensuring the perfect execution of services
    - Monitoring of opinion and behavior of stakeholders
  - Quality of execution and impact of activities measurement
  - Advanced SWOT[1] analysis of the KAM and his pharma company
- **Ambition & strategic priorities** (per hospital center)
  - Ambition setting
  - Strategic priorities to fulfill mid- to long-term ambitions set by the KAM
  - Key activities to support strategic priorities:
    - Shared activities with other departments (e.g., marketing, sales, MSLs, etc.)
    - Non-shared activities
  - Selection of KEIs[2] and KPIs[3] to monitor the services proposed

Sources: Smart Pharma Consulting

The services proposed by KAMs should fulfill highly valued customer needs and thus, contribute to strengthen the business performance of the pharma company

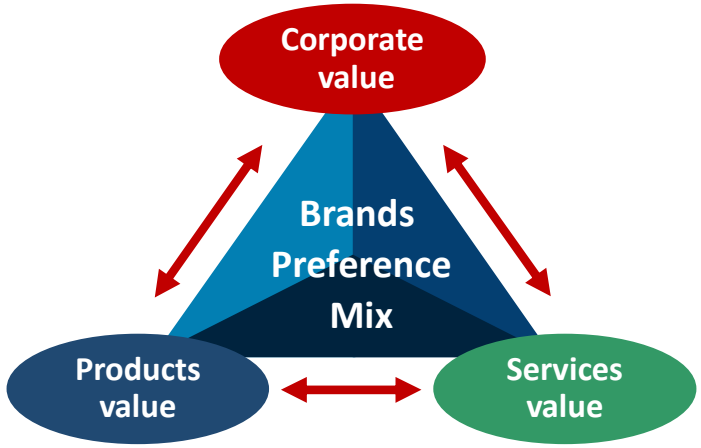
How to select the best services to support the strategy? – Principles

Examples of potential hospital center highly valued needs



- Pharma companies may create great value for hospital centers by helping them:
  - Reduce their costs (e.g., procurement process)
  - Manage their risks (e.g., preparation of chemotherapies)
  - Improve their operational efficacy and efficiency (e.g., reallocation of resources, process simplifications)
  - Increase their medical efficacy (e.g., modify protocols) and convenience (e.g., better patient quality of life)

Potential impact of services on pharma company performance



- By offering services – fulfilling hospital centers highly valuated needs – pharma companies can expect to:
  - Improve their corporate reputation and
  - Strengthen the perception of their product portfolio

  and thus, be preferred at the expense of their competitors (i.e., increased likelihood of being listed, better price, higher prescription rate for inpatients and out-patients)

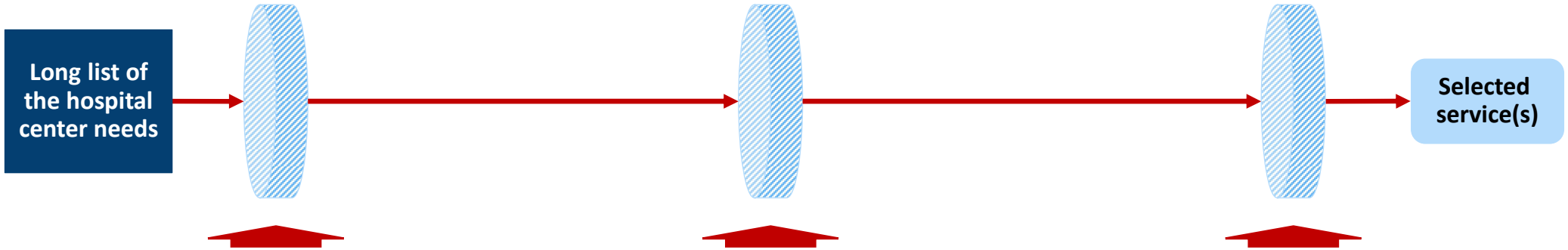
Sources: Smart Pharma Consulting

[1] As perceived by: national and regional health authorities, office-based physicians, other hospital centers, healthcare professionals working for the given hospital center and patients – [2] Beyond the sole savings at the hospital level

KAMs should ensure that the selected hospital needs they intend to fulfill are highly valued and the probability to fulfill them is high to expect a return on investment

How to select the best services to support the strategy? – Method

Selection of most appropriate services to meet hospital center and pharma company respective objectives



- KAMs should determine through interviews of key hospital influencers and decision-makers what are their most important needs[1], over the short (0 to 2 years) and the long terms (3 to 5 years)
- These needs should be related to the:
  - Hospital level of activity
  - Hospital reputation
  - Operational management
  - Medical management of patients

- KAMs should evaluate[1] the probability for the proposed services to fulfill the hospital center needs by checking the following criteria:

From the hospital center perspective
- Willingness to closely collaborate to implement the service

From the pharma company perspective
- Legal and regulatory constraints
- Technical feasibility and skills
- Financial requirements

- KAMs should cross-check with key hospital influencers and decision-makers that the proposed services[2] will have a positive impact on their preference for their product portfolio and their company
- The following metrics can be used to estimate *a priori* the degree[3] of impact :
  - Value of the service (service)
  - Corporate reputation
  - Perceived value of the portfolio

Sources: Smart Pharma Consulting

[1] A 10-point visual scale can be used for that purpose – [2] if properly implemented – [3] High – Medium – Low

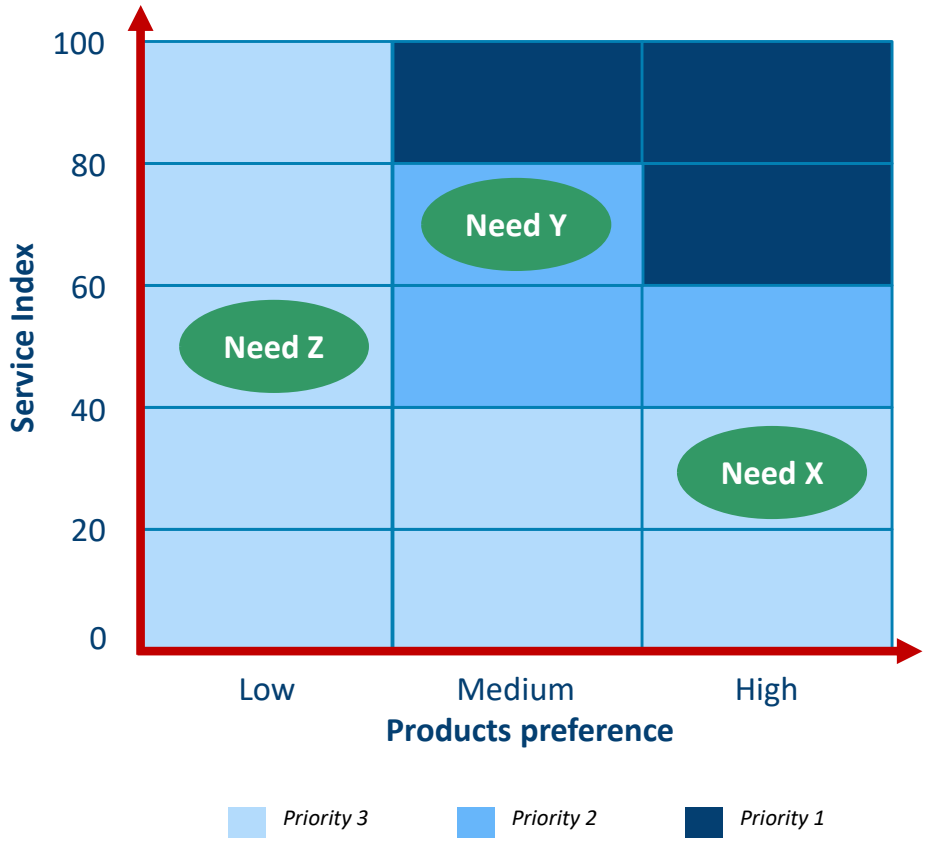
The assessment chart and the selecting map can help KAMs figure out which service they should preferably commit to offer to individual hospital key account

How to select the best services to support the strategy? – Tools

Assessment chart[1]

List of hospital center needs	Need X	Need Y	Need Z	----------
A. Valuation of needs	7	8	8	----------
B. Probability of fulfilling these needs	5	8	6	----------
C. Service Index (AxB)	**35**	**64**	**48**	----------
D. Likely impact on products preference	High	Medium	Low	----------

Selecting map



Sources: Smart Pharma Consulting

[1] A 10-point visual scale can be used to assess the two suggested dimensions of the chart (C –D)

It is essential to follow a rigorous project management process to ensure the smooth implementation of the services and increase the chance to get the expected results

How to ensure the appropriate implementation of the proposed services? – Method

Project management

Shared objectives

Qualitative

Quantitative

Hospital center resources

Pharma company resources

Third party resources[1]

Project management process

Planning	Execution	Monitoring	Closing
▪ Listing of activities ▪ Project schedule ▪ Resource allocation (roles & responsibilities, budget)	▪ Kick-off ▪ Tasks execution and coordination ▪ Information sharing	▪ Execution assessment[2] ▪ Gaps identification ▪ Corrective actions to fill the gaps	▪ Outcomes' evaluation ▪ Overall quality assessment ▪ Agreement on key learnings

Sources: Smart Pharma Consulting

[1] External expert or consultant appointed to carry out the service – [2] With the help of tools such as: Gantt chart, labor report, dashboard with specific Key Execution Indicators (KEIs), etc.

The "Hospital Service Card" is an enabling tool to ensure that hospital stakeholders and the pharma company are aligned on the purpose of the proposed service(s)

How to ensure the appropriate implementation of the proposed services? – Tool

Hospital Service Card (HSC)[1]

Hospital center name and address		Hospital center key stakeholders		Key issues	
Hospital key activities		Hospital center project manager[2]		Key needs	
Hospital influence		Pharma company KAM[3]		Key wants	

Description of the proposed service		
Objective of the service	For the hospital center	For the pharma company
Duration of the service	Start date	End date

Sources: Smart Pharma Consulting

[1] If several services are proposed for the same hospital center, thus several HSC should be filled up – [2] Key contact point regarding the partnership and the service(s) included in this partnership – [3] In charge of the service(s) proposed to the hospital center

The services proposed must create tangible value to the most powerful individuals to increase access and usage of the product portfolio within the hospital key account

Examples of potentially highly valued services by hospital centers and pharma companies

Co-creation of a specific program to increase the number of referred patients, leading to more activity for the hospital center, more drug prescriptions for the pharma company and more income for both

Co-development of a patient registry and offering of a technical support to collect and analyze data to help the hospital center increase medical outcomes in a specific disease covered by the pharma company

Creation and funding of a support program to improve the adherence of patients to their treatment in exchange of a preferred supplier status on the hospital drug formulary

Design and implementation of a specific process to reduce the distribution and inventory costs for both, the hospital center and the pharma company

Help the key account re-engineer the journey of hospitalized patients to reduce the duration of their stay and the time allocated by the HCPs to look after them

Sources: Smart Pharma Consulting

The quality of execution of the service should be subject to a dual assessment by the hospital center which benefits from it and the pharma company which proposes it

How to assess the quality of execution of the services? – Tool

Service description		Service objective		Hospital center stakeholders	

Dual valuation by the partners (key hospital stakeholders & pharma company)

Valuation of the Service*		Rationale	Valuation of the Execution*		Rationale
Impact on hospital costs	1 2 **3** 4 5		Quality of planning	1 2 **3** 4 5	
Impact on operational management	1 2 **3** 4 5		Quality of execution	1 2 **3** 4 5	
Impact on medical (patient) management	1 2 **3** 4 5		Quality of monitoring	1 2 **3** 4 5	
Impact on healthcare savings	1 2 **3** 4 5		Quality of budget control	1 2 **3** 4 5	

Gap analysis	Recommendations	Gap analysis	Recommendations

Sources: Smart Pharma Consulting

** 1 & 2 below expectations – 3 as per expectations – 4 & 5 above expectations*

From the pharma company perspective, the value of the proposed services should be translated into higher product sales and associated profits

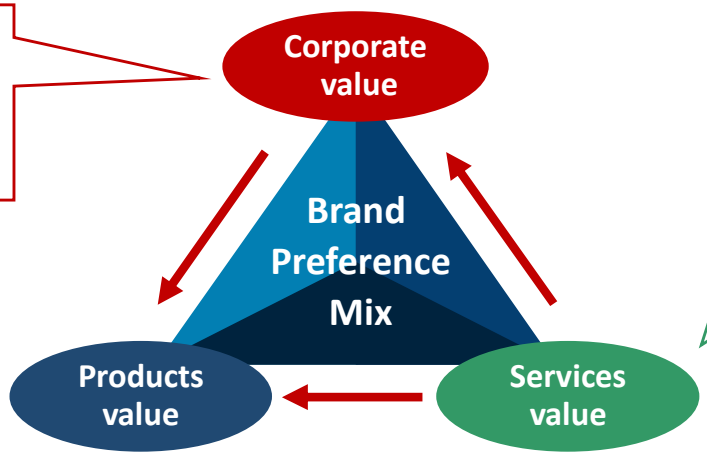
How to measure the impact of the services on pharma company performance? – Method

The ultimate objective of the services proposed to the hospital key account is to fulfill one of its highly valued needs to enhance its preference for the product portfolio marketed by the pharma company

- The KAM should **communicate once or twice a year information about his company** (e.g., R&D news, CSR[1] initiatives, specific services delivered, etc.) to the hospital stakeholders

- The direct or indirect[2] **impact** of **services** on the pharma company will be **objectivized** by the **positive evolution** of its **performance drivers**:
  1. Listing on formularies
  2. Prescription for inpatients
  3. Prescription for discharged patients
  4. Prescription for outpatients

  within the hospital key account



- The **perceived value** of the proposed **services** by the hospital key account will **depend on** their **ability** to:
  - Reduce hospital costs
  - Improve operational management
  - Improve medical management…
- … and on their **quality** of **execution**:
  - Planning
  - Execution *per se*
  - Monitoring
- These services should have a **positive impact** on **corporate reputation** and **products perception**

Sources: Smart Pharma Consulting

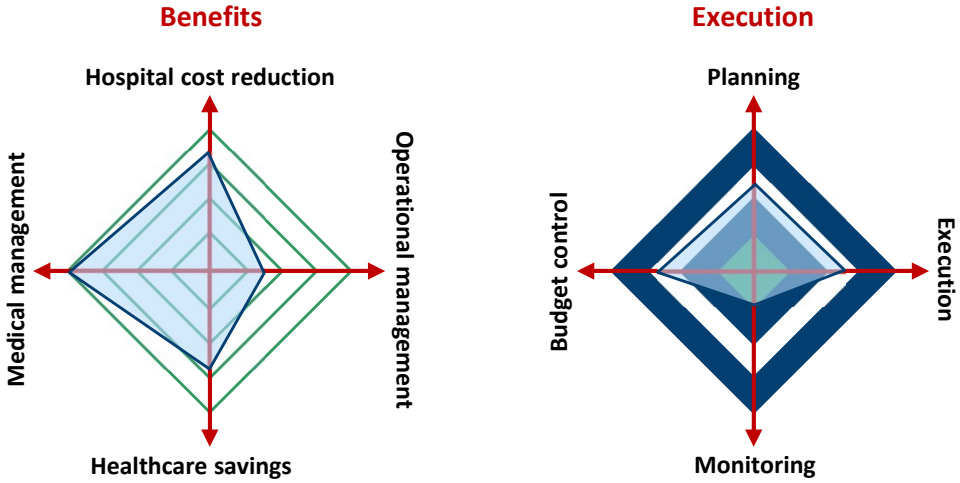
[1] Corporate Social Responsibility – [2] Through corporate reputation

To objectivize the benefits provided by the services to hospital centers, metrics based on tangible and robust data should be selected and agreed upon *a priori*

Measurement of service value for hospital centers – Tools (1/2)

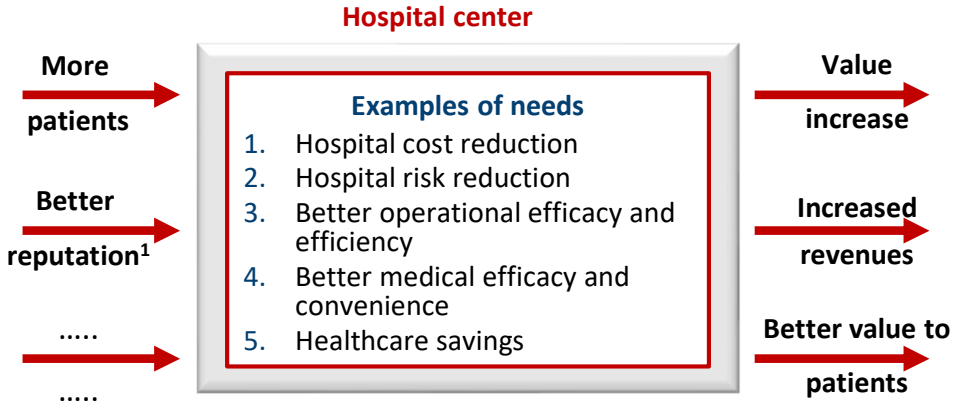
Qualitative and quantitative assessment tools

Perceived value of the services
(Qualitative assessment)



- The perception of hospital stakeholders should be carefully measured to identify and address the potential weaknesses
- The strengths will also be gathered to leverage on them, especially for communication purpose at hospital center level and at the pharma company level to testify the relevance of the service and the quality of its execution

Impact on key hospital center needs
(Quantitative assessment)



The impact of services[2] should be measured – before and after – implementation with robust and tangible metrics selected according to the targeted needs of the hospital center to be fulfilled:

1. Cost reduction (e.g., treatment cost per patient, lower wastage)
2. Risk reduction (e.g., rate of nosocomial infections, death rate)
3. Operational management[3] (e.g., shorter patient length of stay)
4. Medical management[3] (e.g., pain management of patients)
5. Healthcare savings[4] (e.g., improvement of patient adherence)

Sources: Smart Pharma Consulting

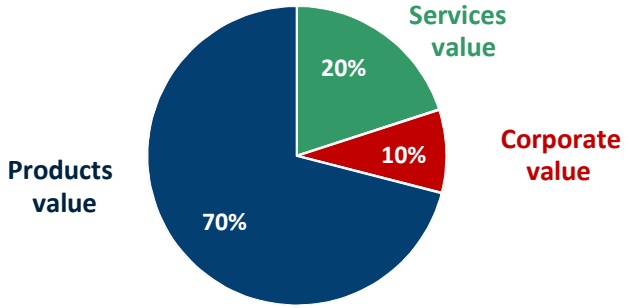
[1] As perceived by: national and regional health authorities, office-based physicians, other hospital centers, healthcare professionals working for the given hospital center and patients – [2] As well as the impact of regular medico-marketing and sales activities – [3] Management includes efficacy and efficiency, amongst other components – [4] Beyond the sole savings at the hospital level

The impact of services proposed by the KAMs to hospital centers should be carefully measured with qualitative and quantitative metrics as proposed here-below

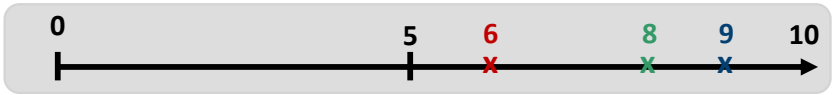
Measurement of service value for hospital centers – Tools (2/2)

Qualitative and quantitative assessment tools

The Brand Preference Mix Index (BPMI)
(Qualitative assessment)



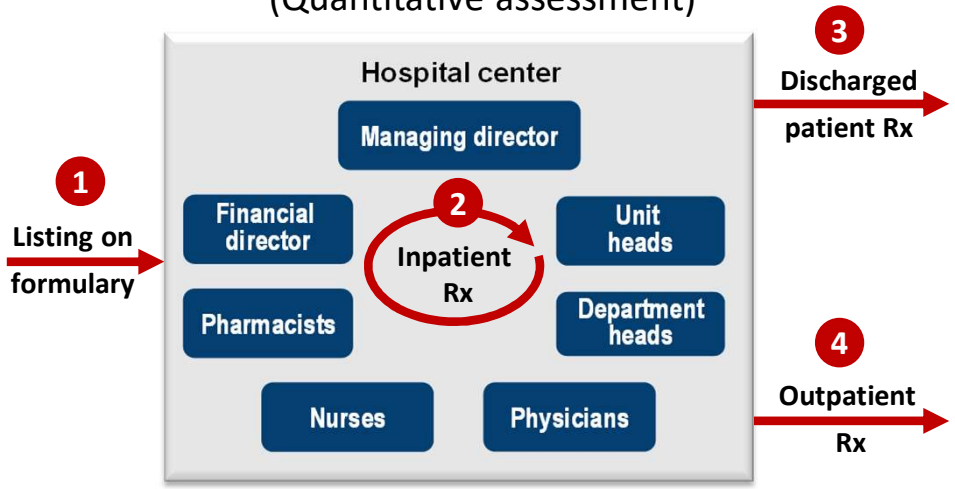
Visual Analog Scale



BPMI calculation ▶ (70% x 9) + (20% x 8) + (10% x 6) = 8.5 / 10

The BPMI **scores the hospital stakeholders perception** at a given point in time, making **possible to track** the **evolution** of this perception over time, considering the medico-marketing and sales regular activities and services provided to fulfill their specific needs

Impact on key performance drivers
(Quantitative assessment)



The impact of services[1] should be measured – before and after – their implementation with the following metrics:

1. **Listing on formulary** • # of products listed – net price per unit
2. **Inpatient Rx** • Sales / profit levels and evolution
3. **Discharged patient Rx** • Share of Rx and Rx evolution
4. **Outpatient Rx** • Share of Rx and Rx evolution

● *Key performance drivers for pharma companies*

Sources: Smart Pharma Consulting

[1] And of the regular medico-marketing and sales activities

KAMs must have an in-depth understanding of hospital center organizations and needs, be able to manage cross-functional teams and to build trusted long-term relationships

Profile & competences of "best-in-class" hospital KAMs

1. Personality

- Enthusiastic & Entrepreneur
- Self-confident & Daring
- Curious & Creative
- Long-term focus
- Empathic & Emotional
- Team player

4. Behavior

- Organizational skills
- Orchestration of in-field collaborators[1] interacting with key hospital centers
- Search for continuous improvement of hospital stakeholders' satisfaction

2. Knowledge

- Healthcare environment
- Hospital organization
- Hospital network of influencers & decision makers
- Stakeholders' profile, field of interest, needs and wants
- Complex project management

3. Analytical Skills

- Understanding of stakeholders' expectations
- Selection of most valuable services by hospital center
- Ability to demonstrate the value of proposed services

Sources: Smart Pharma Consulting

[1] Medical, marketing, salespeople and KIMs (Key Institution Managers)

Irrespective of their competence, KAMs should dramatically improve their performance if they implement the KAM EXPERT WHEEL in a rigorous and systematic way

KAM EXPERT WHEEL implementation

The key success factors

1. Carefully **define** hospital **key accounts** according to:
   - The **business potential** they represent for your current and future products
   - The **importance** they attach to **services** provided by **pharma companies**

   to **avoid investing at loss**
2. Set a **shared objective** with each key account which, if reached, is likely to **lead** to "**win-win**" **outcomes** for both parties
3. The proposed **services** should **fulfill important needs** / **wants** of the hospital key stakeholders and contribute to **strengthen** the pharma company **performance**
4. While **executing** the service, it is **essential to**:
   - **Communicate internally** (to keep informed and aligned the collaborators in contact with the hospital center) and **externally** (to ensure that the key hospital stakeholders link the service with the pharma company and its product portfolio)
   - Comply with the **highest standards** of **quality**
   - **Measure** the **value** (benefit) of the **services for the hospital centers** and their **effect** on the pharma company **business performance**

Sources: Smart Pharma Consulting

As the author of the KAM Expert Wheel and considering their operational experience, Smart Pharma consultants are well positioned to facilitate its implementation

Smart Pharma Consulting Services

KAM EXPERT WHEEL implementation

- Smart Pharma Consulting has an **in-depth expertise** in **improving efficiency of in-field teams** coming from:
  - **General management experiences** in France and abroad for pharma companies
  - **Numerous** operational effectiveness consulting **projects** on the hospital pharma market segment
- The KAM EXPERT WHEEL which has been developed by Smart Pharma Consulting proposes a **rigorous** and **practical** approach to **obtain** a significant **improvement** of **KAMs efficiency** and **efficacy**
- Smart Pharma Consulting can help pharma companies introduce the KAM EXPERT WHEEL as follows:

3. **Support methodologically** and **with** specific **tools** the **selection of services** per hospital key account
4. **Develop tools** to **assess** the **quality of execution** of the **services** proposed…
   … and to **measure** their **impact on** pharma company **performance**

1. **Customize** the proposed **targeting method** and **tools** to the specific context of **the pharma company**
2. **Help setting objectives** per hospital key account and **craft** an appropriate **strategy** (incl. the **design** of specific **hospital key account management plans**)

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Hospital & Institution Relationships in Regions

Recommendations for Pharma Companies

POSITION PAPER January 2019

The evolution of the healthcare environment in regions should spur pharma companies to adjust hospital KAMs[1] and regional KIMs[2] roles and responsibilities

Introduction

Scope & Objective of the study

- The purpose of this position paper is to **analyze** the **hospital KAMs** (Key Account Managers) and the **regional KIMs** (Key Institution Managers) **roles** and **responsibilities** and to discuss **the way** they **must adapt** to the **evolution** of the **regional healthcare environment** in France
- For so doing, Smart Pharma Consulting has:
  - **Reviewed** its previous **publications** on this topic
  - **Interviewed** senior executives from French affiliates of **7 pharma companies** (Biogen, Janssen, MSD, Pfizer, Roche, Novartis and Novo Nordisk) in July and November 2018
- Based on these information, Smart Pharma Consulting **proposes**:
  - **Strategic** and
  - **Organizational recommendations**

regarding hospital KAMs and regional KIMs

Sources: Smart Pharma Consulting

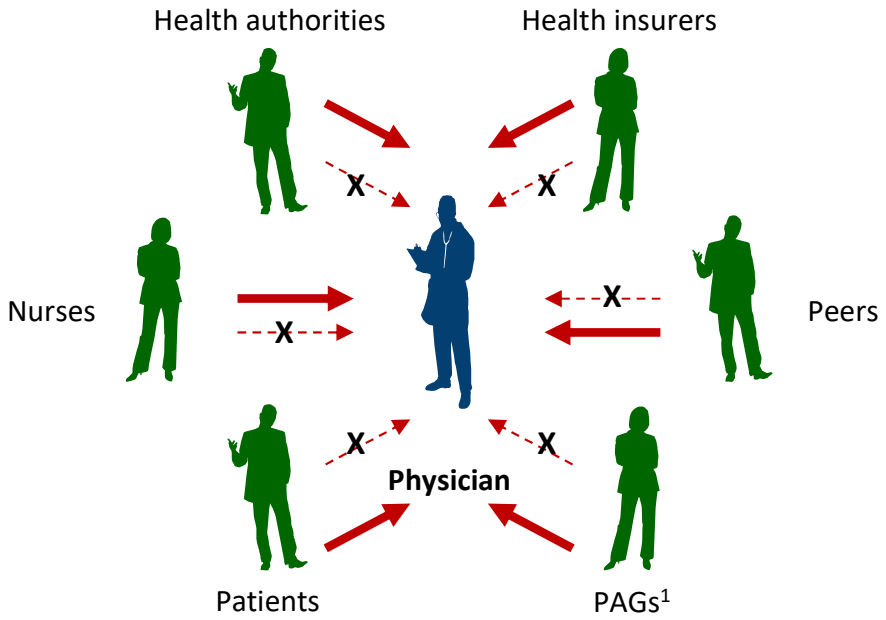
[1] Hospital KAMs are different from retail KAMs who are responsible to negotiate with purchasing groups / VTOs (Voluntary Trade Organizations) of retails pharmacies – [2] KIMs are responsible for Public Affairs at regional or local level

The pharma market is increasingly driven by multiple stakeholders influencing physicians4 prescriptions and by secondary care drugs mainly prescribed at hospital

Key principles

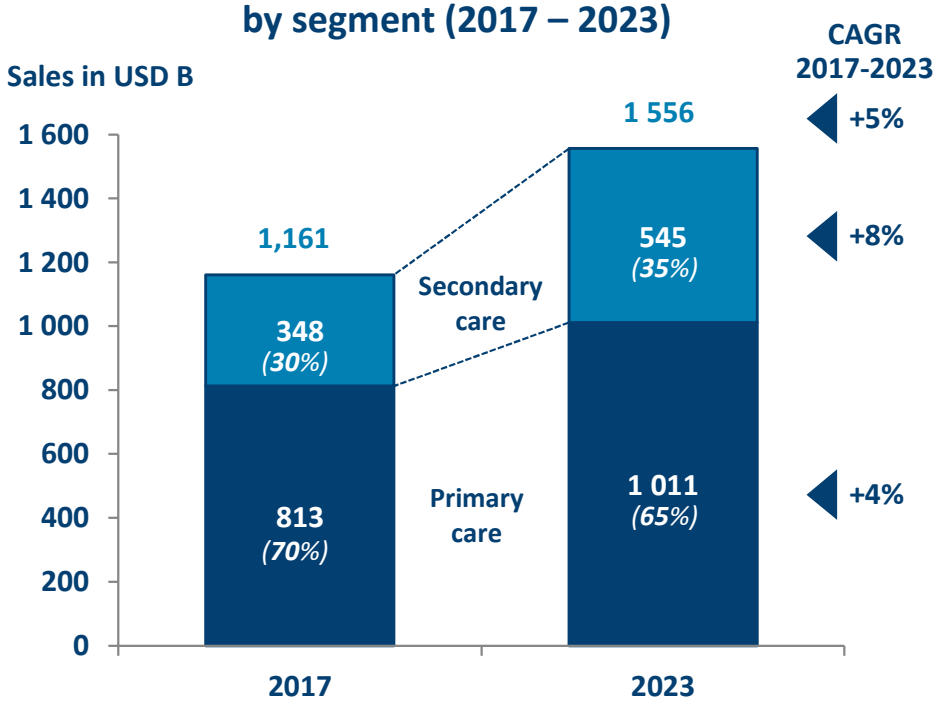
Evolution of the pharma market (1/2)

Therapeutic decision-making process evolution



Physician prescribing decisions are more and more under the influence of multiple stakeholders such as: national / regional health authorities, health insurers and payers, PAGs, etc.

Global pharmaceutical market growth by segment (2017 – 2023)



Secondary care products which are mainly prescribed[2] in hospital centers should grow faster than primary care products mainly initiated and prescribed by office-based physicians

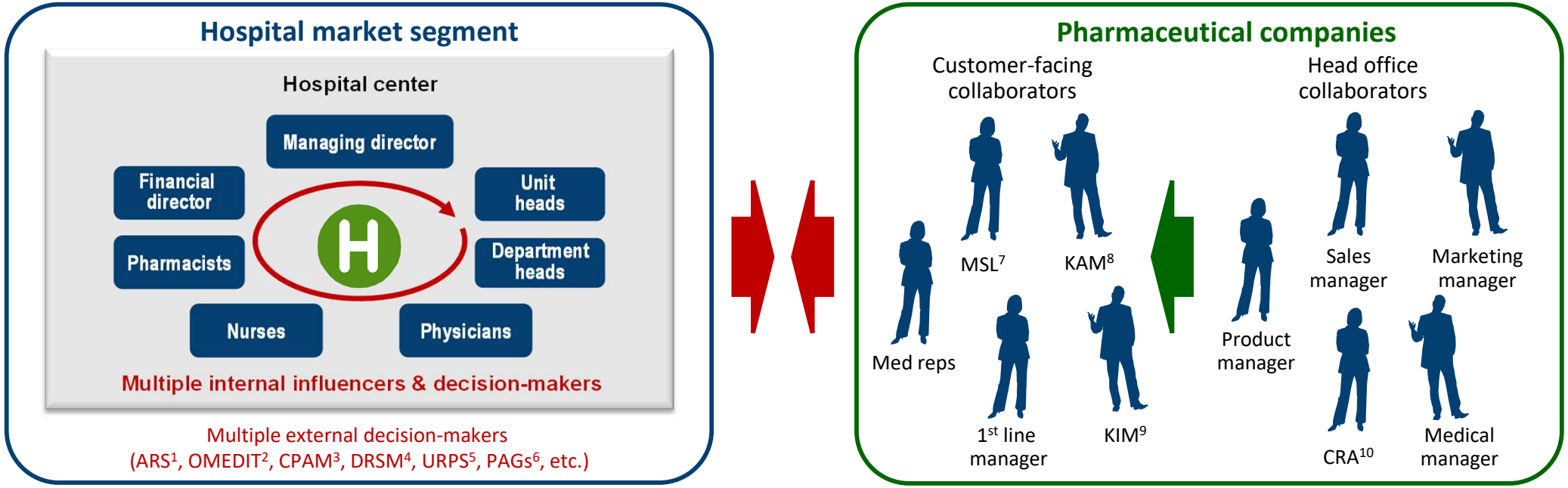
Sources: IQVIA Institute (March 2018) – Global OTC Drugs Market, Mordor Intelligence (May 2018) – Smart Pharma Consulting estimates

[1] Patient Advocacy Groups – [2] Secondary care products could also be initiated by hospital physicians and then renewed by office-based physicians, either specialists or GPs, depending on the treatment. In this case, the prescribing decision made by hospital physicians has a major impact on product sales

Pharma companies must adopt an efficient organization to deal with bigger accounts, more and more price-sensitive, in which decision-making processes are complexified

Key principles

Evolution of the pharma market (2/2)



- The grouping of hospital centers has led pharma companies to deal with bigger accounts benefiting from a stronger bargaining power…
- … in a context of economic pressure, making customers more price-sensitive than ever

- Pharma companies must address two key issues:
  - Protect, as much as possible, the price of their drugs
  - Move from a B-to-C to a B-to-B business model in which the prescribing decision is made by multiple stakeholders having different views and objectives

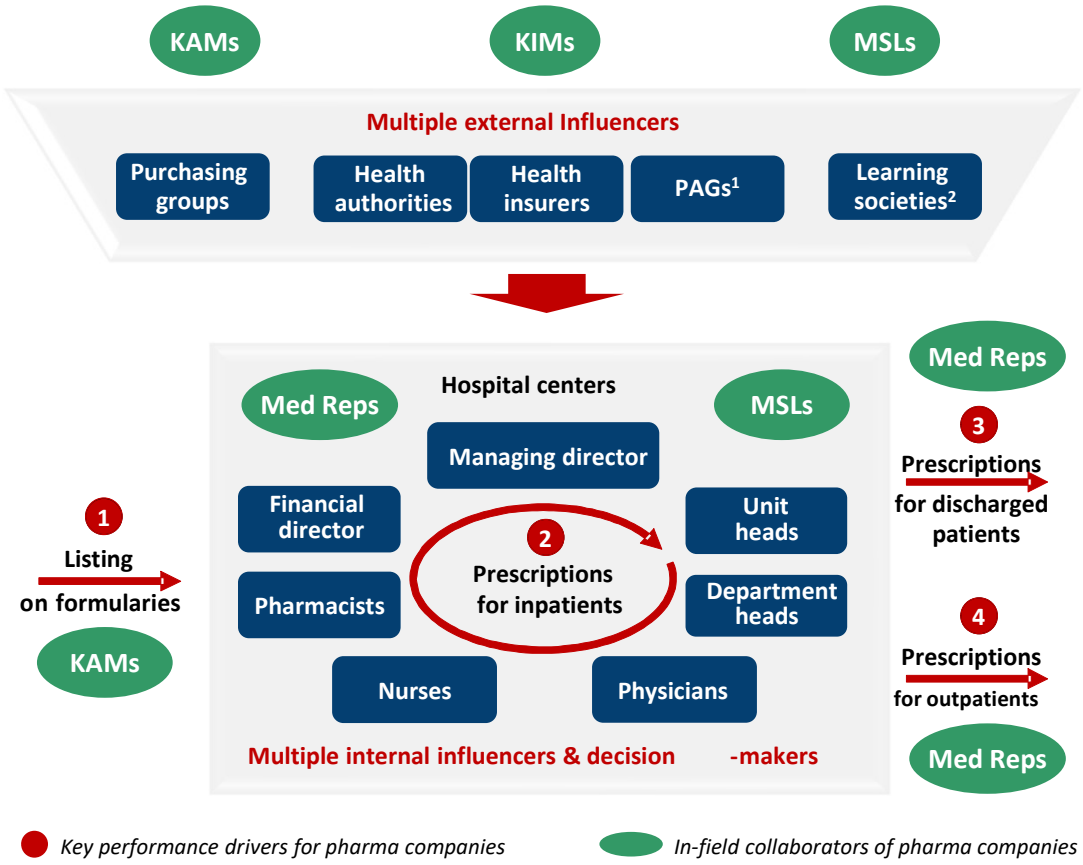
Sources: Smart Pharma Consulting

[1] Regional Health Agency – [2] Observatory of Drugs, Medical Devices and Innovation – [3] Primary Fund for Health Insurance – [4] Regional Directorate of the Medical Service – [5] Regional Unions of Healthcare Professionals – [6] Patient Advocacy Groups – [7] Medical Science Liaisons – [8] Key Account Managers – [9] Key Institution Managers who are in contact with regional health authorities and payers and who can propose hospital centers to participate, for instance, to a local public health initiative on a given pathology – [10] Clinical Research Assistant

Irrespective of the hospital center, the strategy crafted by pharma companies should have a favorable impact on one or several key performance drivers

Key principles

Strategic levers at hospital key account (1/2)



- To boost their hospital performance, pharma companies can activate several internal drivers:
  - The listing on formularies under the KAM responsibility (1)
  - The prescription for inpatients (2), discharged patients (3) and outpatients (4) under the Med Reps responsibility and the activities of MSLs
- Pharma companies may also act at the level of hospital external influencers such as:
  - National or regional purchasing groups through KAMs, along with collaborators such as: head of KAMs, commercial director
  - Health authorities, health insurers and regional branches of PAGs through KIMs
  - Regional branches of learning societies through MSLs

Sources: Smart Pharma Consulting

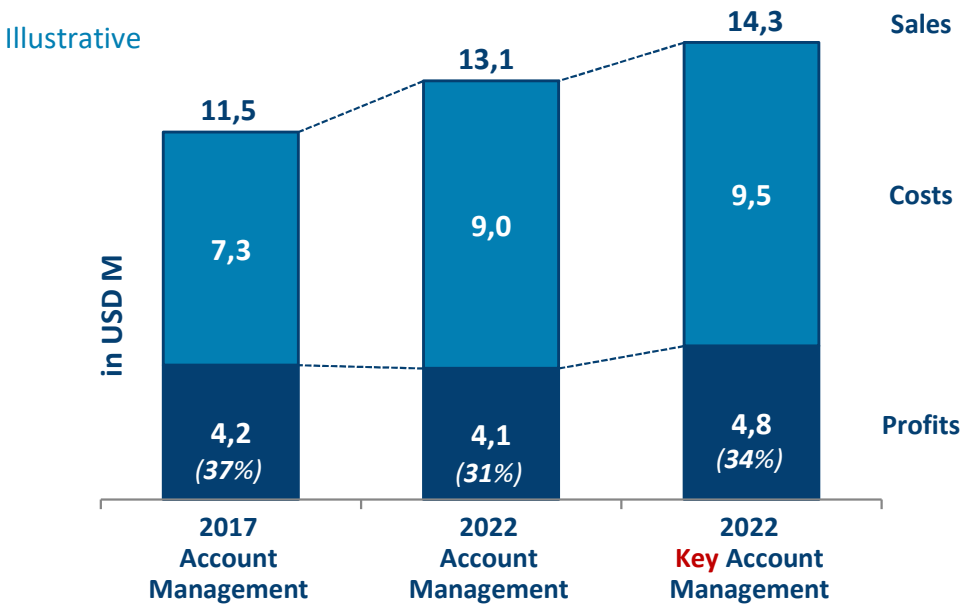
[1] Patient Advocacy Groups – [2] Through the therapeutic guidelines they may publish

To get the expected return on investment from hospital key account management, pharma companies should focus on five critical success factors

Key principles

Strategic levers at hospital key account (2/2)

Expected impact from pharma company perspective



The specific management of hospital key accounts by pharma companies will generate extra costs due to the proposed services but should generate more sales, more profits and possibly higher profitability than a standard account management

Critical success factors

- #1: The services (solutions) proposed should be tailored to important needs / wants of the most influential stakeholders of the hospital center
- #2: The partnership should lead to tangible and long-term "win-win" outcomes for both, the hospital center and the pharma company
- #3: The services should be perfectly planned and executed, while being carefully monitored with specific KEIs[1] and KPIs[2] to deliver the expected joint value
- #4: The services should be clearly communicated by the collaborators of the pharma company and related to its product portfolio
- #5: Each hospital key account should be managed in a coordinated manner by cross-functional multidisciplinary internal and external stakeholders

Sources: Smart Pharma Consulting

[1] Key Execution Indicators – [2] Key Performance Indicators

KAMs are essential to get pharma companies products listed and bought by hospital centers and to ensure the proper coordination of activities carried-out by in-field teams

Hospital KAMs

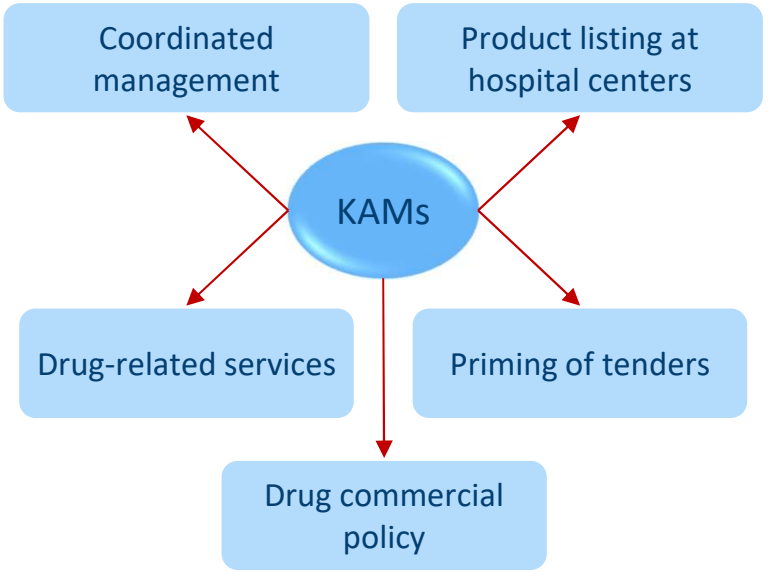
French Survey Outcomes

Role and core activities: Introduction

Role

- KAMs are one of pharma companies in-field collaborators[1] interacting with hospital centers to develop their business over the long-term by ensuring the listing of their products and by developing associated services to optimize their value, and their probability to be purchased at a fair price
- KAMs are best placed, due to their focused interactions with hospital pharmacists and cross-functional responsibilities, to raise the level of knowledge and understanding of each hospital center, regarding their:
  - Key objectives
  - Strategic priorities
  - Key issues
  - Organization (i.e., decision-making process, role and influence of the hospital director, financial director, medical director, heads of medical departments, information system director, etc.)
  - KAMs have most often a background of first-line manager[2] and are in general affiliated to the commercial department

Key activities



In general, services proposed and delivered by KAMs are related to drug supply, drug delivery, commercial policy and focused on hospital pharmacists

Sources: Smart Pharma Consulting based on a benchmarking studies carried out in 2019

[1] Amongst other field teams we can mention: Medical Reps, MSLs (Medical Science Liaisons), KIMs (Key Institution Managers) – [2] It is important to note that competent Medical Reps or 1st line Managers do not make necessarily competent KAMs. The skill set required for key account management role is much broader

The complexity of hospital KAMs role lies in the fact that they must deal with multiple internal and external stakeholders having different needs and priorities

Hospital KAMs

Cross-functional role

French Survey Outcomes

Internal stakeholders

- Market access department (e.g., health economic specialists)
- Public affairs department (KIMs[1])
- Commercial department (in charge of responding to calls for tenders)
- Manufacturing and supply chain departments
- Medical affairs department (Medical manager, MSLs[2], CRAs[3])
- Patient program department
- Marketing department (marketing managers, product managers)
- Sales forces (1st line managers and medical reps)

Integrating role to build an attractive value proposition

KAMs

Orchestrating role to ensure a perfect execution of proposed services

External stakeholders

At regional / local level

- Regional Health Agency (ARS)
- Observatory of Drugs, Medical Devices and Innovation (OMEDIT)
- Primary Fund for Health Insurance (CPAM)
- Regional Directorate of the Medical Service (DRSM)
- Regional Unions of Healthcare Professionals (URPS)

At hospital level

- Managing director
- Finance director
- KOLs and other physicians
- Nurses
- Pharmacists
- Procurement manager

Sources: Smart Pharma Consulting based on a benchmarking studies carried out in 2019

[1] Key Institution Managers in charge of relations with regional health authorities and payers and, in some pharma companies, with local / regional politicians too – [2] Medical Science Liaisons – [3] Clinical Research Assistants

The 5 key activities carried out by hospital KAMs are very similar from one company to another one

Hospital KAMs

French Survey Outcomes

Key activities

Key activities	Description
Listing	▪ Coordination with Med Reps and MSLs to convince prescribers, members of the hospital listing committee, to get the company products listed and to help them fill up the dossier to motivate the listing of the concerned products[1] ▪ Coordination with other KAMs to deliver the same information when decision-makers, for a given call for tenders, belong to purchasing groups at national (e.g., UNI-HA), regional and local (e.g., Hospital Territory Groups) levels ▪ It is essential to anticipate and work upstream with these different decision makers, in a coordinated manner
Tender priming	▪ Tender priming requires a coordinated approach led by the KAMs and based on tangible differentiating points to motivate a more favorable design of lots called for tenders
Commercial policy	▪ The commercial policy is set with or without prior agreement[2] ▪ Analysis of earlier calls for tenders provides information to potentially adjust prices for the others to come ▪ KAMs are also involved in negotiated contracts to set the commercial terms
Drug-related services	▪ KAMs can propose drug-related services which can count to ~20% of the final mark in the evaluation of the bids for calls for tenders, as Corporate Social Responsibility initiatives can do (up to 10%) ▪ Certain companies bring their support and propose solutions to hospital centers to improve their efficiency (e.g., revision of terms of payment, conditions of supply, day care organization)
Coordinated management	▪ To support the coordination of hospital centers and especially of key accounts, some pharma companies have developed a “key account plan” but, for compliance reasons, the KAMs, KIMs, MSLs and Med Reps sections are not shared on the same document or partially shared (e.g., Intranet with shared and non-shared sections) ▪ The KAM is key to raise the knowledge and understanding of hospital centers, especially if he maintains good relationships with hospitals pharmacists who, in general, have a privileged position

Sources: Smart Pharma Consulting based on a benchmarking studies carried out in 2019

[1] The dossier includes information such as: the number of patients, the therapeutic value, the economic impact, etc. –
[2] Depending on the pharma companies, a prior agreement may be required at affiliate or even corporate level, before offering a price to hospital centers in the case of calls for tenders or negotiated contracts

The number of KAMs per company is mainly driven by the size of the hospital-only product portfolio and to the organizational model which has been chosen

Hospital KAMs

French Survey Outcomes

Organization and targeted clients

Companies	Model	FTEs[2]	Portfolio of hospital-only drugs	Target clients
A	Exclusive	15	Broad	Hospital pharmacists
B	Exclusive	4	Narrow	Hospital pharmacists
C	Hybrid[1]	12	Broad	Hospital pharmacists (to a lesser extent have an activity with ARS and OMEDITs)
D	Exclusive	9	Intermediate	Hospital pharmacists

Sources: Smart Pharma Consulting based on a benchmarking studies carried out in 2019

[1] Organizational model: some companies have opted for a hybrid model in which the same collaborator ensures the role of KAM and KIM (Key Institution Manager) at the same time – [2] Full Time Equivalent

KAMs and departments in charge of responding to calls for tenders must collaborate closely to optimize their chances to win calls for tenders

Hospital KAMs

French Survey Outcomes

Interactions with the response to calls for tender department

Response to calls for tender department

- Monitoring of public calls for tenders published in the Official Gazette (with the possible support of specialized agencies such as MEDImarket)
- Contact of hospitals or purchasing groups to clarify requirements specifications, if needed…
- … or to understand why the company products have not been called, if it is the case
- Preparation of the administrative dossier
- Quantitative and qualitative analysis of the tendering results that are useful to prioritize the in-field collaborators activity and draw key learnings for the new calls for tenders to come

Average headcount: 3 to 7 collaborators, depending on the size of the product portfolio concerned by call for tenders

KAMs

- The KAMs will review the list of lots that are called for tenders
- They will collect qualitative and quantitative information, mainly through hospital pharmacists in charge of drugs procurement, to adjust the therapeutic and technical specificities of their products and the associated services they want to highlight
- They are responsible for setting the commercial policy, with a degree of autonomy which is very different from one company to another[1]
- Based on the analysis of the information collected by the response to calls for tender department and by them, they may revise their price for the new calls for tenders to come

Sources: Smart Pharma Consulting based on a benchmarking studies carried out in 2019

[1] In one specific company, the KAM requires the prior agreement of the corporate commercial department. Another company has set up a validation committee at affiliate level

Regional Key Institution Managers role is focused at ARS[1], OMEDIT[2], CPAM[3], DRSM[4], URPS[5] who can have an influence on hospital centers decisions related to drugs

Regional KIMs

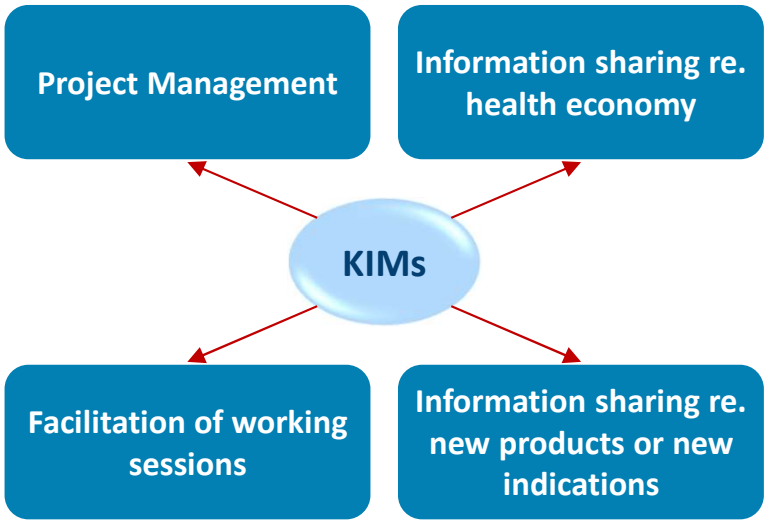
French Survey Outcomes

Role and key activities

Role

- The KIMs role is to interact with regional/local health institutions (e.g., ARS, OMEDIT, CPAM, DRSM, URPS) and for certain companies with local politicians (e.g., Members of Parliament, Senators, Mayors) to optimize the conditions of use of the key products marketed by the pharma company they work for
- Thus, KIMs do not promote products
- KIMs may also be responsible for improving the reputation of their company by carrying out various initiatives that are likely to have a positive impact on public health at a regional/local level
- KIMs may have different backgrounds (e.g., marketing, sales, market access) and are affiliated, in general, either to the commercial department or the market access department
- They need to have a solid knowledge and understanding of the healthcare system at national, regional and local levels
- They must be able to manage projects

Key activities



To carry out these activities, KIMs interact with health institutions by calling on them, inviting them to symposiums and proposing them or co-building with them healthcare projects

Sources: Smart Pharma Consulting based on a benchmarking studies carried out in 2019

[1] Regional Health Agency – [2] Observatory of Drugs, Medical Devices and Innovation – [3] Primary Fund for Health Insurance – [4] Regional Directorate of the Medical Service – [5] Regional Unions of Healthcare Professionals

KIMs activities consist in sharing information to raise the interest of institutions about their company portfolio, the disease they address and in managing healthcare projects

Regional KIMs

French Survey Outcomes

Model – staffing – key activities and target clients

Companies	Model	FTEs[2]	Key activities	Target clients
A	Exclusive	5	Information sharing re. the evolution of the product "pipeline" of the company and the new coming indications for existing products	OMEDITs – ARS – Regional buying groups – Hospitals
B	Exclusive	4	Calls and meeting during regional events	OMEDITs – Hospitals (pharmacists and sometimes hospital directors)
C	Hybrid[1]	12	Complex project management in regions as a KIM *(and hospital interaction management as a KAM)*	OMEDITs – URPS – ARS – Hospitals
E	Exclusive	3	Project management (e.g., support to the development of a telemedicine program)	Specialist physicians – OMEDITs – URPS
F	Exclusive	3	Expertise sharing re. patient care, public health, disease / risk factors prevention (e.g., vaccination campaigns, smoking)	In-field collaborators (i.e., Med Reps, MSLs) who implement the projects at regional/local level
G	Hybrid[1]	5	Health economic projects or information sharing as a KIM *(hospital interaction management as a KAM)*	OMEDITs – DIM[3] – ARS

Sources: Smart Pharma Consulting based on a benchmarking studies carried out in 2019

[1] Organizational model: some companies have opted for a hybrid model in which the same collaborator ensures the role of KIM and KAM at the same time – [2] Full Time Equivalent – [3] Information System Director at hospital level

Regional institutions are little inclined to interact or collaborate with pharma companies, unless they propose and contribute to a public healthcare project of interest to them

Regional KIMs

French Survey Outcomes

Mutual expectations between KIMs and targeted clients

Target clients	Importance L – M – H*	Accessibility L – M –H*	Expectations of targeted clients from pharma companies	Expectations of pharma companies from targeted clients
OMEDIT[1]	H	M	▪ Information sharing regarding products marketed by the companies, especially for new products or new indications of products yet marketed	▪ Getting an opinion / advice before implementing a project to evaluate the benefit of a drug or a therapeutic strategy at the regional level ▪ Facilitation of early access for innovative drugs (e.g. screening of patients with biomarkers)
CPAM[2]	M	L	▪ No expectations ▪ CPAM distrust pharma companies and therefore do not want to interact with their collaborators	▪ To have the possibility to inform the CPAM re. new indications, prices, etc. for a product to avoid them to convey erroneous information to physicians that could negatively impact its performance
DRSM[3]	M	L	▪ No expectations because they distrust pharma companies	▪ To have the possibility to meet them to address specific problems about products indications, use, etc.
URPS[4]	M	M	▪ Provide an organizational and a financial support to carry out trainings, screening campaigns at regional level	▪ URPS are a useful relay to inform and mobilize their members to participate to healthcare projects (e.g. screening campaigns, initiatives to improve adherence of patients to treatments)
ARS[5]	M	L	▪ Limited or no contact, because they do not want to collaborate with pharma companies or because the latter are not a priority for them	▪ To set up healthcare projects and get their approval ▪ Convince ARS to allocate specific resources (financial and/or human) for a better management of the diseases for which the company products are indicated

** L: low – M: medium – H: high*

Sources: Smart Pharma Consulting based on a benchmarking studies carried out in 2019

[1] Observatory of Drugs, Medical Devices and Innovation – [2] Primary Fund for Health Insurance – [3] Regional Directorate of the Medical Service – [4] Regional Unions of Healthcare Professionals – [5] Regional Health Agency

Depending on the project, regional KIMs can propose a scientific, logistics or financial support to public healthcare projects or projects to improve the proper use of drugs

Regional KIMs

French Survey Outcomes

Examples of projects carried out with regional institutions

	Project #1: The Immunization Day	Project #2: Drug Fact Sheet
Objectives	▪ Scientific support ▪ Logistics support ▪ Formatting of messages	▪ Writing of a drug fact sheet for a new product… ▪ … while transitioning from the ATU (Temporary Use Authorization) status to the post-ATU one ▪ Set up of working groups in regions
Partners	▪ **ARS** ▪ **CPAM**	▪ **OMEDIT**
Duration	▪ 1 month	▪ 2 months
Conclusion	▪ Impact on medical practices: raise the awareness re. the pharmaceutical conciliation[1] especially during the patient transition from hospital to ambulatory care ▪ Publication of the results	▪ This drug fact sheet has shown to be useful specially to inform the pharmacists… ▪ … and thus, to guarantee the proper and safe use of this new drug

Sources: Smart Pharma Consulting based on a benchmarking studies carried out in 2019

[1] *Information sharing amongst healthcare professional regarding a given patient to avoid errors while prescribing and/or dispensing drugs to patients*

These two projects show the ability of pharma companies to bring together diverse expertise to produce recommendations or carry out pilot projects related to healthcare

Regional KIMs

French Survey Outcomes

Examples of projects carried out with regional institutions

	Project #3: Innovation in Oncology	Project #4: AMD[1] Screening in Region
Objectives	▪ Multi-disciplinary experts (oncologists, surgeons, pharmacists, PAGs, economists, lawyers, pharma companies, etc.) have written a manifesto with 30 propositions to favor innovation in the oncology field	▪ Screening of AMD in the Northern region of France (Hauts-de-France)
Partners	▪ **113 experts**	▪ **CPAM** ▪ **Healthcare network** ▪ **URPS of pharmacists** ▪ **Teaching hospital**
Duration	▪ 2 years	▪ 4 weeks
Conclusion	▪ Increase awareness regarding key topics such as: delays in access to innovation, methods to evaluate innovation, real-world data processing ▪ This manifesto has been handed over by KIMs while meeting healthcare institutions in regions	▪ Out of the 1,200 patients diagnosed, 250 had a stage 1 AMD and 12 have been treated, urgently ▪ The ARS agreed to deploy this project across the region, but without the support of the pharma company

Sources: Smart Pharma Consulting based on a benchmarking studies carried out in 2019

[1] Aged Macular Degeneration

Projects managed by regional KIMs may (should) contribute to raise the value of the response to the calls for tenders, as illustrated in this example

Regional KIMs

French Survey Outcomes

Examples of projects carried out with regional institutions

Project #5: Hospital Day Care Management

Objectives

- Measurement of time spent by patient
- Search of solutions to reduce the cost of hospital day care against diagnosed-related groups (DRG)
- Methodological contribution to the hospital center

Institutions

- **Hospital centers**

Duration

- 3 to 6 months (delay due to the time required to get the agreement from the hospital director)

Conclusion

- This has enabled hospital centers to improve their efficiency while managing drug perfusion to patients
- This service has been highlighted in the responses to calls for tenders

Sources: Smart Pharma Consulting based on a benchmarking studies carried out in 2019

The services proposed must offer tangible benefits to the targeted customer and to the pharma company by improving access and usage of its products

Hospital KAMs & Regional KIMs

Examples of services for hospital centers and regional institutions

Co-creation of a specific **program** to increase the **number of referred patients**, leading to more activity for the hospital center, more drug prescriptions for the pharma company and more income for both

Co-development of a **patient registry** and offering of a **technical support** to collect and analyze data to help the hospital center increase medical outcomes in a specific disease covered by the pharma company

Creation and funding of a **support program** to **improve the adherence** of patients to their treatment in exchange of a preferred supplier status on the hospital drug formulary

Design and implementation of a specific **process to reduce** the **distribution** and **inventory costs** for both, the hospital center and the pharma company

Help the key account **re-engineer** the **journey** of **hospitalized patients** to reduce the duration of their stay and the time allocated by the HCPs to look after them

Sources: Smart Pharma Consulting

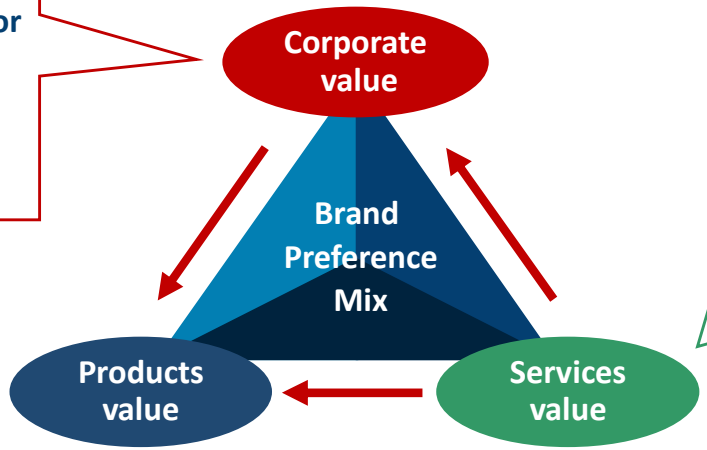
From the pharma company perspective, the value of the proposed services should be translated into higher product sales and associated profits

Hospital KAMs & Regional KIMs

Impact of services on pharma company performance

The ultimate objective of services proposed to hospital centers or regional institutions is to fulfill their highly valued needs to enhance – directly or indirectly – their preference for the products marketed by the pharma company

- KAMs and KIMs should **communicate once or twice a year information about their company** (e.g., R&D news, CSR[1] initiatives, specific services delivered, etc.) to hospital stakeholders and regional institutions



- The direct or indirect[2] **impact** of **services** on products will be **objectivized** by the **positive evolution** of their **performance drivers** in **hospital centers**:
  1. Listing on formularies
  2. Prescription for inpatients
  3. Prescription for discharged patients
  4. Prescription for outpatients

- The **perceived value** of the proposed **services** by KAMs and/or KIMs at hospital center level will **depend on** their **ability** to:
  - Reduce hospital costs
  - Improve operational management
  - Improve medical management…
- … and on their **quality** of **execution**:
  - Planning
  - Execution *per se*
  - Monitoring
- These services should have a **positive impact** on **corporate reputation** and **products perception** of the pharma company

Sources: Smart Pharma Consulting

[1] Corporate Social Responsibility – [2] Through corporate reputation

The activities of in-field collaborators interacting with the same hospital center should be integrated in a single key account management plan, including separated sections

Hospital KAMs & Regional KIMs

Integrated Key Account Management Plan

MSL Section

- **Key clients:** KOLs
- **Key objectives:** build strong and sustainable relationships to develop advocacy at hospital level and beyond
- **Key activities:** interactions with KOLs, scientific lectures at congresses, symposia, staff meetings, support of research clinical trials, training of speakers and collaborators from marketing and sales teams, competitive intelligence initiatives, etc.

Marketing & Medical Rep Section

- **Key clients:** physicians and pharmacists
- **Key objectives:** increase prescriptions
- **Key activities:**
  - **Marketers:** brand preference strategy crafting leveraging products attributes, perceived quality of associated services and corporate reputation
  - **Medical reps:** calls, invitations to medical meetings and congresses and other services to boost preference

KAM Section

- **Key clients:** hospital pharmacists, purchase managers, director
- **Key objectives:** facilitate the hospital listing of drugs and maximize the chances to win the calls for tenders and get a fair price when products are bought through negotiated contracts
- **Key activities:** develop close relationships with hospital pharmacists, prime calls for tenders, highlight the value of the products and of their associated services regarding drug supply and management, negotiate payment terms, coordinate MSLs, Med Reps and KIMs activities per key account

KIM Section

- **Key clients:** health authorities[1], payers[1], hospital directors, regional and local politicians, PAGs
- **Key objectives:** create the conditions to grow the therapeutic areas covered by the company products, ensure their proper use and participate to strengthen the company reputation at regional level
- **Key activities:** share relevant health economic information, new indications, new products information, propose specific projects (e.g., medico-economic studies to increase the access to the products, patient support programs to improve adherence to treatments, etc.)

Sources: Smart Pharma Consulting

[1] At regional or local level

KAMs and KIMs must have an in-depth understanding of hospital centers and of regional healthcare environment and be able to build trusted relationships

Hospital KAMs & Regional KIMs

Profile & competences of "best-in-class" hospital KAMs & KIMs

1. Personality

- Enthusiastic & Entrepreneur
- Self-confident & Daring
- Curious & Creative
- Long-term focus
- Empathic & Emotional
- Team player

4. Behavior

- Organizational skills
- Orchestration of in-field collaborators[1] interacting with key hospital centers
- Search for continuous improvement of stakeholder satisfaction

2. Knowledge

- Regional healthcare environment
- Health economic basic principles
- Hospital organization, network of influencers & decision-makers
- Stakeholders' profile, field of interest, needs and wants
- Complex project management

3. Analytical Skills

- Understanding of stakeholder expectations
- Selection of most valuable services by hospital center
- Ability to demonstrate the value of proposed services

Blue text concerns more specifically KAMs

Green text concerns more specifically KIMs

Sources: Smart Pharma Consulting

[1] Medical, marketing, salespeople and KIMs (Key Institution Managers)

The performance and activities of KAMs and KIMs are evaluated with the help of KPIs and KEIs respectively, as indicated by interviewed senior executives

Hospital KAMs & Regional KIMs

KPIs & KEIs[1]

Key Performance Indicators (KPIs)	Key Execution Indicators (KEIs)
▪ **Hospital Listing** (Yes / No) ▪ **Calls for tenders** (Won / Lost) ▪ **Average price level** (actual vs. budgeted) ▪ **Sales performance** (Units sold per month per hospital center) ▪ **Savings due to optimized management of products whose patent has expired** ▪ **Customer preference survey** (Brand Preference Mix[1]) ▪ **Reputation assessment survey** (Pharma Reputation Index[1])	▪ **Number of contacts** (F/F. phone, e-mails) ▪ **Activity planning** (e.g., quality of tendering planning) ▪ **Quality of execution of the action plan** (e.g., % of applications sent on time for calls for tenders) ▪ **Project management** (compliance with project deadlines, satisfaction of targeted customers re. the project development and execution) ▪ **Coordination of the in-field team members activity per hospital center** (e.g., frequency and quality of interactions, relevance of joint-activities, respect of compliance rules)

Blue text concerns more specifically KAMs

Sources: Smart Pharma Consulting

[1] See our position paper "KPIs & KEIs for success" on our website: www.smart-pharma.com

Irrespective of their competence, KAMs and KIMs should dramatically improve their performance if they implement our recommendations in a rigorous and systematic way

Hospital KAMs & Regional KIMs

Recommendations

Objective

- Hospital KAMs and regional KIMs **priority** is to contribute to raise **preference** of stakeholders **for their product** portfolio

Strategy

- **Hospital KAM** job should be to obtain the **listing** of company products at hospital centers, contribute to get **purchased** at a **fair price** by **highlighting** the competitive **advantages** of **products** and "offering" **associated services** re. supply
- **Regional KIM** job should be focused **at contributing to public health initiatives** (e.g., screening, adherence programs) re. diseases covered by the company products, **at ensuring corporate communication** (e.g., pipeline, healthcare services, CSR projects) **to improve** the **reputation** of the **company** and **at raising** the **value** of the **products** by **sharing** or **generating** health **economic data** at regional and/or hospital level(s)

Organization

- **Hospital KAM** and **regional KIM jobs** should **ideally be combined** to get a **greater flexibility** in terms of resource allocation and to increase synergy
- The following **skills** should be strongly developed:
  - **Strategic vision** to help, for instance, hospital general managers or hospital directors meet their objectives
  - **Soft skills** (e.g., interpersonal skills, problem solving, adaptability, teamwork, creativity)
  - **Technical knowledge** (e.g., healthcare system and hospital management, diseases, products, health economics)
  - **Management knowledge** to carry out projects and coordinate multi-disciplinary teams

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Best-in-class
Field Force Organization

The Smart Field Force Framework

POSITION PAPER April 2018

The Pharma Field Force Organization relates to the way the in-field collaborators who meet customers should work and be organized to be effective and efficient

Introduction: Working definitions

Pharma Field Force

Are the people of a pharma company who work in the "field" to contribute – directly or indirectly – to generate sales

Field Force Organization

Is based on 4 key pillars:

- Activities
- Structure
- Processes
- Culture

Pharma Field Force People

May Include: medical reps, pharma reps, MSLs[1], KAMs[2], KIM[3], regional market access managers, area managers[4]

Field Force Reorganization

Consists in readjusting people activities, structure, processes and culture to boost the efficacy and efficiency of the company

"A successful Field Force Organization is the one which supports effectively and efficiently the strategy"

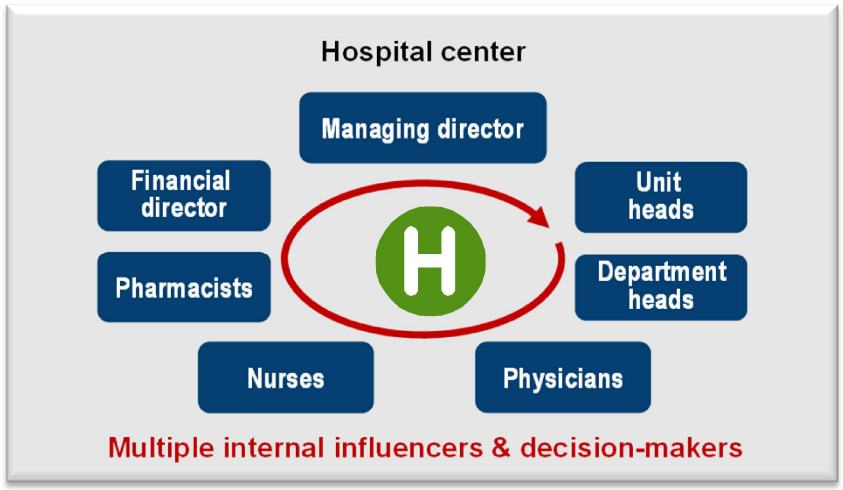
Sources: Smart Pharma Consulting

[1] Medical Science Liaisons – [2] Key Account Managers – [3] Key Institution Managers – [4] 1st Line Managers

Field Force Teams access to customers has become more difficult due to lack of time and interest, and influencing them more complex due to multiple decision-makers

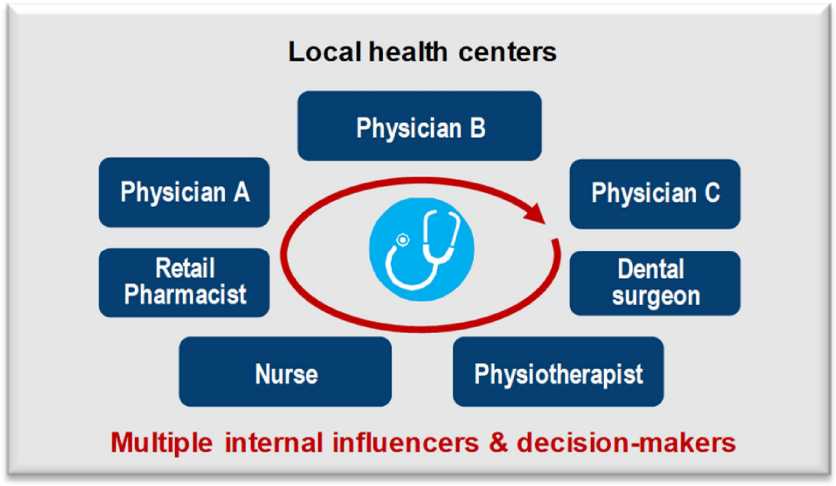
Introduction: Pharma Environment Mega-trends

Hospital market segment



- The access to HCPs and other customers by the Field Force Teams is more and more controlled, if not forbidden
- Within hospital centers, physician prescribing decisions are more and more made in concertation, following protocols, and through the influence and pressure of various stakeholders, incl. payers, regional health authorities, etc.
- Hospital centers are also regrouping themselves which increases their business importance and bargaining power

Open care market segment



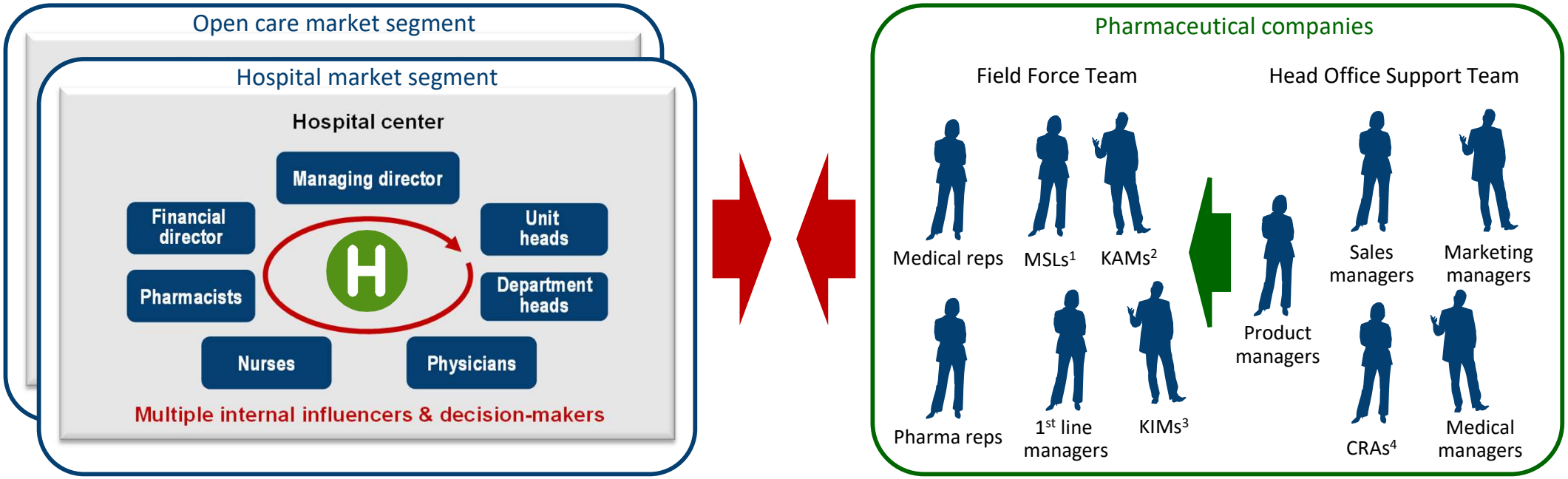
- Access to HCPs on the open care market segment has become a major issue for Field Force Teams
- More and more office-based physicians work in group practice for better efficiency and practicality
- Their prescribing behavior is more and more under the influence of health authorities, payers or other HCPs
- The increasing concentration of retail pharmacies[1], has an impact on their interactions with Field Force Teams

Sources: Smart Pharma Consulting

[1] Regrouped in chains or VTOs (Voluntary Trade Organizations) adopting purchasing behaviors similar to those observed in the FMCG (Fast-Moving Consumer Goods) sector, with an increasing pressure to get better prices and services

Pharma companies must rethink their Field Force Team organization to secure their access to customers and manage to get their products preferred

Introduction: Impact of Pharma Environment on Field Force Teams



- The grouping of hospital centers and office-based physicians have led pharma companies to deal with bigger accounts benefiting from a stronger bargaining power…
- … in a context of economic pressure, making customers more price-sensitive than ever

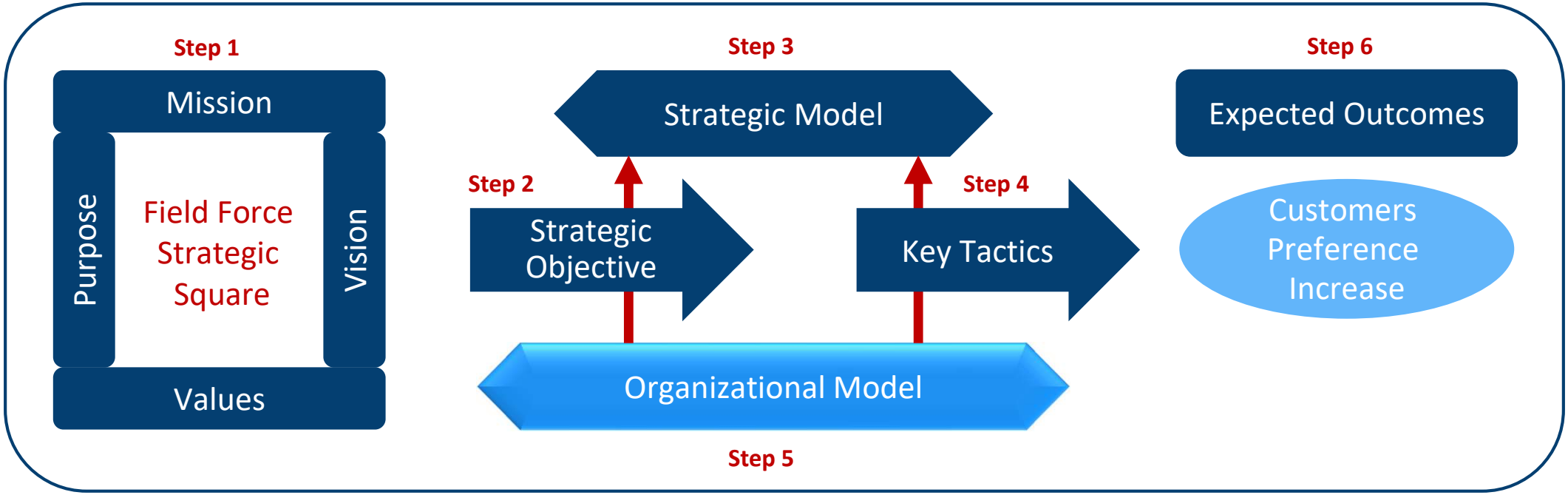
- Pharma companies have to address two key issues:
  - To protect, as much as possible, the price of their drugs
  - To move from a B-to-C to a B-to-B business model in which the prescribing decision is made by multiple stakeholders having different views and objectives

Sources: Smart Pharma Consulting

[1] Medical Science Liaisons – [2] Key Account Managers – [3] Key Institution Managers who are in contact with regional health authorities and payers and who can propose hospital centers to participate, for instance, to a local public health initiative on a given pathology – [4] Clinical Research Assistants

The Smart Field Force Framework will help pharma companies design the best organizational model to support the right strategy and tactics

Methodology: Smart Field Force Framework



- The Smart Field Force Framework, developed by Smart Pharma Consulting, should enable pharma companies to align their "Strategic Square" to their strategic objective and then craft the best strategy and the corresponding tactics to meet this objective
- The organizational model will be designed accordingly to support effectively and efficiently the strategy and the tactics

Sources: Smart Pharma Consulting

Once the purpose, mission, vision and values have been set and shared, the Field Force should contribute to create the highest value for customers

Step 1: Strategic Square

Mission

Facilitate patient access to and usage of our products by interacting with HCPs and their influencers

Purpose

Provide HCPs the support they need to give patients access to our treatments

Field Force Strategic Square

Vision

Be the preferred company which offers the best treatments with the best services

Values

Strive for excellence in knowledge, understanding and behavior

- *Purpose: Why do we exist?*
- *Mission: What do we do and for whom?*
- *Vision: What do we aspire to become?*
- *Values: What do we believe in and how do we behave?*

Sources: Smart Pharma Consulting

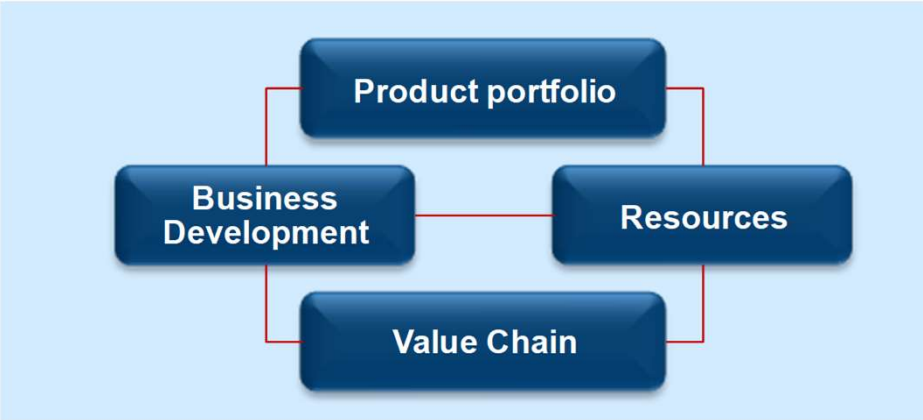
The optimal design of a Field Force organization should start with an in-depth analysis of the evolution of the competitive landscape and of the company assets

Step 2: Strategic Objective – Situation & Trends Analysis

Competitive Landscape Analysis

- The target Field Force organization will depend on the competitive landscape which can be analyzed with the 7Ps method[1] which, stakeholder by stakeholder, defines:
  - Behavioral trends (What?)
  - Driving forces (Why?)
  - Implications (so What?)
  - Strategic priorities (What to do?)

Company Assets Assessment



- To define a target organization, the company assets should also be assessed:
  - The current and future product portfolios
  - The tangible[2] and intangible[3] resources
  - The components of the value chain, including the support functions
  - The business development initiatives going on

Sources: Smart Pharma Consulting

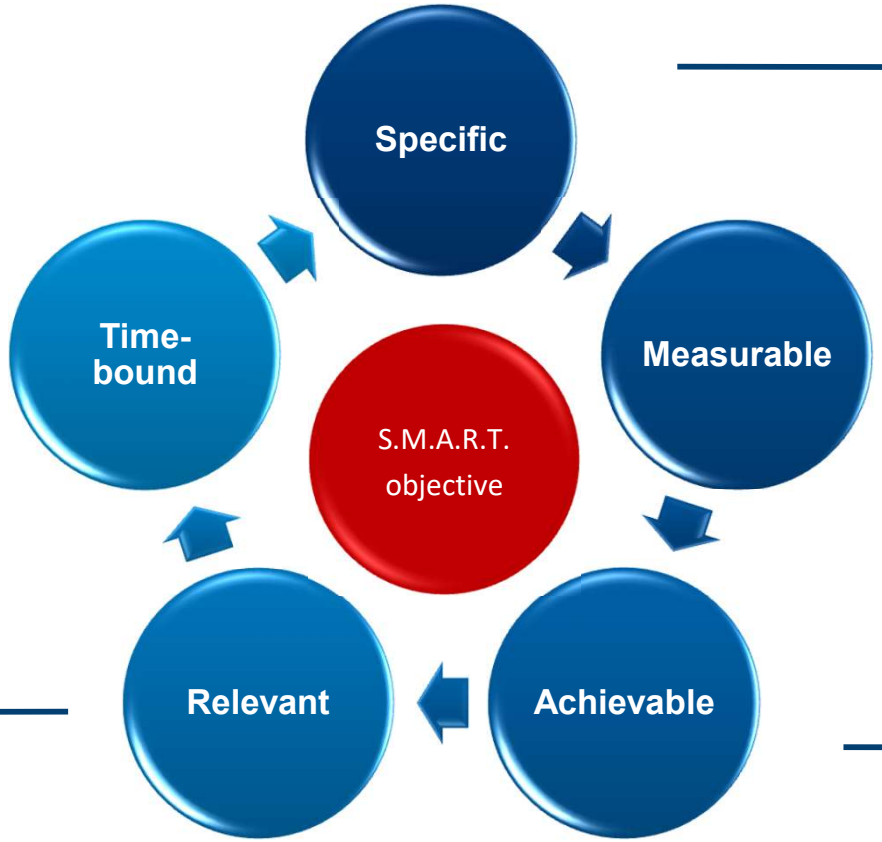
[1] See Smart Pharma Consulting Report "The French Pharma Market 2020 – 2025 Prospects" – [2] Physical and financial – [3] Reputation, technology, people, culture – [4] Regulatory, legal, HR, finance, IT

The strategic objective should be set according to the S.M.A.R.T. rule, well-explained and understood by all members of the Field Force[1] to maximize their adherence to it

Step 2: Strategic Objective – Objective Setting

Realistic
- Set timelines re. the start and the completion of the objective

Worthwhile
- The objective should be in line with the pharma company priorities (regional, national, global)



Clear & Precise[2]
- Reinforce the perceived value of products
- Raise brand preference
- Contribute to improve patients' adherence
- Increase the # of clients

Fact-based
- Quantitatively and qualitatively with specific reliable indicators, relevant to the objective

Stretched & Reasonable
- Stretched to get the best of everyone
- Reasonable to keep everyone motivated

Sources: Smart Pharma Consulting

[1] Irrespective of their function – [2] Illustrative examples

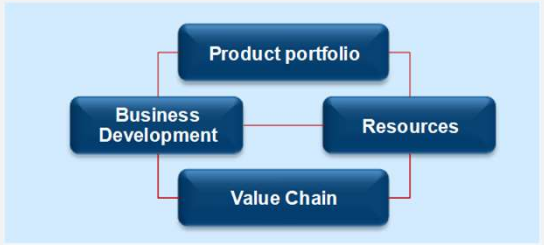
The strategy should be crafted according to the analyzed situation and trends, and the strategic objective set, prior to the design of the Field Force organization

Step 3: Strategic Model – Strategy Crafting

1. Situation & Trends Analysis

Competitive Landscape Analysis

Company Assets Assessment



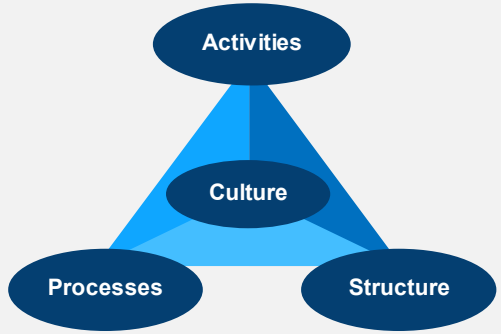
2. Strategic Objective

3. Strategy Crafting

The Pharma Company strategy[1] related to Field Force activities will attempt to raise customer preference and create a long-lasting competitive advantage by:

- Seizing market opportunities
- Combating market threats
- Taking advantage of competitive strengths
- Addressing competitive weaknesses

4. Organization Design



The Field Force organization should be designed to support effectively and efficiently the crafted strategy

Four dimensions should be considered:

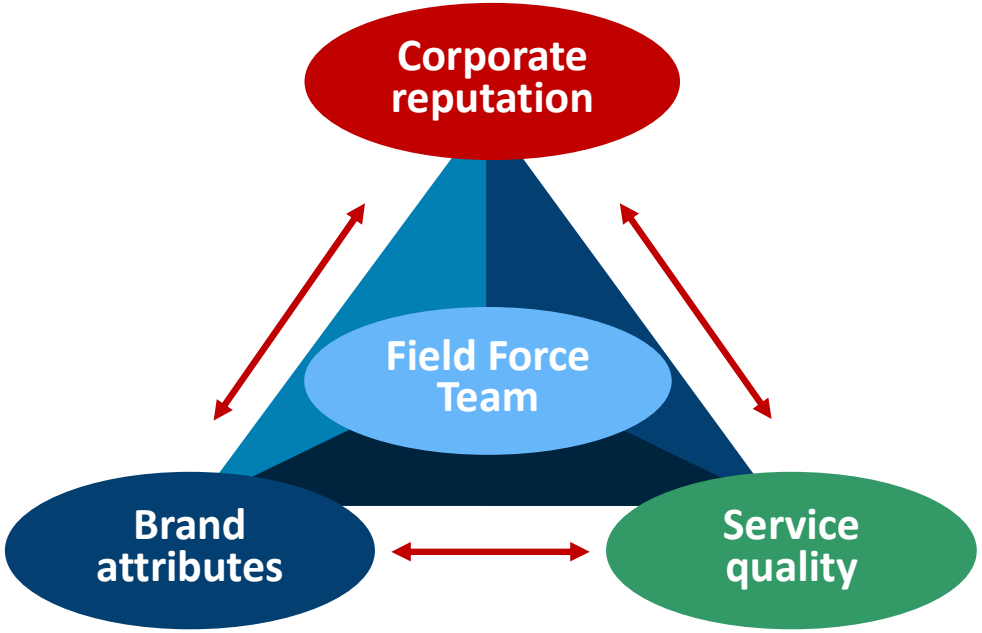
- Activities (and competencies)
- Structure (FTEs, organization chart)
- Processes (coordination, decision-making, information sharing, etc.)
- Culture (working conditions, etc.)

Sources: Smart Pharma Consulting

[1] See Smart Pharma Consulting position paper "Best-in-Class Pharma Strategy" published in March 2018

The utmost strategic priority of the Field Force Team is to strive to strengthen the preference of their customers for the products marketed by their company

Step 3: Strategic Model – The Brand Preference Mix (BPM)[1]



"The Brand Preference Mix concept is a powerful means to enhance customer preference to marketed brands"

- Preference is the most relevant concept – far better than satisfaction – to boost market share growth, and thus the performance of pharma companies
- To raise customers' preference for their products, pharma companies can act on three components:
  - Corporate reputation
  - The perceived quality of proposed services
  - The perceived benefits of brand attributes
- These three components should be strongly linked between themselves by customers
- Field Force Teams play an important role to leverage these three components

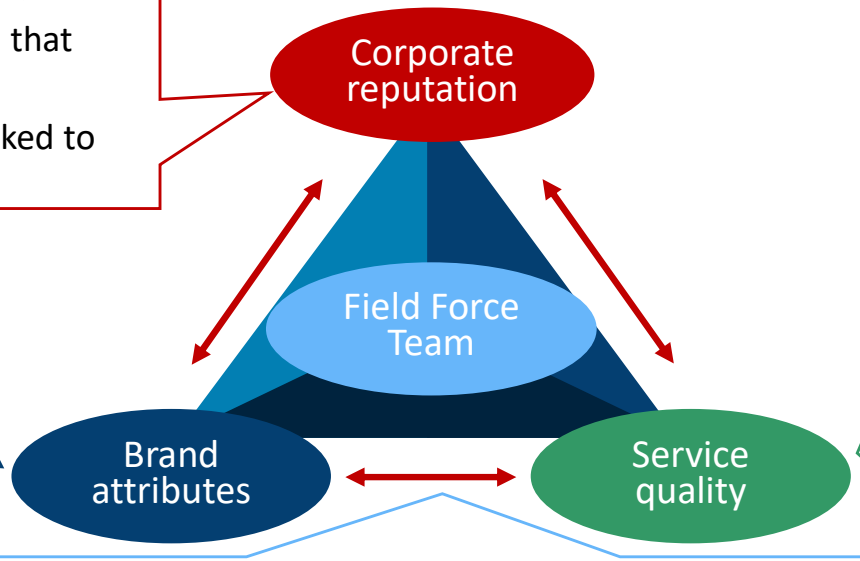
Source: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

[1] See Smart Pharma Consulting position paper "Best-in-Class Medical Reps" published in April 2017 and "Best-in-Class Pharma Marketers" published in March 2017

To boost the preference of physicians for their marketed brands, Pharma Marketers can leverage the three components of their Brand Preference Mix (BPM)

Step 3: Strategic Model – Activation of BPM levers

- Convey an appealing corporate identity
- Maintain a high corporate reputation that induces preference
- Make sure corporate reputation is linked to the brand and/or the services



- Highlight attributes in a way that generates preference
- Create a perception of uniqueness

- Deliver services…
- … that are highly valued, based on their level of:
  - → Usefulness
  - → Interest
  - → Convenience
  - → Quality of execution
- Select and design services that will lead to corporate and/or brand preference
- Make sure services are linked to the brand and/or the company

- Field Force Team must ensure a high level of knowledge and understanding of:
  - → The healthcare environment
  - → The customers they interact with
  - → The products they market and the corresponding pathologies and …
- … create highly valued interactions, meeting basic and extra customers expectations[1]

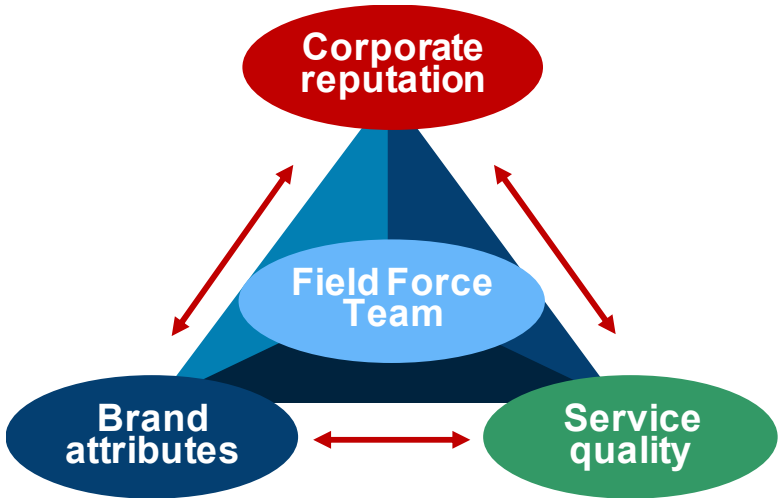
Source: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

[1] See Smart Pharma Consulting position paper "Best-in-Class Medical Reps" published in April 2017

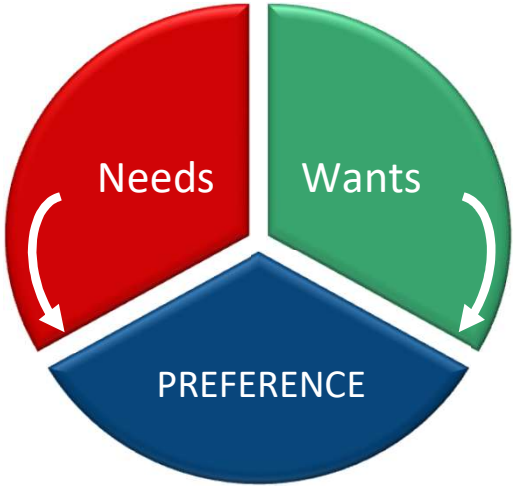
Field Force Teams must put into perspective the value drivers related to the three components of the Brand Preference Mix to gain/strengthen customers preference

Step 4: Key Tactics – Principles

Brand Preference Mix → Value Drivers → Customer Portrait



Benefits



- The 3 components of the Brand Preference Mix are characterized by features which provide the "reasons to believe"
- These features must bring unique and valuable benefits to customers
- The Field Force Team purpose is to make customers aware of these benefits so that they properly use their products

Customers' preference will be driven by their:

- Needs: "I need a treatment for this disease that is effective and safe" [fact-based]
- Wants: "I want to prescribe the treatment because I feel more secure [emotional]

But limited by their:

- Fears: "I am used to another treatment and don't wish to change my habits" [fact-based & emotional]

Source: Smart Pharma Consulting, adapted from the book "Pharma Marketing Tool Box" 2015

Features of each component of the Brand Preference Mix should be expressed as benefits to customers in order to strengthen their preference to the brand

Step 4: Key Tactics – Customers Preference Path (1/3)

Brand Preference Mix (BPM)	Features of the BPM component	Benefits to customers
Corporate reputation	• What to say and what to do to build an appealing image (e.g., values, initiatives, achievements, strategic priorities, etc.) and establish the company as a reliable player? • How should these initiatives be carried out?	**The benefits the customers are likely to draw[1] should be identified for each feature of each component of the Brand Preference Mix,**
Brand attributes	• How to make the brand perceived positively different from competition? • How to highlight these attributes in an effective and efficient way? • To whom these differentiating points should be communicated?	
Service quality	• What services should be developed to create a strong positive difference vs. competition? • How to make sure these services are highly valued by customers? *[Are they useful / interesting / convenient / well executed?]* • How should these services be implemented in an optimal manner? *[How to ensure the in-field people collaborate effectively and efficiently to deliver highly valued services?]*	

Source: Smart Pharma Consulting, adapted from the book "Pharma Marketing Tool Box" 2015

[1] Benefits could be: functional, financial, emotional and/or self-expressive

Field Force Teams must contribute to enhance customers preference to their brands by positively differentiating the components of the BPM they value the most

Step 4: Key Tactics – Customers Preference Path (2/3)

Brand Preference Mix (BPM)	Features of the BPM components	Benefits to customers	Desirability level[1]	Exclusivity level[1]
Corporate reputation (CR)			❑ Low ❑ Moderate ❑ High	❑ None ❑ Partial ❑ Total
			❑ Low ❑ Moderate ❑ High	❑ None ❑ Partial ❑ Total
Brand attributes (BA)			❑ Low ❑ Moderate ❑ High	❑ None ❑ Partial ❑ Total
			❑ Low ❑ Moderate ❑ High	❑ None ❑ Partial ❑ Total
Service quality (SQ)			❑ Low ❑ Moderate ❑ High	❑ None ❑ Partial ❑ Total
			❑ Low ❑ Moderate ❑ High	❑ None ❑ Partial ❑ Total

Source: Smart Pharma Consulting, adapted from the book "Pharma Marketing Tool Box" 2015

[1] Should be selected only the benefits that are at least moderately desirable and partially exclusive

The exclusive and desirable benefits associated to the components of the BPM should be expressed by customer type or, even better, by individual customer

Step 4: Key Tactics – Customers Preference Path (3/3)

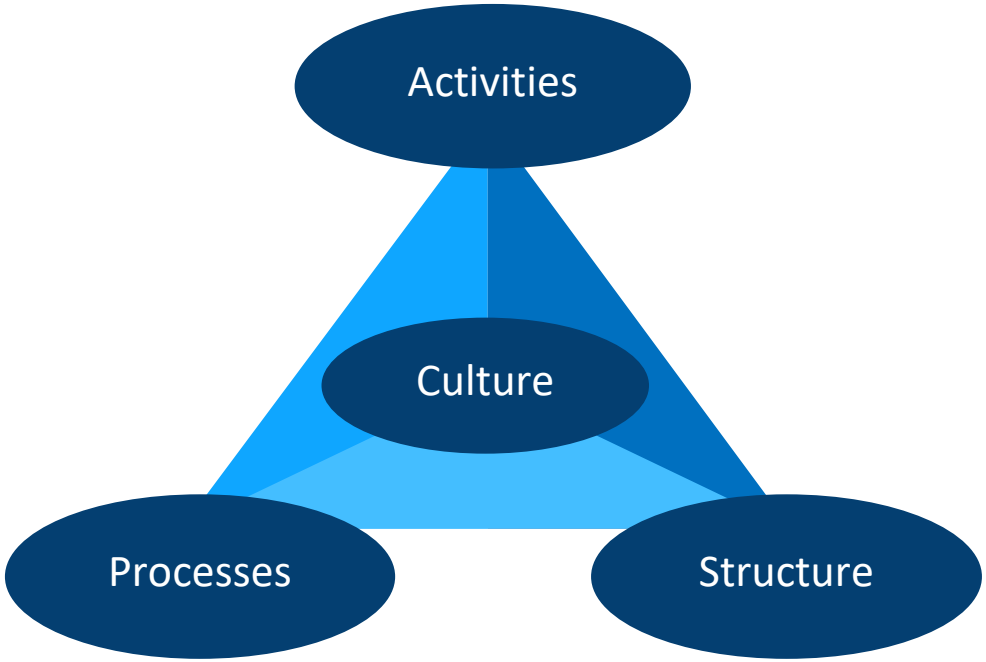
Customer type[1]	BPM[2]	Value proposition (exclusive & desirable benefits)
	Corporate Reputation	
	Brand Attributes	
	Service Quality	
	Corporate Reputation	
	Brand Attributes	
	Service Quality	
	Corporate Reputation	
	Brand Attributes	
	Service Quality	

Source: Smart Pharma Consulting, adapted from the book "Pharma Marketing Tool Box" 2015

[1] Physicians, Pharmacists, Patients, Payers, Policy makers, Patient advocacy groups, etc.
[2] Indicate on which component of the BPM (corporate reputation, brand attributes, service quality) the value proposition is built

The Field Force organization model should be designed to support the execution of the crafted strategy and tactics in the most effective and efficient way

Step 5: Key Tactics – Organizational Model – The Organizational Triangle



- The organization model should be designed to best support the implementation of the strategy and the corresponding tactics
- The organizational model developed by Smart Pharma Consulting is built on four dimensions:
  - Activities of collaborators
  - Structure and headcount
  - Key processes
  - Cultural traits
- These four dimensions should be consistent and regularly adjusted, qualitatively and quantitatively, to ensure an optimal support of the strategy

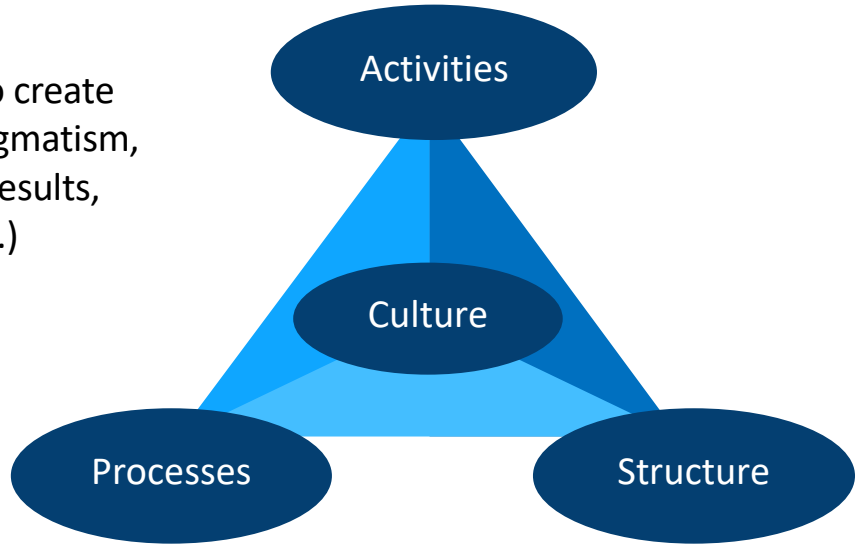
Sources: Smart Pharma Consulting

The organization must be designed to enable quick and easy adjustments to environment changes, and to get collaborators aligned to boost customer preference

Step 5: Key Tactics – Organizational Model – Activation of the four levers

Lever #1: What should be the Field Force Team key activities (and the required competencies)?

Lever #4: What culture do we want to create within the Field Force Team (e.g., pragmatism, proactivity, empowerment, tangible results, cross-functional working method, etc.)



Lever #3: What are the key business processes (interactions, decision making, execution and performance monitoring) and are they efficient?

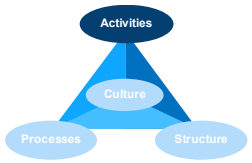
Lever #2: What structure (organigram & FTEs)[1] will best support Field Force Teams to achieve their tasks efficiently?

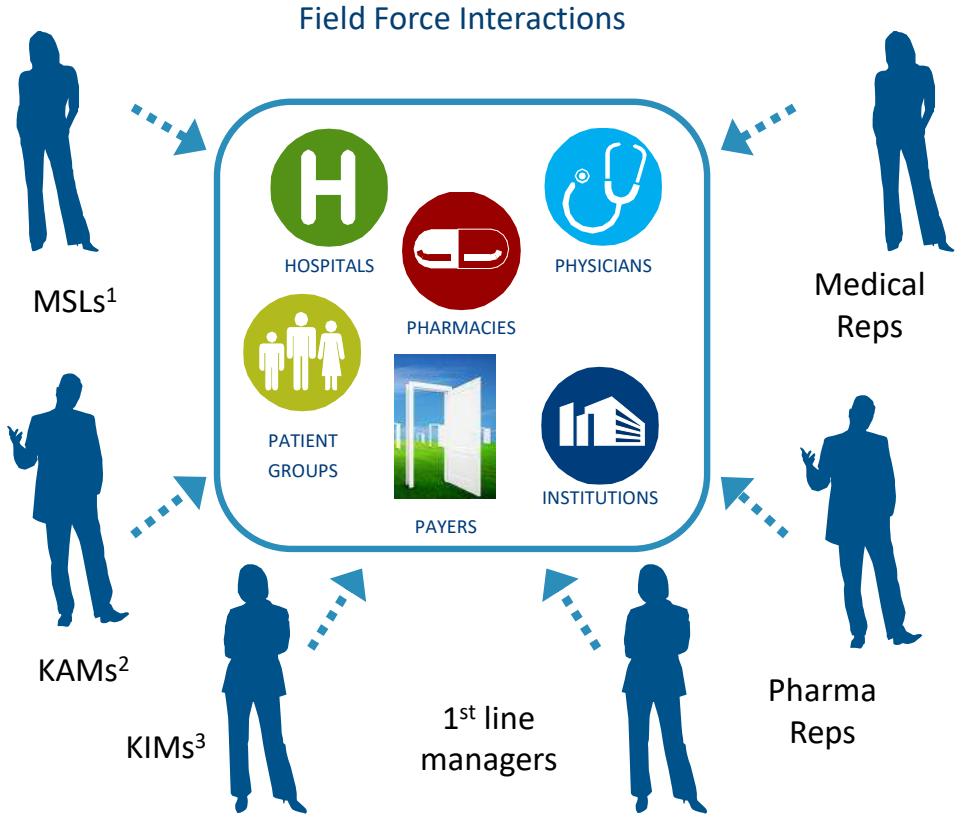
Sources: Smart Pharma Consulting

[1] Including chain of command and span of control dimensions

Field Force Teams activities should be regularly adjusted to secure a regular access to customers and to boost their preference to the brands marketed by the company

Step 5: Key Tactics – Organizational Model – Key activities (1/2)





Principles

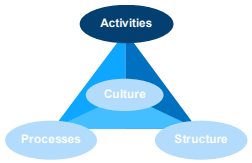
- Activities of Field Force Teams should be systematically streamlined:
  - Activities having no significant impact to raise the value of the marketed brands should be stopped
  - Customers shared by different Field Force functions (e.g., MSLs and medical reps) would require a clear co-positioning to avoid duplication and a thoughtful coordination of activities to leverage potential synergies which will be driven by sharing competencies, and/or costs
- To secure access to customers and influence them, Field Force Teams should, better than competitors:
  - Acquire a high level of market insights[4]
  - Highlight the image[5] of the company they work for
  - Propose and deliver highly valued services
  - Exhibit the benefits offered by the marketed brands
  - Use customers preferred communication channels
- Ambitious capability building programs would be required

Sources: Smart Pharma Consulting

[1] Medical Science Liaison – [2] Key Account Managers – [3] Key Institution Managers – [4] Meaning: have an excellent knowledge and a good understanding of the healthcare system, the key market stakeholders (health authorities, competitors, customers) – [5] See Smart Pharma Consulting position paper "How to create a superior Pharma Corporate reputation" published in August 2016

The development of Field Force Teams competencies can be structured and prioritized with the help of the Smart Index tool

Step 5: Key Tactics – Organizational Model – Key activities (2/2)



The Smart Index

- The Smart Index is a tool which structures the development of competencies around 3 components:

Smart index = Knowing x Understanding x Behaving

Knowing	Understanding	Behaving
Precise – Reliable – Relevant knowledge of facts & figures re. the market, the company, with a special emphasis on customers and their influencers	In-depth & Robust analytical skills and fact-based decision making	Planning, Organizing, Directing & Monitoring to guarantee the quality of execution, leverage potential synergies and keep colleagues engaged

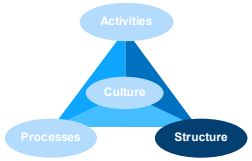
"Any fool can know. The point is to understand" – Albert Einstein

Sources: Smart Pharma Consulting

[1] See Smart Pharma Consulting position paper "Be a Smart Manager, Not just a Good one" published in June 2017

There is no magic numbers, the Field Force size depends on external and internal factors, the impacts of which are specific to each company and each product

Step 5: Organizational Model – Structure (1/3)



Field Force sizing: Driving Factors

External factors

Authorities

- Regulations re. Field Force activities (charter)
- Limitation of interactions with HCPs
- Refusal of institutions to interact with pharma companies

Customers

- Number of HCPs and other customers (e.g., influencers such as PAGs, patients, payers)
- Opinion and behavior vis-à-vis the company, its products and services
- Inclination of customers to change their opinion and behavior under the influence of Field Force Teams

Competition

- Number of targeted customers
- Types, content and frequency of interactions per targeted customer
- Number of in-field FTEs

Key factors to estimate Field Force size

Internal factors

Products

- Number of brands for presentation
- Product life cycle stage (pre-launch, launch, growth, maturity, decline)

Organization

- Number of field days
- Types, content and frequency of interactions[1]
- Number of daily interactions
- Number of interactions per customers
- Cost per in-field collaborator and per interaction

Skills

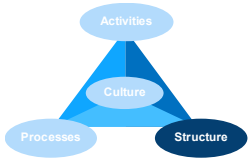
- Quality of contact
- Contact productivity
- Territory management

Source: Smart Pharma Consulting based on "Pharma Marketing Tool Box" published in 2016

[1] Including: face-to-face calls, mailings and e-mailings, contacts during medical meetings, congresses, project collaborations, etc.

The Smart Simulator helps to estimate the optimal Field Force resources and the best structure by adjusting coverage and frequency by customer and by product

Step 5: Organizational Model – Structure (2/3)



Field Force sizing: The Smart Simulator

Overview

GPs

Diabetologists

Neurologists

Hospital pharmacists

Retail pharmacists

Nurses

Smart Simulator: Hospital and retail lines activity

Illustrative

	FTE 2018*	FTE after simulation
GPs	78	79
Diabetologists	5	6
Neurologists	24	24
Hospital pharmacists	7	5
Retail pharmacists	37	11
Nurses	1	2
Total FTE	152	128
Simulation vs. 2018:		-24

*Based on the number of calls planned by the company in 2018 (assuming 900 calls per year per sales rep)

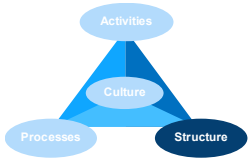
- The Smart Simulator is an enabling tool to help pharma companies evaluate the impact of external and internal factors, either qualitative or quantitative, which will influence the size of their Field Force
- Thus, the sizing, expressed as FTEs, will depend on:
  - The number of customers for whom interactions with the Field Force is likely to have a significant positive impact on the performance of marketed products
  - The types of interactions customers are open to
  - The optimal number of interactions to be carried out for each customer
  - The time related to the implementation of these interactions
  - The combined activities, and possible synergies amongst different in-field collaborators[1]
- The Smart Simulator, as any simulator, gives a preliminary estimate which must be completed by a qualitative analysis, customer by customer

Sources: Smart Pharma Consulting

[1] *Medical reps, MSLs, KAMs, KIMs, Pharma reps, etc.*

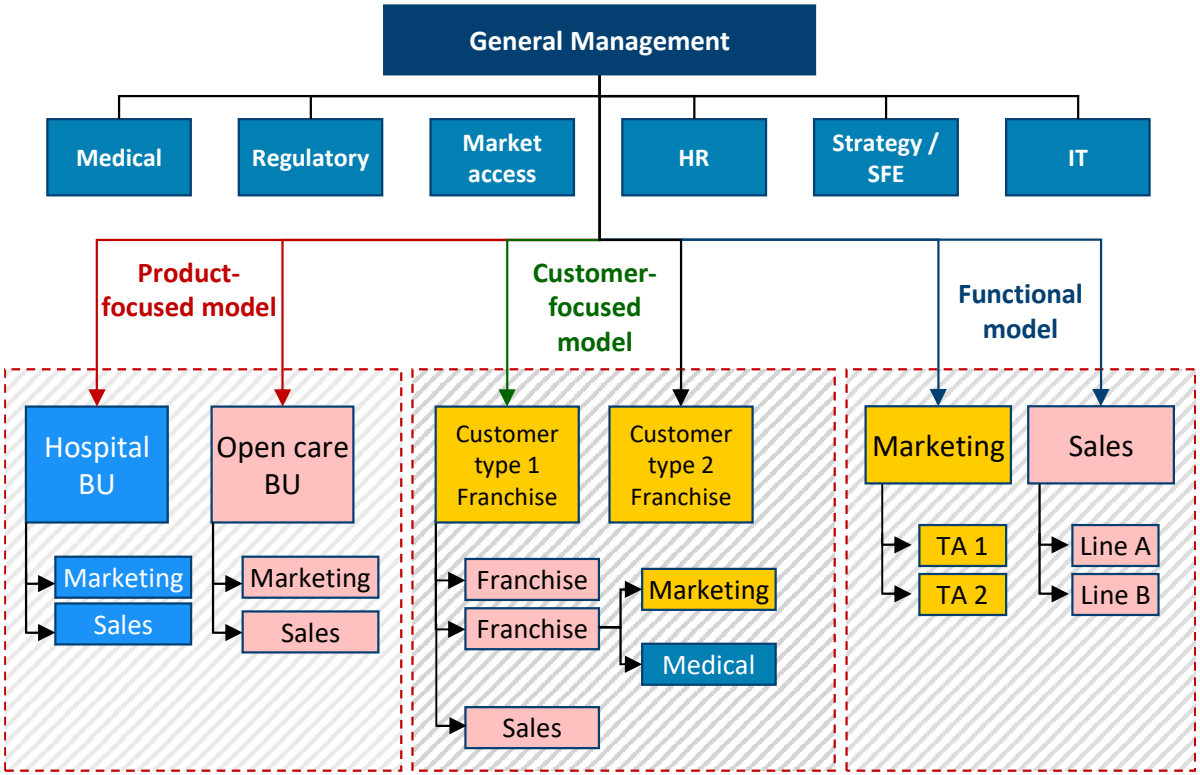
The preferred structure should be built around customers, remain lean and agile, favoring collaborations across departments and with the support functions

Step 5: Organizational Model – Structure (3/3)



Organization Chart

Typical structure of pharmaceutical companies

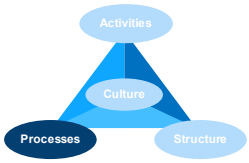


- **In the Product-focused model**, products drive the structure:
  - For "strict" hospital use, activities are organized in BUs or franchises, gathered or not under a common "Hospital Management" structure, and covering different therapeutic areas (TAs)
  - For mix products, companies display hospital dedicated med reps, reporting to open care BUs, and supporting detailing of open care products at hospital
  - Hospital and open care organizations are operationally independent, but share common supporting resources
- **The Customer-focused model** is shaped around customers by franchise, each of them containing marketing and medical resources, supported by sales forces
- **The functional model** is less frequent among pharma companies, irrespective of their size

Sources: Smart Pharma Consulting

High market sensitivity, simple and short processes, cross-departments coordination and cooperation will contribute to better serve customers

Step 5: Organizational Model – Processes (1/3)



Customer-centricity Organization: The 4 Cs

- Customer-focused organization (silos around customers vs. brands)
- Knowledge- and experience-sharing
- Harmonization of activities

- Skills to develop and deliver high value solutions
- Ability to explore and discover customer insights (deep knowledge of their needs, wants, behaviors)
- Motivated and empowered collaborators

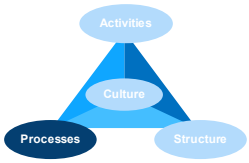
- Project teams including members from various departments centered around customers
- Shared customer database
- Introduction of metrics to foster cultural change

- Partnership with external players to propose unique and highly valued offerings to customers

Sources: Adapted from R. Gulati (HBR 2007) - Smart Pharma Consulting analyses

To create value for field forces, and therefore for the company, head office functions should maintain a business-driven balance between support and control

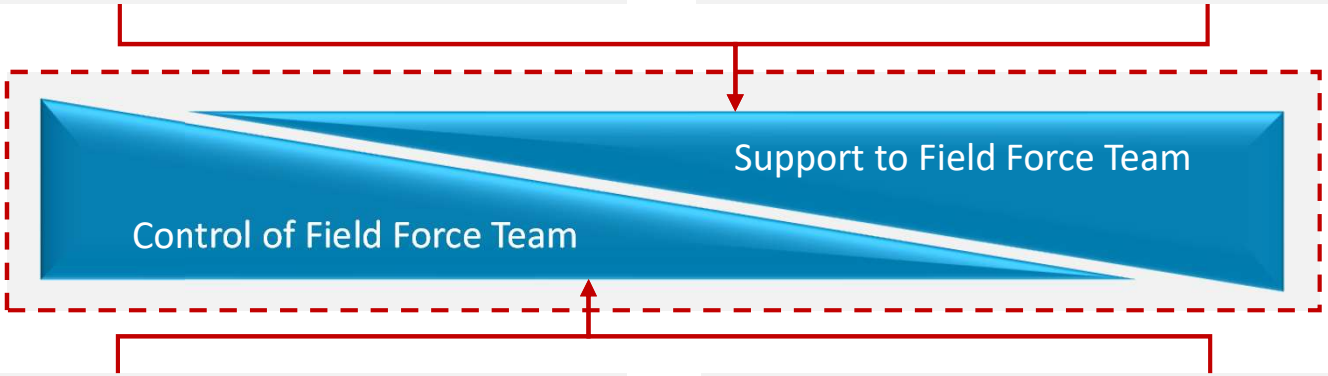
Step 5: Organizational Model – Processes (2/3)



Balanced Support & Control of Field Force Teams

- *Ad hoc* capabilities missing at Field Force level
- Complementary resources (e.g., if understaffing)
- Strategic directions and priorities, whenever required

- Support to facilitate in-field activities, to address scientific, legal, HR issues, etc.
- Competence and experience sharing across BUs and from head office to in-field functions



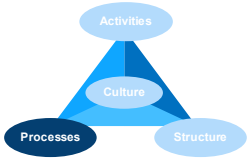
- Business-relevant metrics (automation, dashboards, standardized score cards)
- Selected number of KPIs (key performance indicators) and KEIs (key execution indicators)

- Monitoring of compliance (e.g., HR policy, people management, marketing & sales practices, etc.)
- Monitoring of the level of organizational agility and suggestions of solutions to fill up the gaps (if any)

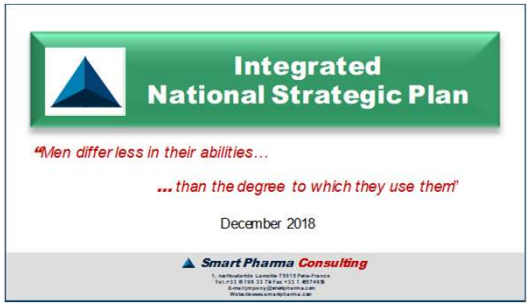
Sources: Smart Pharma Consulting

The activities of in-field collaborators interacting with the same customers should be integrated in a single strategic plan, including separated sections

Step 5: Organizational Model – Processes (3/3)



Integrated Regional Strategic Plan



Medical Section

- Collaborators: MSLs
- Key clients: national and regional KOLs
- Key objectives: build strong and sustainable relationships with KOLs to develop advocacy
- Key activities: interactions with KOLs, scientific lectures at congresses, symposia, staff meetings, support of research clinical trials, training of speakers and collaborators from marketing and sales teams, support of Key Institution Managers (KIMs) and Key Account Managers (KAMs) while meeting their clients, competitive intelligence initiatives

Marketing & Sales Section

- Collaborators: brand managers, area managers, medical representatives
- Key clients: physicians, retail and hospital pharmacists
- Key objectives: strengthen brand preference
- Key activities:
  - Marketers: crafting of a brand preference strategy leveraging brand attributes, perceived quality of associated services and corporate reputation
  - Sales forces: medical calls, invitations to medical meetings, congresses and proposal for services likely to strengthen brand preference

Access & Adherence Section

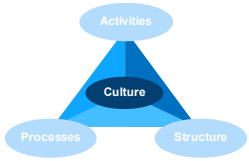
- Collaborators: Key Account Managers (KAMs) and Key Institution Managers (KIMs)
- Key clients: regional health authorities, regional payers, hospital directors, hospital purchase managers, PAGs[2], etc.
- Key objectives: facilitate the hospital listing, and improve patient adherence
- Key activities: development of medico-economic studies to facilitate the market access of brands and support of projects to improve patients' adherence, to promote the proper use of drugs

Sources: Smart Pharma Consulting

[1] In compliance with the national regulations and the companies' internal policies – [2] Patient Advocacy Groups

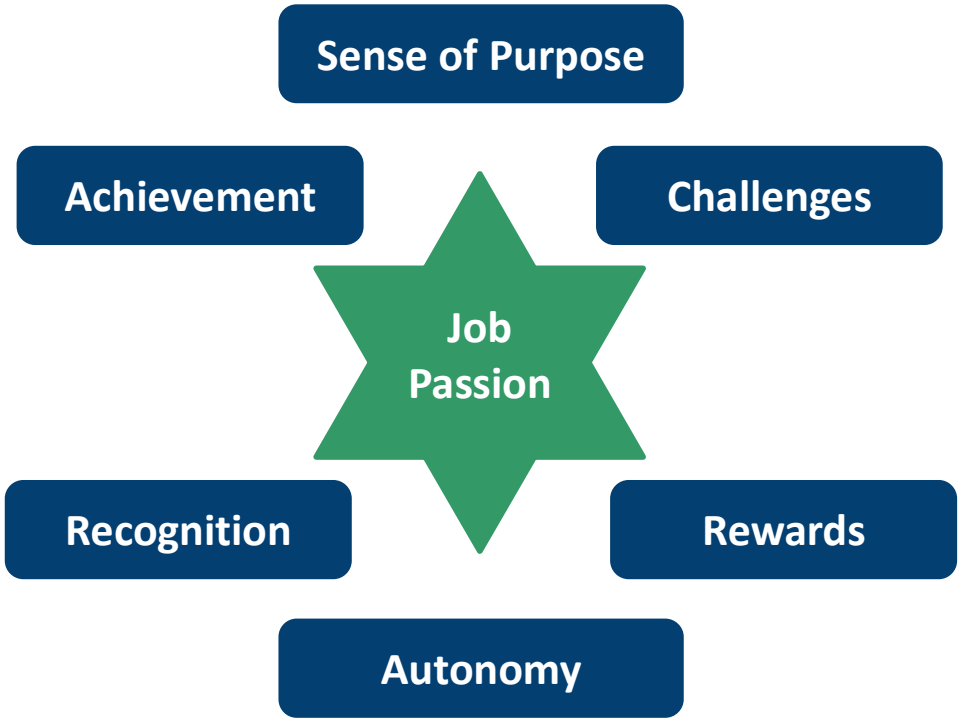
Stimulating Field Force members passion for their job is a key performance driver, especially in a context where customers are increasingly reluctant to meet them

Step 5: Organizational Model – Culture (1/2)



Stimulation of Job Passion[1]

Job passion is influenced by **six key drivers**:



Passion is expressed by:

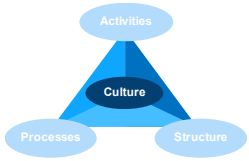
"Pleasure in the job puts perfection in the work" – *Aristotle*

Sources: Smart Pharma Consulting

[1] *See Smart Pharma Consulting position paper "Be a Smart Manager, Not just a Good one" published in June 2017*

Managing by mutual benefits will give Field Force Teams a sense of purpose which will increase the probability to get their full and sustainable engagement

Step 5: Organizational Model – Culture (2/2)



Management by Mutual Benefits[1]

MBO[2] (Management By Objectives)

- Definition of objectives agreed by both management and employees
- Well-adapted to vertical management models
- However, by focusing on results, the way to achieve them (the planning) can be overlooked and lead to suboptimal efficiency
- Does not favor innovation nor flexibility

MBMB (Management By Mutual Benefits)

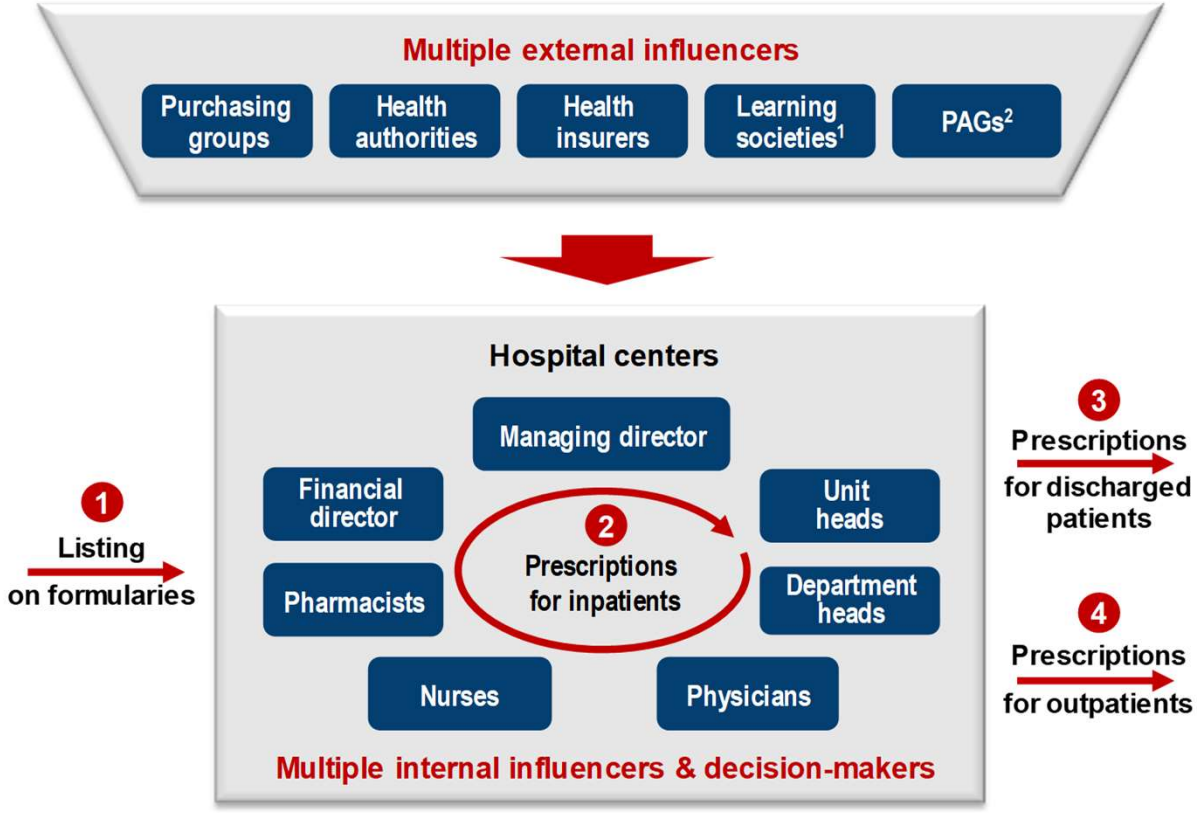
- Creates mutual benefits and value by fulfilling the respective expectations of employees and employers
- Maximize the probability to obtain the full engagement of employees
- Requires from managers to (better) satisfy collaborators …
- … to create favorable conditions to secure a higher quality of execution that will lead to better results

Sources: Smart Pharma Consulting

[1] See Smart Pharma Consulting position paper "Be a Smart Manager, Not just a Good one" published in June 2017 – [2] The term was coined by Peter Drucker in 1954 in the book "The practice of Management"

The Field Force strategy and organization must have a favorable impact on one or several of the key performance drivers of products prescribed at hospital level

Step 6: Expected Outcomes – Hospital Market Segment



- The expected results from the Field Force strategy, its related tactics and supporting organization will come from their – direct or indirect – positive impact on the following performance drivers:
  1. Listing on formularies[3]
  2. Prescription for inpatients[4]
  3. Prescription for discharged patients[4]
  4. Prescription for outpatients[4]
- Maintaining access to HCPs is a key challenge that must be addressed by ensuring high quality interaction, from customers perspective
- The actions to activate these drivers will depend on:
  - Each hospital specificities (e.g., strategic priorities, procurement process and policy, degree of complexity, power games)
  - Product portfolio competitive position
  - Value of services offered to date
  - Corporate reputation

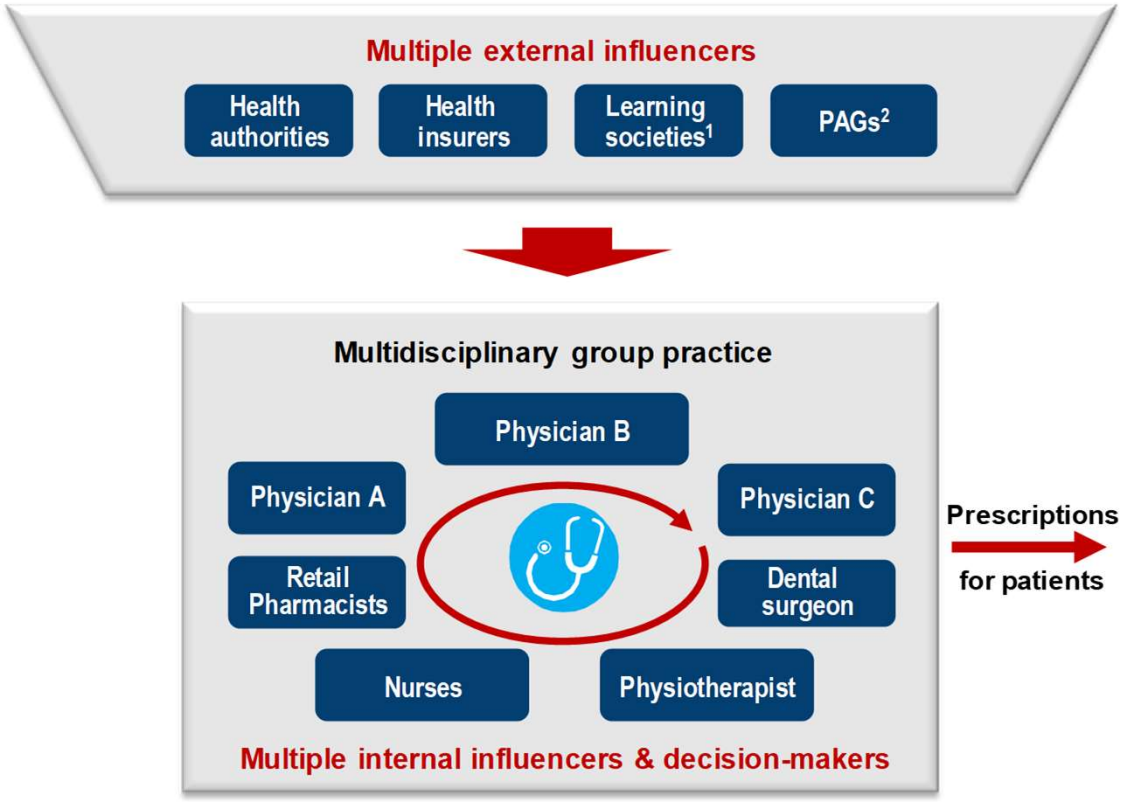
● *Key performance drivers for pharma companies*

Sources: Smart Pharma Consulting

[1] Through the therapeutic guidelines they may publish – [2] Patient Advocacy Groups – [3] Under the direct responsibility of KAMs – [4] Under the direct responsibility of medical reps

Field Force Teams operating on the open care market must secure access to customers and raise their brand preference by ensuring highly valued interactions

Step 6: Expected Outcomes – Open care Market Segment



- On the open care market, the expected outcome from the implementation of the customer strategy and of the supporting Field Force organization is to:
  - Secure a regular access to health care professionals (HCPs) which has become more and more difficult, especially in health centers
  - Raise the preference of HCPs in favor of the marketed products by leveraging the three components of the Brand Preference Mix[3]
  - Maintain a favorable opinion and behavior of stakeholders who are likely to influence HCPs and patients
- To address these challenges, the Field Force Team members will have to:
  - Ensure high value interactions
  - Coordinate their activities to leverage potential synergies
  - Be flexible enough to adjust themselves to the external and internal changes

Sources: Smart Pharma Consulting

[1] Through the therapeutic guidelines they may publish – [2] Patient Advocacy Groups – [3] See Smart Pharma Consulting position paper "Best-in-Class Pharma Marketers" published in March 2017

To measure the efficacy and efficiency of a Field Force Team, it is recommended to monitor the activities, they carry out with KEIs[1] and their related impact with KPIs[2]

Step 6: Expected Outcomes – Measurement Tools

1	2	3	4
What is the objective?	**What is the target?**	**KEIs[1]**	**KPIs[2]**
▪ Create / reinforce awareness ▪ Generate interest ▪ Develop brand preference ▪ Increase share of prescription ▪ Increase compliance ▪ Limit substitution rate ▪ Get the brand listed ▪ Fine tune the profile of the customer	▪ Physicians (e.g., KOLs, specialists, GPs) ▪ Pharmacists (e.g., retail or hospital) ▪ Patients ▪ Nurses ▪ Influencers (e.g., health authorities, "politics", patient advocacy groups, public health insurance, private health insurance, professional associations)	▪ % of the target covered by the Field Force Team ▪ % of the target influenced by the Field Force Team ▪ % of the target having a positive opinion of the services offered[3] ▪ Number of interactions (e.g., by customer, by in-field collaborator) ▪ Implementation time required vs. planned ▪ Actual vs. budgeted cost	▪ Brand Preference Mix index (i.e., corporate reputation, product attributes, service quality) ▪ % of hospitals having listed the brand ▪ Price negotiation ▪ Sales level and evolution ▪ Share of prescription ▪ Change in the number of treatment initiations ▪ Return on investment

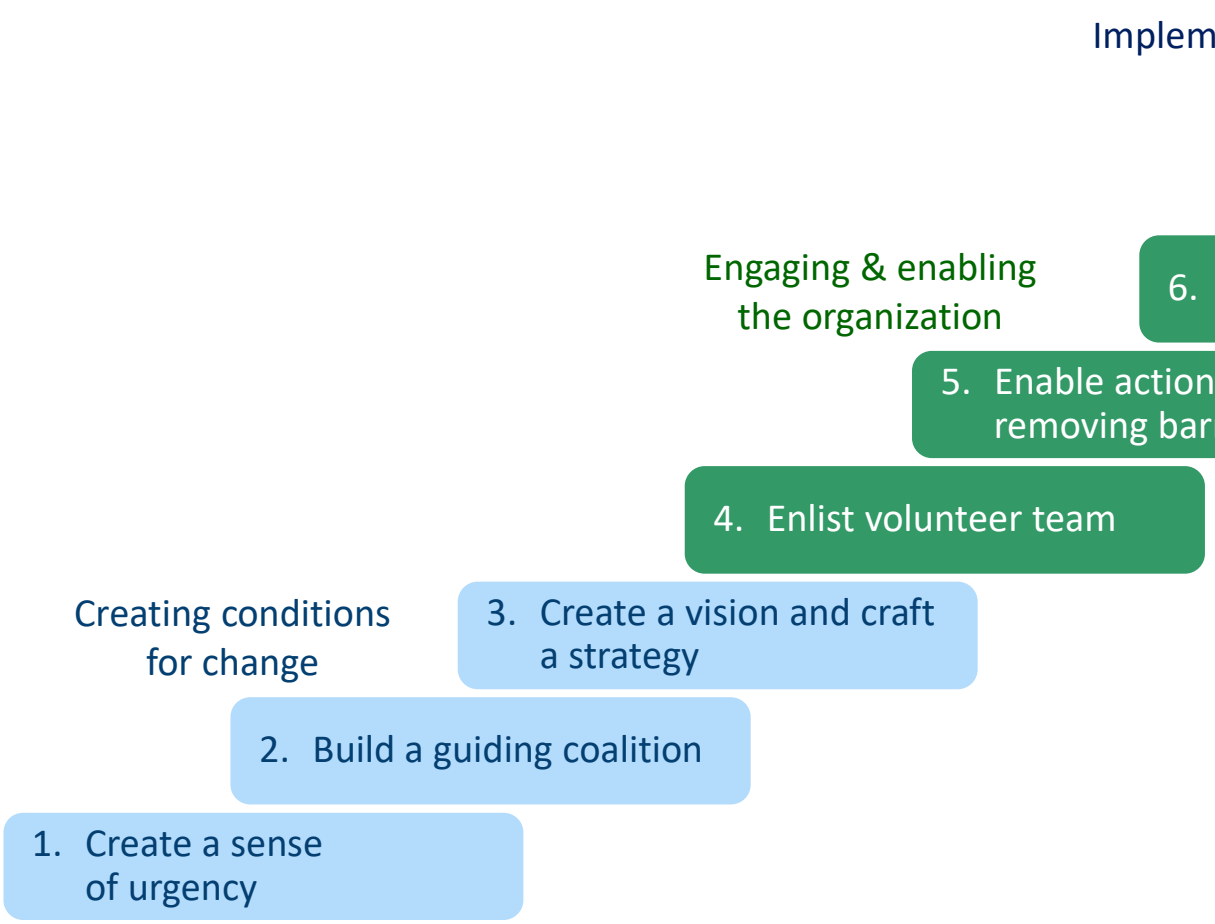
"If it cannot be measured, it cannot be managed" – Peter Drucker

Source: Smart Pharma Consulting based on "Pharma Marketing Tool Box" published in 2016

[1] Key Execution Indicators – [2] Key Performance Indicators – [3] Based on: usefulness, interest, convenience, quality of execution)

Pharma companies having no choice but to transform themselves to boost their performance, they can follow the 8-step process for leading change

The 8-Step Process for Leading Change: Principle



- The 8-step process developed by John P. Kotter from Harvard Business School is a useful and simple tool that can help pharma companies conduct the transformation of their organization
- Transforming organizations is driven by two fundamental reasons:
  - Increase sales and profits
  - Improve efficacy and efficiency

Source: Adapted by Smart Pharma Consulting from John P. Kotter 1996 and 2016, Richard L. Daft 2016

The careful implementation of these eight steps is important because it provides pharma companies with a robust framework to facilitate the change process

The 8-Step Process for Leading Change: Implementation

1. Create a sense of urgency

- From competitive environment and company performance, people must see (facts) and feel (emotions) the necessity to transform the company
- Most managers must be able to describe opportunities for collaborators

2. Build a guiding coalition

- A "transformation team" with a strong leader must be set up
- This "guiding coalition" must be strongly convinced of the need to change…
- … and form a powerful close-knit group in terms of reputation, influence, etc.

3. Create a vision and craft a strategy

- A clear vision people adhere to and…
- … a good understanding of the strategy to make it a reality will help envision the benefits of the change for individuals and the company
- Leaders play a key role at this stage

4. Enlist volunteer team

- To make change happen, a large team of advocate and role models who "walk the talk" and drive in the same direction to achieve the vision, must be built

5. Enable actions by removing barriers

- Structures and processes that obstruct the change effort should be removed
- Risk taking and innovative ideas should be encouraged

6. Generate quick-wins

- Quick wins are essential to boost the credibility of the change process and keep the momentum going

7. Sustain acceleration

- Activities, structures, processes and cultural traits which do not fit with the new vision must be changed
- Change leaders should be hired, promoted, developed

8. Institute change

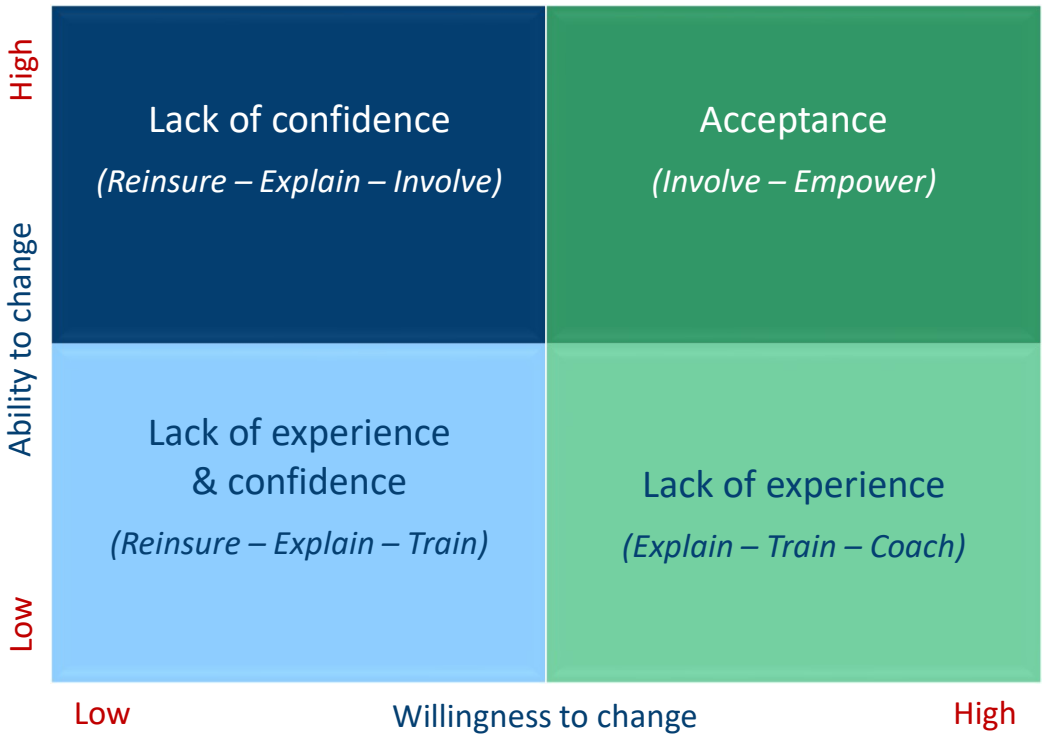
- How have new activities, structures, processes and cultural traits helped improve performance should be shown and institutionalized to make the change stick?

Source: Adapted by Smart Pharma Consulting from John P. Kotter 1996 and 2016, Richard L. Daft 2016

Change management requires to pay a special attention to resisters and apply the appropriate techniques to address the root causes of their resistance

Management of Resistance to Change

Resistance to Change Matrix



Techniques for Reducing Resistance to Change

- **Education & communication**
  - In case of misinformation, but may not work if lack of trust and credibility
- **Participation**
  - When resisters are able to contribute
- **Facilitation & support**
  - When resisters are fearful and anxious
- **Negotiation**
  - When resistance comes from a powerful group, but can open doors for others to apply pressure too
- **Manipulation & co-optation**
  - When a powerful group endorsement is needed, but can backfire and cause to lose credibility
- **Coercion**
  - When a powerful group endorsement is needed, but may be illegal, backfire and cause to lose credibility

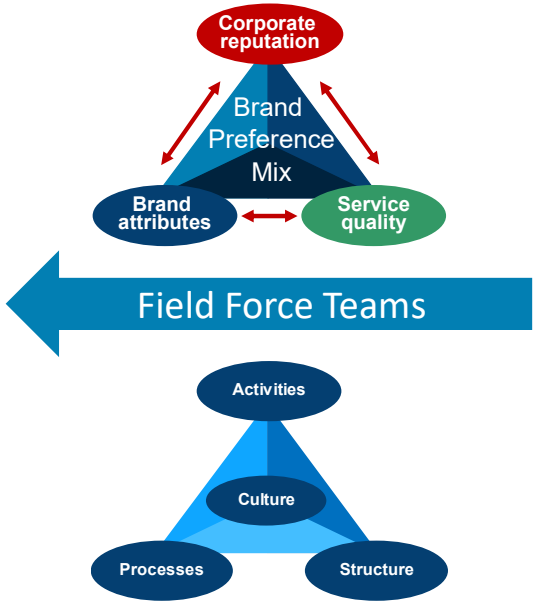
Source: Source: Smart Pharma Consulting – Stephen P. Robbins et al 2017

The Smart Field Force Framework helps pharma companies better align their strategy and their organization to optimize their performance

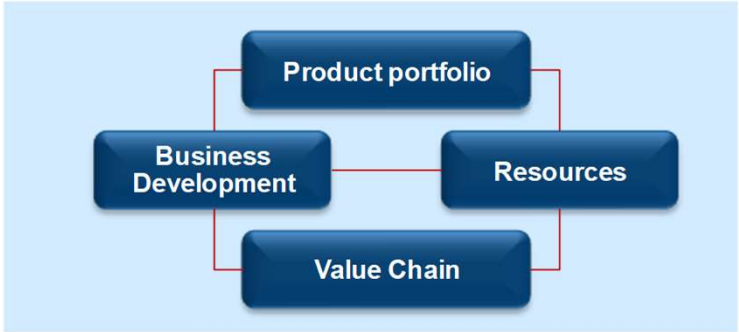
Smart Field Force Framework Recommendations

Competitive Landscape Analysis

- Policy makers want to develop a more effective and efficient healthcare system
- Payers' priority is to better control healthcare expenditure by cutting prices and limiting access to patients
- PAGs fight to get an earlier and broader access to innovative treatments and get better therapeutic outcomes
- HCPs need more time to treat patients and to remain well informed of innovations and new medical practices



Company Assets Assessment



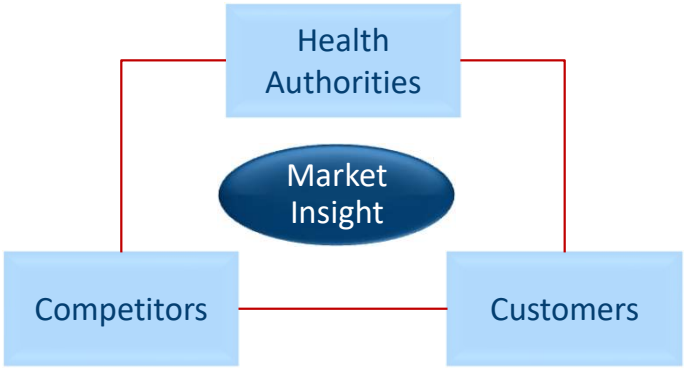
- Strategy should be focused at enhancing customers preference to their brands with the help of the Brand Preference Mix
- Organization should be designed so that:
  - Activities are carried out by highly competent people working in multidisciplinary teams
  - Field Force Teams are structured around customers / customer groups
  - Processes are kept simple to guarantee agility, flexibility and leanness
  - Passion for their job is developed and cultivated amongst Field Force Teams

Sources: Smart Pharma Consulting

The following method to reorganize Field Force Teams is one example of the services proposed by Smart Pharma Consulting to help pharma companies

Example of Method to Reorganize of Field Force Teams

Phase 1: Situation analysis



In-depth market analysis (current situation and key trends) based on primary and secondary data:

- Authorities' decisions
- Customers[1] needs and wants regarding pharma companies in general
- Competitors field force organization and performance

Pharma Company field force organization and performance

Phase 2: Road Map Development

- Objective setting and strategy crafting re. customer management
- Current organization assessment
- Target organization[2] design to best support the crafted strategy
- Organizational gap analysis
- Road map development to transition from current to target organization (incl. change management process)

Phase 3: Road Map Deployment

Deployment of the organization road map defined during the previous phase:

- Support to Field Force Teams and to the head office functions to implement the road map
- Development of tools (e.g., for planning, coordination, monitoring) and training programs to facilitate the change management within the Field Force Teams of the pharma company

Sources: Smart Pharma Consulting

[1] Including: hospital and retail pharmacists, hospital and office-based physicians (specialists or GPs), PAGs, regional health authorities / payers – [2] Taking into account the four following dimensions: Activities – Processes – Structure – Culture

"Click on the picture below to access the article"

ACTUALITES DU MONDE DE LA SANTE

La Visite Médicale Haute Performance

Trois outils innovants pour accéder aux médecins et les convaincre

JEAN-MICHEL PENY
Président
Smart Pharma Consulting

Nous aurions pu nous interroger sur l'avenir de la visite médicale, mais il nous a semblé plus pertinent d'aborder un de ses déterminants majeurs. Qu'apporte la visite médicale aux médecins ?

En effet, l'avenir de la visite médicale, ou plus précisément des délégués médicaux, va dépendre de l'importance de la valeur que ces derniers seront capables d'apporter aux médecins, à travers leurs différents modes d'interactions.

En dépit de la réduction importante des effectifs de visite médicale, cette dernière est toujours le premier poste d'investissement promotionnel des laboratoires pharmaceutiques.

Différentes études récentes confirment que la visite médicale demeure non seulement le canal de communication le plus efficace pour interagir avec les médecins, mais également celui qu'ils préfèrent. Toutefois, l'insuffisance du nombre de médecins, du point de vue des besoins des patients, les met dans une situation critique quant à la gestion de leur temps.

Consacrer dix minutes à recevoir un délégué médical, une ou deux heures pour assister à une réunion médicale en distanciel ou en présentiel, se fait le plus souvent au détriment du temps de consultation.

Au regard de ce constat, les deux questions essentielles que doivent se poser les laboratoires pharmaceutiques sont :

- Comment maintenir une fréquence régulière d'interactions auprès des médecins ?
- Comment générer ou renforcer la préférence des médecins aux marques de médicaments promues par les délégués médicaux ?

De fait, il faut pouvoir communiquer pour convaincre et il faut générer la préférence pour accroître, ou à défaut optimiser, la part de marché des médicaments.

Pour assurer un accès régulier aux médecins et renforcer leur préférence, nous recommandons la mise en place d'une approche simple et pratique reposant sur l'observation et l'analyse.

Les médecins ont chacun :

- Des centres d'intérêt,
- Des besoins et des attentes vis-à-vis des laboratoires pharmaceutiques,
- Des expériences avec ces derniers, leurs collaborateurs et leurs produits,

qui leur sont propres.

Il importe donc d'en tenir compte, dans la mesure où, contrairement à la grande distribution, les laboratoires pharmaceutiques ont la possibilité d'interagir, individuellement, avec la majorité de leurs « *clients* » médecins. Pour ce faire, la méthode suivante, organisée en trois étapes et assortie d'outils spécifiques, peut être mise en place :

Etape 1 : une analyse de la situation, médecin par médecin, dans le cadre d'une **Visite Annuelle d'Evaluation (VAE)**, dédiée et formalisée.

Etape 2 : la fixation d'un objectif et le développement d'une stratégie par médecin reposant sur le renforcement de la préférence à la marque à l'aide du **Brand Preference Mix (BPM)**.

Etape 3 : la mise en œuvre de la stratégie individuelle préalablement définie par l'application du principe de la **Visite Médicale Servicielle (VMS)**.

Visite Annuelle d'Evaluation (VAE)

Nous avons constaté que les délégués médicaux ayant le plus souvent une connaissance et une compréhension insuffisantes des médecins qu'ils visitent, il ne leur est par conséquent pas possible d'adapter le contenu de leurs interactions à chacun d'entre eux pour satisfaire leurs attentes spécifiques.
Pour résoudre ce problème, nous suggérons d'organiser une fois par an une VAE au cours de laquelle le délégué médical évaluera l'opinion de chacun des médecins avec lesquels il interagit concernant :

- La réputation de son laboratoire.
- La qualité perçue de ses produits.
- La valeur des services associés.

Ces trois éléments, que nous appelons le *Brand Preference Mix* sont essentiels pour optimiser la préférence des médecins aux marques de médicaments qui, comme nous l'avons indiqué, a un effet direct sur leur part de prescription, et par conséquent sur la part de marché.

OBJECTIF A LONG-TERME

Renforcer la préférence des médecins aux marques

Maintenir une fréquence efficace d'interactions

OBJECTIF A COURT-TERME

2. Brand Preference Mix

B **P** **M**

1. Visite Annuelle d'Evaluation

V **A** **E**

3. Visite Médicale Servicielle

V **M** **S**

Source : J.-M. Peny, Visite Actuelle 267, Juillet-Août-Septembre 2024 –
Smart Pharma Consulting: "Accessing & Convincing Physicians" (Janvier 2024)

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7. Management

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Be a Smart Manager

Not just a good one!

The Seven Tips you can't ignore

"The Smart Manager knows where, why and how to go"

POSITION PAPER June 2017

This position paper introduces our concept of Smart Manager, demonstrates its superiority and recommends tips to switch from a Good Manager to a Smart Manager

Introduction

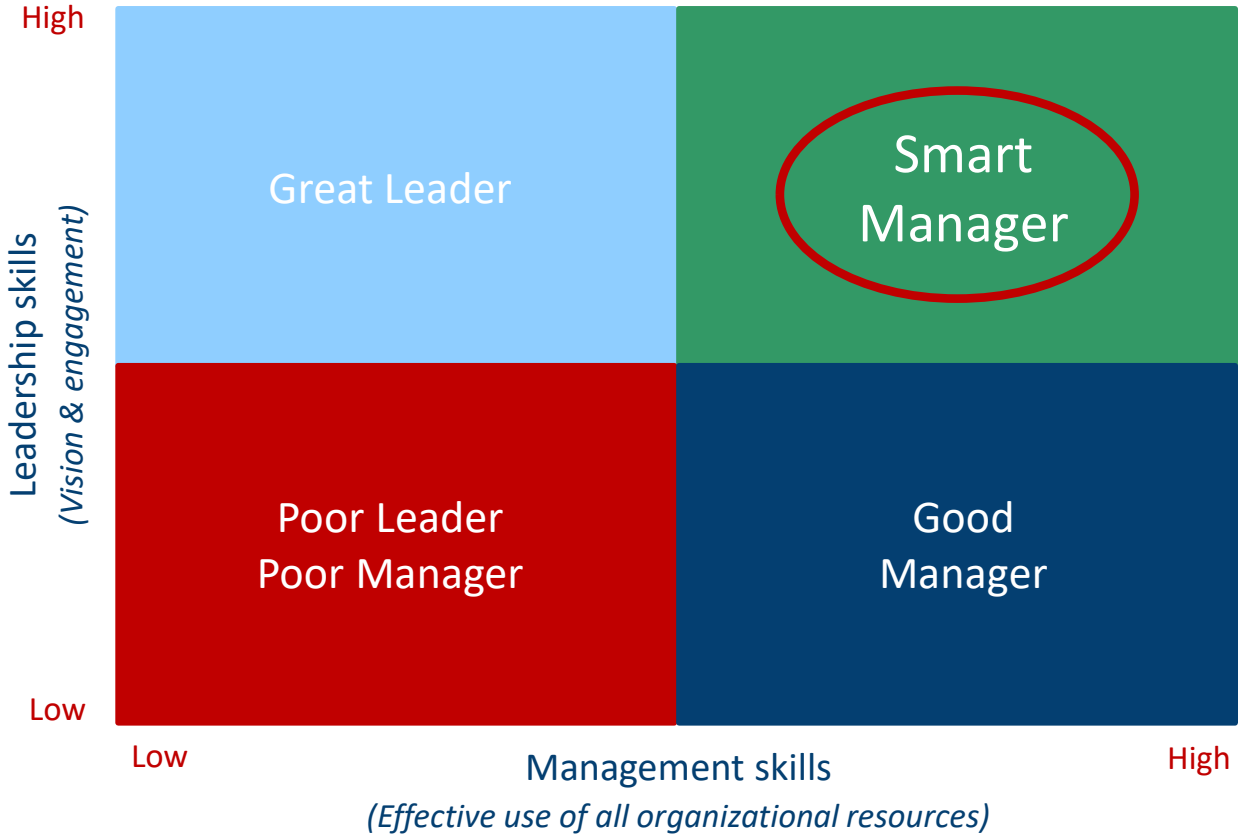
- So many things – often contradictory and rarely applicable – having been said and published about management that it has become **difficult** to **write something new** and **pragmatic**
- **Nevertheless, Smart Pharma Consulting has decided to face the challenge of:**
  - **Demonstrating why being a Good Manager is not sufficient…**
  - **… and why each manager must strive to be a Smart Manager**
  - **Proposing seven tips to become a Smart Manager**
- Our **recommendations** are based on **reference articles** and on our **own experience** of consultant and manager
- **In this position paper, we propose concepts, methods and tools amongst which several have been developed and tested by Smart Pharma Consulting**

"Management is the art of getting things done through people" – *Mary Parker Follet*

Sources: Smart Pharma Consulting

The Smart Manager is a visionary who can keep his collaborators engaged and motivated while meeting company's objectives in an efficient manner

The Manager / Leader matrix



- Leaders show the way to their collaborators by creating and communicating a vision and through their assertiveness. They excel at inspiring and engaging people so that they will strive willingly to reach organizational goals
- Good Managers can plan, organize and monitor the work of organization members, using all available organizational resources to reach a given organizational goal
- Smart Managers combine the skills and competencies of leaders and of good managers. They are also specifically characterized by the following dimensions:
  - High agility of mind to adjust to external and internal changes
  - Perceptual acuity to see change coming
  - Quality of judgment to formulate and select the appropriate solutions
  - Credibility to get decisions accepted by collaborators

Sources: Smart Pharma Consulting, Ram Charan HBR November 2013

The Smart Manager, as we define it, is a Good Manager who knows and understands strategic issues in which its actions and its collaborators actions are framed

The Smart Manager – Definition

Good Managers	Smart Managers
A good Manager is responsible for planning, organizing, directing or monitoring the work of collaborators, while developing them, and taking corrective actions, when necessary, to achieve – in the most efficient manner – the objective set	A Smart Manager knows and understands the environment, can contribute to and express the purpose, the mission, the vision and the values of the company; to engage his collaborators, give a meaning to their actions and frame them within a clear strategy to achieve the shared objective set

Sources: Smart Pharma Consulting

The Smart Manager should be able to participate to the elaboration of purpose, mission, values, vision statements; and ensure they are understood and applied

Tip #1 – Participate to setting Purpose – Mission – Values – Vision

- The Smart Manager contributes to develop the company: Purpose – Mission – Vision – Values
- He translates them at the level of its scope of responsibility[1]…
- He makes sure his collaborators understand, share and comply with them in their daily activities

Purpose
(Why we exist?)

Mission
(What we do and for whom?)

Vision[2]
(What we aspire to become?)

Values
(What we believe in and how we want to behave?)

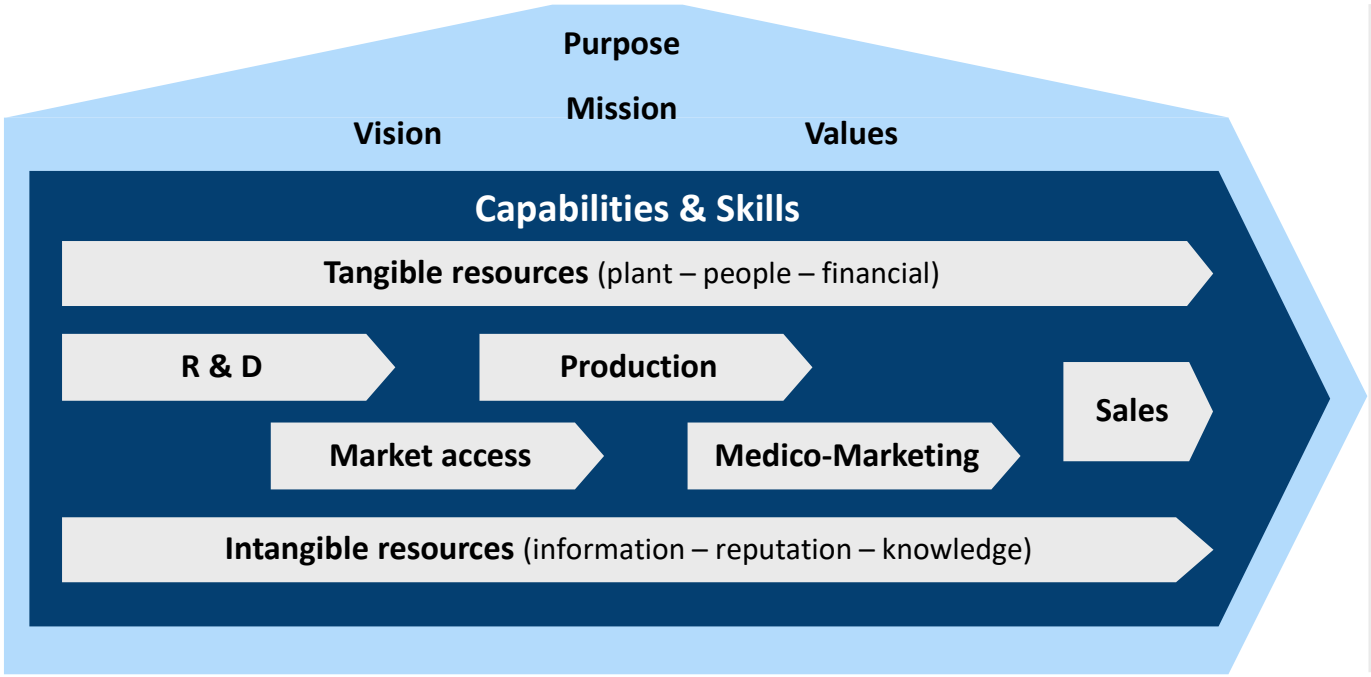
Sources: Adapted from R. Kaplan and D. Norton HBR 2002, by Smart Pharma Consulting

[1] From the CEO level to the First Line Manager
[2] Also called "strategic intent", is an indeterminate mid- to long-term goal

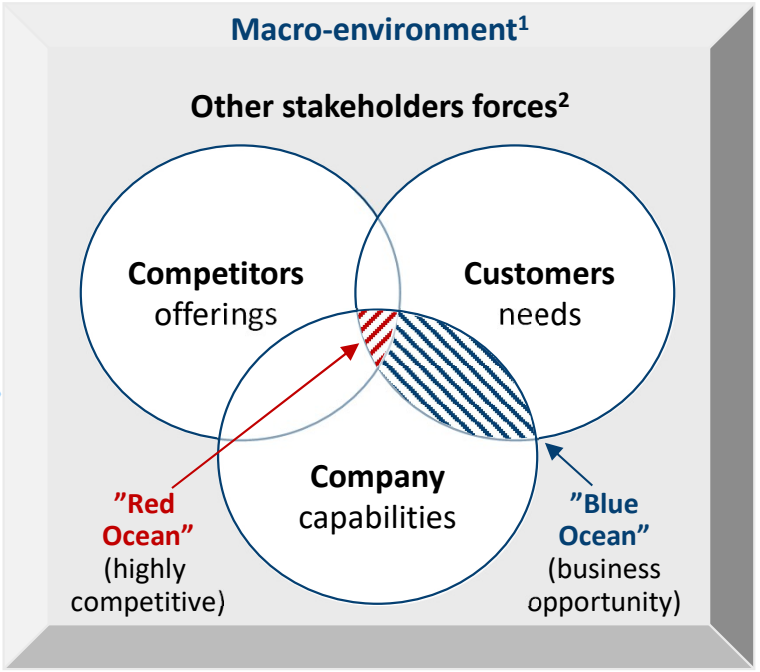
The Smart Manager participates to the crafting of the market strategy and ensures the resources of the company he works for, are efficiently mobilized

Tip #2 – Contribute to the strategy crafting

Company's business model



Market strategy



Strengths & Weaknesses
(Competitive advantage)

Opportunities & Threats
(Attractiveness & Key success factors)

Ambition & Strategic priorities

Sources: Adapted after C. Kim et R. Mauborgne 2005 – D.J. Collis, HBR April 2008, M. Porter 1985 – Smart Pharma Consulting

[1] Political, legal, economic, socio-demographic and technological factors –
[2] Including suppliers, new entrants, substitutes, complements

The Smart Manager will manage by mutual benefits (MBMB) to give a sense of purpose to his collaborators and thus to get their full and sustainable engagement

Tip #3 – Manage By Mutual Benefits

MBO[1]
(Management By Objectives)

- Definition of objectives agreed by both management and employees
- Well-adapted to vertical management models
- However, by focusing on results, the way to achieve them (the planning) can be overlooked and lead to suboptimal efficiency
- Does not favor innovation nor flexibility

MBMB
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- Creates mutual benefits and value by fulfilling the respective expectations of employees and employers
- Maximize the probability to obtain the full engagement of employees
- Requires from managers to (better) satisfy collaborators …
- … to create favorable conditions to secure a higher quality of execution that will lead to better results

Sources: Smart Pharma Consulting

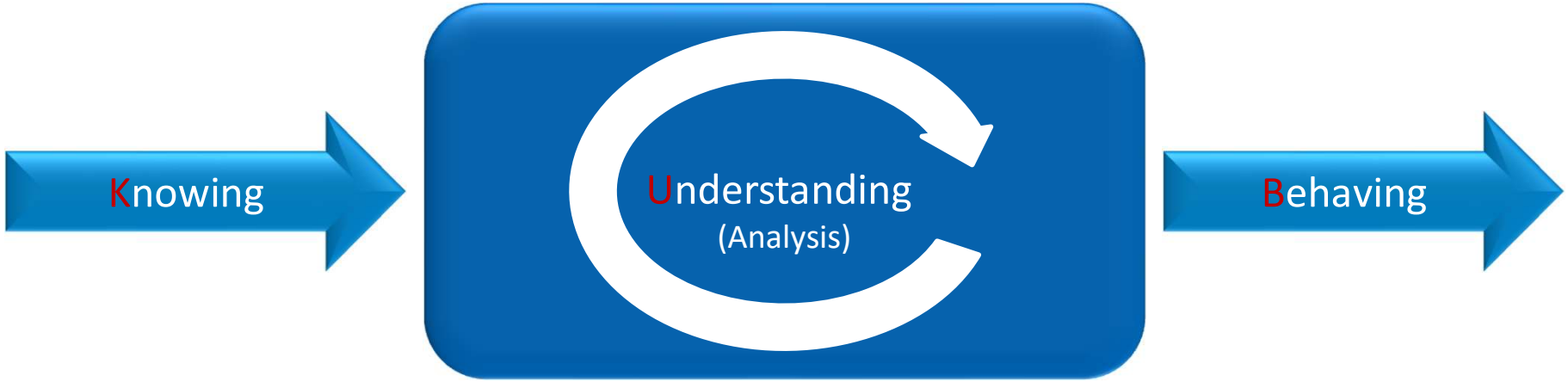
[1] The term was coined by Peter Drucker in 1954 in the book "The practice of Management"

The Smart Manager should use the Smart Index to develop his own competence as well as the ones of his collaborators in a structured and efficient manner

Tip #4 – Use the Smart Index (1/2)

- The Smart Index is a tool which structures the development of competences around 3 components:

Smart index = Knowing x Understanding x Behaving



"Any fool can know. The point is to understand" – *Albert Einstein*

Sources: Smart Pharma Consulting

The Smart Manager differs from the Good Manager, mainly by his much higher analytical and behavioral skills

Tip #4 – Use the Smart Index (2/2)

- Managers should focus their efforts on one or several components of the Smart Index:

Smart index = Knowing x Understanding x Behaving

Knowing

Precise – Reliable – Relevant

knowledge of Facts & Figures

Understanding

In-depth & Robust

analytical skills and fact-based decision making

Behaving

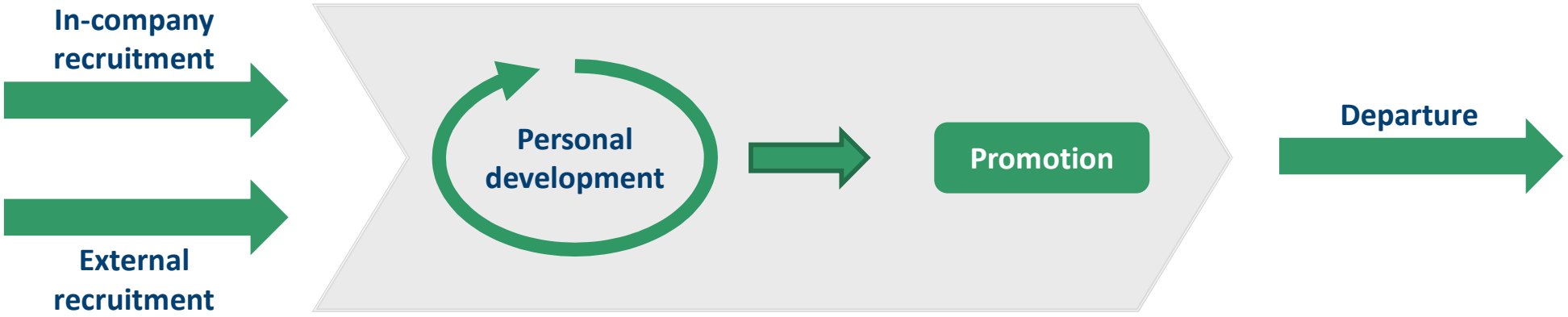
Planning, Organizing, Directing & Monitoring

to guarantee the quality of execution and keep collaborators engaged

Sources: Smart Pharma Consulting

The Smart Manager can attract the best performers, to develop them and make them feel strongly engaged, while granting them the level of autonomy they deserve

Tip #5 – Manage dynamically collaborators



- Scout and recruit gifted people
- Highlight the mutual benefits expected from collaboration

- Give them a sense of purpose
- Develop & motivate them
- Grant autonomy based on ability

- Do not keep those who under-perform
- Make sure all departures occur in a fair and nice way

"Alone we go faster, together we go further" – *African proverb*

Sources: Smart Pharma Consulting

A Smart Manager creates the conditions to stimulate the passion of his collaborators for their job, which will prompt them to give their best to achieve their objectives

Tip #6 – Stimulate job passion

Job passion is influenced by **six key drivers**:

Passion is expressed by:

"Pleasure in the job puts perfection in the work"

Aristotle

Sources: Smart Pharma Consulting

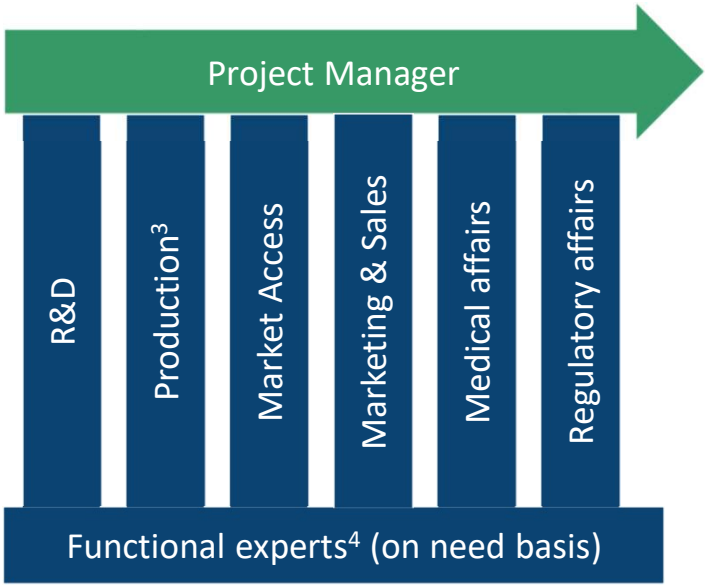
The Smart Manager will adopt a management model considering the business constraints, the company's goal, the strategic priorities and the collaborators' skills

Tip #7 – Adopt the right management model – Typology

Vertical Management Model[1]
(Hierarchical management)

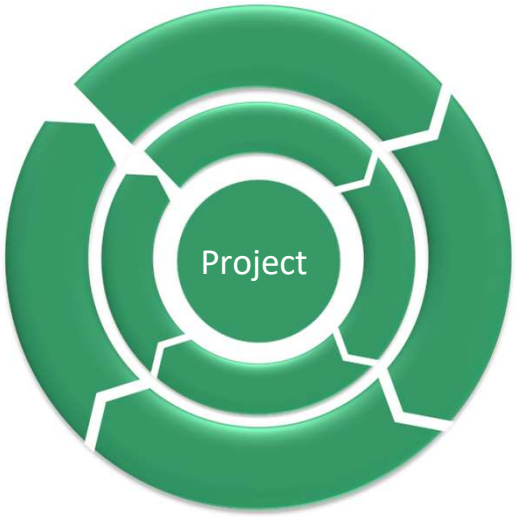
Effective but too rigid to adapt to situational changes

Horizontal Management Model[1]
(Transversal management)



Adapted to multifunctional tasks but problems of prioritization

Concentric Management Model[2]
(Decentralized management)



Adapted to fast-moving situations but requires a change in mindset

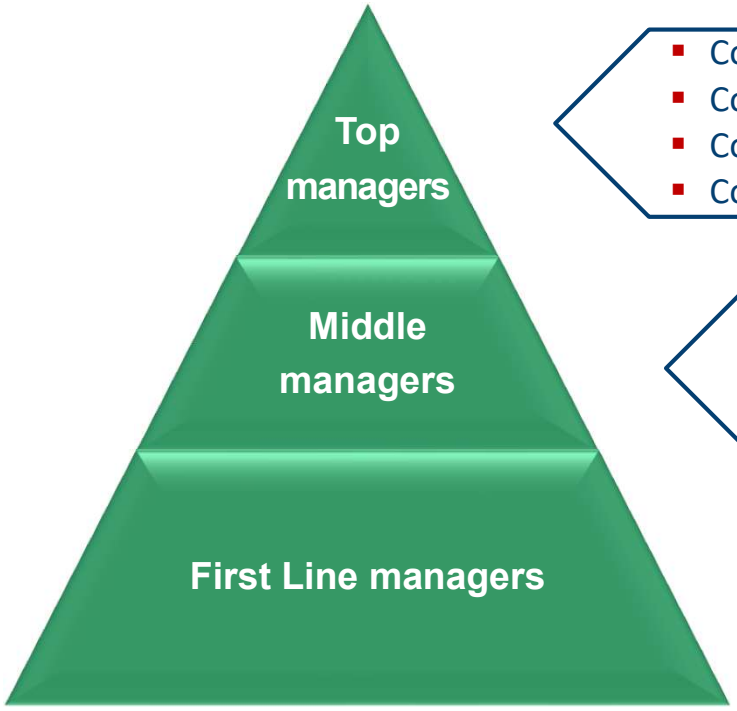
Sources: Smart Pharma Consulting

[1] These two models co-exist in most of big and mid pharma companies – [2] This type of model is of interest in situations requiring flexibility, adaptability and more responsiveness to change – [3] Including logistics – [4] Finance, Human resources, Procurement, etc.

This "Command & Control" management model is efficient, facilitating decision-making and monitoring, but often too rigid to efficiently adapt to situational changes

Tip #7 – Adopt the right management model – Vertical Management Model

The vertical management model is hierarchical, with managers passing information and orders from the top to the bottom. The chain of command is well-defined, and the level of control is in general high



Roles & Responsibilities of Managers

- Corporate purpose, mission, vision and values determination
- Corporate objectives, strategy (incl. M&A) and budget setting
- Corporate organization design and policy making
- Coordination and control of activities across departments[1]

- Implementation of the corporate strategy and organizational directives
- Crafting of the strategy and corresponding tactics to achieve the objective set for their department, while ensuring an efficient resource allocation
- Management of First Line Managers of their department
- Coordination and control of activities of their department

- Implementation of the strategy and the supportive operational activities, directly or, by managing their subordinates (e.g., medical representatives) within the limits of their budget
- Management, daily, of their subordinates

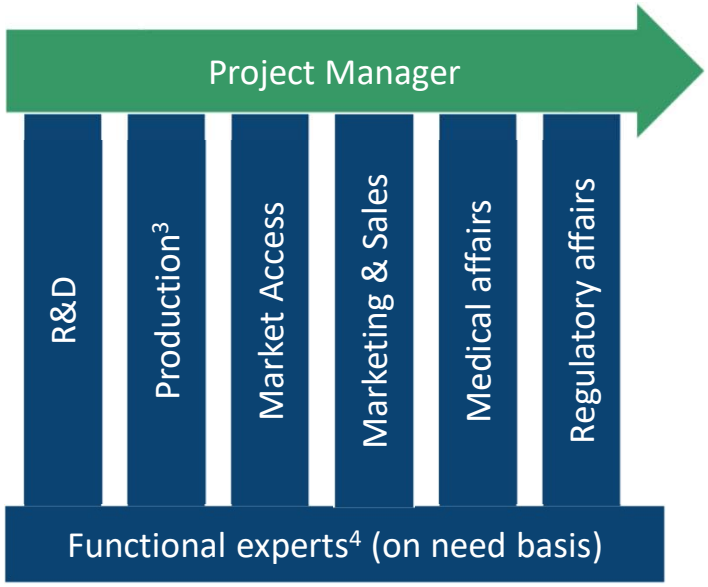
Sources: Smart Pharma Consulting

[1] *R&D, Production, Market Access, Marketing & Sales, Medical affairs, Regulatory affairs, Finance, Human resources, procurement, etc.*

Project managers role is to specify, organize and plan the execution of projects, while creating and sustaining the engagement of team members until their closing

Tip #7 – Adopt the right management model – Horizontal Management Model[1]

The horizontal management model has a less-defined chain of command, and the priority is given to work in teams around projects or specific tasks, led by project managers or team leaders, respectively



Roles & Responsibilities of Project Managers

- Project management requires the mobilization of financial and expert resources from different departments[2] on an *ad hoc* basis to achieve a clearly defined objective
- Project Managers, like managers of the Vertical Management Model, must plan, organize, direct and monitor the work of functional experts that have been assigned to the project and take corrective actions, whenever required
- Thus, they animate the project team (definition of roles and responsibilities, consciousness raising, mobilization, communication, delegation, control) to carry out the project to its term within the time and budget constraints set
- Functional experts report, during the project, to the Project Manager whose authority flows horizontally across departments boundaries, but they also continue to report to the head of their department whose authority flows downwards (vertically)

Sources: Smart Pharma Consulting

[1] This type of organization is also called matrix organization – [2] R&D, Production, Market Access, Marketing & Sales, Medical affairs, Regulatory affairs, Finance, Human resources, procurement, etc. – [3] Including logistics

Concentric management model, like holacracy, is a hybrid model ensuring reliability of hierarchical organizations and adaptability of self-managed organizations

Tip #7 – Adopt the right management model – Concentric Management Model

This is a decentralized model of management which organizes companies around the work that needs to be done instead of people who do it. It makes companies more flexible, more adaptable and more responsive to change

Holacracy[1]

Roles & Responsibilities

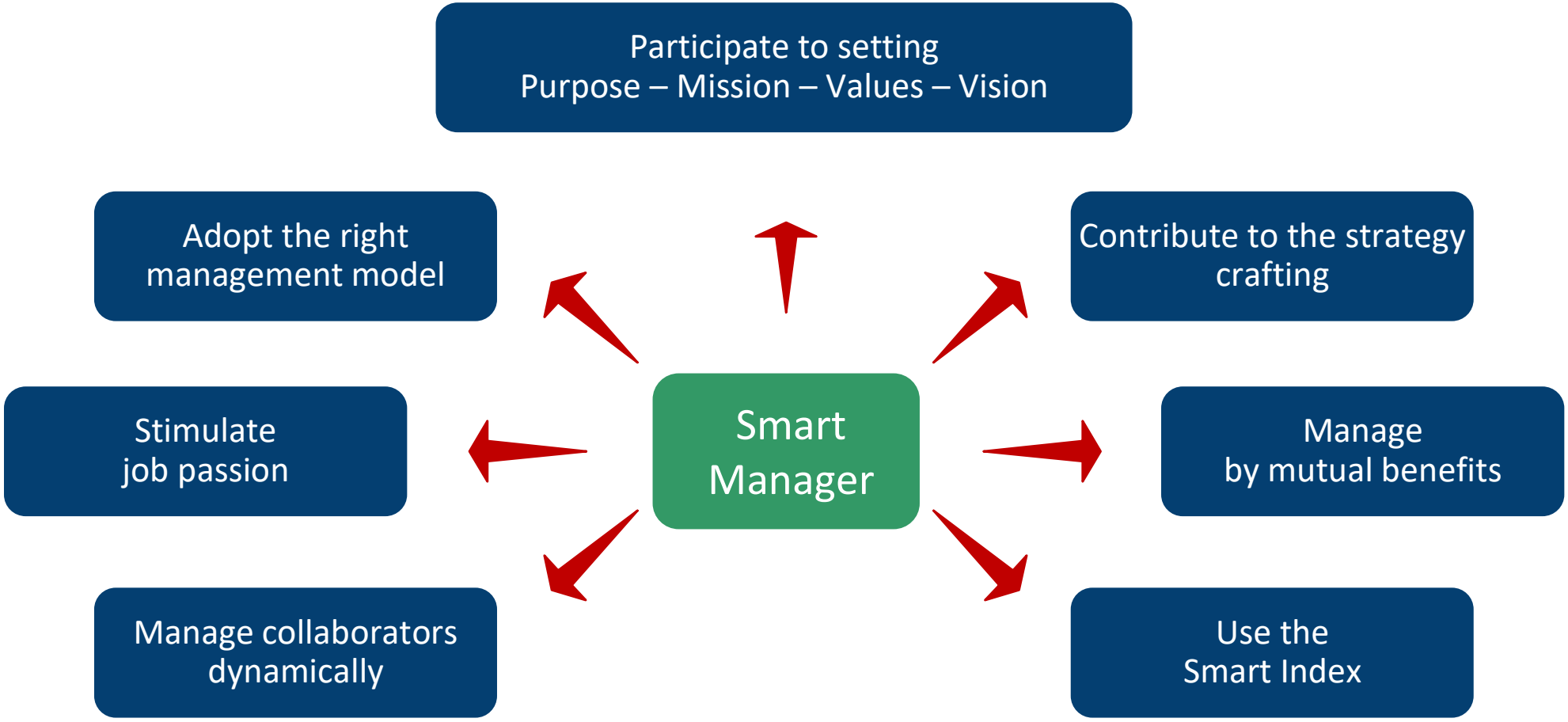
- A "constitution" sets the rules of the game and redistributes responsibilities
- Holacracy is organized as a series of nested teams (circles) made up of a set of roles, grouped together around specific project teams, departments, business units, support functions, etc.
- Roles' definition is constantly updated and clarified based on the day-to-day needs of the teams
- The people who know the most the work to be done are empowered
- People fill multiple roles, and thus are members of several teams
- Teams have their own governance which is an ongoing process
- Issues are added to the agenda when any team member senses a gap between how things are and how they could be addressed in a consensus manner
- Holacracy creates fast and agile organizations to solve tactical issues

Sources: E. Bernstein et al. HBR 2016, David Allen 2016, B. J. Robertson 2015

[1] The term holacracy comes from holarchy which has been coined by Arthur Koestler to describe the way the nature is organized (i.e., a whole being a part of a larger whole like an organ being a part of the body)

Becoming a Smart Manager requires a permanent effort that should be focused, in priority, at excelling in each of the seven tips that have been proposed

Seven tips to become a Smart Manager



Sources: Smart Pharma Consulting

Smart Pharma Consulting can help pharma companies transform Good Managers into Smart Managers through various modes of collaboration

Smart Pharma Consulting Services

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

The Personal Brand Optimizer…

… to Get Preferred

POSITION PAPER September 2023

Smart Pharma Consulting has developed a new concept to boost the Personal Brand Value of pharma companies' collaborators, called the "Personal Brand Optimizer"

Introduction

CONTEXT

- Smart Pharma Consulting has invented, in the 90's, the concept of "Brand Preference Mix" and carried out many projects for pharma companies to enhance the preference of their stakeholders[1] to the drugs they market
- The "Brand Preference Mix" is thus based on the activation of the three following determinants:
  - The perception of the drugs
  - The value of the associated services
  - The corporate reputation

  from stakeholders' perspective

OBJECTIVE

- The "Brand Preference Mix" of drugs being strongly influenced by the Personal Brand Value of pharma companies' collaborators,…
- … it is essential to help them raise it
- For so doing, Smart Pharma Consulting has developed the concept of:

  Personal Brand Optimizer

- This position paper's objective is to show the benefit of boosting collaborators Personal Brand Value and…
- … to propose a concept, a tool and a method to do so

Sources: Smart Pharma Consulting

[1] *Such as physicians, pharmacists, patients, health authorities, payers*

The Personal Brand Optimizer contributes to raise the preference of internal and external stakeholders through the activation of key levers, specific to everyone

Introduction

DEFINITIONS

Personal Branding

- Like products and services, people have a personal brand that they manage with more or less success
- Personal brand, resulting from a personal branding process, is based on the identity, opinion, behavior, goals, achievements, etc., of individuals
- Personal branding is a key driver of personal reputation which has shown to have a strong influence on corporate reputation

Personal Brand Preference

- Developing a good Personal Brand may not be sufficient to achieve personal and corporate goals…
- … because individuals operate in an internal and external competitive environment
- Therefore, individuals should strive to get preferred by:
  - Internal (i.e., colleagues) and
  - External (i.e., authorities, customers, competitors)

  stakeholders

Personal Brand Optimizer

- In continuity with the "Brand Preference Mix[1]" developed for drugs, the "Personal Brand Optimizer" is based on the three following personal levers:
  - Background
  - Personality
  - Reputation

  and to the extent they induce stakeholders' preference from individuals compared to others

Sources: "A new Approach to Building Your Personal Brand" by J. Avery et al., HBR (May-June 2023) – Smart Pharma Consulting

[1] *"Building Prescriber Loyalty" by J.-M. Peny et al, SCRIP Magazine (September 1993) – https://smart-pharma.com/wp-content/uploads/2019/07/Stakeholders-Brand-Preference-Mix-2016-EN-web.pdf*

The process of Personal Branding can influence – positively or negatively – the company brand, the product brand and the career progression of individuals

Personal Branding in the business environment

As a driver for Company Brand

- In some cases, the Personal Brand of CEOs impacts their company brand, such as:
  - Jeff Bezos at Amazon
  - Warren Buffet at Berkshire Hathaway
  - Steve Jobs at Apple
  - Jack Welch at General Electric

As a driver for Product Brand

- Whatever their position, the Personal Brand of employees interacting with customers may have a significant impact on the perception of:
  - Products
    and/or
  - Services sold

As a driver for oneself

- Personal Branding can boost the career of employees
- Professional advancement is more than competencies and experience…
- … it is also driven by personality and reputation

Sources: "Approach Your personal Brand Like a Project Manager" by D. Clark et al., HBR (May 13, 2022) – Smart Pharma Consulting

The challenge is to develop a Personal Brand superior to that of others, from internal and/or external stakeholders' perspective

From Personal Brand to Personal Brand Preference

Having a good Personal Brand is **nice**

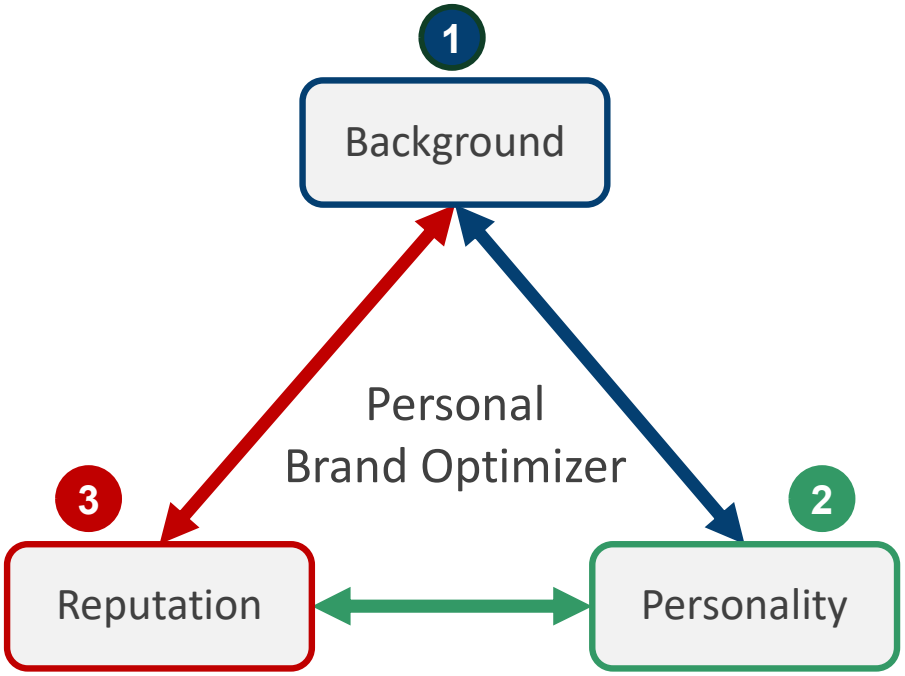
Having a preferred Personal Brand is **better**

- Living in a competitive world,…
- **… it is essential for individuals to develop their Personal Brand in relationships with others and not in isolation**
- Thus, they should strive to develop a **Personal Brand more attractive than that of others**

Sources: Smart Pharma Consulting

The Personal Brand Optimizer is an innovative concept to strengthen the preference of stakeholders for individuals

Personal Brand Optimizer – Introduction



"The purpose of the Personal Brand Optimizer is to build a differentiated and appealing image"

- In the pharma industry context, to reinforce the preference of external stakeholders, such as:
  - Authorities / regulators
  - Prescribers and other healthcare professionals
  - Patients and Patient Advocacy Groups (PAGs)
  - Distributors
  - Buyers
  - Payers…

  … for pharma companies' collaborators…

  … three components can be leveraged:

  1. Their background
  2. Their personality
  3. Their personal reputation
- These three components are strongly interdependent

Sources: Smart Pharma Consulting

If the perceived quality of education, especially in the pharma industry, is important, it is however not enough to make a substantial difference in the eyes of stakeholders

Personal Brand Optimizer – Background (1/2)

1 Background

"All genuine education comes about through experience"
John Dewey

"Education is what remains after one has forgotten what one has learned in school"
Albert Einstein

- Regarding education, the following components:
  - Where individuals have studied (i.e., university, country)
  - The academic program (e.g., engineering, management, medicine)
  - The level of degrees (e.g., bachelor or master degree, PhD)
  - The internships made
  - The participation in a student exchange program abroad
  - Etc.

  serve as evidence that you have acquired certain skills
- Extracurricular activities (e.g., sport, arts, travels, humanitarian actions, social activities, membership to the co-op and/or the junior enterprise, summer jobs) may help differentiate individuals from their university alumni
- Whatever differentiates favorably to stand out from the crowd in the eyes of the audience should be leveraged by individuals

"I made the choice to recruit one consultant who has won several national and international chess competitions"

"A consulting firm has chosen me for a job because they liked the fact that I sold praline-coated peanuts during my summer holidays"

Sources: Smart Pharma Consulting

Experience is an essential complement to education, the relative importance of which increases over time, but both should be carefully communicated

Personal Brand Optimizer – Background (2/2)

1 Background

"The only source of knowledge is experience"
Albert Einstein

"Experience is simply the name we give our mistakes"
Oscar Wilde

- Education and work experience should not be opposed because they complement each other
- However, success in work tells stakeholders, either employers, peers or clients, more about what individuals can offer
- Positions held and the companies the individuals worked for provide information and generate assumptions regarding their credibility and their likely skills to stakeholders, before even having met or talked to them
- The relative importance of experience vs. education will depend on when the degrees[1] have been obtained and the type of job individuals apply for, or carry out[2]
- Education and experience are both essential to differentiate individuals from the crowd, but not always sufficient to make them unique and get preferred

"When recruiting or promoting a marketing or sales executive, pharma companies used to give a special emphasis to work experience and results"

"In general, KOLs[3] prefer to collaborate with pharma companies' employees who have the same education / specialty as them"

Sources: Smart Pharma Consulting

[1] Having obtained a degree 20 years ago does not have the same impact as one year ago – [2] Work experience is often more valued than education for sales jobs – [3] Key Opinion Leaders

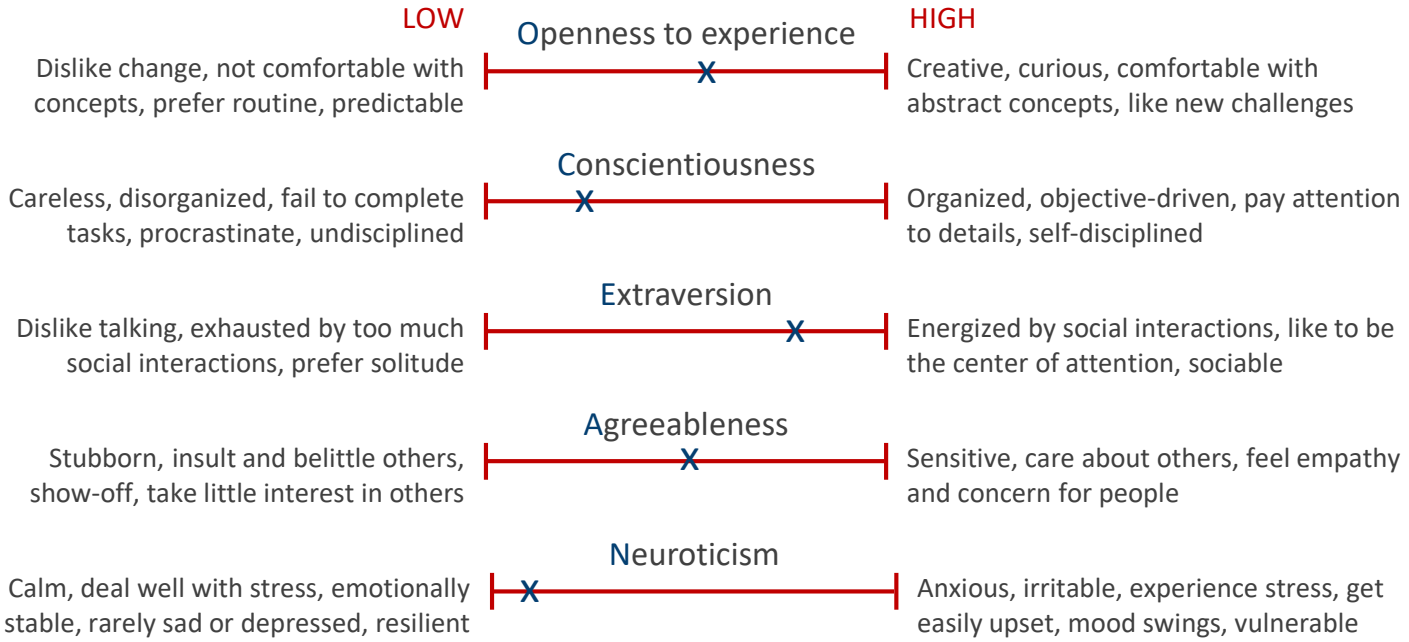
The personality of individuals and its corresponding expression – that are essential to be perceived as positively unique – can be described and assessed with The Big Five Model

Personal Brand Optimizer – Personality (1/2)

2 Personality

"Worry about your character, not your reputation"
John Wooden

- Personality can be defined as "individual differences in characteristic patterns of thinking, feeling, and behaving" *(American Psychological Association)*
- The Big Five Model[1] is the most widely accepted and used personality theory because of its simplicity and easiness to implement
- Individuals are ranked on a scale between the two extreme ends of its five dimensions:



Sources: K. Cherry, March 2023, https://www.verywellmind.com/the-big-five-personality-dimensions-2795422 – Smart Pharma Consulting

[1] Also named "The 5-factor Model" and "The OCEAN Model", OCEAN standing for: Openness to experience, Conscientiousness, Extraversion, Agreeableness, Neuroticism. This personality model is influenced by both nature and nurture

The Big Five Model can help individuals determine the dimensions and related characteristics to leverage and/or correct to better fit their job and become more appealing to their stakeholders

Personal Brand Optimizer – Personality (2/2)

2 Personality

"Your character is who you are, your reputation is who people think you are"
John Wooden

- The Big Five Model enables to **predict the appropriateness of an individual for a job:**

Openness to experience	– Is positively linked to individual pro-activity but… – … negatively to team efficiency
Conscientiousness	– Is a strong indicator related to job performance
Extraversion	– Reflects leadership as well as… – … management and sales skills
Agreeableness & Neuroticism	– Reflect ability to work in a team while… – … agreeableness is negatively related to individual proactivity

- It is also useful to help individuals adjust their personality, by selecting the score they want to improve, through specific interventions such as:
  - Mindfulness-based activities for openness and agreeableness
  - Management training and coaching for conscientiousness
  - Cognitive-Behavioral Therapy for neuroticism, etc.

Sources: A. G.Y. Lim, July 2023, https://www.simplypsychology.org/big-five-personality.html – O.P. John & al., 1999, Handbook of personality: Theory and research (Vol. 2) – Smart Pharma Consulting

Personal reputation which is based on the perception of stakeholders and the opinion they convey about individuals, is a key driver of personal brand preference

Personal Brand Optimizer – Reputation (1/2)

3 Reputation

"The way to gain a good reputation is to endeavor to be what you desire to appear"
Socrates

- Personal reputation reflects personal brand
- Personal reputation is driven by stakeholders' perception – whether based on true or false data – and that perception becomes their reality
- A good personal reputation is built through good words from stakeholders…
- … based on personal appealing and congruent values, goals, motives, aspirations and communication

"You can't buy a good reputation; you must earn it" – Harvey Mackay

- Personal reputation cannot be changed easily, so its management should be carried out cautiously and according to a thought-through strategy
- Knowing that it is impossible to please everyone, it is essential to define a target audience to whom personal reputation will be managed as a priority
- Then, individuals should be clear about what do they want to be recognized for…
- … and communicate accordingly, choosing the social media that will best communicate their content to their target audience

Sources: Smart Pharma Consulting

Developing an outstanding personal reputation is an ongoing effort requiring a precise target audience, a clear objective, a cautious strategy and a meticulous execution

Personal Brand Optimizer – Reputation (2/2)

3 Reputation

"It takes 20 years to build a reputation and five minutes to ruin it"
Warren Buffett

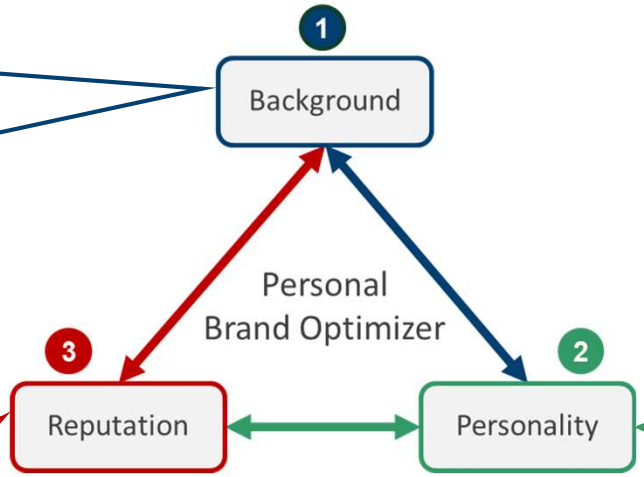
- Target audience: what is the perception individuals want to generate to whom?
  - Customer – Employer – Colleagues – Competitors
- Goal and strategy: what do they want to be recognized for?
- Communication:
  - Content: what should they communicate about?
    - Everything they say, write, post, photograph and do will impact their brand
    - The information, analysis, recommendations, opinions, etc., they convey should be carefully selected so that to serve their personal branding
    - They should not try to have an opinion of everything, but rather focus on a limited number of topics to position themselves in a clear and strong way
  - Channels: what are the best channels to use in the pharma business context?
    - The choice of social media is not neutral, so it should be adapted to the target audience and the content to be conveyed (LinkedIn should be preferred; while Facebook, Instagram, X (formerly Twitter), Tik Tok should be used very cautiously)
    - Other channels, such as face-to-face or remote interactions, lectures, articles, e-mails, mails, are also very important
  - Frequency: the release of content should be regular – without over-saturating the channel – to keep a high level of visibility

Sources: Smart Pharma Consulting

The Personal Brand diagnosis should be carried out in a pragmatic but rigorous manner because it is the starting point to enhance the Personal Brand Preference

Personal Brand Optimizer – Diagnosis

- What are your education, experiences, achievements?
- What do they convey?
- How do they influence your reputation and your personality?
- How do you leverage them to boost your reputation?



- What is your mindset[1] based on your perception of the environment?
- What is your attitude[2] that is influenced by your mindset and your experiences?
- What is your behavior[3] that is influenced by your attitude?
- How does your personality impact your reputation…
- … and is impacted by your background?

- What is your level of visibility / awareness?
- What is the perception of your stakeholders?
- Why do your stakeholders have this opinion about you?
- How do you leverage your background and personality to enhance your reputation?

- How are you perceived by your stakeholders?
- What makes you stand out?
- How important is your notoriety?
- How much influence do you have?
- Are your personal brand and reputation aligned?

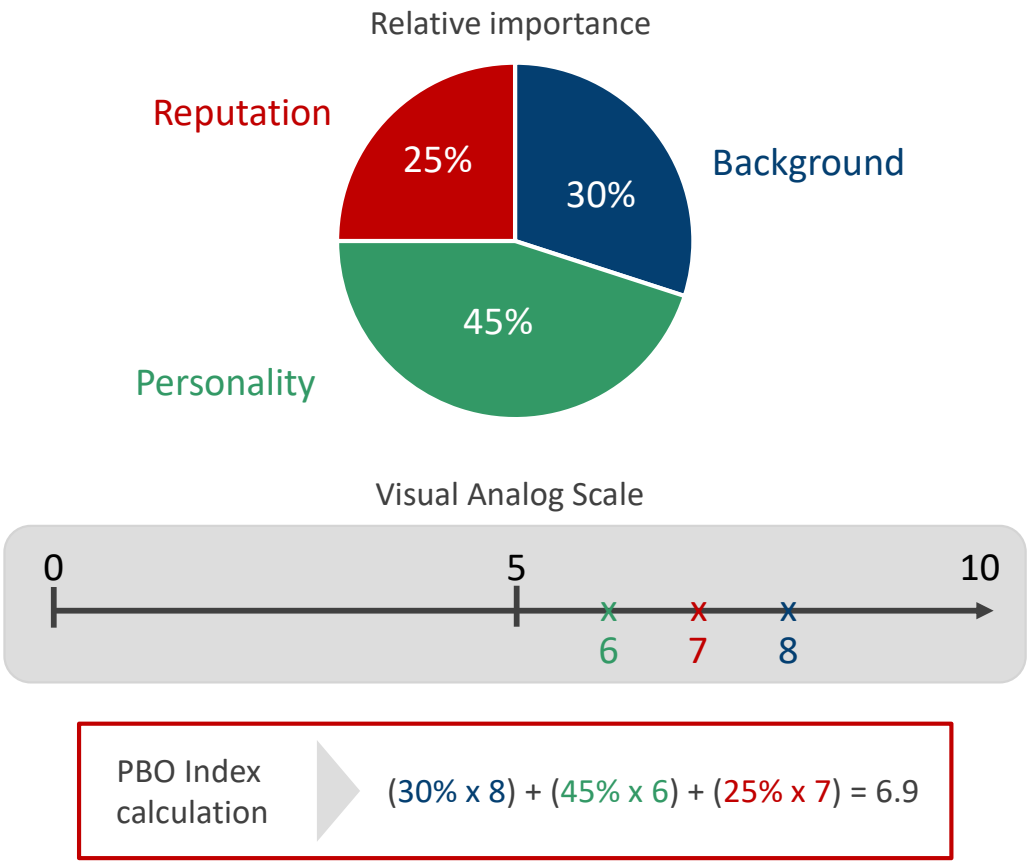
Sources: "What's the Point of a Personal Brand?" by H. Monarth, HBR (February 17, 2022) – Smart Pharma Consulting

[1] Beliefs, thoughts, values, what you are from within – [2] Thinking process – [3] Acts and conducts

The Personal Brand Optimizer Index is a practical tool to assess the performance of individuals on its three components and the progress made between two periods

Personal Brand Optimizer – Assessment tool

Illustrative



- The Personal Brand Optimizer Index (PBO-I) enables to measure, by stakeholder or group of stakeholders[1]:
  - The relative importance of the three components of the Personal Brand Optimizer (i.e., Background, Reputation, Personality)
  - The perceived image on a scale of 0 to 10
- The PBO-I should be used to evaluate:
  - The perception of stakeholders (or a precise target audience) and its evolution over time
  - That perception compared to other individuals (e.g., colleagues, competitors)
- In addition to this measurement, it is essential to:
  - Identify the root-causes underlying the stakeholders' opinion and…
  - … seek their suggestions for improvement

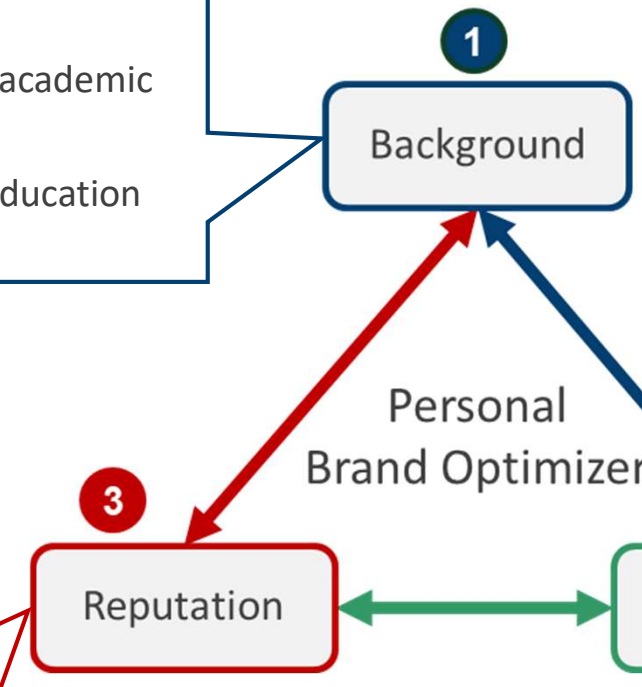
Sources: Smart Pharma Consulting

[1] *Alternatively, a self-assessment can be considered and complemented with the feedback of few people who know you well enough and who will be objective*

To optimize the Personal Brand, it is essential to comply with the following general recommendations, that should be completed with measures based on individual diagnoses

Personal Brand Optimizer – General recommendations

- Capitalize on your education, skills and experience
- Develop your skills through executive academic programs and new experiences
- Communicate on key learnings from education and experience



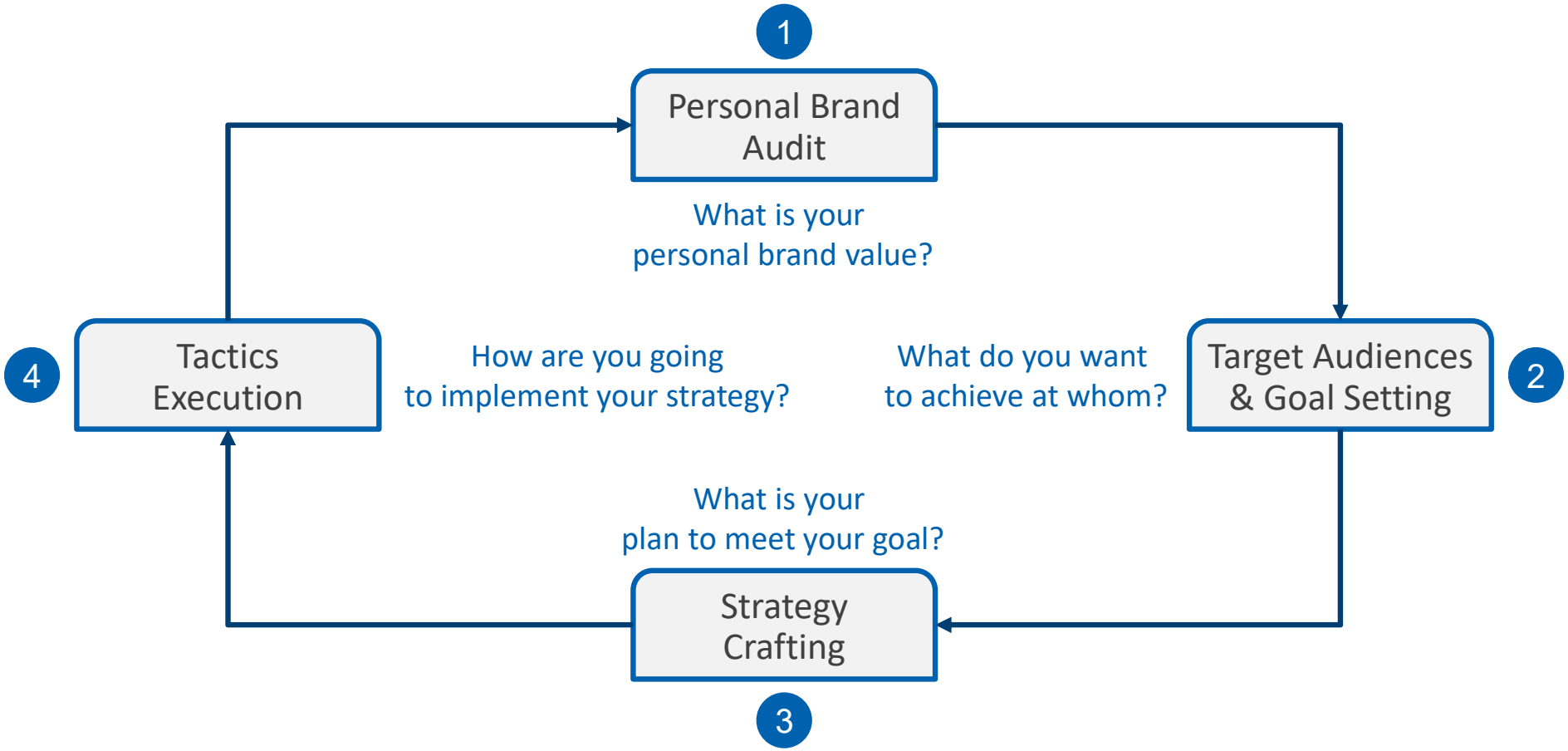
- Highlight your skills, interests, and how they might benefit stakeholders
- Differentiate positively from others through your background and personality
- Leverage your reputation and e-reputation
- Be sincere in whatever you do

- Manage carefully your reputation and e-reputation
- Develop a network within and outside of the company (social connections and relationships)
- Communicate on your background and personality, while broadening your audience to increase your visibility

Sources: Smart Pharma Consulting

To optimize your Personal Brand or that of your collaborators, we propose a straightforward and practical process designed in four steps

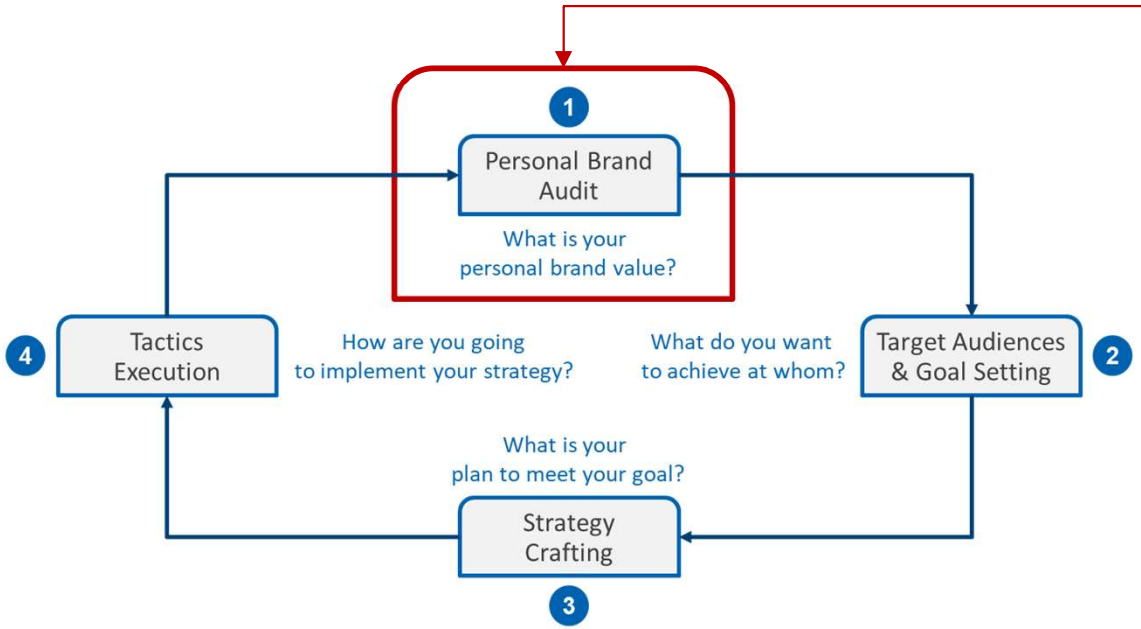
Personal Brand Optimizer – Implementation process (1/5)



Sources: Smart Pharma Consulting

The Personal Brand Audit evaluates where you stand, what professional and personal unique attributes you can leverage and the weaknesses you should correct

Personal Brand Optimizer – Implementation process (2/5)



"If your Personal Brand is not aligned with the corporate brand, you may not be at the right place or be the right collaborator"

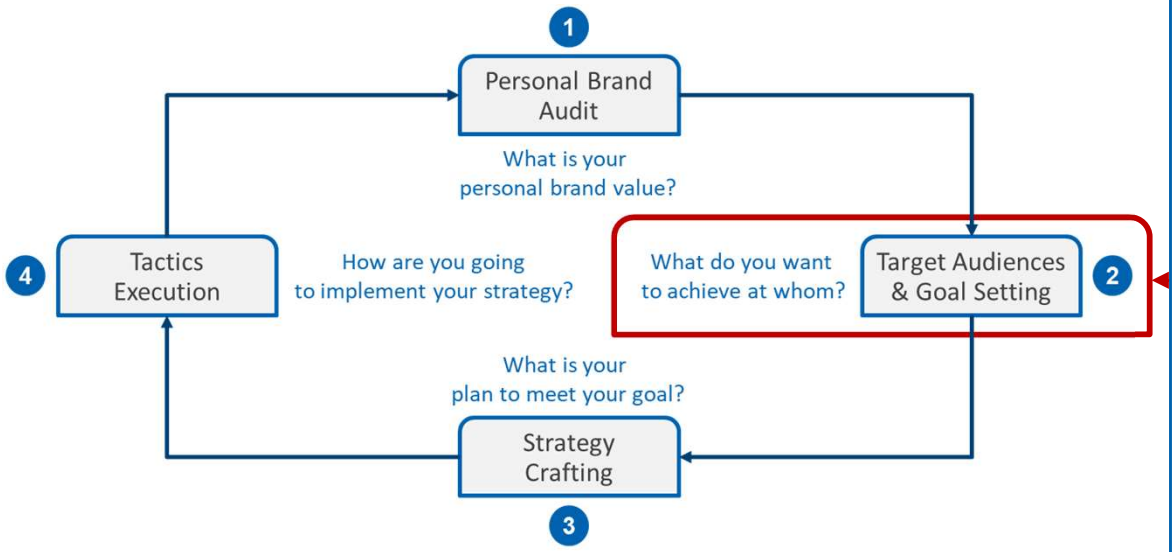
- The three components of the Personal Brand:
  - The background
  - The personality
  - The reputation

  can be evaluated with the Personal Brand Optimizer Index (PBO-I)
- Each component is supported by a variety of attributes that should be selected and analyzed according to:
  - The audience
  - The goal
- To do so, it is possible to carry out:
  - A survey of stakeholders you target
  - A self-assessment, ideally completed by the feedback of trustful and objective people

Sources: Smart Pharma Consulting

If it is possible to address different target audiences with associated specific goals, you should make sure they will not lead to strategies creating inconsistent value propositions and perceptions

Personal Brand Optimizer – Implementation process (3/5)



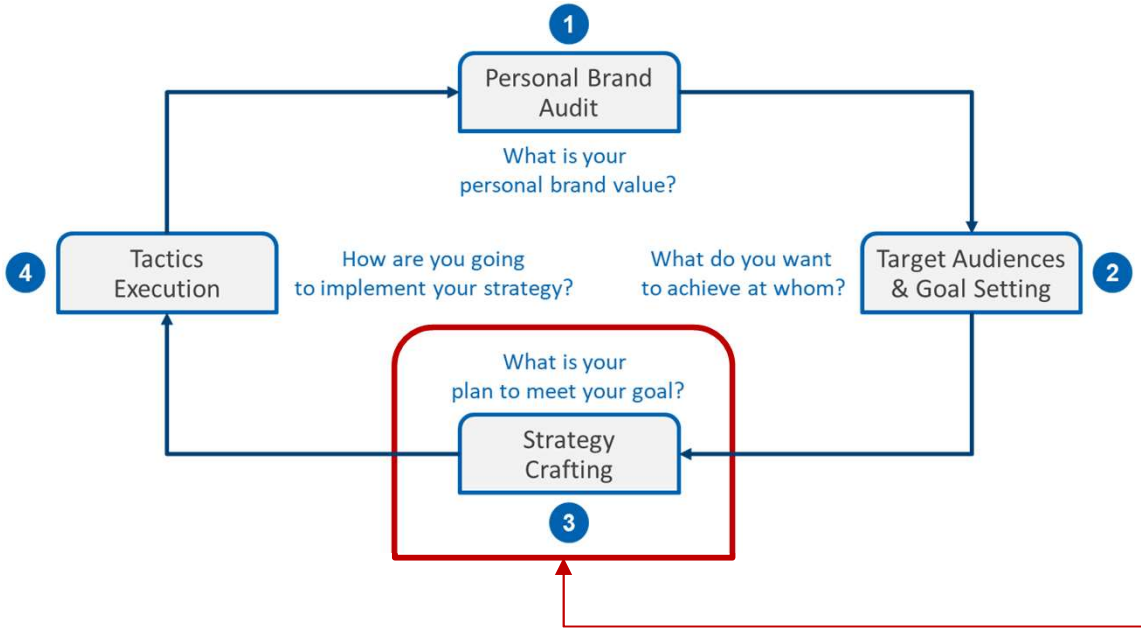
"Different audiences require different goals and thus strategies, while ensuring however a consistent Personal Brand"

- The target audiences should be clearly defined (e.g., customers, colleagues, competitors):
  - To whom would you like to make a good impression?
  - Why have you targeted these audiences?
- The goal should be set considering the following structuring elements:
  - Where do you stand, based on the outcomes of your Personal Brand Audit (step 1)?
  - What do you want and realistically can achieve in a given timeframe?
- The target audiences and the aim pursued are two essential factors to craft the strategy, knowing that it is possible to develop different perceptions according to different target audiences, provided they are consistent with each other

Sources: Smart Pharma Consulting

Personal Brand strategy which consists in elaborating a trustful and attractive personal story to shift positively the target audiences' perception, takes some time to provide significant results

Personal Brand Optimizer – Implementation process (4/5)



"Personal Branding is all about trust…
… packaged into a compelling story"

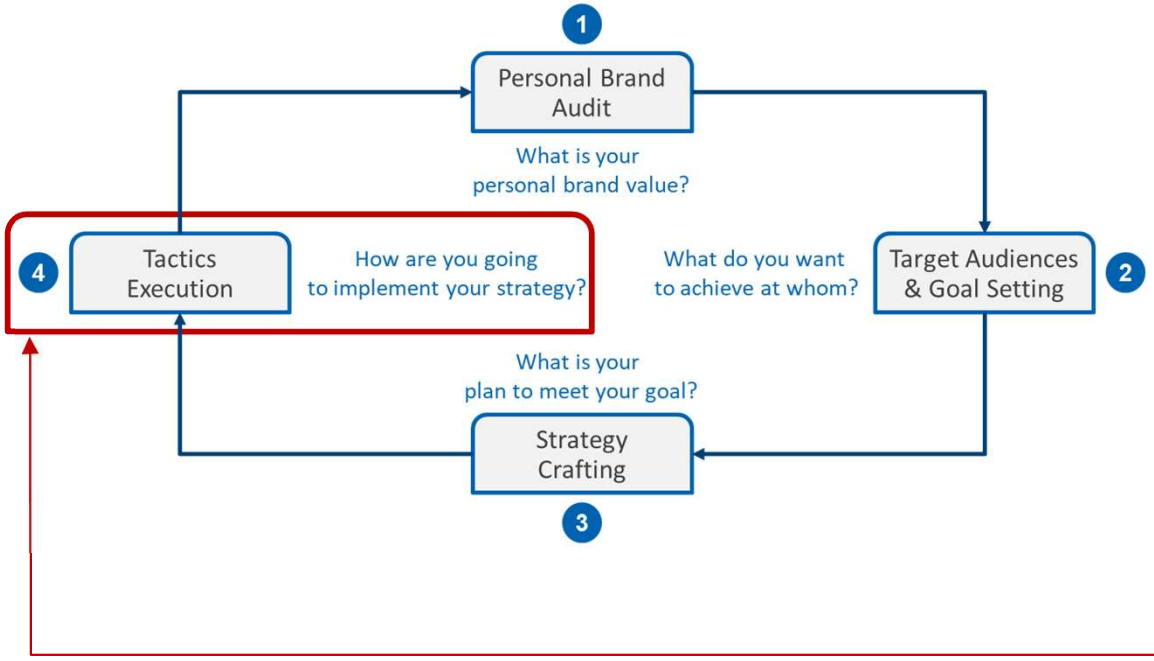
- The Personal Brand strategy is about determining how you can most cultivate positive reactions in your audiences through strategic planning, based on their needs that you will attempt to satisfy
- Thus, the crafted strategy should:
  - Be congruent with your core values, which should guide your opinions and behaviors
  - Increase exposure for your positive attributes and those which are unique to you (points of difference and of preference)
  - Showcase your experience, expertise and the unique traits of your personality (e.g., values, field of interests) with tangible facts and by telling stories
  - Develop your network within and outside of your company (social connections and relationships)

Sources: Smart Pharma Consulting

The activities to optimize the Personal Brand should be carried out with caution, especially while broadening your audience to increase your visibility to avoid jeopardizing your existing reputation

Personal Brand Optimizer – Implementation process (5/5)

"Your Personal Brand should consolidate all your facets into an identifiable, recognizable and memorable format"

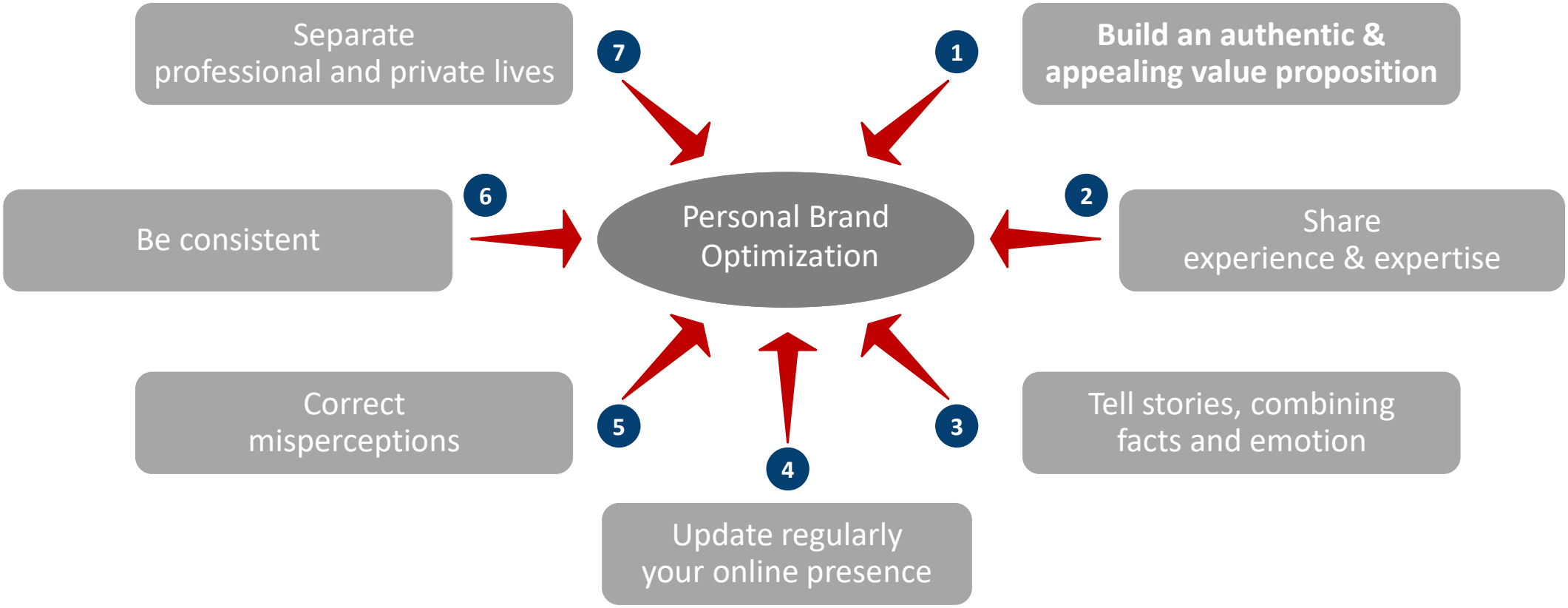


- The execution of the tactics supporting your Personal Brand strategy should comply with the following recommendations:
  - Construct a narrative with illustrative stories about you and your experience that are unique, appealing, and preferable (vs. other people)
  - Create content and tell stories that showcase your background, personality and reputation
  - Expand your network to increase your exposure by using multiple channels (e.g., social media, lectures, face-to-face meetings) adapted to your targeted audiences and your goal
  - Send high quality content at a regular pace (weekly being considered in general as optimal)
  - Package facts about you into a compelling story to get a better and lasting impact

Sources: Smart Pharma Consulting

The Personal Brand Optimizer is a must-have tool for individuals to get preferred by their stakeholders, either their employers, peers and/or the customers of the company they work for

7 imperatives to optimize your Personal Brand



"Be yourself, everyone else is already taken" – Oscar Wilde

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Excellence in Execution

Application to Pharma Companies

"Excellence is not a skill.
It is an attitude"

Ralph Marston

POSITION PAPER June 2019

Excellence in execution is essential to turn a strategy into a business success

1. Introduction

- If the quality of R&D remains the primary success driver of innovative pharmaceutical companies, the quality of their medical, marketing and sales departments is also of utmost importance to turn new products into commercial successes

- The great majority of drugs face strong competition, which requires the crafting of a solid medical, marketing and sales strategy to boost customer preference and hence optimize corporate revenues

- However, business successes or failures are more dependent on the quality of the strategy execution than on the chosen strategy

- The purpose of this position paper is to propose principles and practical recommendations to help pharma companies excel in executing their strategy

"Strategy is about execution" – Sanjiv Anand

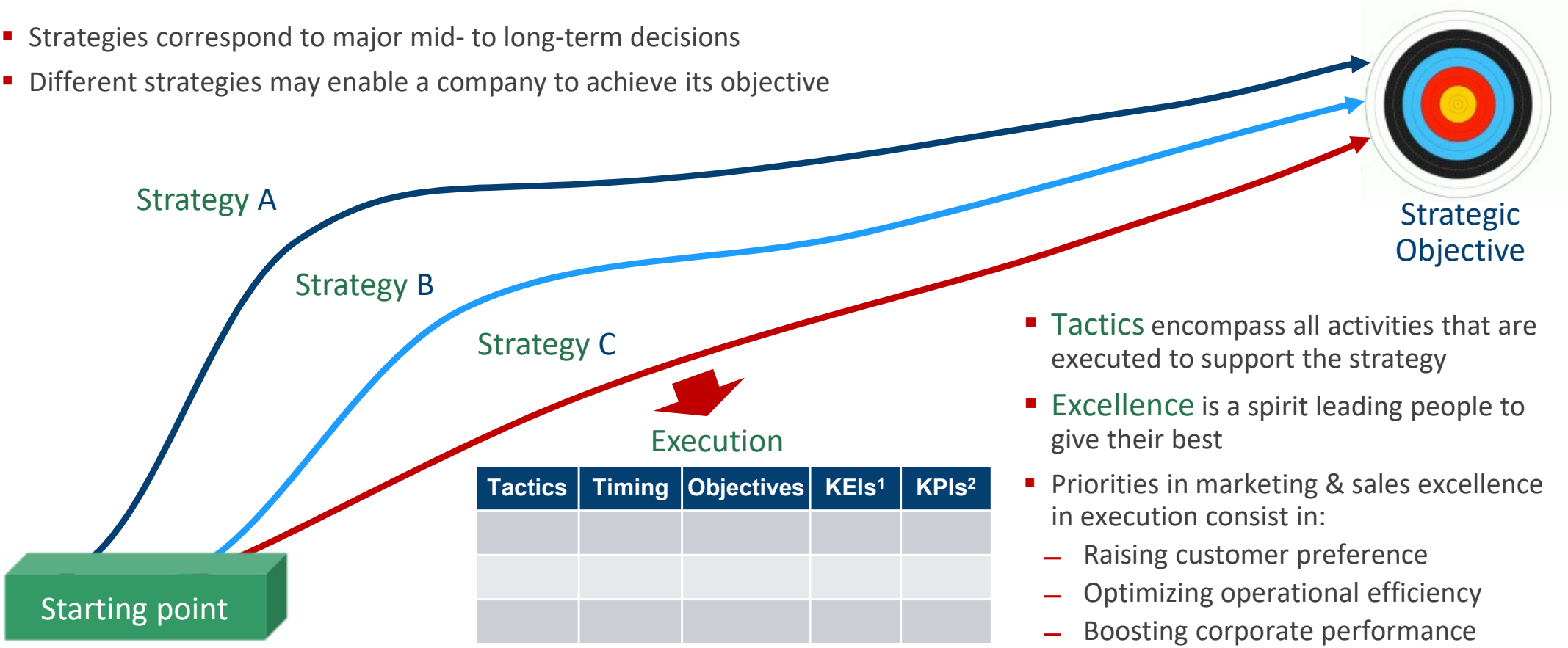
Sources: Smart Pharma Consulting

Excellence, when applied to strategy execution, contributes to drive customer preference, optimize operational efficiency and corporate performance

1. Introduction

Strategy – Tactics – Execution – Excellence

- Strategies correspond to major mid- to long-term decisions
- Different strategies may enable a company to achieve its objective



Tactics	Timing	Objectives	KEIs[1]	KPIs[2]

- Tactics encompass all activities that are executed to support the strategy
- Excellence is a spirit leading people to give their best
- Priorities in marketing & sales excellence in execution consist in:
  - Raising customer preference
  - Optimizing operational efficiency
  - Boosting corporate performance

Sources: Smart Pharma Consulting

[1] Key Execution Indicators – [2] Key Performance Indicators

The Smart Strategic Model helps to align the "Strategic Square" to the strategic objective and then to craft the best strategy and the corresponding tactics supported by the right organization

1. Introduction

The Smart Strategic Model™ – Principles

- **Purpose:** Why do we exist?
- **Vision:** What do we aspire to become?
- **Mission:** What do we do and for who?
- **Values:** What do we believe in and how do we behave?
- **Objective:** What do we want to achieve?
- **Strategy:** Where to play and how to play to win?
- **Organization:** What activities, processes, structure[1] and culture we put in place to execute the strategy?
- **Key tactics:** How are we going to execute the strategy?
- **Performance:** What have we quantitatively and qualitatively[2] achieved and what are the gaps and why, if any?

Sources: Smart Pharma Consulting

[1] Including the headcounts and the organigram – [2] Such as corporate reputation (see our position paper on our website)

The strategy should be crafted according to the analyzed situation and trends, and the strategic objective set, prior to the design/adjustment of the organization

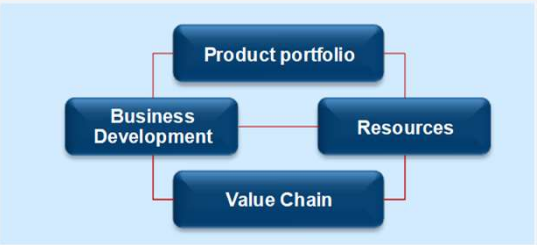
1. Introduction

The Smart Strategic Model™ – Strategy & Organization

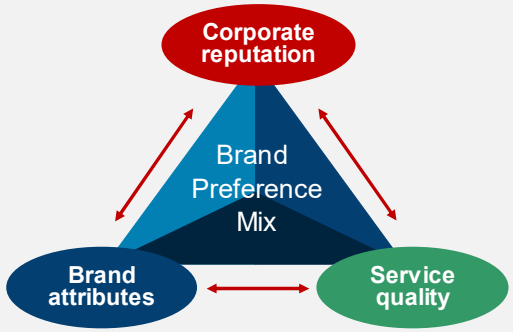
Situation & Trends Analysis

Competitive Landscape Analysis

Company Assets Assessment



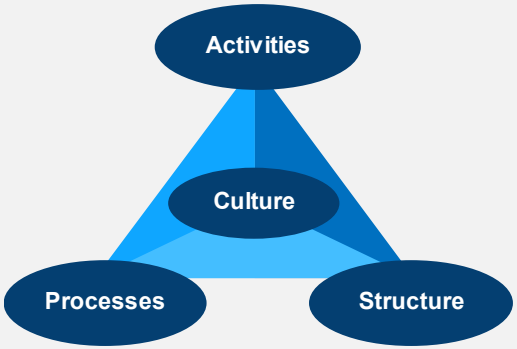
Strategy Crafting



Marketing & sales strategies should be crafted to raise customer preference and create a long-lasting competitive advantage by:

- Seizing market opportunities
- Combating market threats
- Leveraging competitive strengths
- Addressing competitive weaknesses

Organization Design



The organization should be designed to support the crafted strategy efficiently

Four dimensions should be considered:

- Activities (and competencies)
- Structure (FTEs, organization chart)
- Processes (coordination, decision-making, information sharing, etc.)
- Culture (working conditions, etc.)

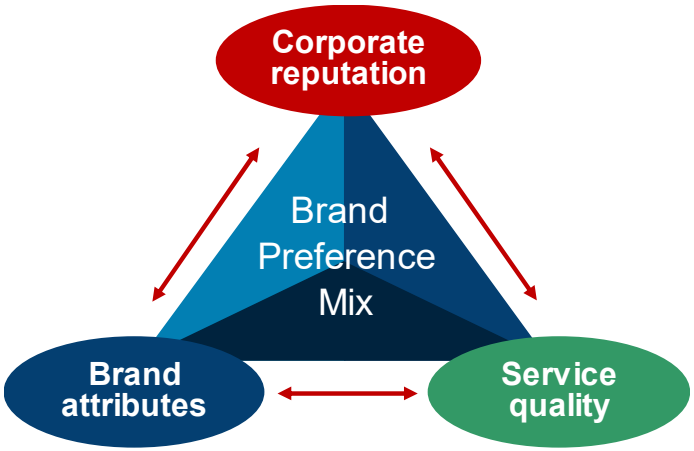
Sources: Smart Pharma Consulting

Medical, Marketing & Sales departments must put into perspective the value drivers related to the three components of the Brand Preference Mix to gain/strengthen customer preference

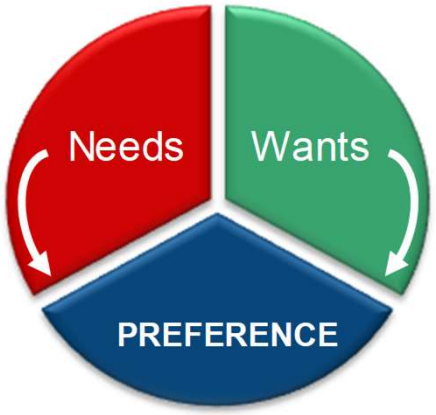
1. Introduction

The Smart Strategic Model™ – Key Tactics (1/2)

Brand Preference Mix → **Value Drivers** → **Customer Portrait**



Benefits



- The 3 components of the Brand Preference Mix must be activated…
- … to bring **superior benefits** to customers than competitors do
- Marketing & Sales activities aim at **promoting** these **benefits** and **convincing** customers to **recommend, buy** or **use** the proposed **products**

Customer preference is **driven by** their:

- **Needs**: "I need a treatment for this disease that is effective and safe" [fact-based]
- **Wants**: "I want to prescribe this treatment because I feel more secure" [emotional]

But **limited by** their:

- **Fears**: "I am used to another treatment and do not wish to change my habits" [fact-based & emotional]

Sources: Smart Pharma Consulting

Features of each pillar of the Brand Preference Mix should be expressed as benefits to customers in order to strengthen their preference to the brand

1. Introduction

The Smart Strategic Model™ – Key Tactics (2/2)

Brand Preference Mix (BPM)	Features of the BPM pillars	Benefits to customers
Corporate reputation	• What to say and do to build an appealing image and establish the company as a reliable player? • How should these initiatives be carried out?	The benefits the customers are likely to draw[1] should be identified for each feature of each component of the Brand Preference Mix
Brand attributes	• How to differentiate positively the brand from competition? • How to highlight these attributes in an effective and efficient way? • To whom these differentiating points should be communicated?	
Service quality	• What services to develop to create a superior difference vs. competition? • How to make sure these services are highly valued by customers? *[Are they useful / interesting / convenient / well executed?]* • How should these services be executed to meet excellence?	

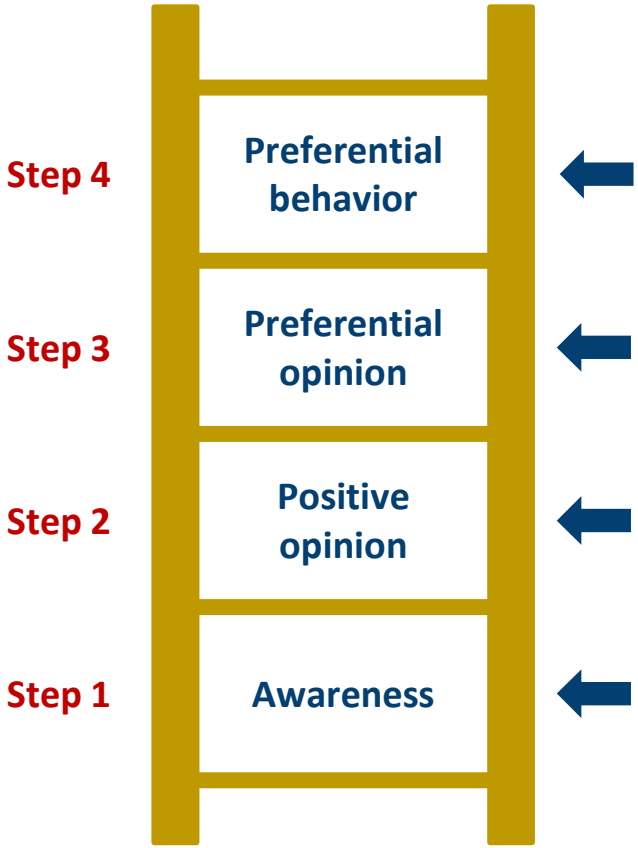
Sources: Smart Pharma Consulting

[1] Benefits could be: functional, financial, emotional and/or self-expressive

The Preference Ladder shows where do customers stand and how to make them move up to the ultimate preferential behavior step

1. Introduction

The Smart Strategic Model™ – Expected Outcomes



Leverage points

- Be highly desirable
- Offer attractive experiences
- Induce unmatchable perception of higher benefits

- Offer higher benefits
- Be significantly distinctive
- Ensure superior execution

- Be relevant (what are the benefits?)
- Be credible and legitimate
- Ensure high quality of execution

- Communicate
- Create experience
- Stimulate / sustain memorization

- To induce a preferential behavior in favor of their products, Marketing & Sales departments must make their customers climb the Preference Ladder
- While defining:
  - Activities to be executed
  - Quality standards of execution
  - Communication priorities

It is key to monitor where each customer stands on the Preference Ladder and fine tune how to make them move up

Sources: Smart Pharma Consulting

Strategy and execution must be perfectly aligned to lead to success

1. Introduction

Strategy to Execution Alignment

- Strategy and execution are closely intertwined since, to achieve an objective, it is necessary to choose:
  - A strategy (approach) and
  - The activities to be executed to implement that strategy

Case study: Starbucks

- Howard Schultz, former CEO of Starbucks, wanted his coffee shops to be the “third place” for conviviality beyond home and workplace
- Starbucks has managed to deliver its promise by:
  - Creating a warm layout and decor in its stores
  - The warm and friendly behavior of its employees who know how important they are to succeed

“Strategy without action is a daydream. Action without strategy is a nightmare”

Sources: Smart Pharma Consulting

Excellence is a spirit leading people to give their best to beat competitors, to exceed customer expectations, in an efficient manner, to optimize corporate performance

2. Definitions

Excellence vs. Perfection

EXCELLENCE

- The pursuit of excellence is focused on the reason for a task and the results to make it a success
- Excellence is related to:
  - Doing the right things (i.e., focus on what matters), making it more productive than perfectionism
  - Looking for continuous improvement to deliver outstanding quality to outperform the competition
- There is no fear attached to excellence

~~PERFECTION~~

- If perfection is the ultimate goal, the business environment moves too fast to achieve it
- Perfection is related to do things right
- Looking for perfection is inefficient due to the inordinate amount of time required
- Perfectionism has shown to cause anxiety and procrastination by fear of failure and thus to reduce people performance

"Strive for excellence, not perfection"

Sources: Smart Pharma Consulting

Excellence in execution is the ability to carry out a plan in an outstanding and better manner than your competitors so that to generate customer preference

3. Why is Excellence in Execution so Important?

Excellence in Execution

"The thing that keeps a business ahead of the competition is excellence in execution" – Tom Peters

- If the right strategy is needed to achieve companies' objectives, it is not sufficient
- To produce its effect, the strategy must be well executed
- Thus, looking for excellence in execution is imperative to create and increase the preference of customers
- Execution excellence does not only boost sales, but it also reduces costs by improving operational efficiency
- According to John Kotter from Harvard Business School, 70% of strategies fail because of poor execution
- Achieving excellence in execution is challenging because it requires to have the right tactics in place, the right capabilities and the right behaviors

"When a strategy looks brilliant, it's because of the quality of execution" – Rosabeth Moss Kanter

Sources: Smart Pharma Consulting

Poor medical, marketing and sales execution is mainly due to inadequate strategy, lack of customer insights, insufficient coordination and absence of efficient monitoring system

4. Reasons for Poor Execution in the Pharma Industry

10 factors preventing Excellence in Pharma Medical, Marketing & Sales Execution

- #1 Brand strategy crafted at the global level is not necessarily relevant to local markets
- #2 Unclear understanding of the brand strategy by medical, marketing and salespeople
- #3 Insufficient customer insights (knowledge and understanding of their wants and needs)
- #4 Poor quality of interactions with HCPs which are seen as useless and not interesting
- #5 Inefficiency of first line managers to develop frontline collaborators competence[1]
- #6 Low enthusiasm from medical, marketing and sales teams who are insufficiently connected
- #7 Activities carried out without prior evaluation of their likely impact on customers
- #8 Non-systematic evaluation of the impact of key activities on customer level of preference
- #9 Suboptimal collaboration and cooperation between medical, marketing and sales teams
- #10 Lack of boldness from the regulatory department to accept innovative ideas

Sources: Smart Pharma Consulting

[1] *Medical representatives, MSLs, KAMs, etc.*

Alignment on the objective, the selected strategy and the corresponding tactics, of collaborators involved in execution will make it more relevant and more efficient

5. How to develop a Smart Execution Excellence Model?

Introduction (1/2)

Make sure the selected strategy is accepted

Make sure the situation analysis is understood

Make sure the objective is shared and agreed upon

Agree on most relevant tactics to support the strategy with those who will implement them

Execution

Tactics	Timing	Objectives	KEIs[1]	KPIs[2]

Determine with the "implementers" the best manner to execute these activities in terms of efficacy, efficiency and motivation for them

Sources: Smart Pharma Consulting

[1] Key Execution Indicators – [2] Key Performance Indicators

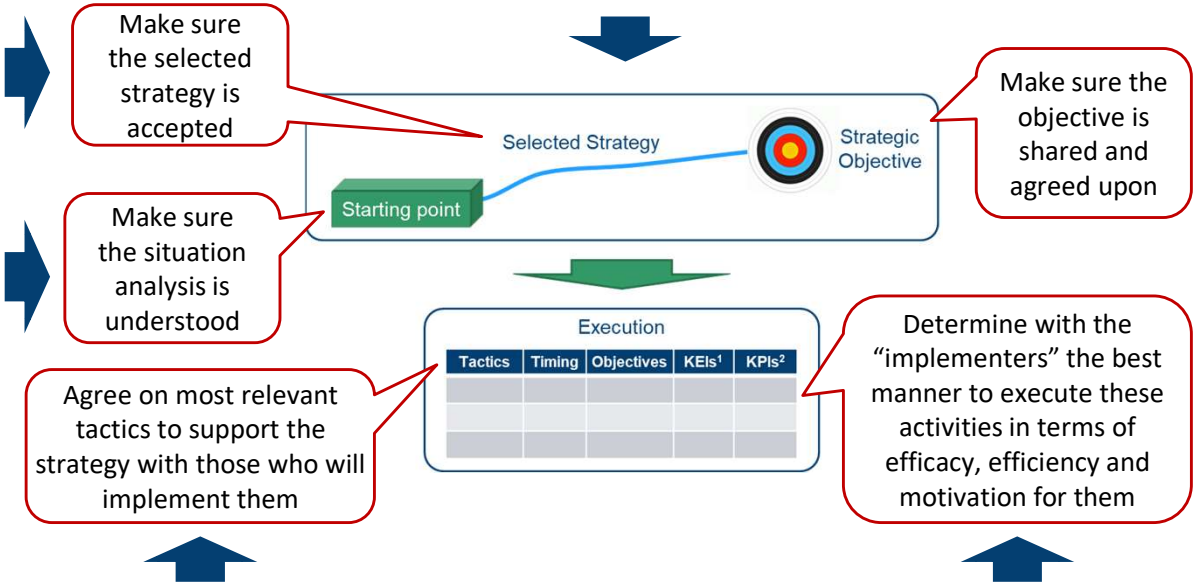
Excellence in execution requires a participative and collaborative approach, to focus on the most important activities, to develop competence and to ignite passion of collaborators

5. How to develop a Smart Execution Excellence Model?

Introduction (2/2)

A holistic approach to strategy and execution is required for a perfect alignment

- Involve employees in crafting the strategy to facilitate their buy-in, and make the execution both easier and smoother
- Empower employees to develop their sense of ownership and figure out how best to meet the objective
- Share values to make decisions aligned with the strategy



- Set specific and measurable objectives to help frontline employees take ownership over their roles in the execution
- Ensure that metrics measure that right things are done (KPIs) in the right way (KEIs)

- Ensure excellence in execution is focused on the most critical activities to achieve the strategic objective, which must be broken down in tactical objectives and thus in cross-team and/or individual objectives
- Build plans which are practical (i.e., clear, concrete, familiar), flexible and adapted to market or company changes
- Leaders must define the ways of working, how to exercise operational monitoring, inspire and mobilize the most talented employees

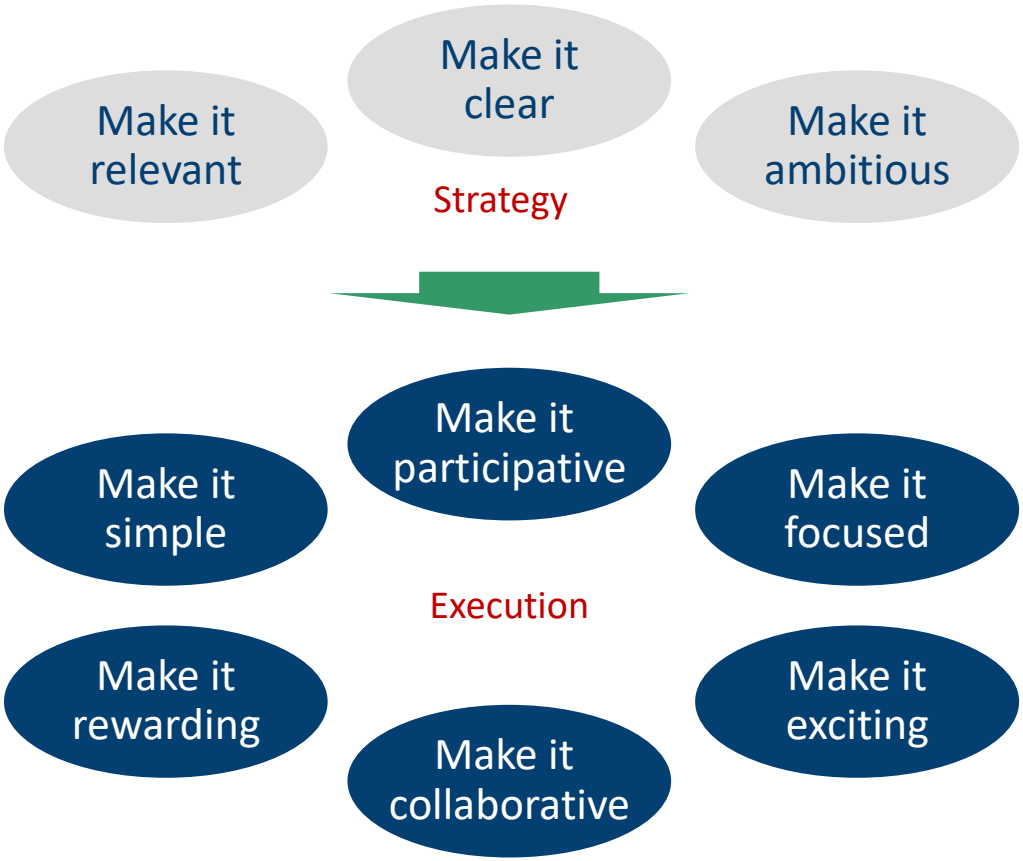
Sources: Smart Pharma Consulting

[1] Key Execution Indicators – [2] Key Performance Indicators

Nine guiding principles to be applied and five key questions to be answered should help the implementation of a Smart Execution Excellence Model

5. How to develop a Smart Execution Excellence Model?

Nine guiding principles



Five key execution-related questions

1. What to do?
Select the most relevant activities

2. Why to do it?
Document the rationale to carry out these activities

3. How to do it?
Define the best practices and the best organization

4. How well it has been done?
Monitor the quality of execution

5. How close are we from the objective?
Monitor the performance

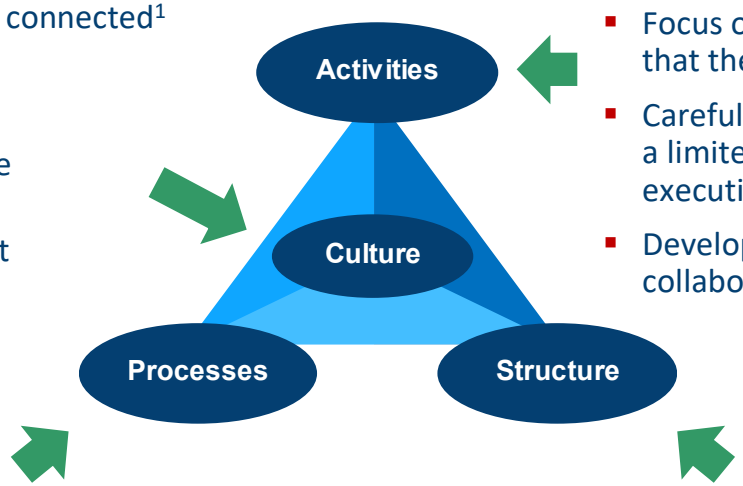
Sources: Smart Pharma Consulting

To achieve Excellence in Execution, companies must design a holistic organizational system that will foster the search for excellence by all its collaborators, front line and back-office ones

5. How to develop a Smart Execution Excellence Model?

Key organizational recommendations

- Develop a culture of superior customer satisfaction to gain customer preference and increase market share
- Develop a powerful vision so that people feel connected[1]
- Install a participative culture[2]
- Engrain a culture of excellence
- Create a working atmosphere that will engage collaborators to give their best
- Encourage pro-activity, agility and experiment to find new solutions to excel in execution



- Provide direction and resources for achieving strategic objectives
- Focus on activities that best support the strategy and that the company excels at
- Carefully plan the execution of key activities and select a limited number of metrics to monitor the quality of execution and the impact of activities
- Develop the skills of managers and of their collaborators in charge of executing activities

- Facilitate and motivate cooperation and collaboration across multifunctional teams
- Develop enabling tools to:
  - Align objective, strategy and tactics
  - Measure the quality of execution and the impacts of activities
  - Reinforce the cohesion of the teams
  - Learn from experience
- Streamline processes and set up standards of excellence
- Define a process to facilitate participation of collaborators

- Design an adaptative structure that can be easily modified according to the changing environment
- Set up flat and lean organizational chart to favor accountability and empowerment
- Simplify structures by eliminating needless complexity
- Delineate lines of authorities and decision rights

Sources: Adapted from Scott A. Snell "In search of Execution" SHRM (2016) by Smart Pharma Consulting

[1] Set clear performance expectations, hold them accountable, give them regular feedbacks, reward their performance, share outcomes, etc. – [2] Solicit ideas and inputs, listen to people, select and implement their most appropriate suggestions

The lunchbox delivery system carried out by dabbawalas is considered as one of the best-in-class model of service excellence in logistic for its level of accuracy and its timeliness

6. Case Study: The Mumbai Dabbawalas

Description of the Business Model (1/2)

Dabbawala in Mumbai area

- The dabbawalas deliver ~130,000 lunchboxes per day, in Mumbai area, from homes and restaurants to people at work
- The lunchboxes are picked up in the morning, delivered predominantly using bicycles and railway trains by 1:00 pm

Lunchboxes distribution by handcarts

- Lunchboxes are labeled using a system of signs symbols, numbers, letters and colors indicating:
  - Where the lunch has been picked up
  - Which station it will be sent to
  - The final address of the owner
- This old-fashioned distribution system is more effective than Deliveroo or Uber Eats
- It is recognized as one of the world's most efficient logistics systems

Lunchbox coding system

- The cost for the service is ~ € 6 per month
- The dabbawalas belong almost exclusively to the Varkari community, which worships the Hindu god Vithala who teaches that "giving food is a great virtue"
- They are organized in a cooperative of 5,000 semiliterate partners, are self-employed and paid the same, around € 190[1] per month, and receive in addition tips from their customers

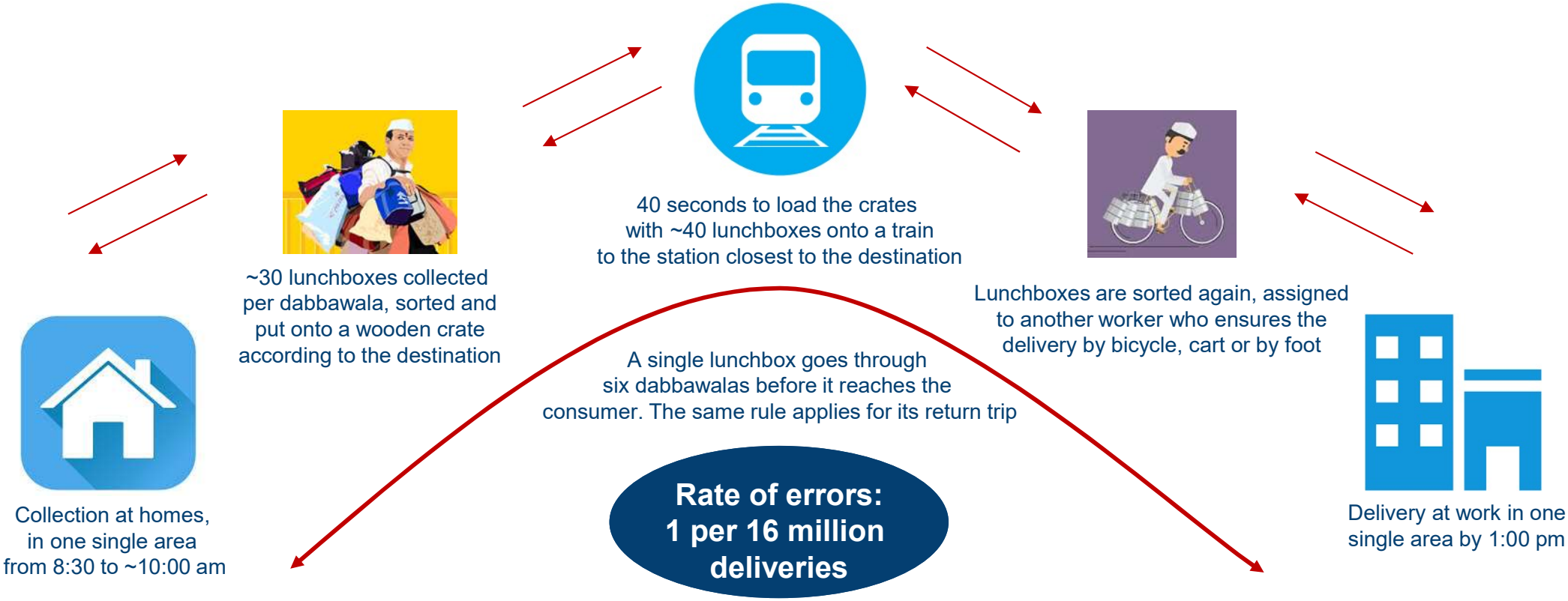
Sources: Sources: "How Dabbawalas became the world's best food delivery system" by Emma Henderson, Independent (2017) – Smart Pharma Consulting analysis

[1] Which is considered as a good salary in India, especially for unskilled labour

The low-tech distribution system carried out by the dabbawalas has been graded "Six Sigma", meaning that the rate of mistakes is fewer than 3.4 per million transactions

6. Case Study: The Mumbai Dabbawalas

Description of the Business Model* (2/2)



Sources: "Mumbai's models of service excellence" by Stefan Thomke, HBR (2012) – Smart Pharma Consulting analysis

** Description of the delivery system: https://www.youtube.com/watch?v=USb0eXtT2vs*

The efficacy of the dabbawalas distribution system is based on the perfect alignment of their organization, their management and culture which tend to reinforce one another

1. Introduction

Analysis of the Business Model

Activities

- Each dabbawalla is responsible for his allocated group of customers
- Workers with more than 10-year experience serve as supervisors[1]
- Tight schedule helps synchronize everyone and imposes discipline

Structure

- 200 units of 20-25 groups of dabbawalas are headed by a supervisor
- Flat structure ensuring agility
- 2 committees[2] tackle operational and organizational issues

Process

- Simplicity is key[3]
- Each group is autonomous
- 2-3 extra workers per group stand by in case of emergency
- Adherence to processes and to quality standards is mandatory
- Performance is based on schedule and proper lunchbox delivery

Culture

- Dabbawalas remain in their group for their entire working life, which creates strong ties
- Most of them have the same culture
- They are proud to deliver food to people and have a strong sense of belonging

Dabbawalas mission: "Delivering food on time every time"

Sources: "Mumbai's models of service excellence" by Stefan Thomke, HBR (2012) – Smart Pharma Consulting analysis

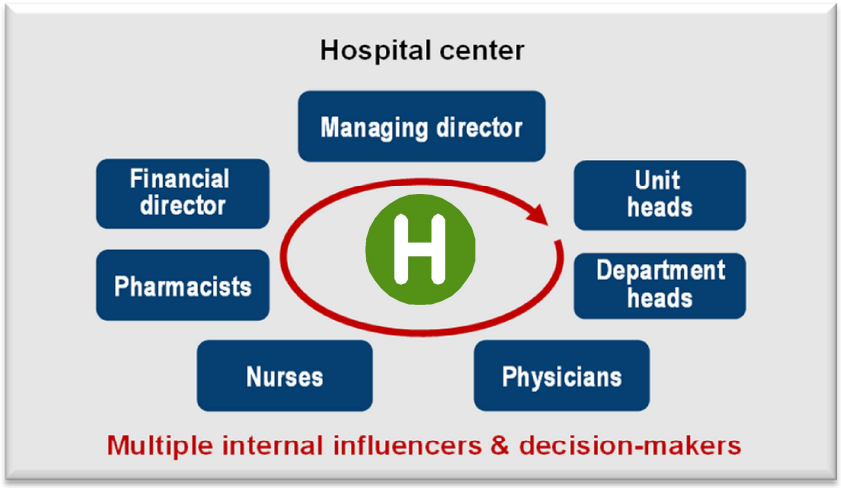
[1] There are 635 supervisors amongst the 5,000 dabbawalas – [2] The Operational Committee and the Charitable Trust – [3] As shown by the coding system, the standardization of lunchboxes size and shape

To get physicians to prefer a brand is becoming more complex, both in hospital and open care markets, due to increased price sensitivity and the multitude of influencers

7. Pharma Medico-Marketing & Sales Application

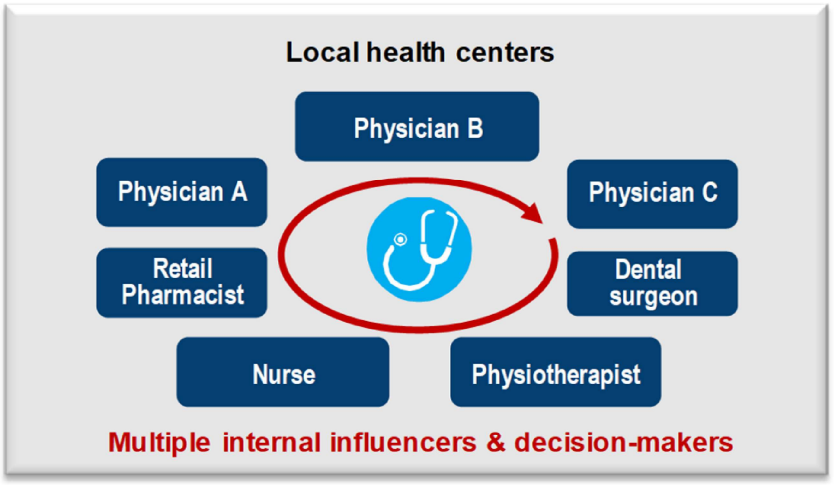
Situation analysis (1/2)

Hospital market segment



- Prescribing decisions are more and more made in concertation, following protocols, and through the influence and pressure of various stakeholders
- The access to HCPs at hospital centers by Field Forces has become a burning issue

Open care market segment



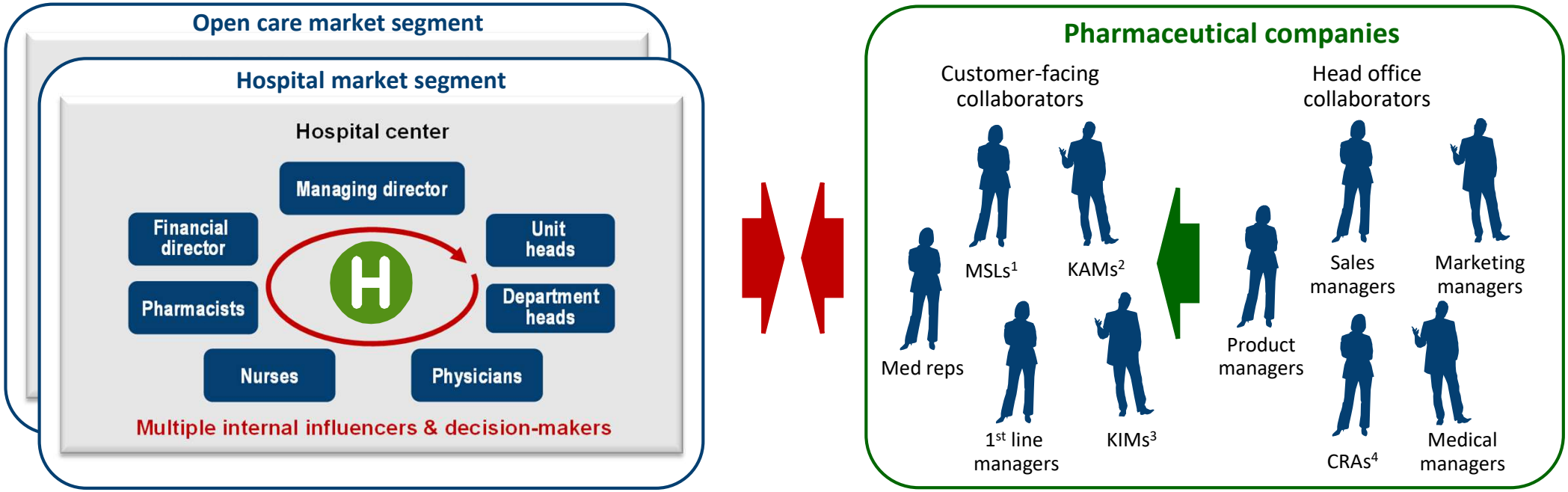
- Office-based physicians prescribing behavior is more and more under the influence of health authorities, payers or other HCPs
- Access to HCPs on the open care market segment has become a major issue for Field Forces

Sources: Smart Pharma Consulting

Pharma companies must adopt an efficient organization to deal with bigger accounts, more and more price-sensitive, in which decision-making processes are complex

7. Pharma Medico-Marketing & Sales Application

Situation analysis (2/2)



- Pharma companies have to address two key issues:
  - To protect, as much as possible, the price of their drugs
  - To move from a B-to-C to a B-to-B business model in which the prescribing decision is made by multiple stakeholders having different views and objectives

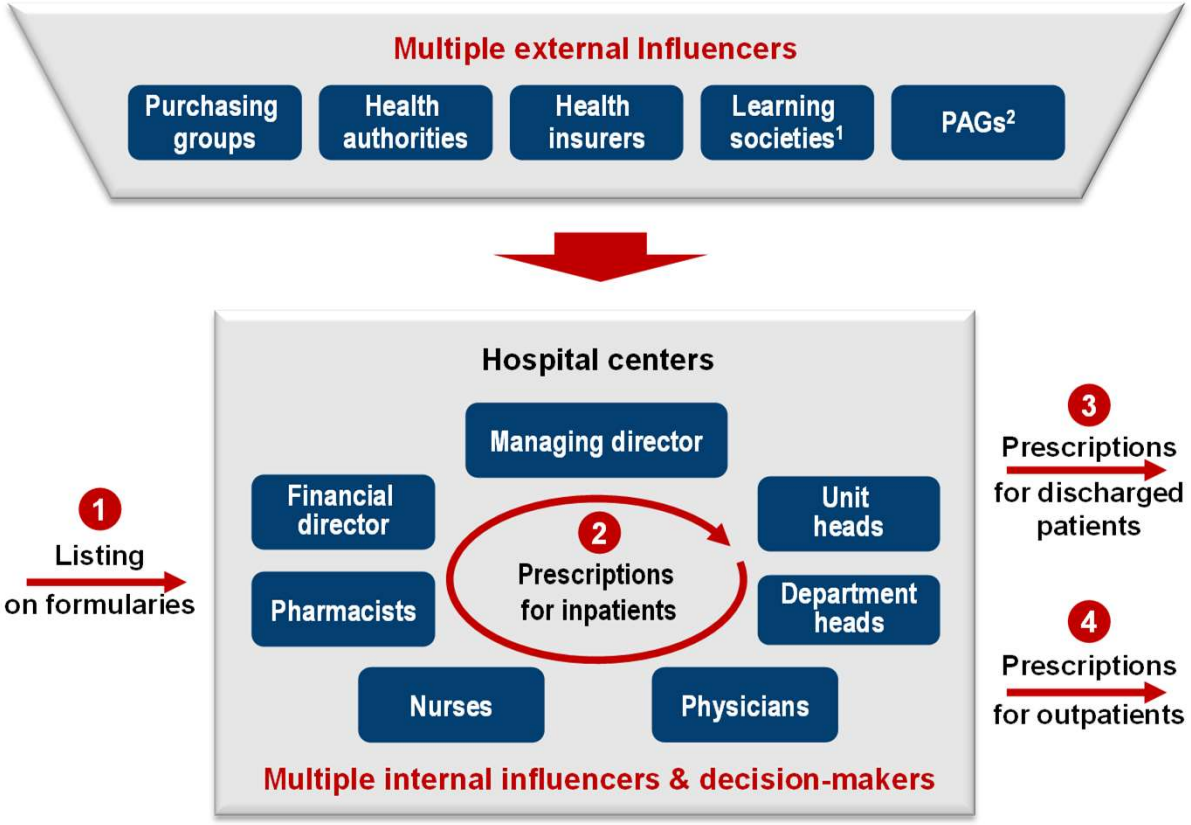
Sources: Smart Pharma Consulting

[1] Medical Science Liaisons – [2] Key Account Managers – [3] Key Institution Managers who are in contact with regional health authorities and payers and who can propose hospital centers to participate, for instance, to a local public health initiative on a given pathology – [4] Clinical Research Assistants

Irrespective of the hospital key account, the strategy crafted by pharma companies should have a favorable impact on one or several of its four key performance drivers

7. Pharma Medico-Marketing & Sales Application

Strategy Crafting on the Hospital Market



- To boost their performance at hospital center level, pharma companies should activate one or several of the following key performance drivers:
  1. The listing on formularies[3]
  2. The prescription for inpatients[4]
  3. The prescription for discharged patients[4]
  4. The prescription for outpatients[4]
- These drivers will be selected according to the objective set and the actions to activate them will depend on:
  - Each hospital specificities (e.g., strategic priorities, procurement process and policy, degree of complexity, power games)
  - Product portfolio competitive position
  - Value of services offered to date
  - Corporate reputation

● *Key performance drivers for pharma companies*

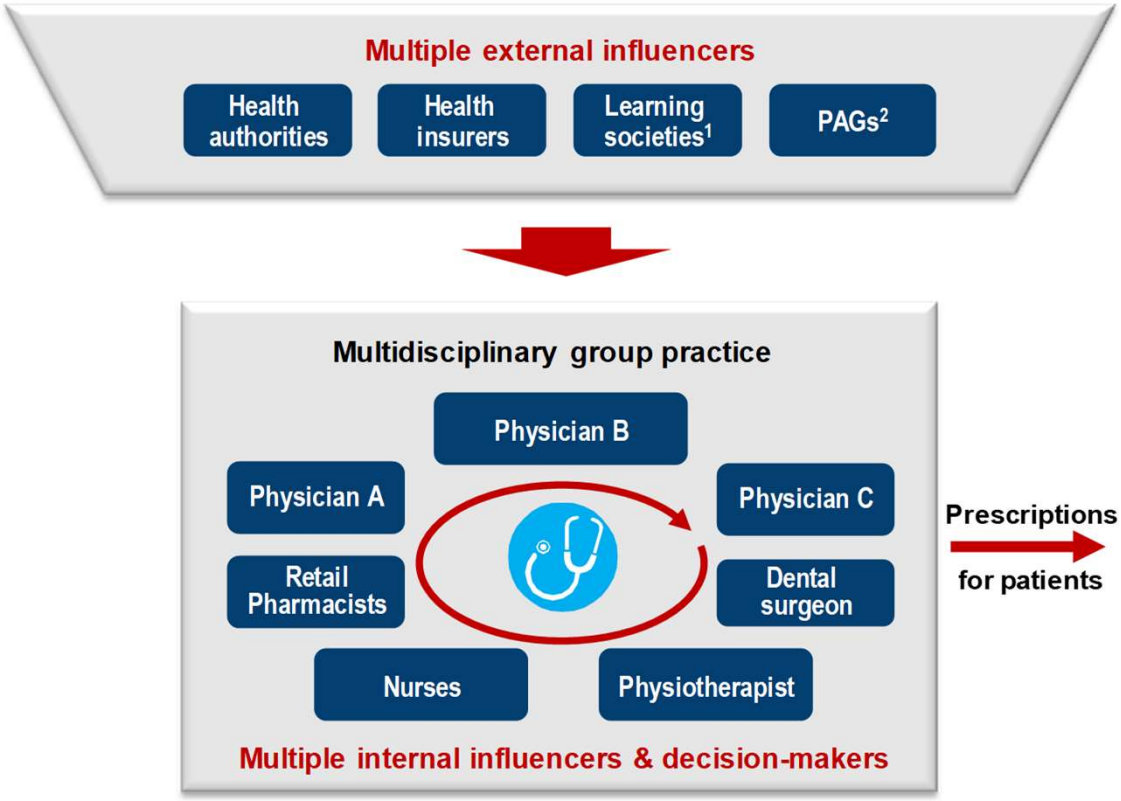
Sources: Smart Pharma Consulting

[1] Through the therapeutic guidelines they may publish – [2] Patient Advocacy Groups – [3] Under the direct responsibility of KAMs – [4] Under the direct responsibility of medical reps

Field Force Teams operating on the open care market must secure access to customers and raise preference to their brand by ensuring highly valued interactions

7. Pharma Medico-Marketing & Sales Application

Strategy Crafting on the Open care Market



- The expected outcome from customer strategy on the open care market is to:
  - Secure regular access to HCPs which is particularly difficult in health centers
  - Raise HCPs preference in favor of marketed products by leveraging the three components of the Brand Preference Mix[3]
  - Maintain a favorable opinion and behavior of stakeholders who are likely to influence HCPs and patients
- To address these challenges, the Field Force Team members will have to:
  - Ensure highly valued interactions
  - Coordinate their activities to leverage potential synergies
  - Be flexible enough to adjust themselves to the external and internal changes

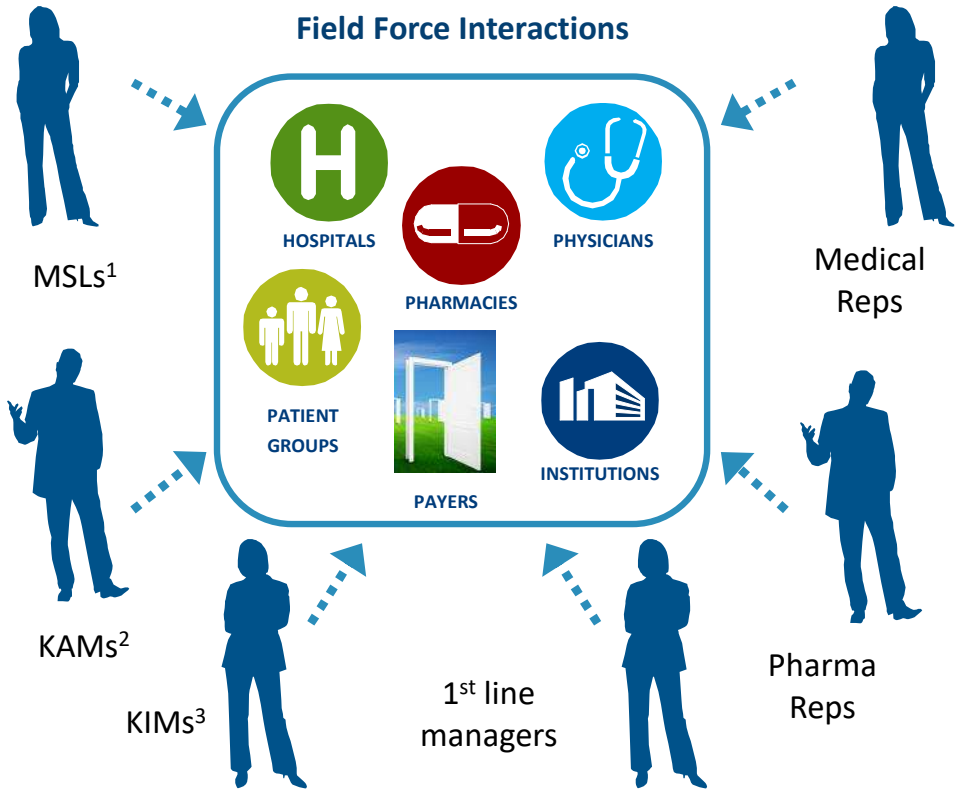
Sources: Smart Pharma Consulting

[1] Through the therapeutic guidelines they may publish – [2] Patient Advocacy Groups – [3] See Smart Pharma Consulting position paper "Best-in-Class Pharma Marketers" published in March 2017

Field Force Teams activities should be regularly adjusted to secure a regular access to customers and boost their preference to the brands marketed by the company

7. Pharma Medico-Marketing & Sales Application

Organization – Key activities (1/2)



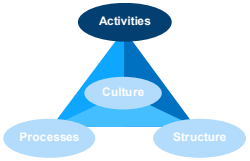
- Activities of Field Force Teams should be systematically streamlined:
  - Activities having no significant impact to raise the value of the marketed brands should be stopped
  - Customers shared by different Field Force functions (e.g. MSLs and medical reps) require a clear co-positioning to avoid duplication and a thoughtful coordination of activities to leverage potential synergies which will be driven by sharing competencies and/or costs
- To secure access to customers and influence them, Field Force Teams should, better than competitors:
  - Acquire a high level of market insights[4]
  - Highlight the image[5] of the company they work for
  - Propose and deliver highly valued services
  - Exhibit the benefits offered by the marketed brands
  - Use customer preferred communication channels
- Ambitious capability building programs would be required

Sources: Smart Pharma Consulting

[1] Medical Science Liaison – [2] Key Account Managers – [3] Key Institution Managers – [4] Meaning: have an excellent knowledge and a good understanding of the healthcare system, the key market stakeholders (health authorities, competitors, customers) – [5] See Smart Pharma Consulting position paper "How to create a superior Pharma Corporate reputation" published in August 2016

The development of Field Force Teams competencies can be structured and prioritized with the help of the Smart Index tool

7. Pharma Medico-Marketing & Sales Application



Organization – Key activities (2/2)

- The **Smart Index** is a tool which structures the development of competencies around 3 components:

Smart index = Knowing x Understanding x Behaving

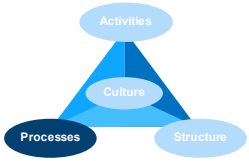
Knowing	Understanding	Behaving
Precise, reliable & relevant knowledge of facts & figures re. the market, the company, with a special emphasis on customers and their influencers	**In-depth & robust** analytical skills and fact-based decision making	**Planning, organizing, directing & monitoring** to guarantee the quality of execution, leverage potential synergies and keep colleagues engaged

"Any fool can know. The point is to understand" – Albert Einstein

Sources: Smart Pharma Consulting

High market sensitivity, simple and short processes, cross-departments coordination and cooperation will contribute to serve customers better

7. Pharma Medico-Marketing & Sales Application



Organization – Processes (1/6)

- Customer-focused organization (silos around customers vs. brands)
- Knowledge- and experience-sharing
- Harmonization of activities

- Skills to develop and deliver high value solutions
- Ability to explore and discover customer insights (deep knowledge of their needs, wants, behaviors)
- Motivated and empowered collaborators

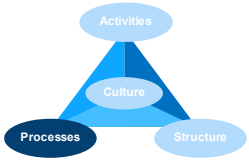
- Project teams including members from various departments centered around customers
- Shared customer database
- Introduction of metrics to foster cultural change

- Partnership with external players to propose unique and highly valued offerings to customers

Sources: Adapted from R. Gulati (HBR 2007) - Smart Pharma Consulting analyses

To create value for field forces, and therefore for the company, head office functions should maintain a business-driven balance between support and control

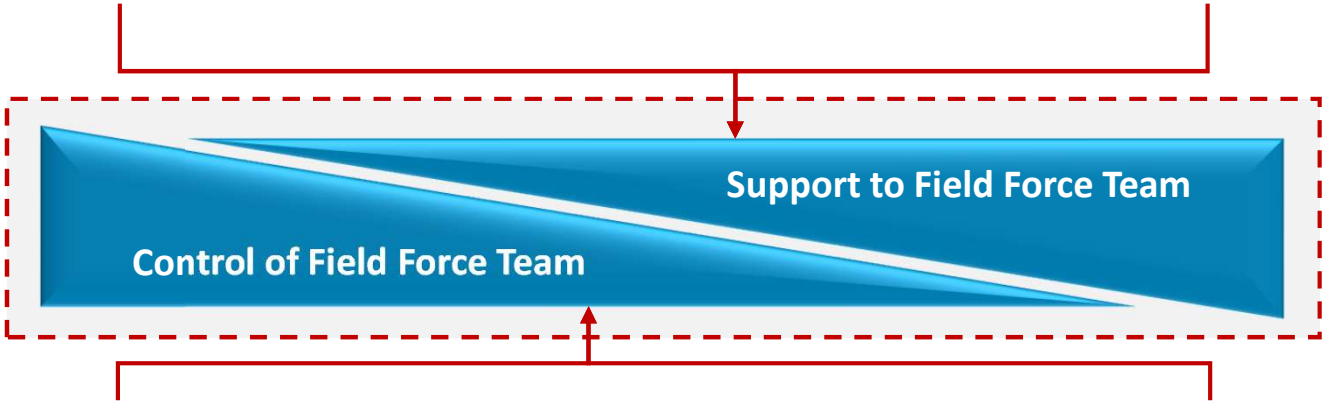
7. Pharma Medico-Marketing & Sales Application



Organization – Processes (2/6)

- *Ad hoc* capabilities missing at Field Force level
- Complementary resources (e.g., if understaffing)
- Strategic directions and priorities, whenever required

- Support to facilitate in-field activities, to address scientific, legal, HR issues, etc.
- Competence and experience sharing across BUs and from head office to in-field functions



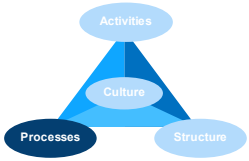
- Business-relevant metrics (automation, dashboards, standardized score cards)
- Selected number of KPIs (key performance indicators) and KEIs (key execution indicators)

- Monitoring of compliance (e.g., HR policy, people management, marketing & sales practices, etc.)
- Monitoring of the level of organizational agility and suggestions of solutions to fill up the gaps (if any)

Sources: Smart Pharma Consulting

The activities of in-field collaborators interacting with the same customers should be integrated in a single strategic plan, including separated sections

7. Pharma Medico-Marketing & Sales Application



Organization – Processes (3/6)

Medical Section

- **Collaborators:** MSLs
- **Key clients:** national and regional KOLs
- **Key objectives:** build strong and sustainable relationships with KOLs to develop advocacy
- **Key activities:** interactions with KOLs, scientific lectures at congresses, symposia, staff meetings, support of research clinical trials, training of speakers and collaborators from marketing and sales teams, support of Key Institution Managers (KIMs) and Key Account Managers (KAMs) while meeting their clients, competitive intelligence initiatives

Marketing & Sales Section

- **Collaborators:** brand managers, area managers, medical representatives
- **Key clients:** physicians, retail and hospital pharmacists
- **Key objectives:** strengthen brand preference
- **Key activities:**
  - **Marketers:** crafting of a brand preference strategy leveraging brand attributes, perceived quality of associated services and corporate reputation
  - **Sales forces:** medical calls, invitations to medical meetings, congresses and proposal for services likely to strengthen brand preference

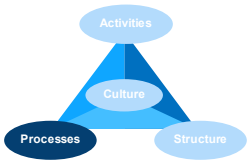
Access & Adherence Section

- **Collaborators:** Key Account Managers (KAMs) and Key Institution Managers (KIMs)
- **Key clients:** regional health authorities, regional payers, hospital directors, hospital purchase managers, PAGs[1], etc.
- **Key objectives:** facilitate the hospital listing, and improve patient adherence
- **Key activities:** development of medico-economic studies to facilitate the market access of brands and support of projects to improve patients' adherence, to promote the proper use of drugs

Sources: Smart Pharma Consulting

Four questions would need to be answered before deciding to implement any activity, which should then be monitored with KPIs and KEIs

7. Pharma Medico-Marketing & Sales Application



Organization – Processes (4/6)

Calls to HCPs[1]	Services to hospitals	Services to HCPs	Services to Patients[2]	Mailings/ E-mailings	Congress/ symposium/ meetings	Clinical studies	Publications

1. What is the objective of the activity?
2. What is the activity target (nature and size)?
3. How should the activity be implemented?
4. What is the cost of the activity?

Selection of:
Key Performance Indicators (KPIs)
Key Execution Indicators (KEIs)

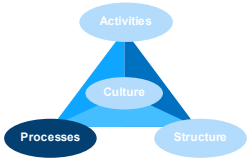
"What gets measured gets managed" – Peter Drucker

Sources: Smart Pharma Consulting

[1] Carried out by Medical representatives, MSLs, KAMs, etc. – [2] Through Patient Advocacy Groups (PAGs) or HCPs

Before making the decision to invest in medico-marketing or sales operations, the expected impact should be clearly defined, as well as execution and performance indicators

7. Pharma Medico-Marketing & Sales Application



Illustrative

Organization – Processes (5/6)

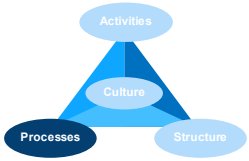
What is the objective?	What is the target?	KEIs[1]	KPIs[2]
▪ Create / reinforce awareness ▪ Generate interest ▪ Develop brand preference ▪ Increase share of prescription ▪ Increase compliance ▪ Limit substitution rate ▪ Get the brand listed ▪ Fine tune the profile of the customer	▪ Physicians (e.g., KOLs, specialists, GPs) ▪ Pharmacists (e.g., retail or hospital) ▪ Patients ▪ Nurses ▪ Influencers (e.g., health authorities, "politics", patient advocacy groups, public health insurance, private health insurance, professional associations)	▪ % of the target covered by the Field Force Team ▪ % of the target influenced by the Field Force Team ▪ % of the target having a positive opinion of the services offered ▪ Number of interactions (e.g., by customer, by in-field collaborator) ▪ Implementation time required vs. planned ▪ Actual vs. budgeted cost	▪ Brand Preference Mix index (i.e., corporate reputation, product attributes, service quality) ▪ % of hospitals having listed the brand ▪ Price negotiation ▪ Sales level and evolution ▪ Share of prescription ▪ Change in the number of treatment initiations ▪ Return on investment

Source: "Pharma Marketing Tool box", J.-M. Peny, Smart Pharma Consulting, 2015

[1] Key Execution Indicators – [2] Key Performance Indicators

This type of tool is essential to prioritize and monitor the activities that are likely to contribute to reinforce the preference of customers for the brands

7. Pharma Medico-Marketing & Sales Application



Illustrative

Organization – Processes (6/6)

Activity Description		Activity Objective		Target (HCPs, patients, etc.)	

Key steps					Perceived benefit by the target		
Description	Responsible	Timing	Cost (K€)	Comments	Evaluation*		Rationale
					Usefulness & Interest	1 2 **3** 4 5	
					Execution	1 2 3 **4** 5	
					Overall	1 2 **3** 4 5	

Barriers		Rationale	KPIs (Key performance indicators)	KEIs (Key execution indicators)	Expected Impact on Brand Preference Mix	
Technical	**L – M – H**	• Implementation	Indicate the metrics and the expected achievement	Indicate the metrics and the expected achievement	**Brand**	
Regulatory	**L – M – H**	• Compliance			**Service**	
Economic	**L – M – H**	• Estimated cost and return			**Reputation**	

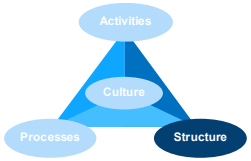
L: Low – M: Medium – H: High

** 1 & 2 below competitors – 3 as competitors – 4 & 5 above competitors*

Sources: Smart Pharma Consulting

There is no magic numbers, the Field Force size depends on external and internal factors, the impacts of which are specific to each company and each product

7. Pharma Medico-Marketing & Sales Application



Illustrative

Organization – Structure (1/2)

Field Force sizing: Driving Factors

External factors

Authorities

- Regulations re. Field Force activities (charter)
- Limitation of interactions with HCPs
- Refusal of institutions to interact with pharma companies

Customers

- Number of HCPs and other customers (e.g. influencers such as PAGs, patients, payers)
- Opinion and behavior vis-à-vis the company, its products and services
- Inclination of customers to change their opinion and behavior under the influence of Field Force Teams

Competition

- Number of targeted customers
- Type[1], content and frequency[2] of interactions
- Number of in-field FTEs

Key factors to estimate Field Force size

Internal factors

Products

- Number of brands
- Product life cycle stage (pre-launch, launch, growth, maturity, decline)

Organization

- Number of field days
- Type[1], content and frequency[2] of interactions
- Number of daily interactions
- Number of interactions per customers
- Cost per in-field collaborator and per interaction

Skills

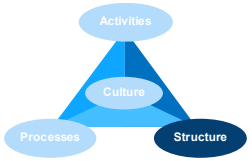
- Quality of contact
- Contact productivity
- Territory management

Source: "Pharma Marketing Tool box", J.-M. Peny, Smart Pharma Consulting, 2015

[1] Including: face-to-face calls, mailings and e-mailings, contacts during medical meetings, congresses, project collaborations, etc. – [2] Per targeted customer

The preferred structure should be built around customers, remain lean and agile to favor collaborations across departments and with the support functions

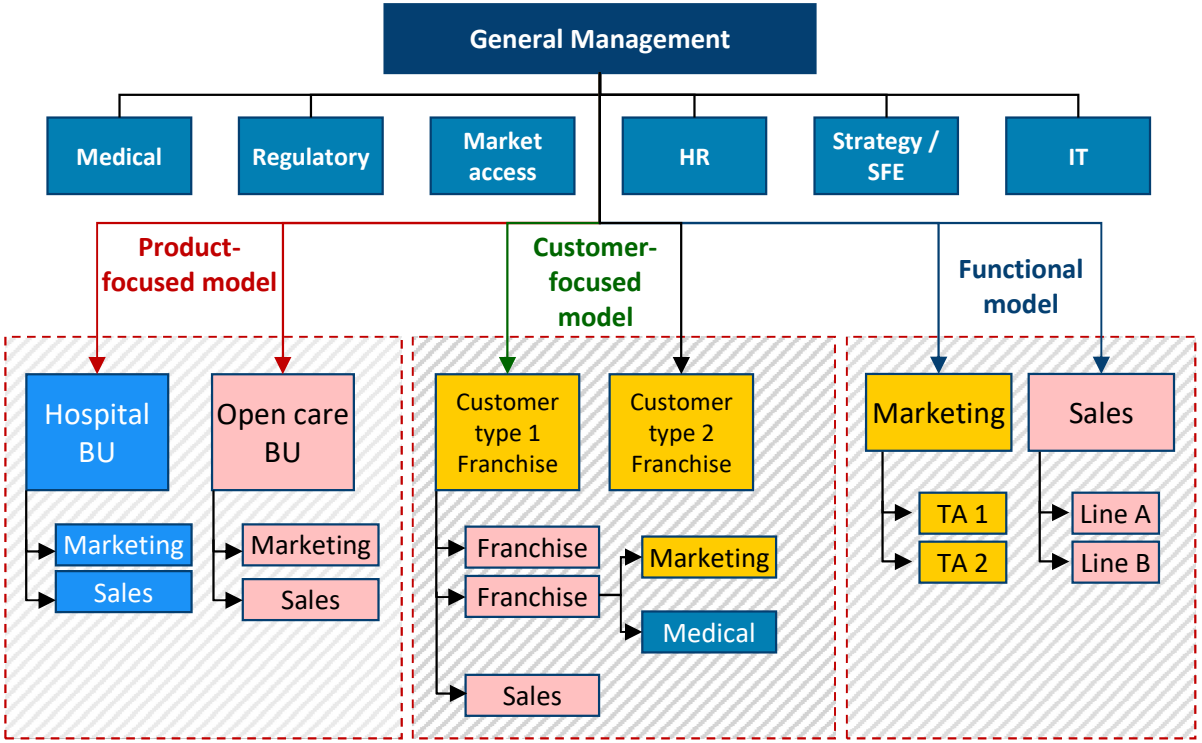
7. Pharma Medico-Marketing & Sales Application



Illustrative

Organization – Structure (2/2)

Typical structure of pharmaceutical companies

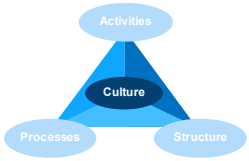


- In the **Product-focused model**, products drive the structure:
  - For "strict" hospital use, activities are organized in BUs or franchises, gathered or not under a common "Hospital Management" structure, and covering different therapeutic areas (TAs)
  - For mix products, companies display hospital dedicated med reps, reporting to open care BUs, and supporting detailing of open care products at hospital
  - Hospital and open care organizations are operationally independent, but share common supporting resources
- The **Customer-focused model** is shaped around customers by franchise, each of them containing marketing and medical resources, supported by sales forces
- The **Functional model** is less frequent among pharma companies, irrespective of their size

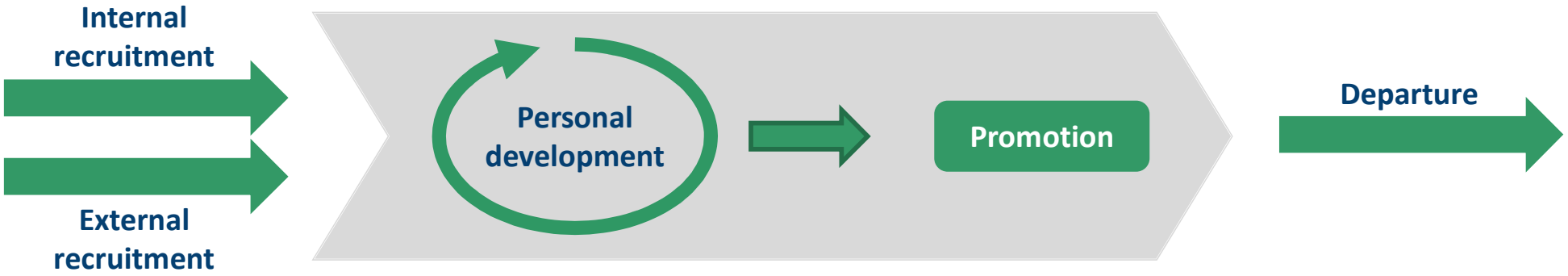
Source: Smart Pharma Consulting benchmark study

Employees should be managed dynamically, by attracting best performers, developing and making them feel strongly engaged, while granting them the level of autonomy they deserve

7. Pharma Medico-Marketing & Sales Application



Culture (1/3)



- Recruit **gifted people**
- Highlight the **mutual benefits** expected from collaboration

- Give them a **sense of purpose**
- **Develop** & **motivate** them
- Grant **autonomy** based on ability

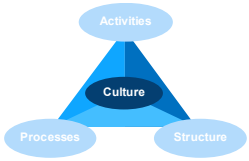
- **Do not keep** those who **under-perform**
- Make sure all **departures** occur in a **fair** and **nice way**

"Alone we go faster, together we go further" – African proverb

Sources: Smart Pharma Consulting

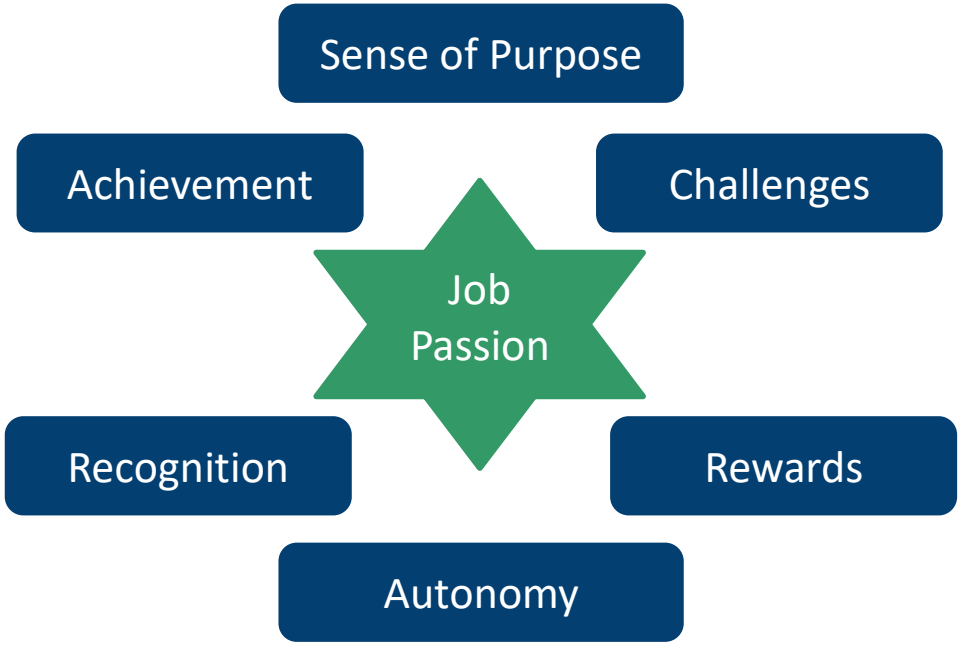
Stimulating Field Force members passion for their job is a key performance driver, especially in a context where customers are increasingly reluctant to meet them

7. Pharma Medico-Marketing & Sales Application



Culture (2/3)

Job passion is influenced by six key drivers



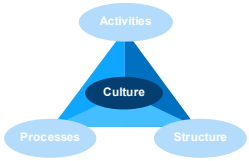
Passion is expressed by

"Pleasure in the job puts perfection in the work" – *Aristotle*

Source: Smart Pharma Consulting benchmark study

Managing by mutual benefits will give people a sense of purpose which will increase the probability to get their full and sustainable engagement

7. Pharma Medico-Marketing & Sales Application



Culture (3/3)

MBO[2] (Management By Objectives)	MBMB (Management By Mutual Benefits)
▪ Definition of objectives agreed by both management and employees	▪ Creates mutual benefits and value by fulfilling the respective expectations of employees and employers
▪ Well-adapted to vertical management models	▪ Maximize the probability to obtain the full engagement of employees
▪ However, by focusing on results, the way to achieve them (the planning) can be overlooked and lead to suboptimal efficiency	▪ Requires from managers to (better) satisfy collaborators …
▪ Does not favor innovation nor flexibility	▪ … to create favorable conditions to secure a higher quality of execution that will lead to better results

Source: Smart Pharma Consulting benchmark study

[1] *The term was coined by Peter Drucker in 1954 in the book "The practice of Management"*

Excellence in Execution requires to set a shared objective, the relevant strategy to reach it and high standards of quality, and to ignite the passion of collaborators

8. Conclusion

6 Tips to boost Excellence in Execution

1. Set the ambition of delivering product and service excellence to customers, which are second to none
2. The strategy set should be explained to align, inspire and motivate people in charge of its execution to excel
3. The structure and processes should facilitate / encourage the search for excellence by all the collaborators of the company
4. The team in charge of execution should be capable, accountable and passionate about exceeding customer expectations
5. The executed activities should be focused on the actions the company excel at and that are the most important to support the strategy
6. The activities supporting the strategy should be carefully planed and monitored with execution and performance indicators

"Excellence is a set of beliefs, ways of thinking, a matter of discipline, and ways of focusing"

Sources: Smart Pharma Consulting

If you have ticked seven "Yes" boxes or more, you are on the right track to move closer to Excellence in Execution, but keep in mind that excellence is a moving target

8. Conclusion

Where do you stand on the Excellence in Execution Scale?

		YES	NO
1	You have a clear **understanding** of the Purpose – Vision – Mission – Values of the company and you **share** it		
2	The medical, marketing and sales **objectives are achievable,** and the crafted **strategy** is **appropriate**		
3	The **organization** is particularly **well-designed** to implement the strategy through your activities		
4	You have the **right means** (human and financial resources) to implement the strategy		
5	You have the **right skills** to **meet** customers **expectations** and **raise** their **perceived value** of your products		
6	You know how to **conduct projects** in an effective and efficient way		
7	You have built a **good reputation** with your customers		
8	You are **passionate** about your job		
9	You regularly **measure** the **quality of execution** and the **impact of your actions**		
10	Your feel highly **satisfied** and **proud** when you manage to **excel in the execution** of an activity		

Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

KPIs & KEIs
for Success

The Survival Kit

POSITION PAPER August 2018

KPIs & KEIs are both essential to optimize the business performance over time

1. Introduction

- The purpose of business indicators is to help improve performance through enhanced efficacy and efficiency
- "KPIs & KEIs for Success" highlights the value of measuring:
  - Key Performance Indicators (KPIs) related to objectives achievement
  - Key Execution Indicators (KEIs) related to activities to be carried out to reach these objectives
- In this document, we propose a method, tools and practical examples to facilitate the proper use of KPIs and KEIs in the context of the pharmaceutical industry

"If you can't measure it, you can't manage it" – Peter Drucker

Sources: Smart Pharma Consulting

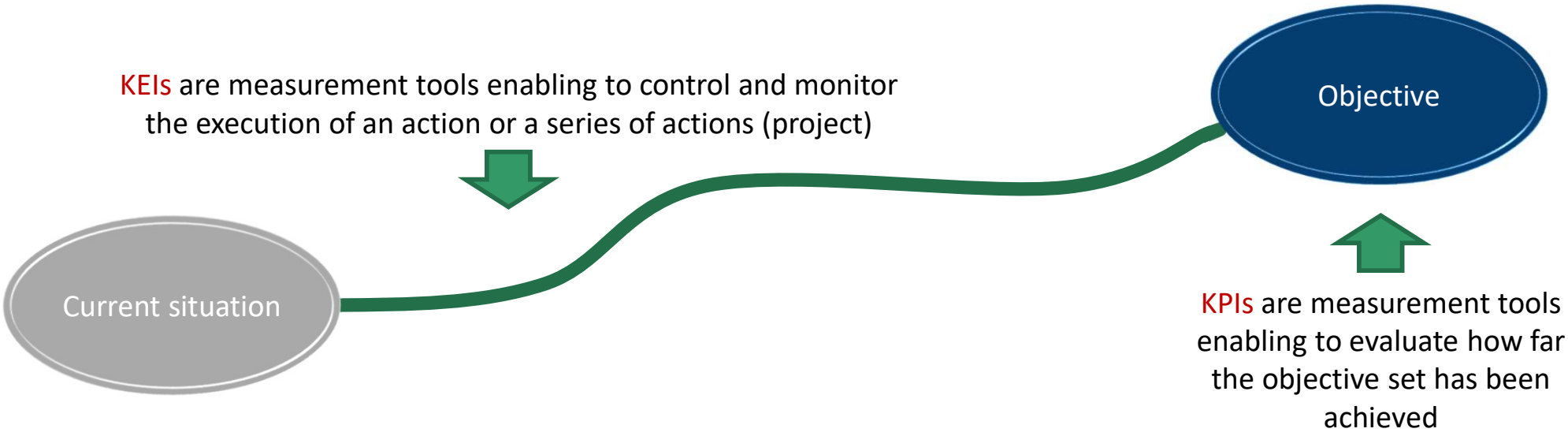
KPIs measure the degree of objective achievement and KEIs the excellence in execution

2. Definitions

KPIs vs. KEIs

For purposes of clarity and efficacy, it is essential to differentiate:

- Key Performance Indicators (KPIs) which measure the outcome of an activity or a project
- Key Execution Indicators (KEIs) which measure the quality of execution of an activity or of a project



Sources: Smart Pharma Consulting

KPIs and KEIs can be quantitative and/or qualitative

2. Definitions

Examples of KPIs & KEIs

	KPIs	KEIs
Quantitative	▪ Number of new customers ▪ Average # of prescriptions per customer ▪ Sales dynamics ▪ Return on investment	▪ % of targeted customers covered ▪ Number of interactions with customers ▪ Number of projects carried out ▪ Level of resources allocated to customers
Qualitative	▪ Brand Preference Mix Index[1] ▪ Corporate reputation improvement ▪ Perceived quality of products / portfolio ▪ Perceived value of services offered	▪ Quality of interactions with customers ▪ Level of market insights ▪ Proper management of projects, from the customer perspective

Sources: Smart Pharma Consulting

[1] Corporate reputation x products image x perceived service quality: see Smart Pharma Consulting website

Business departments use different KPIs to measure their success and KEIs to monitor the manner to achieve it

2. Definitions

Examples of Potential Indicators by Business Activity

Illustrative

Customer-focused

- Number of customers
- Brand Preference Mix (BPM)
- Net Promoter Score (NPS)
- Reputational Index

"KPIs should reflect the priorities of the business departments"

KPIs

Employee-focused

- Staff advocacy score
- 360-degree feedback score
- Absenteeism rate
- Employee engagement index

Financed-focused

- Sales growth
- Net profit (€)
- Net profit margin (% of sales)
- Return on Investment (ROI)

KEIs

"KEIs should help do the right things to meet objectives"

Organization-focused

- Time to market
- Compliance to deadlines
- Delivery in full, on time rate[1]
- Quality level (product / service)

Sources: Smart Pharma Consulting after Bernard Marr & Co

KPIs and KEIs may be very different in nature

2. Definitions

Typology of KPIs & KEIs

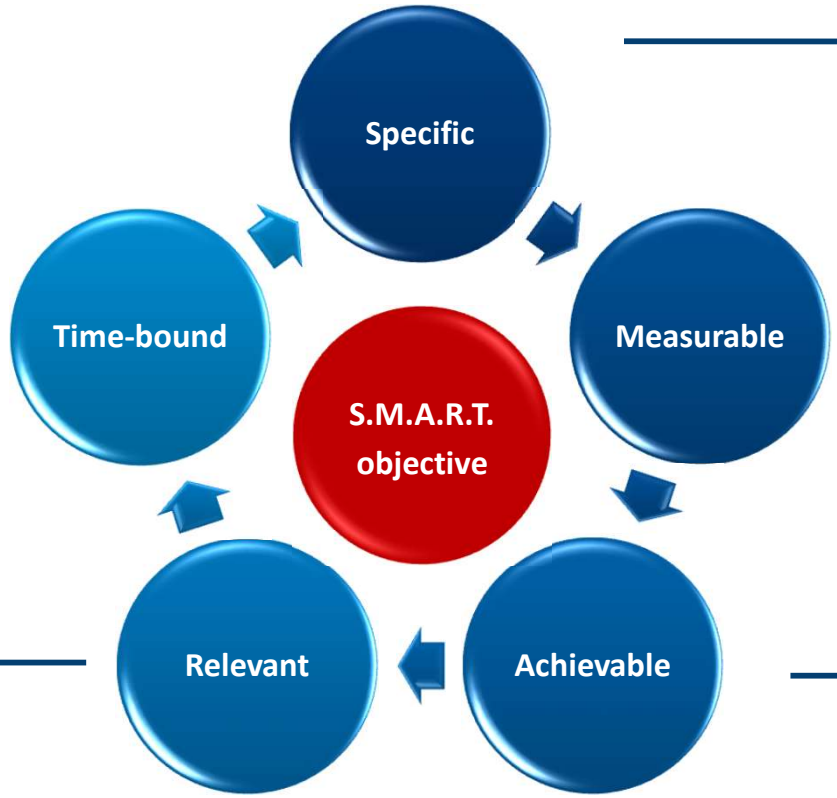
Typology	Definitions	Examples of KPIs	Examples of KEIs
Quantitative	Measure by counting, averaging numbers, calculating rates, ratios, etc.	Units sold per month	Number of customers met
Qualitative	Express opinions, traits, characteristics	Customers' satisfaction survey	Opinion of customers
Process	Measure the efficiency or productivity of a business process	Days of hospitalization to treat a patient with appendicitis	Compliance with project deadlines
Input	Measure assets and resources invested in or used to generate business results	Investments in a project to improve patient care	Actual vs. budgeted investment
Output	Measure the financial and non-financial results of business activities	Revenues – Numbers of new clients	Number of clients having a positive opinion of products
Leading	Measure activities that will have a significant impact on future performance	Pricing negotiated with payers	Quality of tendering planning
Lagging	Measure the output (success or failure) of past activities	ROI – profitability	Number of applications sent on time for tenders

Sources: Smart Pharma Consulting

While defining KPIs and KEIs, target performance and execution objectives should be S.M.A.R.T

2. Definitions

Objective Setting



Clear & Precise
- Limit price erosion
- Gain market share
- Improve the quality of services to HCPs

Fact-based
- Quantitatively and qualitatively with specific reliable indicators, relevant to the objective

Stretched & Reasonable
- Stretched to get the best of everyone
- Reasonable to keep everyone motivated

Realistic
- Set timelines re. the start and the completion of the objective

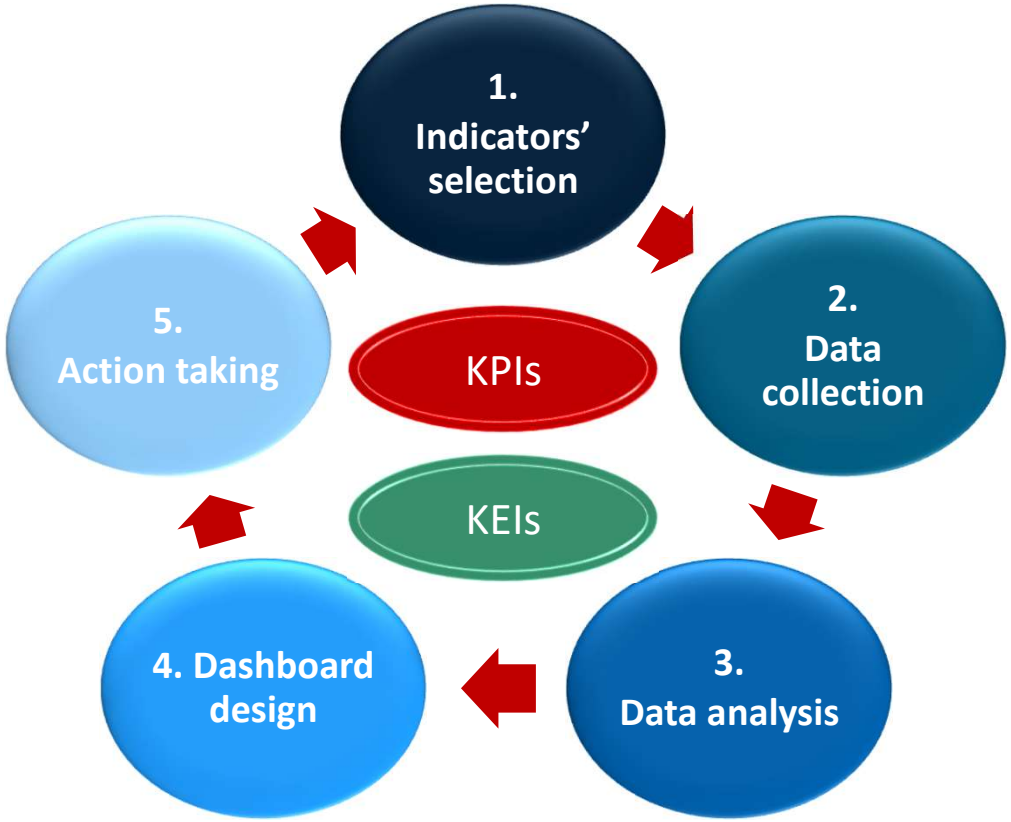
Worthwhile
- The objective set should be in line with the pharma company priorities

Sources: Smart Pharma Consulting

The following wheel defines the key steps to make the best use of KPIs & KEIs

3. How to choose the right indicators?

From Selection to Action: Introduction

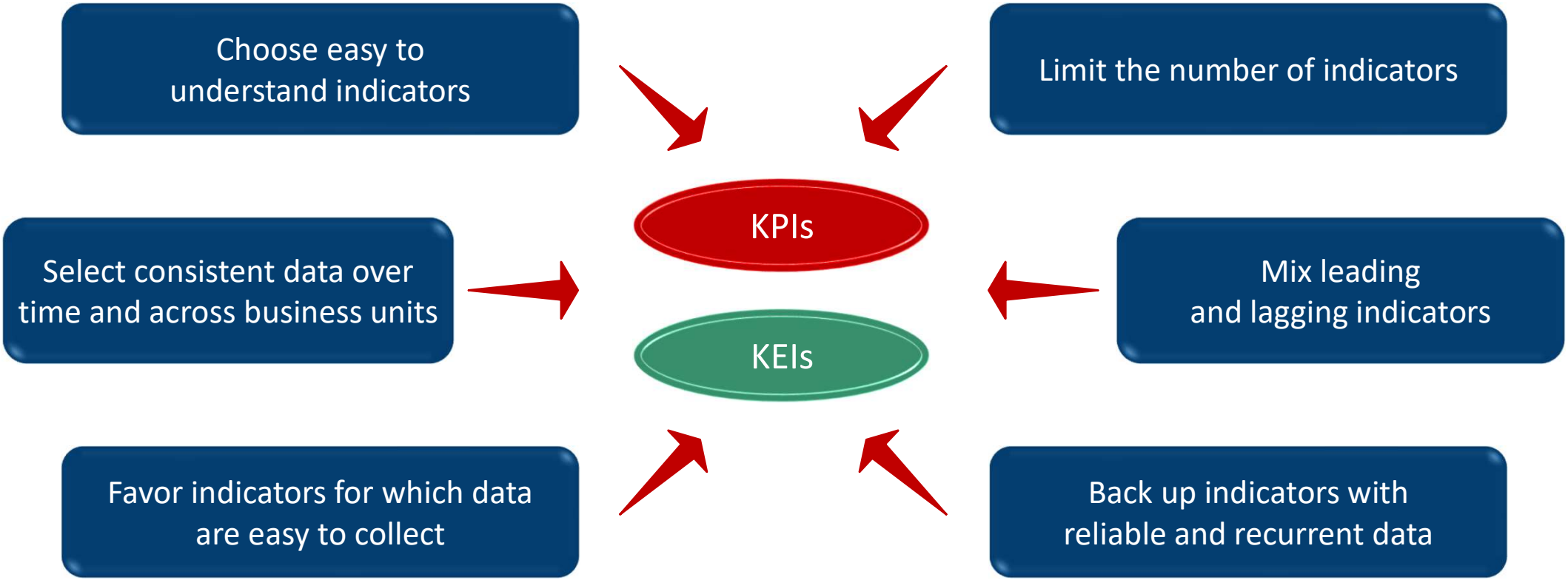


Sources: Smart Pharma Consulting

The following tips will help select the metrics that make the best KEIs & KPIs

3. How to choose the right indicators?

From Selection to Action: 1- Indicators' selection (1/3)



Sources: Smart Pharma Consulting

Selection of KPIs & KEIs should be clearly put in the context of the objectives they are related to

3. How to choose the right indicators?

From Selection to Action: 1- Indicators' selection (2/3)

To select effective KPIs and KEIs, the following questions should be answered

Key questions	Examples
▪ What is the objective the KPIs & KEIs relate to?	▪ *Improve customer preference to company products*
▪ What is the performance issue to be addressed?	▪ *The degree of our customer preference*
▪ What is the audience for the KPIs and KEIs?	▪ *Management committee / Market access team*
▪ How will these indicators be used?	▪ *The KPIs & KEIs will be used to assess and report the impact of services on customer preference*

Sources: Smart Pharma Consulting

Selected KEIs & KPIs must reflect progress on specific challenges to be addressed

3. How to choose the right indicators?

From Selection to Action: 1- Indicators' selection (3/3)

Illustrative

Indicators	Formula	Insight	When to apply
Brand Preference Mix[1]	▪ Average response on a 10-point scale re. corporate reputation, brand image and perceived quality of associated services	▪ Provides a measure of customer level of preference	▪ Once or twice a year depending on the activity
Net Promoter Score	▪ Average response on a 10-point scale to the question "Would you recommend this service or product to a friend?"	▪ Provides a measure of customer satisfaction	▪ Once or twice a year depending on the activity
Trust & Value	▪ Multivariate formula measuring perception on a visual analog scale	▪ Understanding of what drives Trust & Value with HCPs and how the company performs	▪ Once a year
Number of client hospitals	▪ Number of hospital where products are listed vs. the total number of targeted hospitals	▪ Evaluation of the performance vs. objective ▪ Measure of the impact of projects carried out with hospitals	▪ On-going measurement

Sources: Smart Pharma Consulting

Data collected should be reliable, actionable and reflect the priorities of the company

3. How to choose the right indicators?

From Selection to Action: 2 - Data Collection (1/2)

To collect data (qualitative or quantitative), the following questions should be properly answered

Key questions	Examples
What are the data to be collected?	*Opinion of customers re. corporate reputation, service quality and product attributes*
What are the sources of data to be collected?	*Survey of customers having benefited from a service in 2020*
How will the data be collected?	*Through face-to-face customers interviews by a market research agency*
How will the performance level be determined?	*With a 10-point visual analog scale*
What are the targets and performance thresholds?	*Gain 2 points in 2020 vs. 2019*
How often should the data be collected and reported?	*Data collected twice a year and reported once a year*

Sources: Smart Pharma Consulting after Bernard Marr & Co

For each indicator, the measure, the target, the source and the frequency should be defined

3. How to choose the right indicators?

From Selection to Action: 2 - Data Collection (2/2)

	KPIs	KEIs
Measure	Sales achieved vs. objective	# of customer interactions vs. objective
Target	100%	800 face-to-face contacts per annum
Source	Sales reports	Activity reports
Frequency	Monthly	Monthly

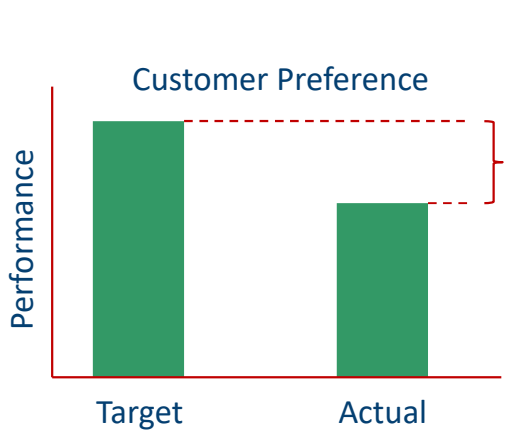
Sources: Smart Pharma Consulting

Analysis of data related to KEIs & KPIs enables to extract business insights

3. How to choose the right indicators?

From Selection to Action: 3 - Data analysis

- The proper analysis of KPIs & KEIs will require to link the collected data to the objective to be achieved or the industry benchmarks, respectively in terms of performance and quality of execution
- One of the generic approach consists to:
  - Compare actual to target performances
  - Measure and analyze the potential differences (either positive or negative): gap analysis
  - Look for the factors responsible for these gaps: root cause analysis[1]



Root cause analysis

1st level analysis

- Corporate reputation similar to competition
- Quality of services 1.5 point > than competition
- Perceived efficacy of drug lower than competition

2nd level analysis

- Least physicians' hindsight
- Limited number of published clinical trials
- Heterogeneous clinical results from one to another study

Illustrative

Sources: Smart Pharma Consulting

[1] *With the help of the Ishikawa diagram, also called fishbone or cause-and-effect diagrams*

Display types will depend on analyses, audience and messages

3. How to choose the right indicators?

From Selection to Action: 4 - Dashboard Design (1/3)

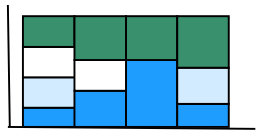
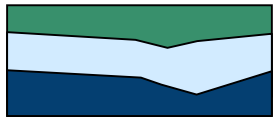
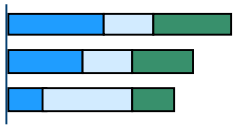
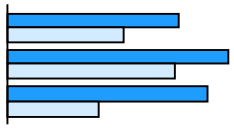
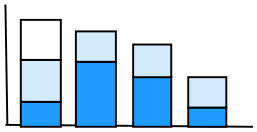
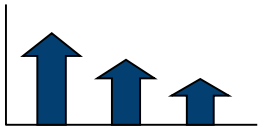
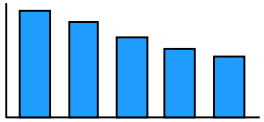
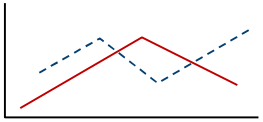
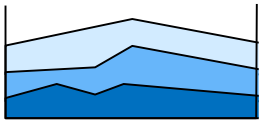
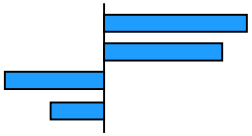
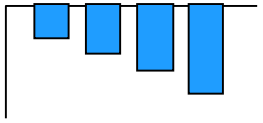
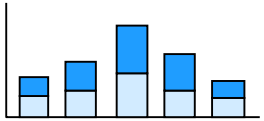
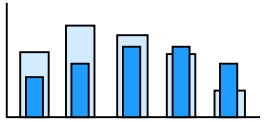
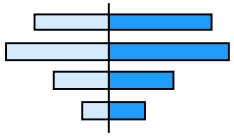
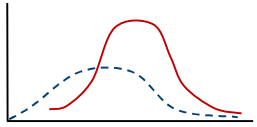
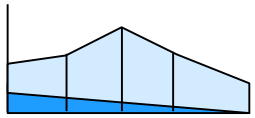
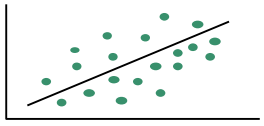
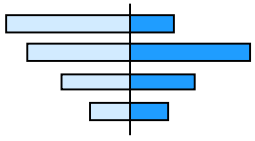
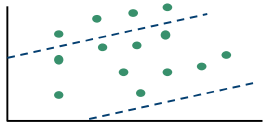
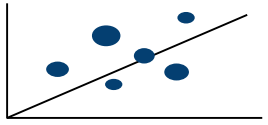
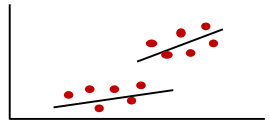
- Quantitative and qualitative data should be carefully analyzed before choosing the type of graphics
- The choice of graphical display will depend on the analysis carried out, on the audience and on the message to be conveyed:
  - Type 1 : Composition => Share of business…
  - Type 2 : Ranking => Ranking of regions based on number of hospital where products are listed…
  - Type 3 : Evolution => Number of tenders won…
  - Type 4 : Distribution => Business distribution by region…
  - Type 5 : Correlation => Relation between projects carried out in hospitals and product listing…

Sources: Smart Pharma Consulting

The selection of displays should be done in an easy to interpret manner

3. How to choose the right indicators?

From Selection to Action: 4 - Dashboard Design (2/3)

Type	Model 1	Model 2	Model 3	Model 4	Model 5
Composition					
Ranking					
Evolution					
Distribution					
Correlation					

Sources: Smart Pharma Consulting

A dashboard is an efficient way of displaying multiple KPIs & KEIs in a singular view

3. How to choose the right indicators?

From Selection to Action: 4 - Dashboard Design (3/3)

Illustrative

- Dashboards provide at-a-glance views of indicators
- They contain series of graphics, charts, gauges and other visual indicators that can be monitored and interpreted
- The visualizations on a dashboard may come from one underlying dataset or many, and from one underlying report or many
- Dashboards should comply with 3 elements:
  1. Display “need-to-have” data only, to avoid distraction and remain focused on what is essential to perform
  2. Be well-structured, in a logical manner
  3. Easy to read and to interpret

Sources: Smart Pharma Consulting

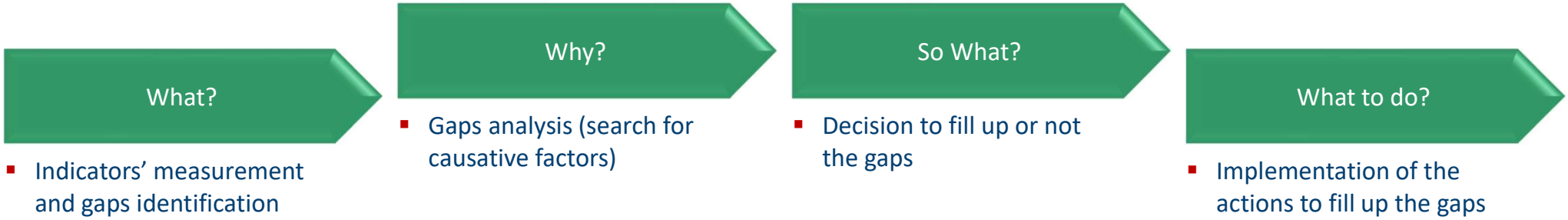
A dashboard is an enabler to make decisions

3. How to choose the right indicators?

From Selection to Action: 5 - Action Taking

- If KPIs show that performance is progressing as per plan, actions should be taken to secure the momentum or outperform the preset objective
- If the performance is below expectation, and the causative factors have been determined with the help of KEIs, the management should take actions to fill up the gaps
- If judged as non-attainable, the performance target may be revised

From observation to action



"KPIs change when objectives are met or if management focus shifts"

Sources: Smart Pharma Consulting

Selecting and using KPIs & KEIs is a difficult process requiring a deep thought

3. How to choose the right indicators?

Problems & Issues related to KPIs & KEIs

KPIS & KEIs may not yield what they were meant to provide for various reasons:

- The indicator is not related or relevant to the work being performed
- The rate of change in the indicator is too slow to produce a result that is actionable
- Turnaround time for actions needed to correct low performing indicators takes too long
- The responses or the processes needs to deal with indicators indicating a problem either do not exist or are inadequate
- The indicators are only loosely monitored by front line managers as opposed to being shared with the team as a whole
- Too many KPIs & KEIs selected leading to confusion and “noise”

Sources: Smart Pharma Consulting after T. Tsongas, Symantec

KPIs & KEIs play the role of a compass to help companies achieve their objective, efficiently

4. Key learnings

- Targeted KPIs are an effective tool for driving project objective realization
- KEIs will help keeping activities (projects) on track to deliver the expected value (performance)
- Although industry standards matter, companies may choose different KPIs & KEIs from their competitors; what matters is how relevant the indicators are to the business
- Companies should also review their objectives and strategies regularly and make necessary adjustments on their KPIs & KEIs
- KPIs are important to help focus on common objectives…
- … and ensure they stay aligned within the company priorities
- A well-designed set of KPIs should provide a clear indication of current levels of performance and help make better decisions that bring the business closer to achieving its strategic objectives

Sources: Smart Pharma Consulting

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CONSULTING

Time Management Programs

8 Practical Recommendations to save 3 hours per Day

POSITION PAPER August 2017

Time is a limited resource which must be used efficiently to achieve the objectives set

Introduction

Time at work

- Employees of companies receive a salary in exchange for their competence…
- … which will be expressed during a finite period of time[1]
- The issue for employers and employees is to make the best use of this limited resource
- Thus, the key question to be answered is:

"How to boost employees' productivity by properly allocating time to meet their objectives?"

Time management at work

- We all run after time
- To help you make a better use of your time, Smart Pharma Consulting proposes easy-to-implement method and tools
- If properly executed, you and your teams can expect to:
  - Save more than three hours per day
  - Boost significantly efficiency and efficacy

  while improving quality of life

"Time management doesn't give more time, just helps make a better use of it"

Sources: Smart Pharma Consulting

[1] For instance: 10-11 hours a day and 218 days per annum

If one of these six statements reflects your situation, then read this document

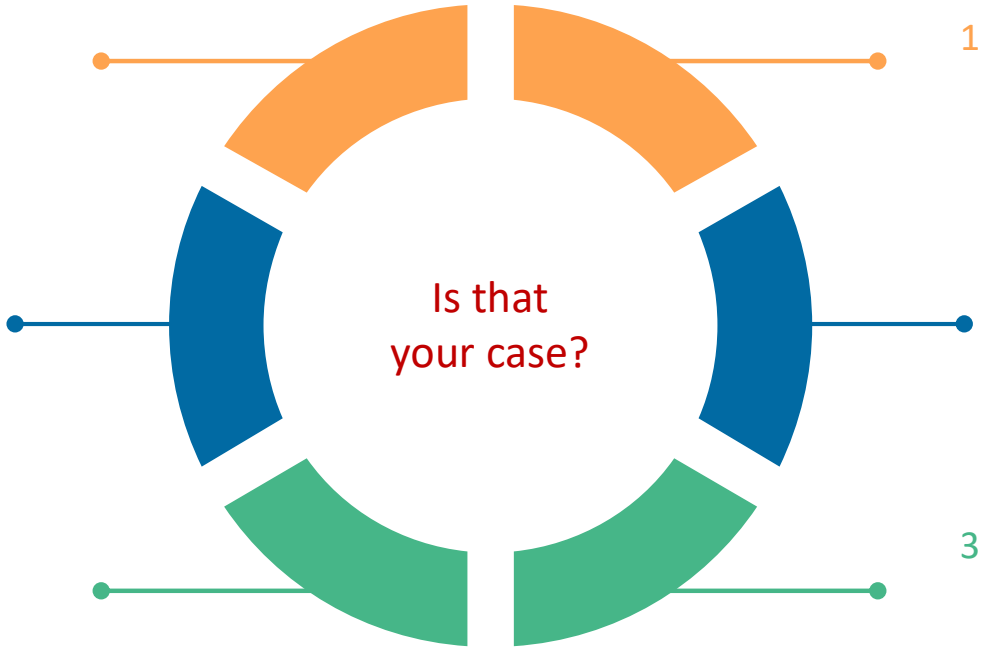
Express Self-diagnosis

How well do you manage your time?

6. I am regularly stressed and exhausted by my workload

5. I work ~11 hours a day, and work regularly at home in the evening and during the week-ends

4. Due to lack of time, the quality of my work is not always up to the mark



1. I don't have enough time to work on critical tasks[1]

2. I must spend too much time on non-important tasks

3. I often complete tasks at the last moment and fail to meet deadlines

Sources: Smart Pharma Consulting

[1] *Such as: people management, thinking, decision-making*

To better manage your working time, implement the following method

Method to Optimize your Time

A four-step easy-to-implement method

1. Situation analysis

During the first step, you will identify the main time wasters

2. Management of time wasters

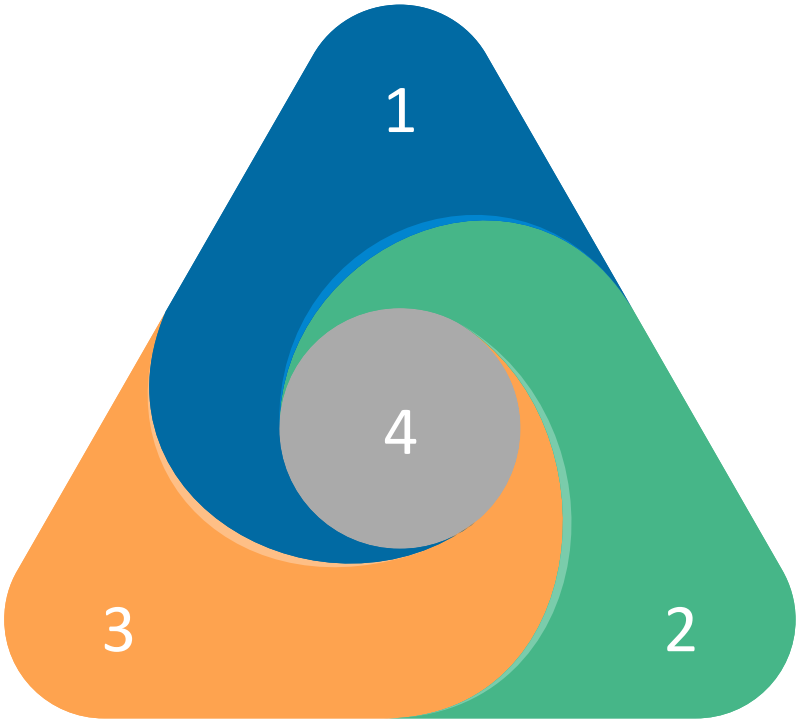
The second step will consist in defining solutions to eliminate the time wasters or, at least, limit their noxious effect

3. Planning & implementation

The solutions selected to improve time management will be carefully planned and rigorously applied

4. Tracking & sharing outcomes

Systematically track the impact of the applied solutions and convince your colleagues to adopt the same method



Sources: Smart Pharma Consulting

You must carefully identify the main time wasters

1. Situation Analysis

Main factors responsible for poor time management

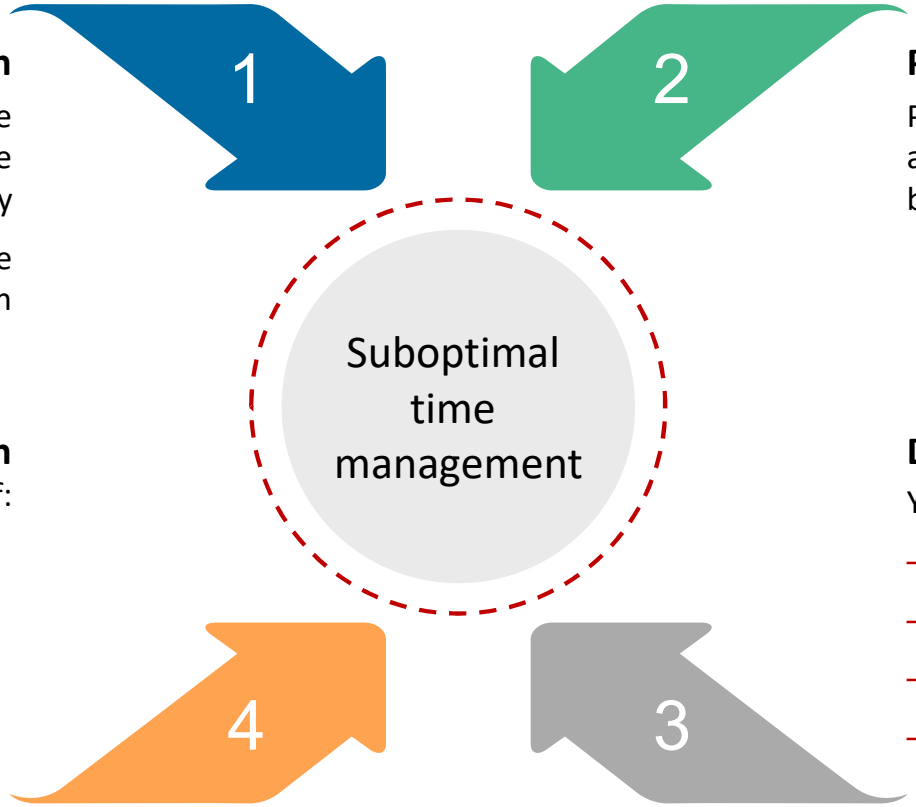
Lack of prioritization

All subjects and tasks are not of the same importance and do not carry the same degree of urgency

Thus, they should not be given the same level of attention

Procrastination

Procrastination occurs when you put off activities that are important and urgent, but you cannot decide yourself to start



Suboptimal organization

A significant time is lost as a result of:

- Multitasking
- Little or no delegation
- Clutter / Poor IT maintenance
- Unhealthy lifestyle

Distractions

You are subject to several distractions:

- Phone calls, e-mails, text messages[1]
- Urgent demands from colleagues[2]
- Meetings of low value and/or too long
- Crisis management time

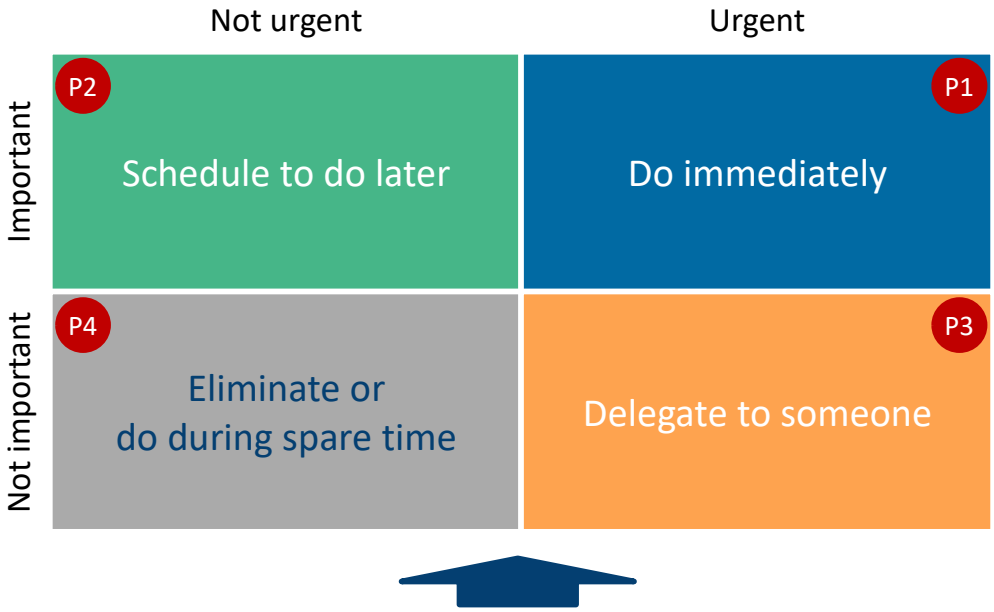
Sources: Smart Pharma Consulting

[1] As well as phone notification, social networks, etc. – [2] Including hierarchy, peers, subordinates

The Eisenhower Matrix helps selecting activities to focus on and those to eliminate

2. Management of Time Wasters

1. Prioritization of activities: Eisenhower[1] Matrix



Make a specific to-do list (e.g., for the day, the week, the month) with all the things to get done

- The Eisenhower Matrix is a tool to prioritize activities based on importance and urgency
- Important activities contribute to meet long-term personal and/or corporate goals and urgent ones require immediate attention
- A great attention should be paid at evaluating:
  - What activities should be done?
  - When and by whom?
- This matrix helps sorting out activities to focus on and those that should be ignored
- Then a daily, weekly, monthly… schedule of activities will be set considering their degree of priority based on importance and urgency

P1 *Priority ranking*

Sources: Smart Pharma Consulting

[1] Dwight D. Eisenhower was the 34th President of the United States from 1953 to 1961. Before becoming President, he served as a five-star general in the United States Army and as the Allied Forces Supreme Commander in Europe during World War II. He also later became NATO's first Supreme Commander

By putting off priority tasks, you will miss deadlines and impair quality of outcomes

2. Management of Time Wasters

2. Avoidance of procrastination

Be determined

Procrastination is a habit requiring a strong determination to get rid of

A firm decision to accomplish an activity, either you enjoy it or not, will let you get it done

Break the task into pieces

Break the task into smaller steps to reduce reluctance (e.g., unpleasant, lack of interest) or fear (e.g., to fail) to start it

Tackle tough activities first

Start your day with the most important tasks, when your level of energy and motivation is high and make sure not to be distracted

Get started immediately

By having started a task, you have already invested some time which will increase the likelihood to complete it

"Never leave that till tomorrow which you can do today" – Benjamin Franklin

Sources: Smart Pharma Consulting

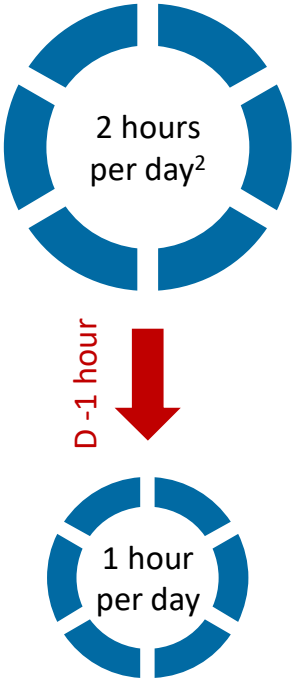
Better management of NICTs[1] and meetings should free 3 hours per day

2. Management of Time Wasters

3. Reduction of key distractions

Phone calls, e-mails, text messages, instant messaging chats, Twitter, Facebook, LinkedIn, etc.

Meetings of low value or too long

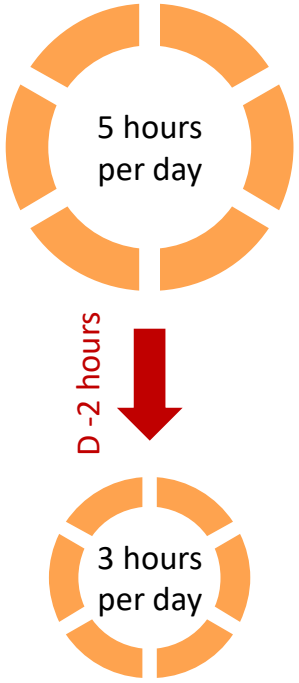


Save one hour per day by better managing electronic time wasters, as follows:

- Unplug (switch off phones, disconnect instant messaging, close the door[3], etc.) especially when you need to concentrate on priority tasks
- Check e-mails, text messages, phone calls, etc., 3-4 times a day and…
- … set aside 2 time slots to respond to them, before lunch and leaving the office
- Unsubscribe from or block email lists if you don't want to receive their content[4]
- Don't feel obliged to pick phone calls[4]

Save two hours per day on meetings and make them more efficient by:

- Reducing their time by 25% (e.g. 45 minutes instead of one hour)
- Cancelling informative meetings, where no decisions are made (1/5 on average)
- Preferring teleconferences when participants are from different locations
- Inviting only people that are absolutely required and who will benefit from it
- Preparing (precise objective, agenda) and managing them rigorously (no off-topic discussions, time-keeping)



Sources: Smart Pharma Consulting

[1] New Information and Communication Technologies – [2] Estimates for a manager receiving ~100 e-mails, 10 phone calls and 20 text messages per day – [3] If you still have none – [4] Unless it is Smart Pharma Consulting

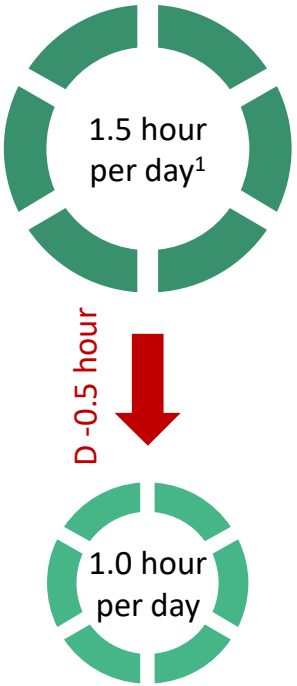
A proper management of unplanned demands or events could save 1 hour per day

2. Management of Time Wasters

3. Reduction of key distractions

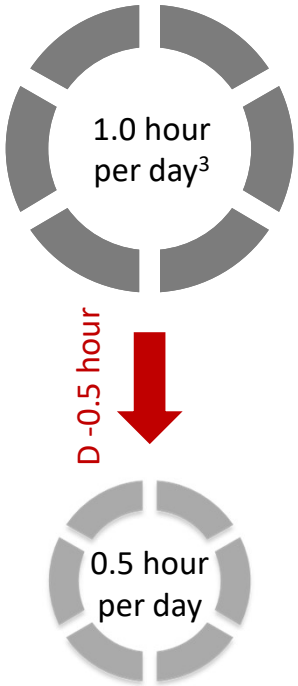
Urgent demands from hierarchy, peers, subordinates, etc.

Crisis management time



- Don't take more than you can handle
- Avoid saying "maybe" or "I'll see", just say "Yes" or "No" when you are asked to carry a task
- You should dare to say "No" and explain tactfully why you can't do it[2]
- Help the demander analyze the situation which can make him realize that:
  - His demand may not be so urgent and propose longer deadlines to do it
  - It could be done by another colleague who may have more availability and be even more competent or…
  - … outsourced to an agency

- "Crisis management time" such as a last moment replacement of a colleague at a meeting or settlement of a dispute with health authorities will disrupt daily and/or weekly schedules
- To properly manage these urgencies, you need to put them in perspective with your scheduled priorities which will enable you to achieve your goals
- If you are familiar with basic time management rules, it will be easier to properly allocate your time…
- … avoiding to over-invest in these urgent events, at the expense of your priorities



Sources: Smart Pharma Consulting

[1] Daily average on a weekly basis, considering all demands: administrative work, reporting to headquarter, requests from colleagues, from your manager, etc. – [2] Showing your weekly planning could be a useful approach – [3] Let us assume that these crises account on average for 2 days per month (i.e., 1 hour per day), we can expect to reduce the time allocated by 50%

If multitasking is a false good idea, delegating is an imperative

2. Management of Time Wasters

4. Getting better organized[1]

Avoid multitasking

- Studies have shown that multitasking increases the time required to accomplish different tasks when compared to doing them in a sequential manner
- Switching one task to another impairs:
  - Productivity
  - Quality of the work done
- You should work in sequence, one task at a time, to save time and deliver higher quality outcomes
- Close off the applications you are not using…
- … the tabs in your browser that may distract your attention from the task you are doing

Delegate

- Delegate, whenever possible, tasks that are essential, but which can be done by someone else; and sometimes better because she/he is more competent or has less time pressure
- Don't underestimate the importance to:
  - Explain the objective of the task
  - Precise what you expect
  - Indicate the deadlines
  - Motivate the person who is going to do the task
  - Not micromanage
- Outsourcing to an agency or purchasing goods/services that will save your time are other options to be considered

Sources: Smart Pharma Consulting

[1] *By getting better organized, it is possible to free several hours per week, that will add up to those coming from a better management of key distractions*

Good organization and balanced lifestyle contribute to improve work efficiency

2. Management of Time Wasters

4. Getting better organized[1]

Eliminate clutter / maintain your equipment

- Clear your desk of everything except the work you intend to do during the day
- Adopt an effective filing system for electronic and hard copies of your documents
- Keeping a good system for filing e-mails, computer documents and papers will save many hours in the long run
- Take the habit to save every 15 to 20 minutes your work on your computer, especially on PowerPoint and Excel
- Make sure your computer equipment is well maintained, that the antivirus and other data protection software are updated regularly

Keep a healthy balance between work and home life

- Healthy lifestyle will boost your energy and motivation, clear your mind and increase your productivity
- Thus, it is strongly recommended to:
  - Sleep enough (~seven hours, depending on individuals)
  - Have a healthy and balanced diet (light lunches to prevent postprandial sleepiness and remain alert)
  - Exercise 2-3 times a week (e.g. swimming, running) for ~2 hours to increase your stamina, better manage your stress
  - Maintain a good balance between work and private life
  - Take breaks (5-10 minutes in morning and afternoon) at work to breathe, relax, socialize at the coffee machine…

Sources: Smart Pharma Consulting

[1] *By getting better organized, it is possible to "free" several hours per week, that will add up to those coming from a better management of key distractions*

Take time to plan carefully your activities and you will end up saving time

3. Planning & Implementation

Prioritization of tasks: Activity planning tools

Illustrative

Weekly time log	Monday	Tuesday	Wednesday	Thursday	Friday
Morning					
Lunchtime					
Afternoon					
Evening					

Morning time log	Activities	Priority[1]	Afternoon Time log	Activities	Priority[1]	Remarks
≤8:30			14:00			
9:00			14:30			
9:30			15:00			
10:00			15:30			
10:30			16:00			
11:00			16:30			
11:30			17:00			
12:00			17:30			
12:30			18:00			
13:00			18:30			
13:30			≥19:00			

- The purpose of this tool is to help you organize your activity and make sure you will focus your time and effort at your 2-3 top priorities (P1) to reach your main goals and set deadlines
- It is not only a planning tool but also a diagnostic tool to check if you allocate your time in an optimal way
- Your most challenging[2] activities should be slotted into your most productive (high-energy) time of the day
- The time log should be filled up (on a notebook or an electronic device[3]), ideally, at the end of the previous week or day, accordingly, which should not take more than 10-15 minutes

Sources: Smart Pharma Consulting

[1] From P1 to P4 as per the Eisenhower Matrix – [2] Such creativity sessions, decision-making activities, complex analyses, assessment of collaborators performance, etc. – [3] Such as a simple Excel spreadsheet, Outlook or a more specific tool like Trello, Taskworld

Time management is an ongoing process which should involve all employees

4. Tracking & sharing outcomes

Tracking outcomes

- Tracking your planned activities will enable you to:
  - Analyze whether the time allocated reflects your priorities
  - Calculate the potential gaps between planned and effective time spent per activity and find the reasons
- Based on these information, you can:
  - Rectify your time management mistakes
  - Look for solutions to better use your time
  - Measure your improvements from one period to another
- Tracking can be done with the help of time logs such the activity planning tools we have proposed[1], Gantt charts commonly used for project management, specific time tracking software or time-saving apps

Sharing outcomes

- Once you get tangible results through the application of Time Management recommendations, you can try to engage your close colleagues, either superiors, subordinated or pairs, to follow them
- Sharing your "*positive*" outcomes will benefit:
  - Your colleagues who should obtain a similar added-value if they apply the same recommendations
  - You because your colleagues will be more sensitive to distractions they may generate and pay more attention to avoid or limit them
  - The overall organization through an overall increase of its collaborators' productivity and quality of works

Sources: Smart Pharma Consulting

[1] See previous page

8 Practical Recommendations to help you save more than 3 hours per day & boost your efficiency

1. Avoid meetings before 10:30 am to focus on your key activities requiring the greatest concentration[1]
2. Do not attend meetings if you are not essential or if it doesn't contribute to meet your goals[2]
3. Shorten the usual one-hour meetings to 45 minutes and suggest your colleagues to do the same
4. Batch similar tasks together (e.g., e-mails reply, administrative work, etc.)
5. Avoid meetings after 5:30 - 6:00 pm to keep time available to answer your phone calls, e-mails, etc.,
6. Keep a one-hour buffer time per day for absorbing unexpected extra work or in case you fall behind on your scheduled activities of the day
7. Keep 10 minutes, at the end of the day, to organize your next working day
8. Impose yourself strict rules to minimize the time spent dealing with unsolicited or irrelevant messages

"By saving 3 hours per day, you will get the equivalent of 1.5 more day per week"

Sources: Smart Pharma Consulting

[1] Unless your peak concentration is at another moment of the day. In such a case, you adopt your schedule accordingly – [2] In a survey published in Harvard Business Review (July – August 2017,62 – 69): 71% of Senior managers said meetings are unproductive and inefficient; 64% said they come at the expense of deep thinking

We propose intra-company services to better manage time

How can Smart Pharma Consulting help you?

Three Time Management services

Training seminars[1]

- We organize one- to two-day intra-company seminars for groups
- We share methods, simple tools, tips and tricks to optimize time management of individuals or teams
- We propose practical exercises in the form of role plays, case studies, simulations, etc.

Transformational projects

- We help companies set customized rules and develop specific means to optimize the time management at global, affiliate, department or functional level
- We produce guidelines and support tools regarding the management of projects, meetings and distractions; internal and external communication (incl. writing of e-mails and text messages, phone calls, etc.)

Individual coachings[1]

- We provide individual support for a period of three to six months
- We co-develop a specific approach, agree on the rules and enabling tools to improve time management
- We carry out a bi-monthly review to analyze the progress of the situation
- We set a hotline for the coachee

Sources: Smart Pharma Consulting

[1] Smart Pharma is certified as a "Training Organization" since February 1st, 2002

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CONSULTING

Project Management

The Survival Kit

POSITION PAPER August 2018

This Survival Kit reviews key principles and tools to manage projects efficiently

Introduction

- The purpose of this document is to review:
  - Clearly
  - Precisely
  - Concisely

  the key principles and tools that enable to manage projects in an effective and efficient way

- These principles and tools can be useful to manage both simple and complex projects for personal or professional purposes

- The most important steps of the project management will be illustrated

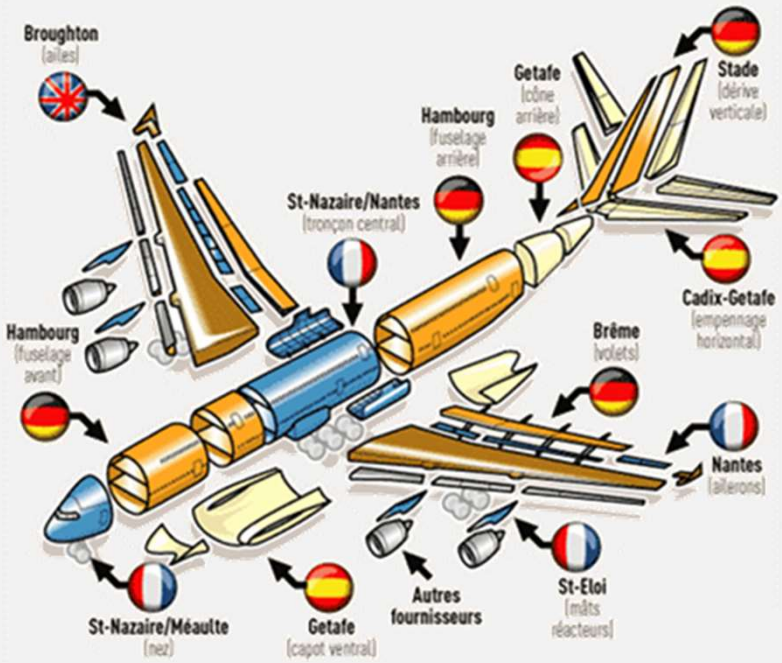
Sources: Smart Pharma Consulting

A project combines activities, carried out within a set time frame, to achieve a defined result

Project Definition (1/2)

- The term “project” refers to several non repetitive and temporary activities that are carried out to produce:
  - A product
  - A service
  - A unique result
- A project can:
  - Last from a couple of hours to several years
  - Involve one or thousands of people
  - Cost from a few to billions of euros
  - Be of a professional or personal nature

Illustration of a complex project



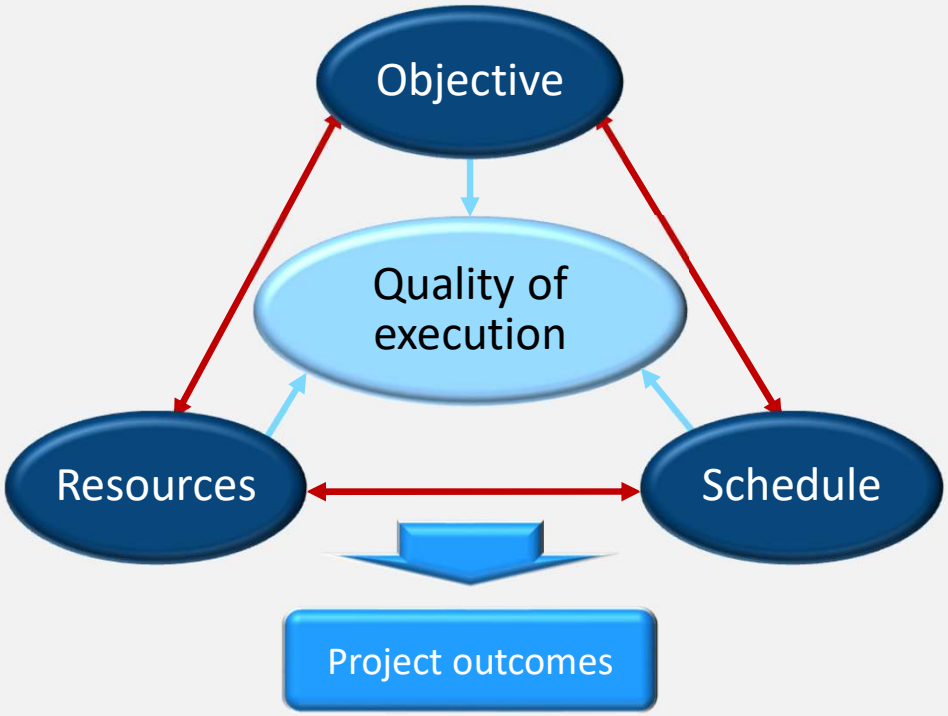
Sources: Smart Pharma Consulting

A project has 3 components: its objective, a schedule, and the required resources to complete it

Project Definition (2/2)

- A project can be defined by three components:
  - Its objective: purpose and desired outcome
  - The schedule: timetable and milestones, including its start and completion dates
  - The resources available to conduct the project: people, technical and financial resources
- The 3 components impact the quality of execution and the outcome of the project
- They are intertwined and influence each other:
  - A change in desired outcome will impact the cost and schedule
  - A shortening of the deadline could have an impact on costs and the quality of the outcome
  - A reduction in the budget can modify the quality of the outcome and the deadline

Project components



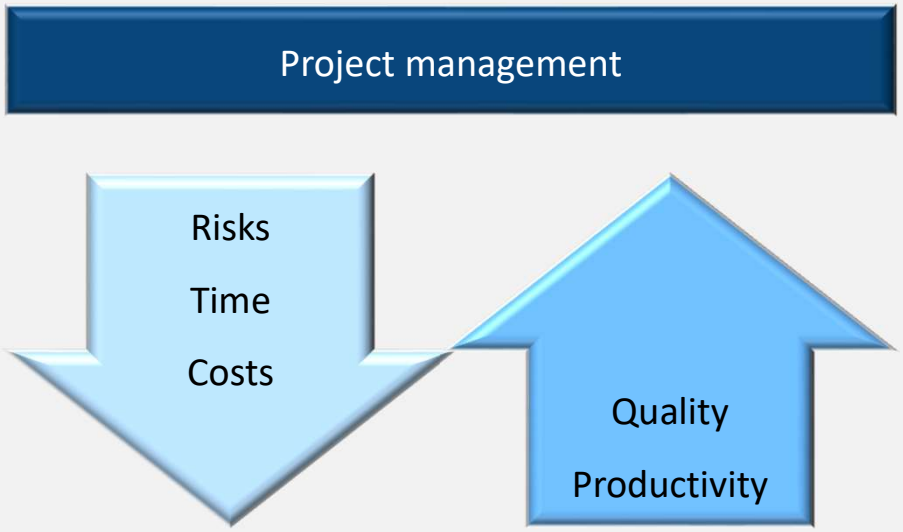
Sources: Smart Pharma Consulting

The proper management of projects improves their probability of success

Project Management Benefits

- Using a project management methodology allows a project manager to:
  - Set adequate expectations for the project
  - Improve the quality of deliverables
  - Increase productivity / efficiency
  - Reduce scope creep
  - Avoid cost overruns
  - Meet the agreed deadlines
  - Prevent risks
  - Promote communication between the project team and the project stakeholders
  - Build on experience
  - Reduce the number of projects that fail

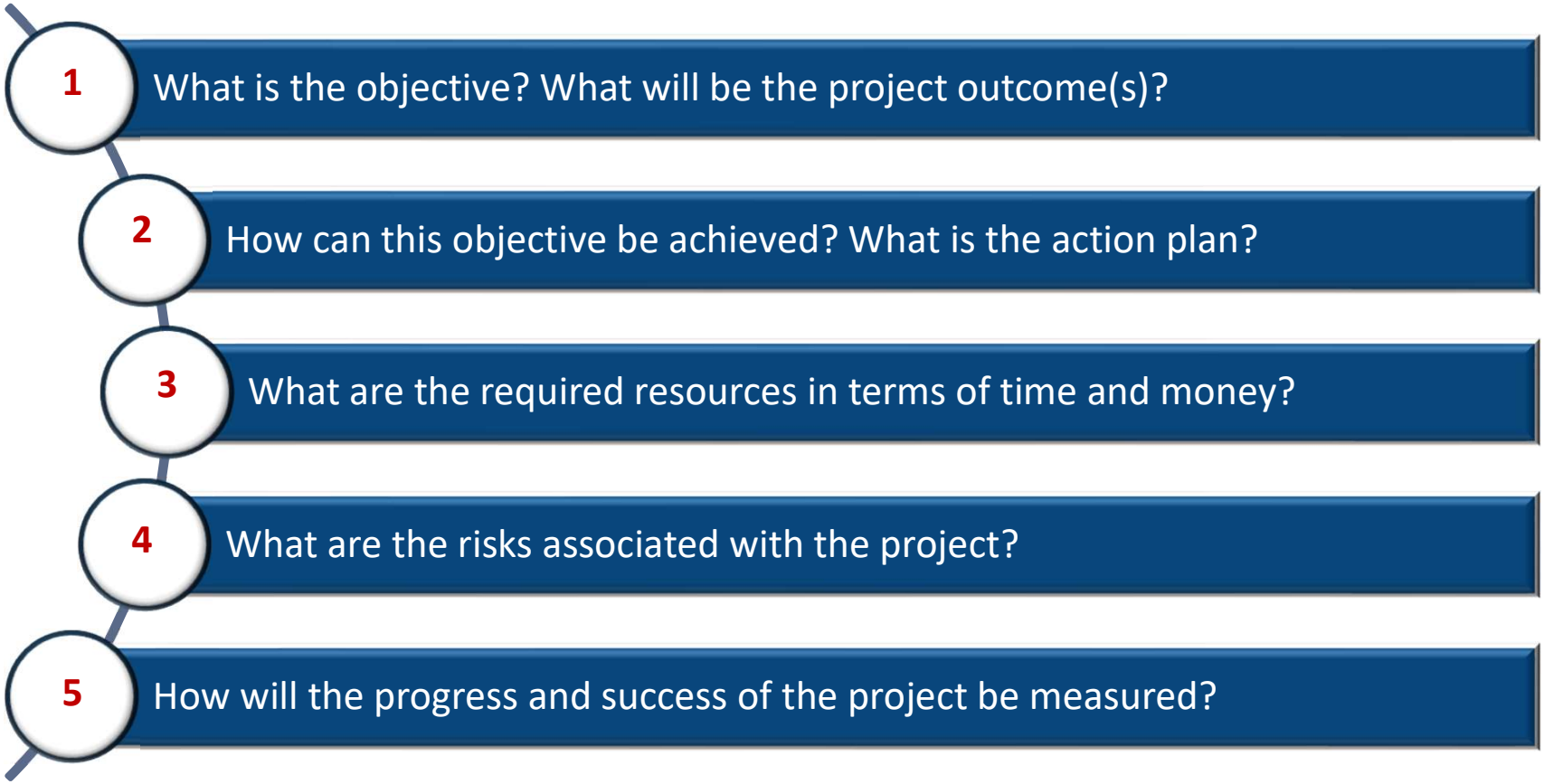
Benefits of project management



Sources: Smart Pharma Consulting

These questions will help ensure the proper unfolding of a project and limit the risk of failure

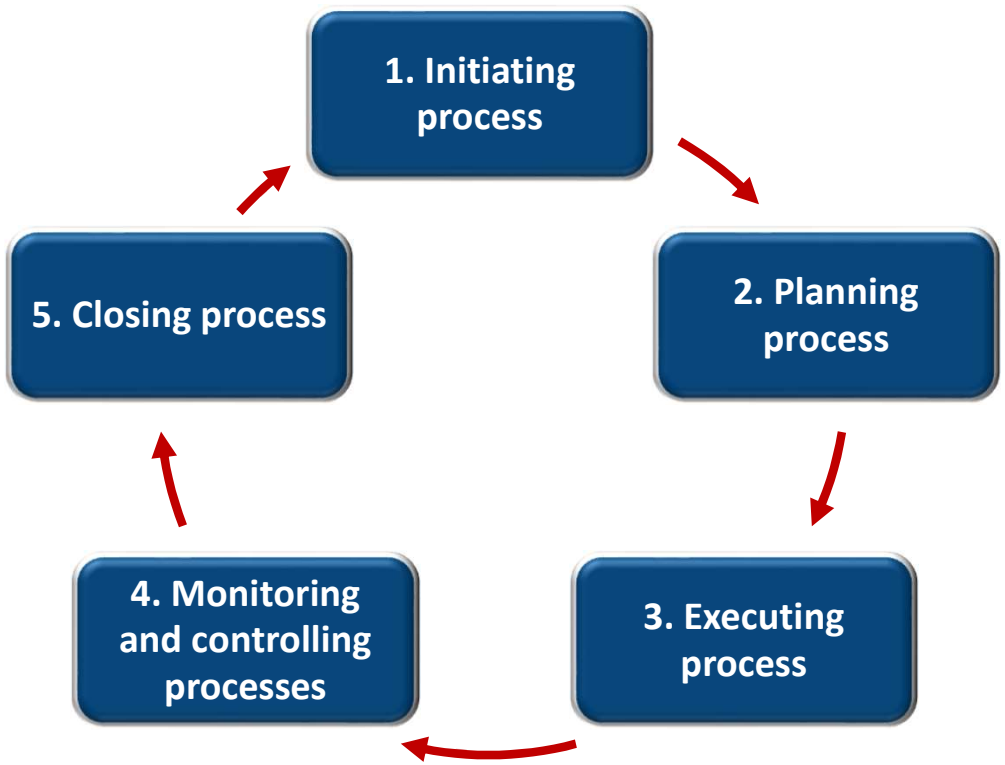
Key Principles of Project Management



Sources: Smart Pharma Consulting

Every project goes through five different steps

Key Steps of a Project



1. The initiating process includes a cost-benefit analysis and evaluating the feasibility of the project from a technical and resource point of view
2. The planning process ensures a smooth execution and increases the chance of success
3. The executing process is the part where works get done and where people skills and team-work are most important
4. The implementation of the project needs to be monitored and controlled to ensure that everything is carried out according to the plan
5. The closing process comes after the project has been completed and is meant to build on the project experience

Sources: Smart Pharma Consulting

The initiating process avoids pursuing projects that are bound to fail

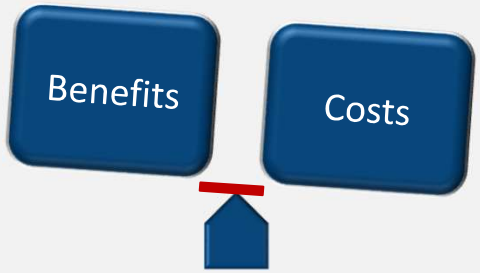
Step 1: Initiating Process

The initiating process answers two key questions:

1. Should the project be done?
   - Are the expected benefits worth the expected costs of the project?
   - Can the issue be approached in a better way?
   - Can the expected outcome be achieved in a better way?
2. Can the project be done?
   - Is the project technically feasible?
   - Are the required resources (people, money, time) available?

Cost-benefit analysis

A cost-benefit analysis is a systematic process for calculating and comparing the costs and benefits of a project to determine if the project should be undertaken (benefits > costs) or to choose among several potential projects



Sources: Smart Pharma Consulting

Project planning will reduce risks and mistakes

Step 2: Planning Process: Introduction

The project management plan should include:

- An overview of the reasons for the project and a detailed description of intended results
- A list of all constraints, assumptions and required works related to the project
- A breakdown of the roles and responsibilities of the project management and team members
- A detailed project schedule
- Resources needs (personnel, funds, equipment, facilities, information, etc.)
- A description of how significant risks and uncertainties will be managed
- Plans for project communications
- Plans for ensuring project quality

A scope statement precising the following points must be written:

- Rationale: how and why the project came to be, the business need addressed, the scope of work, how it will interfere with other activities
- Objectives: deliverables of the project
- Scope description: features and functions of the deliverables
- Acceptance criteria: process and criteria for accepting the completed deliverables
- Constraints: restrictions limiting what can be achieved, the manner and deadlines within which they can be achieved, and the cost of achieving it
- Assumptions: way in which uncertainty related to the project will be addressed

Sources: Smart Pharma Consulting

Success will depend on the quality of objective set and the proper management of constraints

Step 2: Planning Process: Objectives & Constraints

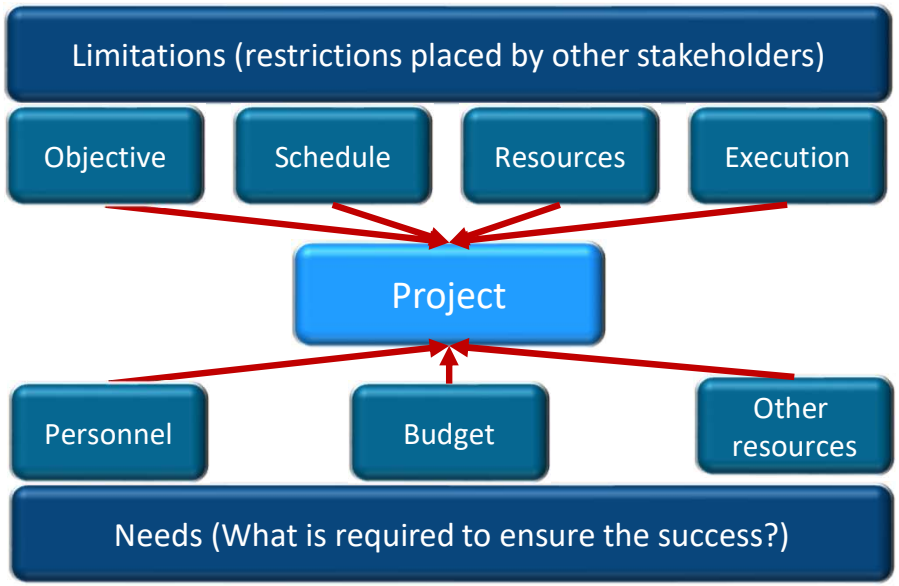
Objectives

The project objectives should be:

- Brief and simple to understand (no jargon)
- Accepted by the project stakeholders
- Controllable: the project team should be able to influence the success of each objective
- SMART:
  - Specific: clear and detailed target
  - Measurable: specified performance indicators[1]
  - Achievable: challenging but attainable
  - Rewarded: benefits that people will get for attaining the set objective
  - Time-bound: including deadlines

Constraints

Every project must be achieved within a defined set of constraints influencing its duration, cost and quality



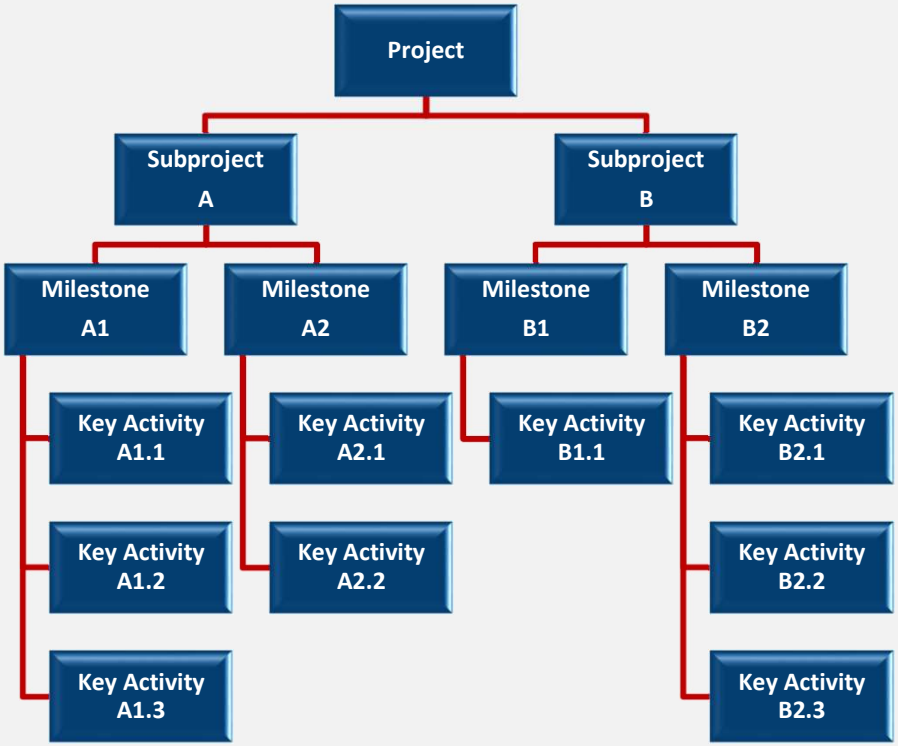
Sources: Smart Pharma Consulting

[1] Can be either quantitative or qualitative goals. What matters is that people define goals precisely enough to measure progress and the achievement

A WBS makes work sequences both identifiable and understood by breaking a project down

Step 2: Planning Process: Work Breakdown Structure

- A work breakdown structure (WBS) breaks down a full project into several manageable units:
  - Subprojects
  - Milestones: completion of an important set of work packages
  - Key activities: summary tasks
  - Work packages: tasks, activities, work elements
- A work breakdown structure (WBS) helps to:
  - Identify all the work that needs to be done
  - Logically organize work so that it can be scheduled
  - Assign work to team members
  - Identify the needed resources
  - Communicate what must be done
  - Organize work using milestones



Sources: Smart Pharma Consulting

Roles & Responsibilities must be transparent and widely available for reference

Step 2: Planning Process: Roles & Responsibilities

- Roles depend on actions and activities assigned
- Each role is associated with some responsibilities
- Team members relate to each others as follows[1]:
  - Authority: ability to make binding decisions
  - Responsibility: commitment to achieve results
  - Accountability: consequences of own performance
- Delegating involves transferring authority[2]
- Defining and sharing roles and responsibilities upfront can help improve performance and identify potential difficulties during a project
- A Responsibility Assignment Matrix (RAM) can be used to display the team roles and responsibilities:
  - A RAM depicts each project audience role in the performance of different project activities
  - There is no standard format for a RAM

Responsibility Assignment Matrix (RAM)

		People			
WBS code	Key activities and milestones	Project manager	Task Leader	Employee A	Employee B
3.1.	Design of a questionnaire	A	P		
3.2.	Look out for potential respondents			P	
3.3.	Carry out the interviews		A		P
3.4.	Summarize and analyze the answers	A	S, A	P	S

P = Primary responsibility
S = Secondary responsibility
A = Approval required

Sources: Smart Pharma Consulting

[1] Although authority can be transferred to another person, responsibility for the results can only be shared –
[2] Delegation involves risk as you are responsible for the consequences of someone else decisions

The initial project schedule aims at determining the time it will take to complete the project

Step 2: Planning Process: Schedule – Introduction

- Two pieces of information are needed to determine the amount of time required to complete a project:
  - Sequence: the order in which activities need to be performed
  - Duration: the time each activity will last
- Network diagrams can be used to illustrate the order in which project activities are to be performed:
  - Activities-on-arrow diagrams
  - Activities-on-node diagrams
- Network diagrams display:
  - Activities required to complete the project (i.e. work breakdown structure) and their dependencies
  - The time that each activity will take to complete
  - The milestones (or events) which are important but take no time and consume no resources mark the start or the end of one or more activities

Scheduling vocabulary

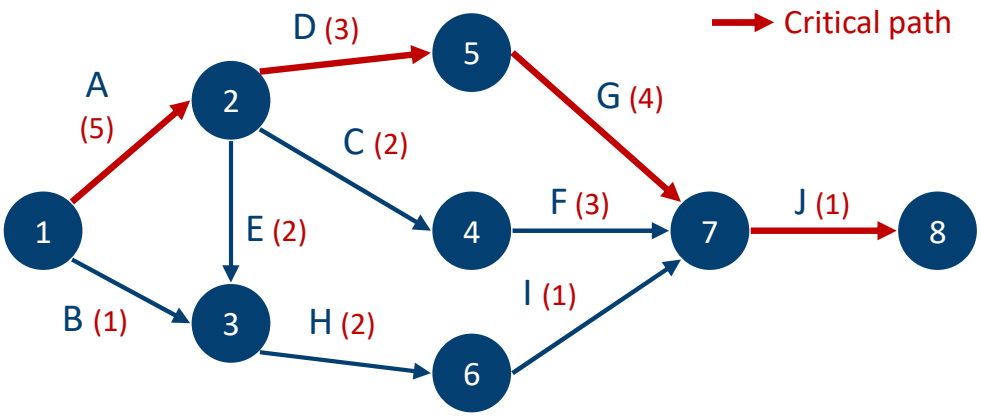
Critical path	A sequence of activities that takes the longest time to complete
Noncritical path	A sequence of activities in which some activities can be delayed without moving back the project completion date
Slack time/float	The maximum amount of time an activity can be delayed w/o moving back the completion date
Earliest start date	The earliest date an activity can be started
Earliest finish date	The earliest date an activity can be finished
Latest start date	The latest date an activity can be started without moving back project completion date
Latest finish date	The latest date an activity can be finished without moving back the project completion date

Sources: Smart Pharma Consulting

CPM displays the sequencing of activities and helps find the critical path of the project

Step 2: Planning Process: Schedule – Activities-on-arrow Diagram

Critical Path Method (CPM)



- The critical path is the path that takes the longest to complete (A-D-G-J)
- The time a project takes is equal to the time of its critical path (5+3+4+1), which in this case is 13 months if everything is done on schedule with no delays
- Other paths are not critical because they can waste some time without slowing the project (i.e.? activity C can take up to two extra months and not hold up the project)

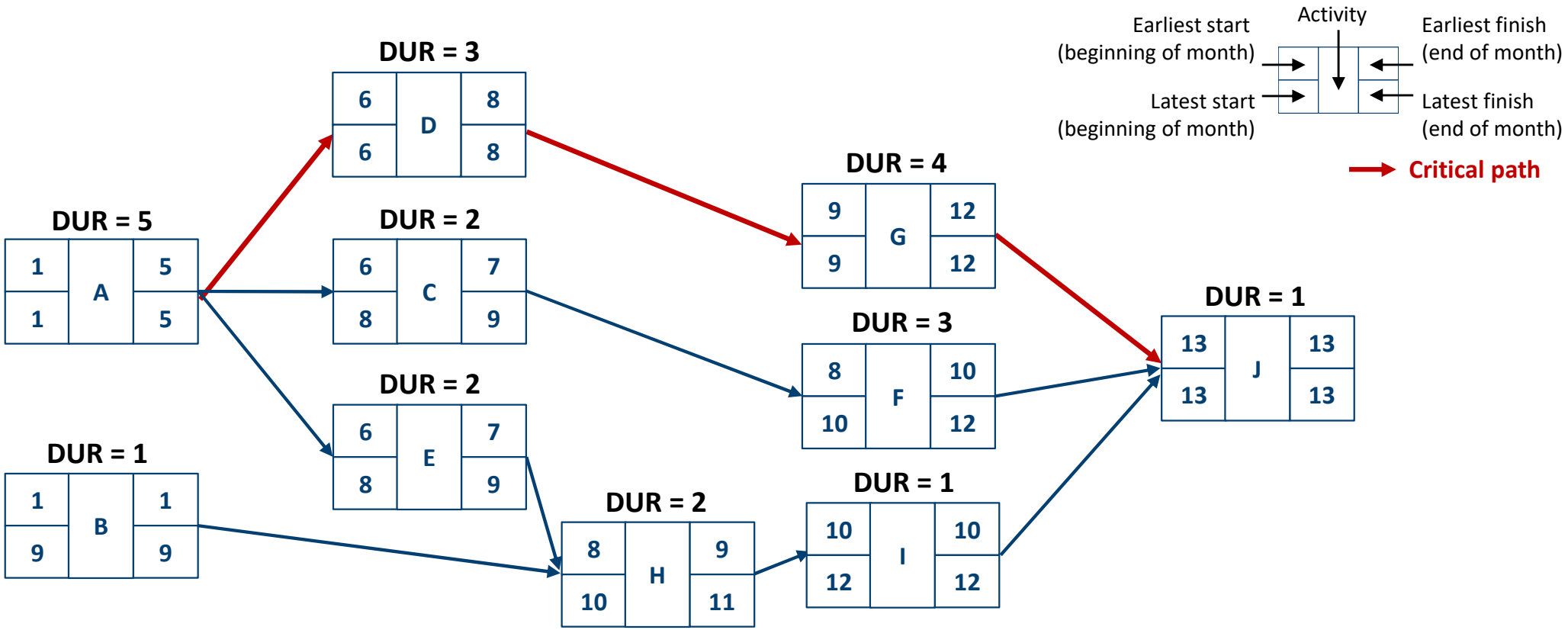
Activities

Activity	Description	Required Predecessor	Duration (months)
A	Product design	(None)	5
B	Market research	(None)	1
C	Production analysis	A	2
D	Product model	A	3
E	Sales brochure	A	2
F	Cost analysis	C	3
G	Product testing	D	4
H	Sales training	B, E	2
I	Pricing	H	1
J	Project report	F, G, I	1

Sources: Smart Pharma Consulting

The activities-on-node diagrams are more used than those displaying activities on the arrows

Step 2: Planning Process: Schedule – Activities-on-node Diagram



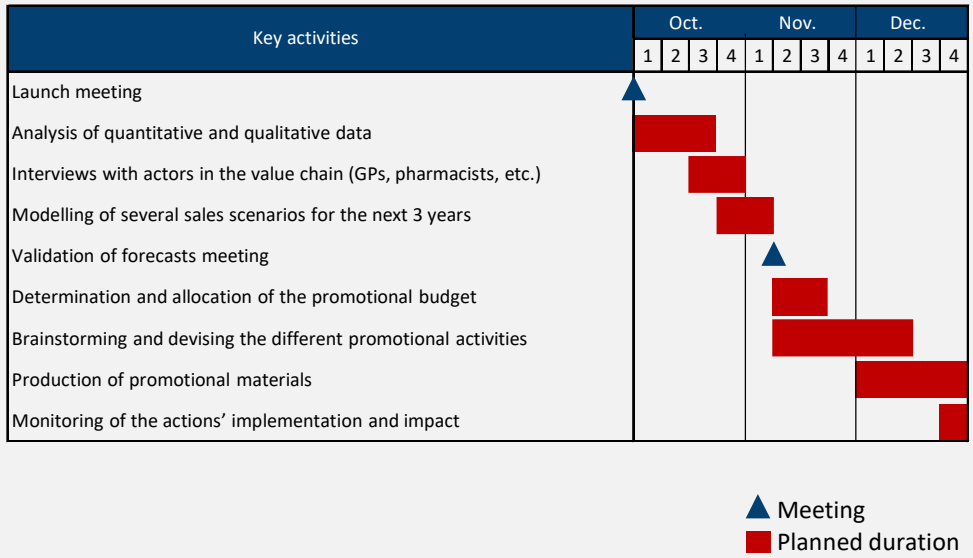
Sources: Smart Pharma Consulting

The Gantt chart allows to visualize the start and completion dates of a sequence of tasks

Step 2: Planning Process: Schedule – Gantt Chart

- The Gantt chart is a planning tool that displays the dates by which a series of activities should be completed as well as the expected duration of those activities
- To create a Gantt chart, it is previously necessary to have determined:
  - A list of all activities required to complete the project (i.e., the work breakdown structure)
  - The time that each activity will take to complete
  - The dependencies between the activities (i.e., some activities can't be started before others are finished)
  - The milestones (events)
- Gantt charts provide a good presentation tool for illustrating milestones and the planned duration of activities; however, they provide less information than network diagrams

Illustration of a Gantt chart
Marketing plan product X



Sources: Smart Pharma Consulting

Matching people to the most suitable tasks can save time and increase the quality of the outcome

Step 2: Planning Process: Schedule – Human Resources Allocation

- Planning for the personnel needed for a project raises the probability of success by enabling the project manager to:
  - Ensure the best qualified people available are assigned to each task
  - Explain more effectively to team members what contribution to the project is expected from them
  - Develop more accurate and realistic schedules
  - Ensure that people are on hand when they're needed
  - Monitor resources expenditure to identify and address possible overruns or underruns
- A Skills Matrix can be used to display people proficiency in specified skills and knowledge, as well as their interest in working on assignments using these skills and knowledge

Skills Matrix

	Employee A			Employee B		
	Level of skill or knowledge	Level of responsibility applying it	Interest	Level of skill or knowledge	Level of responsibility applying it	Interest
Writing skills	0	2	0	2	1	1
Quantitative skills	3	3	1	1	1	0
Communication skills	2	1	1	3	2	1

Level of skill or knowledge	Level of responsibility applying the skill or knowledge	Interest
0 = no capability	1 = must work under supervision	0 = no interest in applying this skill or knowledge
1 = basic level	2 = can work independently with little or no direct supervision	1 = interested in applying this skill or knowledge
2 = intermediate level	3 = can manage others applying the skill or knowledge	
3 = advanced level		

Sources: Smart Pharma Consulting

The planning phase budget is a more detailed version of the one calculated at project initiation

Step 2: Planning Process: Budget

- Estimating a project costs is important for three key reasons:
  - It is a way to weigh the anticipated benefits vs. costs to see whether the project makes sense
  - It allows to determine whether the necessary funds are available to support the project
  - It serves as a guideline to help ensure that sufficient funds are available to complete the project
- A project costs can be divided into:
  - Direct costs on the project:
    - Salaries for team members
    - Specific materials, supplies, and equipment
    - Travel to perform work
    - Subcontracts that provide support[1]
  - Indirect costs on the project:
    - Overhead costs[2]
    - General and administrative costs[3]

Detailed project estimates

Bottom-up approach

- Determine detailed cost estimates for each lowest-level activity/task
- Aggregate these estimates to obtain the total project budget estimates

Top-down approach

- Set a target budget for the entire project
- Apportion this budget among all Level 2 components in the WBS
- Apportion the budget for each of the Level 2 components among its Level 3 components

Sources: Smart Pharma Consulting

[1] Consultants, advertising agency, etc. – [2] Office space rent, equipment, etc. – [3] Finance, accounting, etc.

Effective communication is critical in that it ensures that everyone is on the same page

Step 2: Planning Process: Communication

- Effective communication consists in:
  - Sharing the right message….
  - … with the right people…
  - … in a timely manner…
  - … through the right communication channels
- Informative communication supports the following:
  - Continued buy-in and support from key audiences and team members
  - Prompt problem identification and decision-making
  - A clear project focus
  - Ongoing recognition of project achievements
  - Productive working relationships among team members

Communication Management Plan

It is a document that specifies all communications generated throughout the project. At a minimum, it should include:

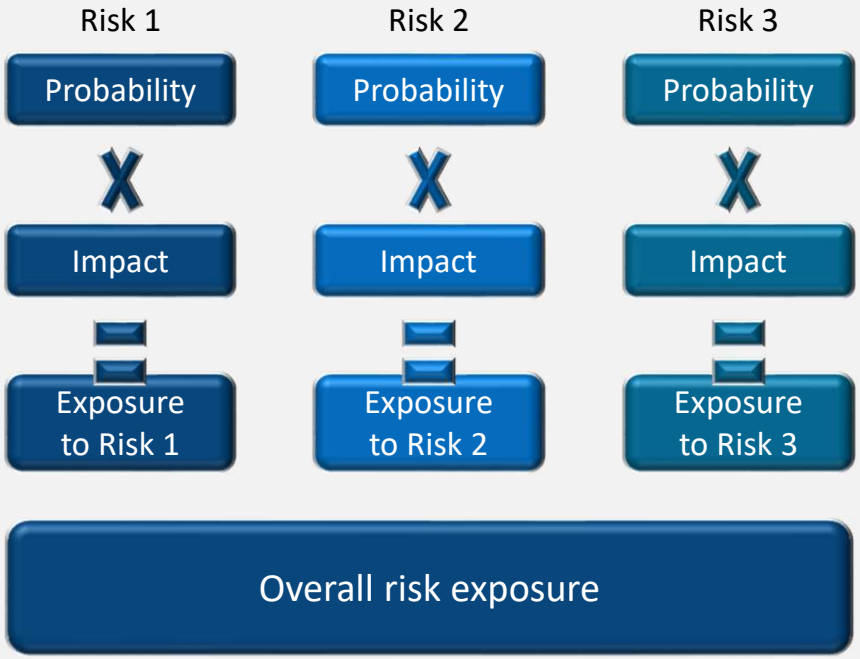
Target audience	The people whose information needs are addressed through the project communication
Information needs	The information that the target audience wants and/or needs
Information-sharing activity	The specific type of activity to be used to transmit information to the audience
Content	The specific data to be shared in the project communication
Frequency	When the information-sharing activity occurs (regular schedules vs. ad hoc)
Data collection	How and when the data for the report are collected

Sources: Smart Pharma Consulting

Risks that could come up during the project should be identified, assessed and dealt with

Step 2: Planning Process: Risk Assessment

- They are four ways to deal with a risk:
  - Accept: incur the chance of a negative impact
  - Avoid: adapt plans to circumvent the problem
  - Mitigate: reduce the impact through implementation of actions
  - Transfer: outsource the risk to a third party that is used to or prepared to manage the outcome
- When assessing how to deal with a risk, two criteria must be considered:
  - Probability: the likelihood that the risk will materialize
  - Impact: the consequences that will affect the project



Sources: Smart Pharma Consulting

The executing process is where works get done and people skills and team-work are key

Step 3: Executing Process

The executing process can be split between:

- The preparation phase
  - Assigning people to all project roles
  - Introducing team members
  - Giving and explaining tasks to team members
  - Defining how the team will perform
  - Setting up necessary tracking systems
  - Announcing the project to the organization
- The execution phase
  - Doing the work that is in the plan
  - Assuring quality
  - Managing the team (assignment, review, etc.)
  - Developing the team (training and mentoring)
  - Sharing information

Sources: Smart Pharma Consulting

Monitoring and controlling processes are used to bring a project to a successful close

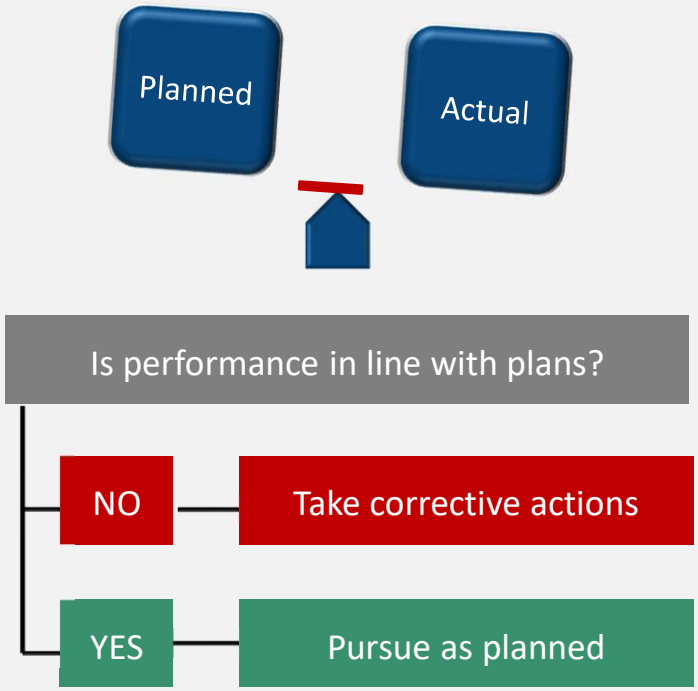
Step 4: Monitoring and Controlling Processes: Introduction

Monitoring and controlling processes are used to bring a project to a successful close, and they involve:

- Reconfirming the plan and team members commitment
- Assessing performance
- Comparing performance with plans
- Taking corrective actions and fixing problems
- Keeping everyone informed

Projects progress can be measured by tools such as:

- Gantt charts to control achievement vs. plan
- Labor report to show how resources have been initially allocated and how they are being used



Sources: Smart Pharma Consulting

The workload chart summarizes how resources are used and organized during a project

Step 4: Monitoring and Controlling Processes: Labor report

- The labor report shows how resources have been initially allocated and how they are being used on the project
- This tool is a way to plan for the workload (in hours, days, etc.) of the different members of the team for each of the activities that constitute the project
- The labor chart shows the number of days of work allocated to each activity (e.g.: forecast, remaining, revised, realized)

Illustration of a labor report

Employee A is spending less time than planned at the beginning but ends up working slightly more than what was planned

Work break-down code	Description of key activity	Employee		Budget	Week 1	Week 2	Week 3
2.1	Analysis of quantitative and qualitative data	A	Planned	150 hrs	50 hrs	50 hrs	50 hrs
			Actual		40 hrs	50 hrs	70 hrs
			Remaining	150 hrs	110 hrs	60 hrs	0 hrs
			Difference		-10 hrs	-10 hrs	+10 hrs
2.1	Analysis of quantitative and qualitative data	B	Planned	75 hrs	0 hrs	40 hrs	35 hrs
			Actual		0 hrs	30 hrs	20 hrs
			Remaining	75 hrs	75 hrs	45 hrs	25 hrs
			Difference		0 hrs	-10 hrs	-25 hrs

Employee B is spending less time than planned on the activity, which needs to be investigated: he might be working faster than anticipated or he might be working on some other activities/projects

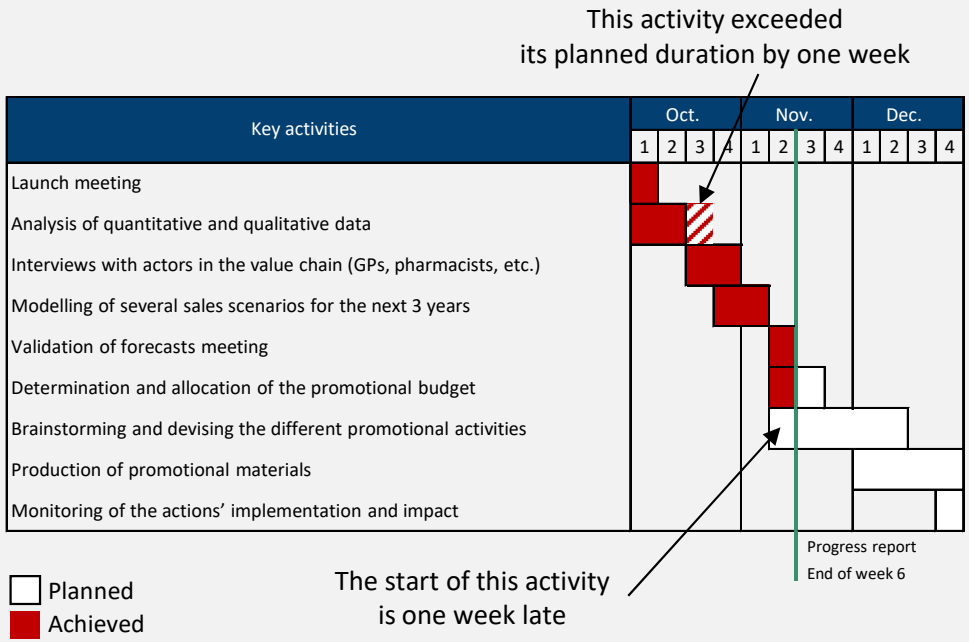
Sources: Smart Pharma Consulting

Besides its use for planning purposes, the Gantt chart can also be used as a controlling tool

Step 4: Monitoring and Controlling Processes: Gantt chart

- The Gantt chart is also used for controlling purposes as this tool can display on the same chart the dates by which a series of activities should be completed and the status of their effective achievement
- It is therefore possible to distinguish what remains to be done to complete a certain task or project, and to determine if work is ahead, late, or in line with the planned timetable
- The Gantt chart allows to measure the gaps between the actual and expected dates of completion of tasks or activities
- As such, when a gap is recorded, the project manager can decide whether he needs to implement a corrective action to catch up for the delay or prevent the delay from expanding

Illustration of a Gantt chart
Marketing plan product X



Sources: Smart Pharma Consulting

Dashboards depict key indicators of project performance in a visual way

Step 4: Monitoring and Controlling Processes: Dashboards

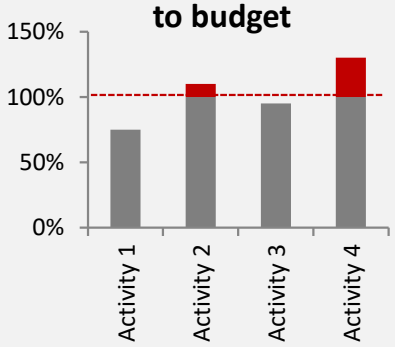
Designing a dashboard requires to follow 3 steps:

1. Select the major categories of information:
   - Results (outcome of the project or KPI[1])
   - Performance to schedule[2] and resource budgets
   - Risk management (current status of risk factors)
2. Choose specific indicators for each information
   - Results (e.g., Patient adherence increase by 9%)
   - Performance to schedule (e.g., # of milestones met vs. missed) and to resource budgets (e.g., ratio of funds used to budget)
   - Risk management (e.g., # of risks likely to occur)
3. Select the format for each indicator
   - Table, bar graph, pie chart, traffic lights, etc.

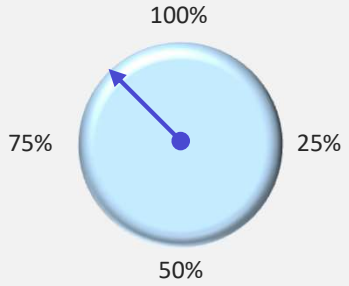
Scheduled status of activities in progress

# activities	Legend
2	Red light: one or more serious situation(s) requiring urgent attention
4	Yellow light: one or more minor problem(s) existing
10	Green light: the element is proceeding according to plan

Ratio of expenditure to budget



Percentage of milestones reached on time to date



Sources: Smart Pharma Consulting

[1] Key performance indicators – [2] Date of milestones achievements, start & completion dates of activities

The closing process is meant to build on the project experience

Step 5: Closing Process

The closing process involves several activities that must be carried out after the project has been completed:

- Closing all project accounts
- Performing a post-implementation review
- Holding a post-project evaluation with the project team to recognize project achievements and discuss lessons that can be applied to the next project
- Providing performance feedbacks and help team members move on to their next assignments
- Delivering project completion report

Post-project evaluation

A post-project evaluation is an assessment of the results, activities, and processes that allows the project manager to:

- Recognize achievements and acknowledge people work
- Identify techniques and approaches that worked, and devise steps to ensure they're used in the future
- Identify techniques and approaches that didn't work, and devise steps to ensure they aren't used again in the future

Sources: Smart Pharma Consulting

The 5 steps of project management include activities essential to maximize chances of success

Summary of Project Key Steps

1. Initiating process	▪ Clarification of the business need(s) ▪ Definition of the high-level expectations and resource budgets ▪ Identification of the audiences that may play a role in the project
2. Planning process	▪ Detail of the project scope, time frames, resources, risks, quality, etc.
3. Executing process	▪ Establishment and management of the project team ▪ Communication with and management of project audiences ▪ Implementation of project plans
4. Monitoring and controlling processes	▪ Tracking of the project developments (time frames, costs and quality) ▪ Introduction of the necessary actions to ensure project plans are successfully implemented and the desired results achieved
5. Closing process	▪ Evaluation of the achieved outcome ▪ Final evaluation (feedback with the project team)

Sources: Smart Pharma Consulting

The project manager specifies, organizes and plans a project from conception to realization

The Project Manager (1/2)

The project manager:

- Defines and implements the execution plans (schedules and deadlines, workloads, budget and funding, quality and risks)
- Keeps tracks of, and control, the progress, the execution of the plans and the meeting of budgets
- Animates the team (roles and responsibilities definition, consciousness raising, mobilization, communication, delegation, control)
- Communicates internally on the project progress
- Is both a manager and a leader
- Is responsible for the outcomes of the project

The ideal project manager should have:

- Enthusiasm for the project
- Team-building and negotiation skills
- Ability to manage change effectively
- A tolerant attitude toward ambiguity
- A customer-focused orientation
- Adherence to the priorities of business
- Knowledge of the industry or technology

Sources: Smart Pharma Consulting

A key role of the project manager is to create and sustain the motivation of team members

The Project Manager (2/2)

To foster team members motivation and commitment to a project success, the project manager must:

- Raise commitment by clarifying project benefits
  - To the organization, its employees, its clients and to each team member
- Encourage persistence by demonstrating feasibility
  - Involve team members in the planning process
  - Explain why targets and plans are feasible
  - Develop responsive risk-management plans
- Let people know how they are doing
  - Establish meaningful and frequent milestones
  - Continually assess people performance
  - Frequently reinforce the project potential benefits
- Provide rewards for work well-done
  - Talk with the concerned person and express appreciation for the work done

Leadership and Management approaches to project activities

	Leadership approach	Management approach
Planning	Create and share visions and strategies	Specify objectives, schedules, and budgets
Organizing	Elicit commitments from members	Assign people to the team, and define roles of members
Performing	Motivate team members	Monitor and report on progress

Sources: Smart Pharma Consulting

Project planning involves several steps for which several sections of the plan are produced

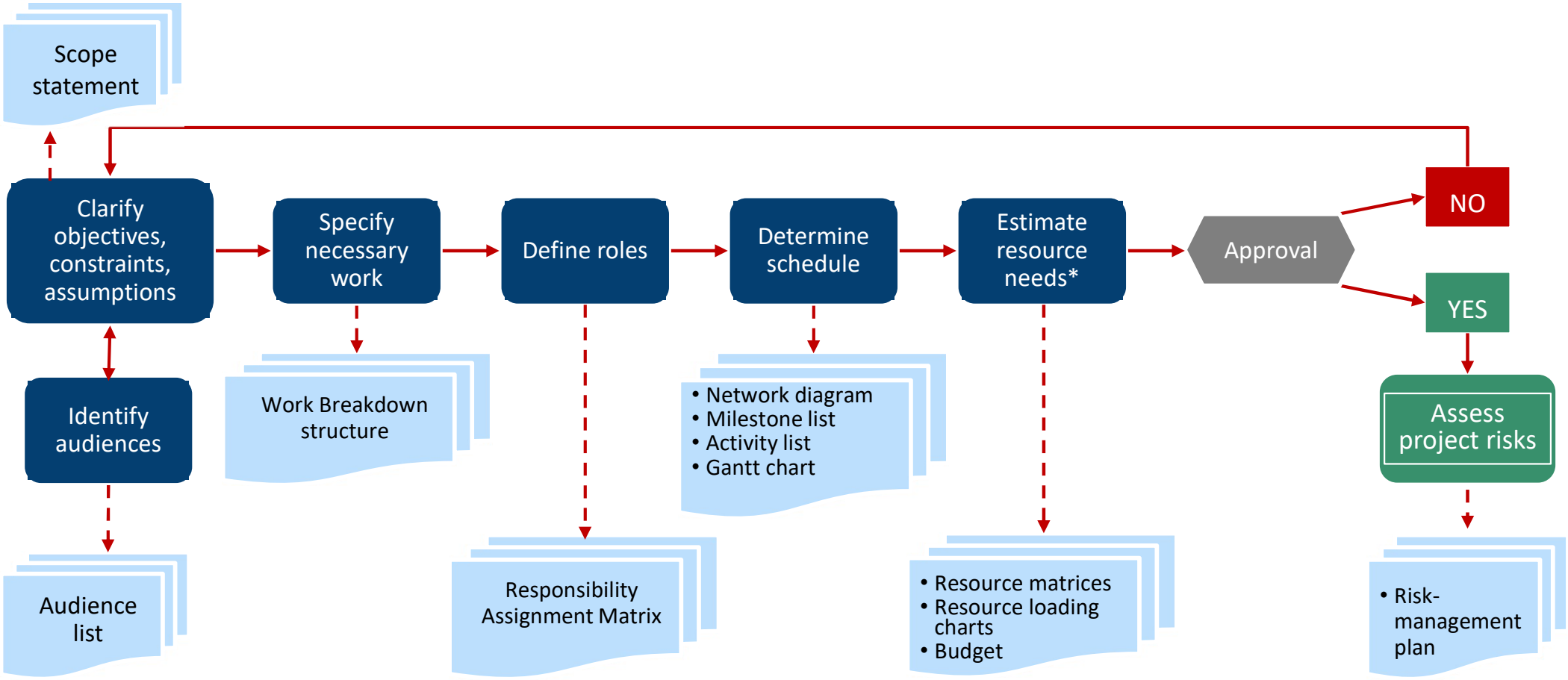
Key Learnings: Preparing a Project Plan (1/2)

1	Clarify the reasons for the project and the desired results - Identify the audiences who will have a say in your project - Get information from all the audiences and written sources about expectations	• Scope statement • Audience list
2	After you know all the results and deliverables your project is supposed to produce, identify the work required to achieve them	• Work Breakdown Structure (WBS)
3	Consider the WBS and the audience list together to decide on each audience roles and responsibilities for each project activity	• Responsibility Assignment Matrix
4	Create and analyze a network diagram of the activities from the WBS to develop a schedule that meets your project drivers' requirements	• Milestone list • Activity list • Gantt chart
5	Estimate your resources needs	• Resources Matrices • Project budget
6	Identify, analyze, and plan for any significant project risks	• Risk management plan

Sources: Smart Pharma Consulting

These steps should be adjusted until drivers and supporters agree with and support the results

Key Learnings: Preparing a Project Plan (2/2)



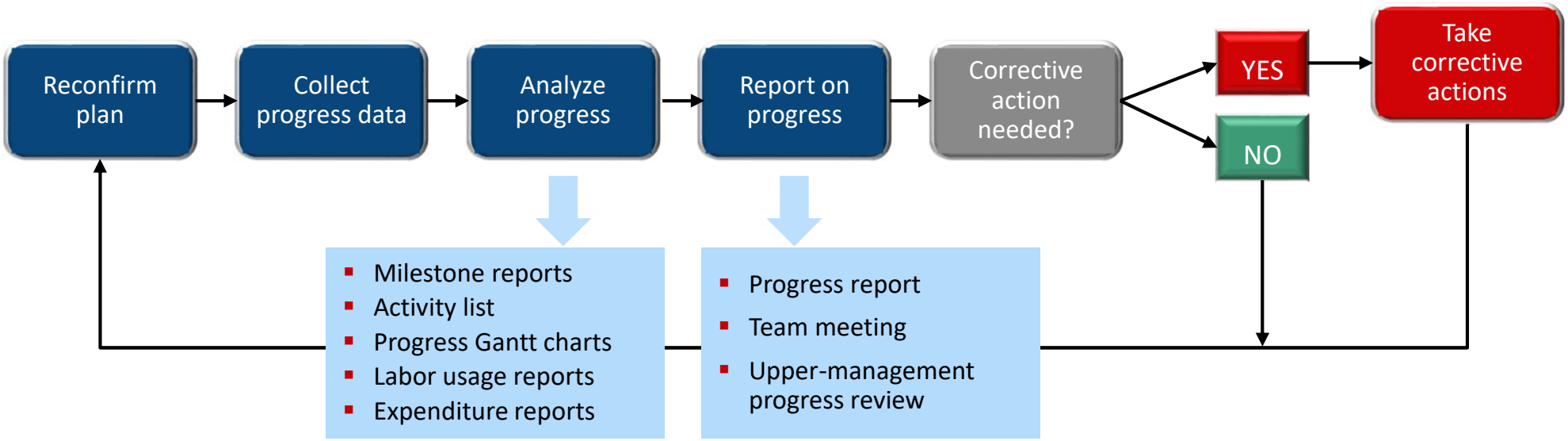
** Personnel, equipment, raw materials, facilities, information, funds*

Sources: Smart Pharma Consulting, adapted from S. E. Portny

Tracking, assessing and reporting project performance requires to apply specific activities

Key Learnings: Controlling Project Execution

- At the start of each performance period, people and resources availability must be confirmed and scheduled
- At the end of each performance period, activities performed, milestones dates, resource expenditure and quality should be assessed vs. project plan; issues or problems should identify, and necessary corrective actions taken



Sources: Smart Pharma Consulting, adapted from S. E. Portny

Smart Pharma
CONSULTING

Storytelling
in Business

The Survival Kit

"The most powerful person in the world is the storyteller"

Steve Jobs

POSITION PAPER June 2019

Storytelling is a unique tool to communicate a message, it captures attention and engages the mind through emotions

Introduction

- The purpose of business storytelling is to help improve credibility and engagement to an organization through the sharing of a well-constructed speech
- The aim of this position paper is to understand the power of storytelling as a tool in business and to provide the key practices to best implement it in organizations

"We want to hear information through stories, with villains, characters, and a hero to rally around. It's the way the world and our brains work. We're wired that way" – *Carmine Gallo*

"Marketing is no longer about the stuff that you make, but about the stories you tell" – *Seth Godin*

Sources: Smart Pharma Consulting

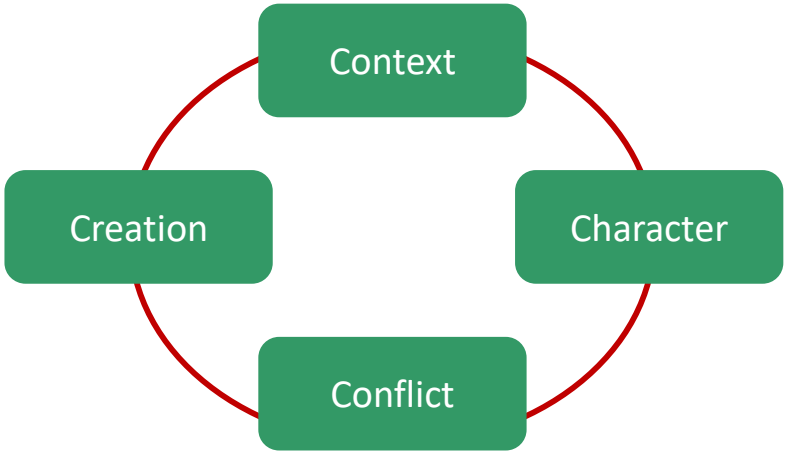
Storytelling is a very old technique which is considered as one of the most effective and influential means to reach people and move them with a message

What is storytelling?

Storytelling consists in sharing stories through different media to disclose the narrative of a story

- A story describes what happened
- A good story helps you see what happened
- A great story helps you feel what happened

The 4 Cs of a story



To create a great story, 4 components are required:

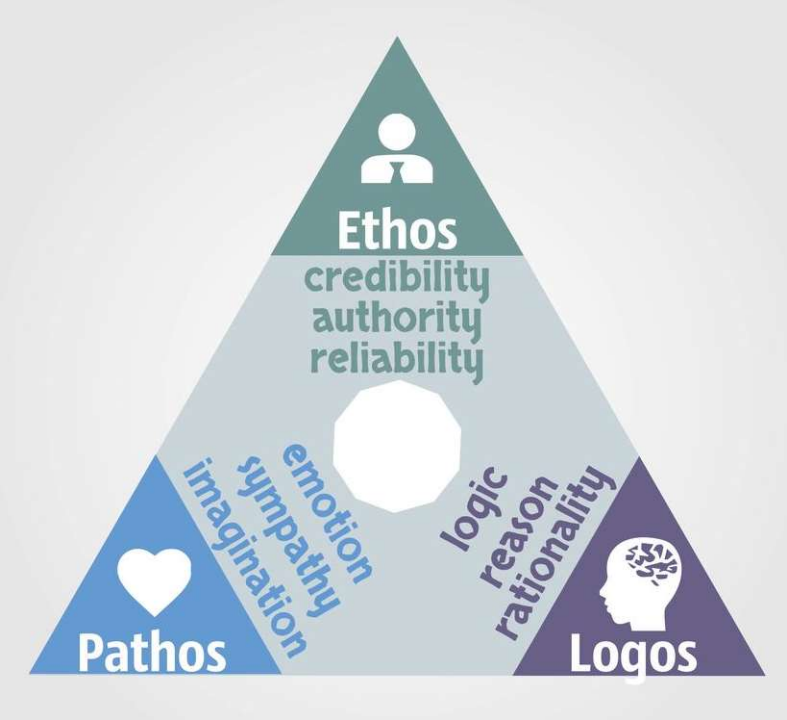
- The Context which indicates when and where the story happened
- The Characters to create connections and emotion with the audience
- The Conflict which drives the action of the story, creates tension and that is likely to be resolved at the end of the story
- The Creation which defines the telling, the way the context, characters and conflict are articulated into a narrative

"A story is a fact wrapped in context and delivered with emotion" – *Indranil Chakraborty*

Sources: "The Original Storyteller", Robert Carnes (2017) – Smart Pharma Consulting analyses

The Aristotle's modes of persuasion, based on the ethos, logos and pathos triad build credibility, stir emotions and prompt action

Storytelling & modes of persuasion



Aristotle has written *"The Art of Rhetoric",* more than 2,000 years ago in which he proposed three modes of persuasion:

- Ethos (credibility) of the storyteller which depends on his:
  - Good sense Good moral character Goodwill
- Pathos (emotion) which is used to build a common bond with the audience through a shared identity and/or shared values, and inspire action by stirring emotions such as:
  - Anger and Calmness
  - Fear and Confidence
  - Kindness and Unkindness
  - Envy and Emulation
  - Friendship and Enmity
  - Shame and Shamelessness
  - Pity and Indignation
- Logos (logical argument) is based on:
  - Deductive reasoning (e.g., syllogism[1])
  - Inductive reasoning (from specific to general[2])

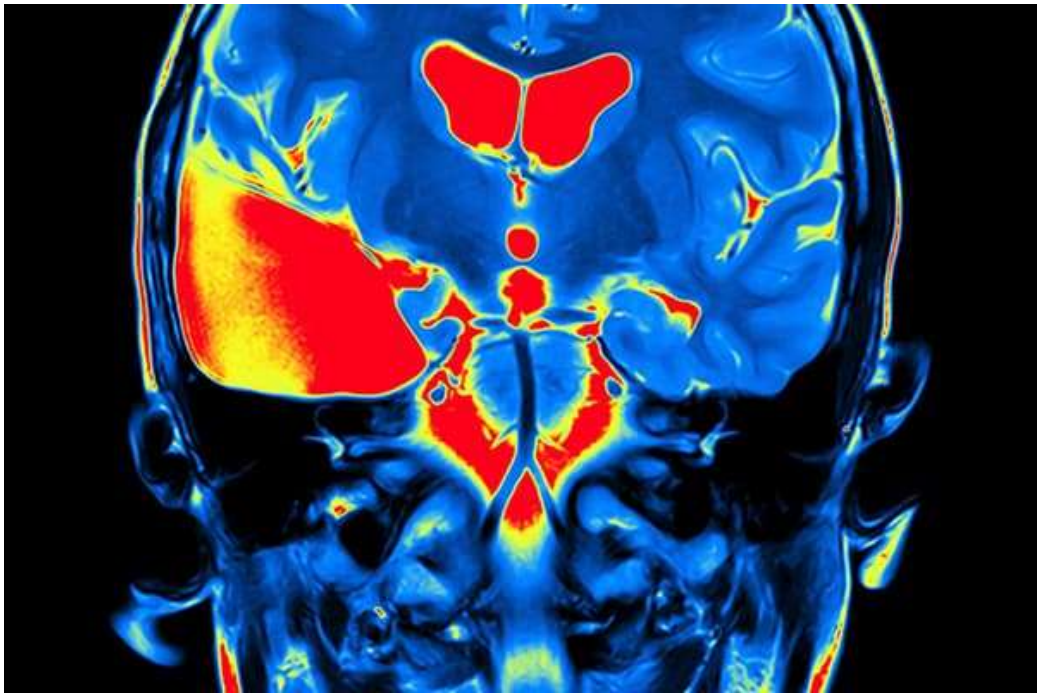
and is important to demonstrate strong evidence with the help of facts, figures and testimony to support conclusions

Sources: Adapted from "Know the three modes of persuasion", Jeremy Porter (2014) by Smart Pharma Consulting analyses

[1] "All humans die (premise) – You are human (premise) – You will die (conclusion)" – [2] You used to commute by car (premise) – Tomorrow you have to commute (premise) – You will probably commute again by car (conclusion)

Neurobiological findings on storytelling have shown that character-driven stories with emotional content are more persuasive and memorable

Storytelling & Neuroscience



Storytelling evokes strong neurological responses:

- The stress hormone cortisol is produced by our brain during the tense moments in a story, which helps the audience to focus
- The oxytocin (the "feel-good" chemical) is produced when we are trusted or shown kindness, and it motivates cooperation with others
- A happy ending to a story triggers the limbic system – our brain's reward center – to release dopamine which makes us feel more hopeful and optimistic
- Character-driven stories cause increased oxytocin synthesis which motivates people to engage in cooperative behaviors
- Studies have shown that, in order to motivate a desire to help others, a story must first sustain attention by developing tension during the narrative

Sources: "The irresistible power of storytelling as a strategic business tool", Harrison Monarth in the Harvard Business Review (March 2014) – "Why your brain loves good storytelling", Paul J. Zak in the Harvard Business Review (October 2014) – Smart Pharma Consulting

It has been shown that storytelling makes facts and figures delivered with emotion more convincing and memorable, and thus more persuasive

Why use storytelling? (1/2)

- Storytelling is deeply rooted in making an emotional connection with another person
- The neuroscientist Antonio Damasio has shown that emotions play a central role in decision-making
- The British Institute of Practitioners in Advertising (IPA), analyzed the impact of 1,400 marketing campaigns on profit gains and demonstrated that, when based on…:
  - … logic, they are 16% effective
  - … emotion, they are 31% effective
  - … logic and emotion, they are 26% effective
- Stanford Marketing Professor Jennifer Aaker has shown that stories are remembered up to 22 times more than facts and figures alone
- Millennials[1] (or Generation Y) and Generation Z[2] base their relationships with brands on emotional attachments with stand-out companies
- People are more and more keen to give a sense to what they do
- Storytellers can engage audiences deeply with the right balance of emotion and key facts

Storytelling

- Captivates interest
- Remains in the memory
- Gets to the heart

"To win a man to your cause, you must first reach his heart" – Abraham Lincoln

Sources: Smart Pharma Consulting

[1] Demographic cohort of people who were born between early 1980s and mid-1990s –
[2] Demographic cohort after the Millennials, using the mid-1990s to the mid-2000s as starting birth year

Storytelling can be used to shape vision, to pass on knowledge and wisdom and to shape identity and organizational culture

Why use storytelling? (2/2)

- A story **creates an emotional** experience that the audience will remember
- Some brands (e.g., Apple, Coca-Cola, Virgin, etc.) trigger an **emotional feeling** – positive or negative
- These brands, like many others, have a **personality**
- This personality, **generating emotions**, differentiates a brand from a product
- The critical aspect of stories is the feeling they create; so, one must relate to **stories associated** to the **brands** and **not to** its **commercial elements**
- The **corporate narrative** provides the framework for getting **everyone on the same page**
- Stories can **help** — internal and external — audiences **understand the value** of a product, a company, a decision
- A clear narrative **helps** employees **appreciate the vision** of where the **company** is headed and **empowers** them **to use** their own **creativity** to **get there**
- Corporate story and storytelling **help leaders** to **communicate their vision** to their community
- A powerful way to **persuade** people is **by insinuating** an **idea with an emotion**
- A **compelling story** combines information and actions to **stimulate emotion** and **energy**

"90% of human behavior and decision-making is driven by our emotions" – *Christine Comaford*

Sources: Smart Pharma Consulting

Telling the right story will provide meaning and evoke a sense of purpose while helping the audience relate, empathize and remember

Telling the right story: Seven narrative patterns

To spark action	▪ Describe, straight to the point, how a successful change was implemented in a way the audience imagines how it might work for them
To tell who you are	▪ Tell who you are, what you have done, what you think, based on a life event that reveals some of your strengths or weaknesses from your past
To transmit values	▪ Use characters – real or fictional – in a situation that will prompt discussion about the issues related to the value being promoted
To foster collaboration	▪ Tell a story that collaborators have also experienced and that prompts them to share their own stories, and have a plan ready to tap the energy released
To communicate on brands	▪ The story should relate to products, services or companies and reflect the brand promise as it is delivered and perceived
To share knowledge	▪ Focus on mistakes made and show how they were corrected, with an explanation of the reasons why the solution worked, and solicit other solutions
To lead into the future	▪ Evoke the future you want to create without providing excessive details that will only turn out to be wrong

Sources: "Telling tales", Stephen Denning in the Harvard Business Review (May 2004) – Smart Pharma Consulting

The 5 following essential tips will guide the preparation and delivery of business storytelling likely to be successful

Business storytelling tips

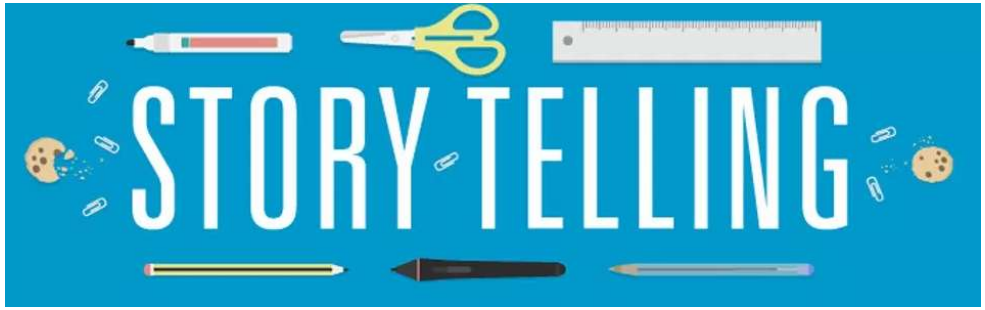
1. Know the audience

2. Define the right message

3. Be authentic

4. Keep it simple & visual

5. Involve the audience



Sources: "Storytelling and other strategies in the art of persuasion", Bill Chiat – "9 Business storytelling tips to guide your next presentation", Jakub Mastalerz (November 2017) – Smart Pharma Consulting

The stories should be crafted according to the audience perspective and thus, the same story should be adapted accordingly

1. Know the audience

- You must know your audience:
  - What are the audience experiences and expertise?
  - What are their thoughts and concerns?
  - What are their needs and wants?
  - What do they expect from you?
  - What would resonate well to them?
- Thus, to tell the right story, it is essential to know what the audience values and what the audience is likely to be interested by to create empathy and craft a story which is relatable

"Make sure you find common ground with people to whom you are telling stories" – *Nancy Duarte*

Sources: Smart Pharma Consulting

The message that will be conveyed should serve the objective of the storytelling and in a form that will generate emotion and empathy

2. Define the right message

- Define the **idea** you want to **communicate** according to your **intent** (e.g., the action you want the audience to take, the feeling you want them to have, the opinion you want them to modify)
- The **way** you will **communicate** your message should be **related** to the audience on a human level
- Do not just share information, … tell a story:

Information sharing

"Smart Pharma has helped more than 80 companies addressing strategic, management and organizational issues"

Likely to be perceived as boring and not different from competition

Vs.

Storytelling

"Imagine your smartphone breaks down. Don't worry because at Smart Pharma we deliver services 24/7 to solve your problems"

By using metaphors and anecdotes, it is possible to tell compelling stories

"People will forget what you said and did but will remember how you made them feel" – *Maya Angelou*

Sources: Smart Pharma Consulting

Authenticity is key to gaining audience trust and creates an emotional connection, without fear, to show your own challenges and failures

3. Be authentic

- Ideally, storytelling should not be fictional because a genuine narrative is more likely to connect with the audience
- If the audience can relate to a real-life story, you are making a connection and building trust
- Anecdotes that illustrate overcoming struggle, failures and barriers are what makes the teller appear authentic
- Storytelling is an effective way to communicate if you mean what you're saying
- The key is to show some vulnerability

- Be you, just you! Don't pretend to be anyone else

- If your stories are honest and transparent, you can win over your audience
- Storytelling brings more authenticity into business…
- … which explains why blogs and social media recommendations are so relied on and impactful

"The stories that move and captivate people are true to the teller and the audience" – *Peter Guber*

Sources: "How to tell a great story", Carolyn O'Hara in the Harvard Business Review (July 2014) – Smart Pharma Consulting

Most of the successful and memorable stories are relatively simple, straightforward and can be enhanced by a limited number of well-chosen visuals

4. Keep it simple and visual

- Apply the KISS principle: ”Keep It Simple, Stupid”
- Messages should be clear, precise and concise, without focusing on the details
- Simplicity is a challenge when subjects are complex
- The number of substantive arguments and persuasion principles should be limited

be visual

- Visual storytelling (e.g., animated images, videos) allows complex data to be broken down into smaller digestible pieces and chunks of memorable information
- Visual aids help improve engagement and retention
- Visuals are the most effective communication vehicles for evoking emotion and getting people to act

- Visuals drive emotions
- Emotions drive decisions
- Decisions lead to action

Sources: “How to tell a great story”, Carolyn O’Hara in the Harvard Business Review (July 2014) – Smart Pharma Consulting

Stories must be built and delivered so that the audience can feel involved as being a character of the story

5. Involve the audience

- We cannot tell a story if we don't feel that there is someone listening to us and paying attention
- Storytelling is about connecting
- You need to be vulnerable and connect to the vulnerability of others
- We can't really listen to a story when the storyteller is not aware of his or her audience and is instead caught up in his or her own speech bubble
- In this most basic sense, there is a reciprocal relationship between listening and telling

- People like to be a part of stories
- Your audience can be characters in your stories
- Get your audience involved

- Get your audience involved in the presentation:
  - Ask questions
  - Brainstorm
  - Challenge them

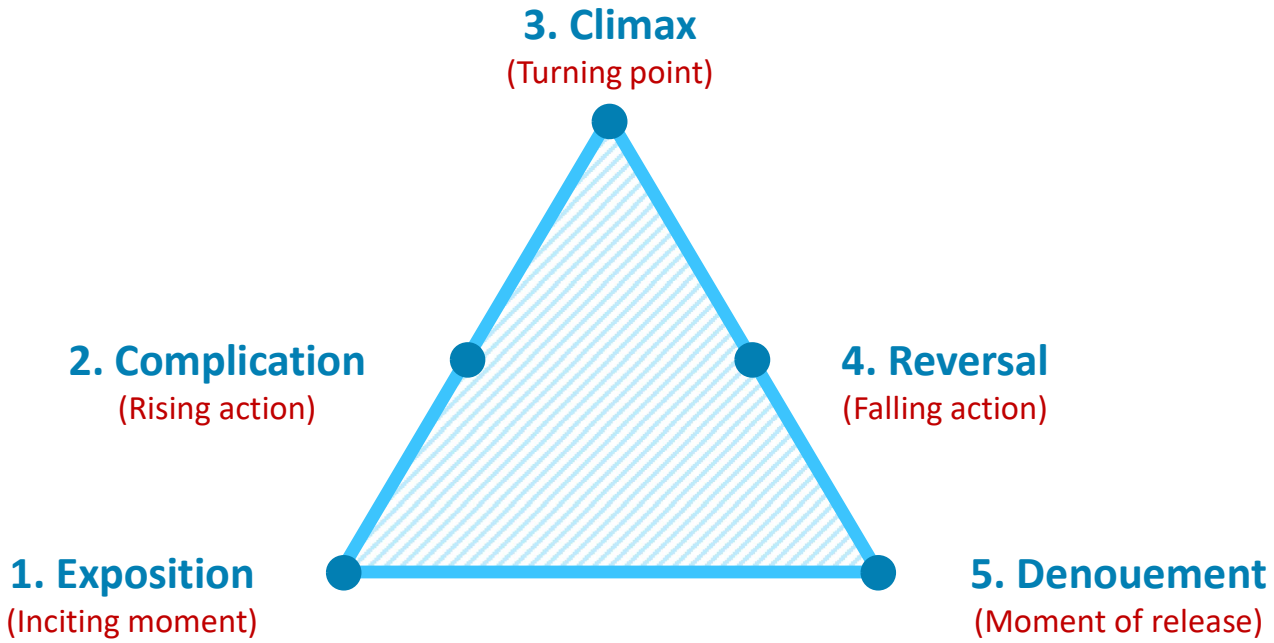
"A good storyteller makes the target audience part of the story he tells"

Sources: Smart Pharma Consulting

Freitag's pyramid[1] uses a 5-part system to describe the story plot[2], the climax being the high point which is surrounded by rising and falling actions

Structuring the story – Freitag's Pyramid (1/2)

To capture attention, convey emotion and engage the audience,
stories need a dramatic arc, some conflicts to arise and after the struggle, a resolution



"A story without a challenge, simply isn't interesting" – *Caroline O'Hara*

Sources: "The irresistible power of storytelling as a strategic business tool", Harrison Monarth in the Harvard Business Review (March 2014) – Smart Pharma Consulting

[1] Gustav Freytag was a 19th century German novelist who saw common patterns in the plots of stories and novels and developed a diagram to analyze them – [2] Sequence of events through the principle of cause and effect

Structuring stories by using Freitag's Pyramid will help to raise audience attention and forge an emotional connection likely to change their opinion and behavior

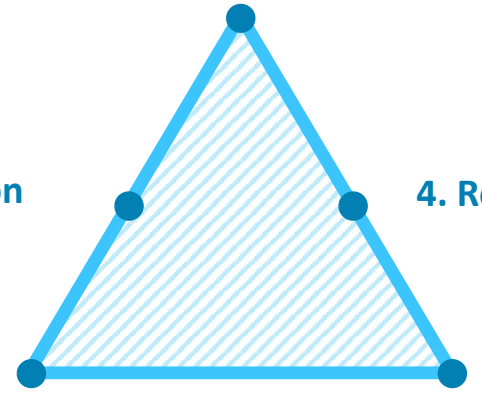
Structuring the story – Freitag's Pyramid (2/2)

3. Climax

- It is the most intense moment (either mentally or in action) or the greatest tension in the story, turning positively for the protagonist in a comedy or negatively in a tragedy

- A single event usually signals the beginning of the main conflict, rising tension
- The story builds as sequential events happen and…
- … becomes more exciting with a series of conflicts and crisis

2. Complication



4. Reversal

- It is the event that occurs as a result of the climax, and marks up the story will end soon

1. Exposition

- This 1st step marks the start of the story where the scene is set (time and place)
- The teller introduces the characters[1] providing description of the situation and establishing the atmosphere of the story

5. Denouement

- At this point, any secrets, questions or mysteries which remain after the resolution are solved by the characters or explained by the teller

Note: As an example of the implementation of the Freitag's Pyramid, see the TED show presentation of Richard Tuere: https://www.ted.com/talks/richard_turere_a_peace_treaty_with_the_lions/up-next?language=fr

Sources: "The irresistible power of storytelling as a strategic business tool", Harrison Monarth in the Harvard Business Review (March 2014) – Smart Pharma Consulting

[1] *Protagonist, hero, antagonist*

To grab attention of the audience and make a story relatable, engaging and compelling, the story should be structured according to the classic narrative arc[1]

How to compose a story: Practical recommendations

- Know your audience to craft a story that has a meaning for them

I. Who is my audience?

- Why are you telling the story?
- What do you want the audience to think, feel or do at the end of the story?

II. What is the message I want to share?

- Tell a story that has a meaning for you
- Tell a story that happened
- Pick a story that addresses a problem the audience has

III. What is the story I want to tell?

- Pick a main character similar to the audience
- Start your story with some context[2]
- Something must be at stake
- Have a happy or constructive ending from which lessons can be learned

IV. How I structure my story?

Sources: : "Storytelling and other strategies in the art of persuasion", Bill Chiat – Jennifer Aaker – – Smart Pharma Consulting

[1] As per the Freytag's pyramid – [2] Place, date, etc.

The delivery of the story being as important as its composition, it is essential for the storyteller to be well-prepared and to practice

How to deliver a story: Practical recommendations

1. Style

- Talk in a relaxed and direct way
- Keep stories focused and simple
- Be yourself
- Be confident (no apologies)

2. Truth

- Tell the truth as you see it
- Be cautious while disclosing information about other people
- Be congruent

Successful presentation

4. Delivery

- Be lively (use body language, voice inflection, make pauses)
- Connect with the audience
- Use pauses for emphasis
- Keep it short (~6 to 8 minutes)

3. Preparation

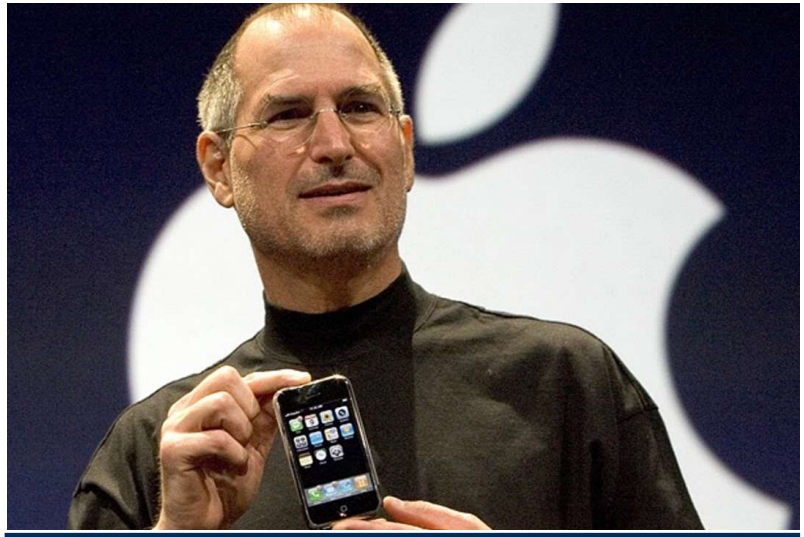
- Rehearse, but don't lose your spontaneity
- Stick to the structure of your story
- Test your story on others to check if you changed their perspective

Sources: : "Storytelling and other strategies in the art of persuasion", Bill Chiat – Smart Pharma Consulting

Steve Jobs was not a natural speaker but used to work hard, rehearsing, again and again, to make keynote presentations look effortless and conversational

The Apple case

- Steve Jobs introduction of the first iPhone in 2007 was a masterpiece
- Steve Jobs begins the presentation by building suspense. A touchscreen iPod? A phone? An internet communicator?
- Then, even as the audience is starting to catch on, he lingers in the suspense a bit longer before making the reveal: a three-in-one mobile phone that would change the world forever
- Jobs was building the iPhone brand even before the audience had seen it, and the story was consistent with the company brand Apple had already built
- Apple knew they had made something exceptional
- Today, Apple continues Steve Jobs tradition of storytelling
- They do a great job of telling a story about what it looks like for customers to successfully use their products
- Apple weaves their products seamlessly into the story
- They also show how their products help people create their own stories, and Apple highlights the stories people create



What can we **learn from Apple**?

1. **Hook the audience** first, introduce your product second
2. **Build suspense**
3. **Focus your story on customers** successfully using your product

Sources: "How Airbnb & Apple build their brands with storytelling marketing", Jarom McDonald (February 2016) – Smart Pharma Consulting

https://www.youtube.com/watch?v=z9w6tO4d90U

Airbnb has built its brand with storytelling marketing, focusing on people, telling stories about people, Airbnb hosts from around the world, thus creating connection

The Airbnb case

- Airbnb content is focused on the people who own the homes listed and the travellers who go there
- They show how connecting with others is important to their brand and how their brand makes that possible
- It is a very human approach with a clear statement about the importance of stories to the Airbnb brand
- There is an entire page on their website labelled airbnb.com/stories with videos and biographies of hosts around the world
- Airbnb is also experimenting, on their website, a brand magazine called Pineapple which is "a platform for incredible stories from Airbnb family to be shared; showing how people live and create connections in cities today"
- This meshes perfectly with Airbnb approach which focuses on stories and people, which is the language by which humans communicate; this approach attracting more customers

What can we **learn from Airbnb**?

1. **Always seek connection** between the brand and the audience
2. **Always bring it back to the human element**
3. **Be sincere**

Sources: "How Airbnb & Apple build their brands with storytelling marketing", Jarom McDonald (February 2016) – Smart Pharma Consulting

Storytelling can help companies connect with their audience and build a long-lasting relationship of loyalty with their customers and increase employee motivation

Key learnings

- As an **emotional tool**, storytelling **creates purpose** and **drives action** from the audience
- Well-constructed storytelling is an effective tool to **inspire**, **engage** and **motivate** your team
- Through imagination, stories **help customers visualize** the **context** of a **company**, its **challenges** and **comprehend its strategy**
- Many **companies use** storytelling to tell their story, **share** their **values** and **aspirations** and **create** a **lasting bond** with their target audience
- In order to **craft an impactful story** to tell, an **analysis** of the targeted **audience** is required to **understand** its **concerns**, **perceptions**, **personalities** and **priorities**
- A **great** crafted **story** is **not sufficient** to move an audience, **its delivery** through a **plotted speech** is **necessary** to achieve a behavioral change
- Telling a great **story** can **help to leverage** the full **potential** of a **brand** and to distinguish from competition

"Stories evoke emotion and inspire action"

Sources: Smart Pharma Consulting

"Click on the picture below to access the article"

Smart Pharma CONSULTING

Smart Pharma Insights – N°4 – Novembre 2024

Optimisez votre Marque Personnelle ...

... pour accroître la préférence de vos « clients »

Jean-Michel Peny – Président de Smart Pharma Consulting – jmpeny@smart-pharma.com

Smart Pharma Consulting, concepteur du « Brand Preference Mix », a réalisé de nombreuses études et missions de conseil pour aider les laboratoires pharmaceutiques à sa mise en place.

Comme nous l'avons rappelé dans un article récent publié dans le magazine Visite Actuelle, l'activation des trois déterminants du « Brand Preference Mix » que sont :

- La perception du médicament,
- La valeur des services associés proposés par les laboratoires pharmaceutiques,
- La réputation de ces derniers,

permet de renforcer la préférence des médecins et ainsi d'optimiser la part de prescription des médicaments promus.

L'expérience nous a démontré que le « Brand Preference Mix » était fortement influencé par la valeur de la Marque Personnelle des collaborateurs des laboratoires pharmaceutiques, et notamment des délégués médicaux, mais pas uniquement. Il en va de même pour les autres collaborateurs qui interagissent avec les différentes parties prenantes externes de l'entreprise.

Forts de ce constat, il nous est apparu essentiel de développer une nouvelle approche pour les aider à accroître la valeur de leur Marque Personnelle. Nous avons ainsi développé le « Personal Brand Optimizer » (PBO) que nous présentons dans cet article.

« Une Marque Personnelle appréciée c'est bien, mais une Marque Personnelle préférée c'est mieux »

Il importe, tout d'abord, de préciser quelques définitions :

- La Marque Personnelle : tout comme les produits ou les services, les individus ont une Marque Personnelle qu'ils gèrent plus ou moins bien.
- La Préférence à la Marque Personnelle : dans un environnement concurrentiel, avoir une Marque Personnelle appréciée ne suffit pas, il est nécessaire de construire une Marque Personnelle supérieure, plus attrayante que celle des autres, afin d'induire la préférence des différentes parties prenantes.
- L'Optimisation de la Marque Personnelle : sur le même principe que le « Brand Preference Mix » il s'agit de renforcer la préférence des parties prenantes à la Marque Personnelle des individus.

La Marque Personnelle peut influencer, positivement ou négativement :

- La marque entreprise (ex. Jeff Bezos sur Amazon ou Elon Musk sur X).
- La marque des produits ou services (ex. les employés qui interagissent avec les clients).
- Le parcours personnel ou professionnel des individus qui ne dépend pas seulement de leur compétence, mais également de leur personnalité et de leur réputation.

Principe du Personal Brand Optimizer

Le « Personal Brand Optimizer » permet de renforcer la préférence des parties prenantes aux individus en agissant sur trois piliers :

- Le parcours.
- La personnalité.
- La réputation.

Le « Personal Brand Optimizer » a pour vocation de renforcer l'image personnelle pour la rendre plus attrayante »

LE PARCOURS

L'évaluation du parcours repose principalement sur la formation, les expériences professionnelles, et dans une certaine mesure sur les activités extra-scolaires et extra-professionnelles.

La formation initiale est en général appréciée en considérant les établissements et les pays où les individus ont étudié, les programmes académiques suivis, les stages réalisés et les diplômes obtenus.

L'importance de la formation initiale a tendance à s'estomper avec le temps, au profit de l'expérience.

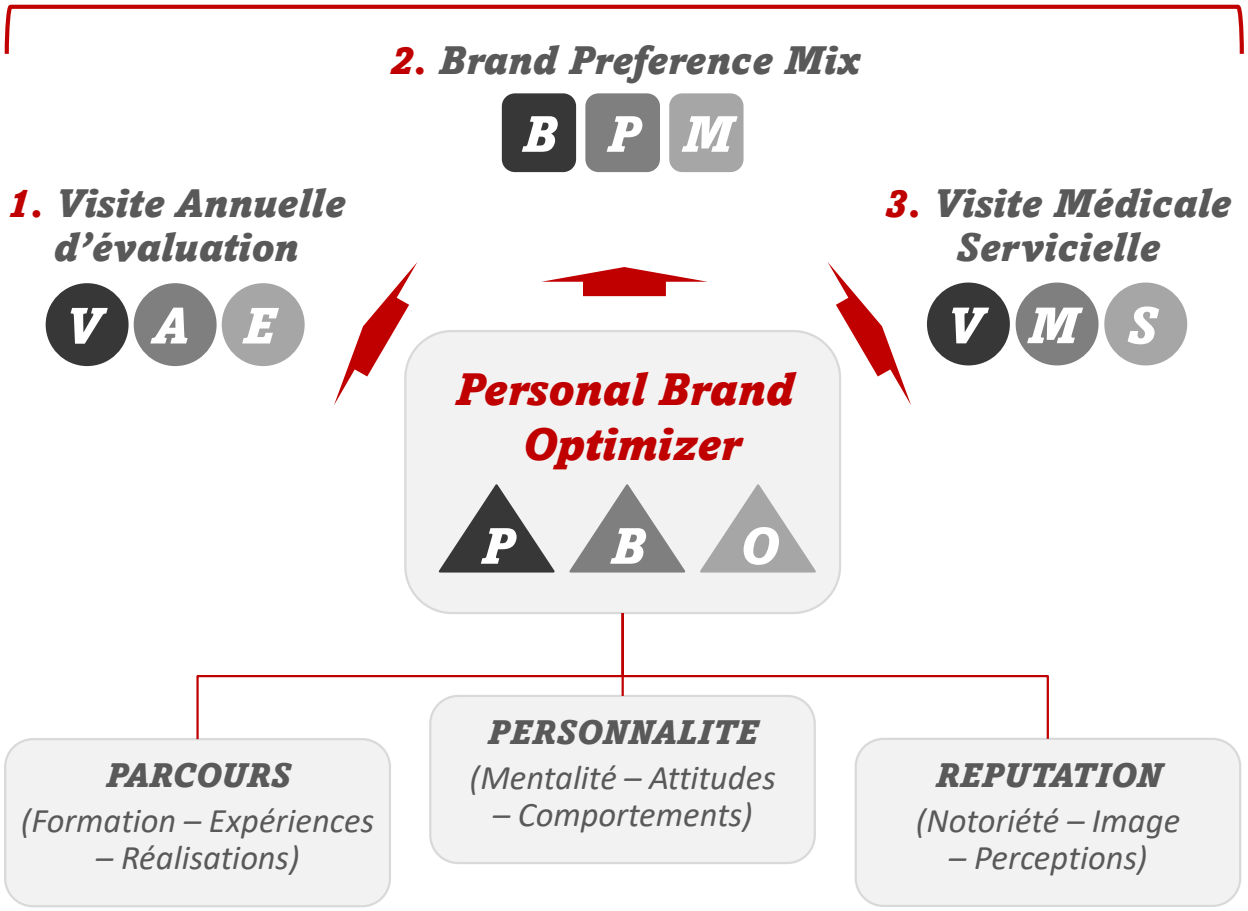
Si les formations professionnelles peuvent être essentielles dans le parcours de certains collaborateurs, leur qualité demeure cependant très inégale, ce qui explique qu'elles ne sont pas toujours bien valorisées.

11

Optimisez Votre Marque Personnelle…

… pour accroître la préférence des médecins

La Visite Médicale Haute Performance



Sources : J.-M. Peny, Smart Pharma Insights – N°4 – Novembre 2024 – Smart Pharma Consulting d'après les "position papers" : "Accessing & Convincing Physicians" (Janvier 2024) et "The Personal Brand Optimizer to get preferred" (Septembre 2023)

8. Smart Pharma Institute of Management

Smart Pharma
CONSULTING

2025 Pharma Training Programs

High Potential Performers Programs

CARTALOGUE

January 2025

Table of Contents

Sources: Smart Pharma Consulting

The Smart Pharma Institute of Management offers a large array of training programs for high potential executives from pharma and biotech sectors

Introduction

Training Program Offering

- Our training programs are developed and carried out by the "Smart Pharma *Institute of Management*" which is our professional training center

- Smart Pharma *Institute of Management* is a division of Smart Pharma Consulting that offers training programs to high potential executives from pharma and biotech sectors

- Those high-level training programs have been designed for professionals who are willing to reinforce their skills in Strategy, Operational Marketing and Management in both national and international contexts

"The Smart Manager knows where, why and how to go"

Sources: Smart Pharma Consulting

Our training & teaching programs are unique because they are built on our market research and consulting expertise in the pharma sector and delivered by experts

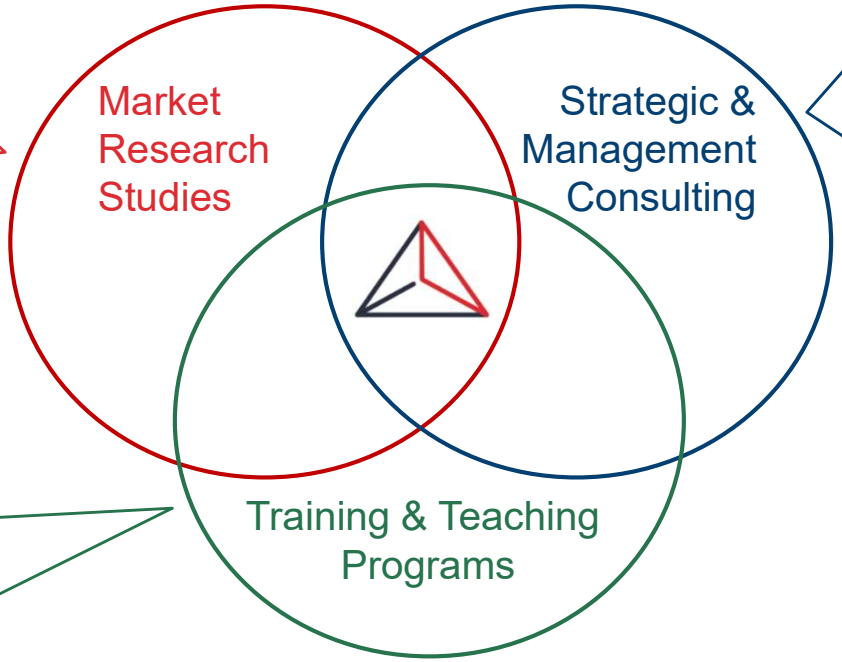
Introduction

Our Unique Value Proposition

- Our market research expertise allows us to take a critical look at third party studies
- As we carry out our own studies, we ensure a direct quality control on the data we collect, which is key to develop fact-based analyses and recommendations

- Our teaching method, based on educative challenge[1], is acclaimed by executives[2] and students[3] since 1992
- Thanks to our consulting activities, we are aware of specific pharma executive training needs (i.e., business knowledge and analytics, solution development)

Three core businesses



Our recommendations are supported by:

- Our strong academic background
- Our experience in pharma companies and several of the best worldwide consulting firms
- The reliability of the data that we collect
- The robustness of our analyses to draw up solutions
- Our innovative viewpoints, methods, etc. (several of them having been published in peer-reviewed journals)
- Our ability to explain and convince with clear, precise and concise messages

Smart Pharma is a certified Training Organization since 2002

Sources: Smart Pharma Consulting

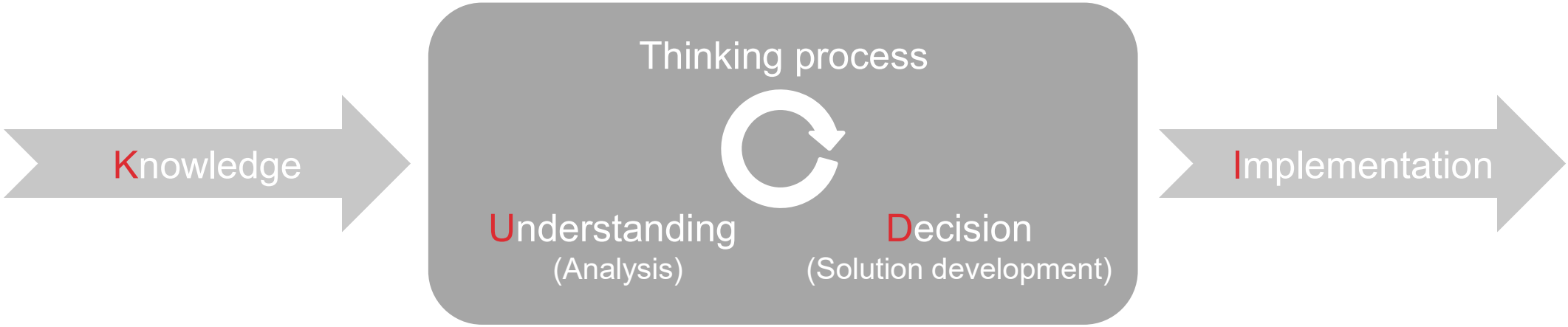
[1] Challenge of participants (e.g., analytical rigor, relevance of recommendations, quality of the oral presentations, etc.) – [2] ~1,150 executives trained since 2002 – [3] More than 2,100 students trained since 1992

Our training and teaching programs have been designed to boost the knowledge of participants, their ability to understand, to make decisions and to implement them

Introduction

"Smartness Formula" (1/2)

Smartness = Knowing x Understanding x Deciding x Implementing



"Any fool can know. The point is to understand" – Albert Einstein

Sources: Smart Pharma Consulting

The "Smartness Formula" has shown to be effective to diagnose development needs of participants and to structure development programs

Introduction

"Smartness Formula" (2/2)

- The "Smartness Formula" provides a structure to identify development needs and organize in an effective and more efficient manner

Smartness = Knowing x Understanding x Deciding x Implementing

Smartness components

Knowing	Understanding	Deciding	Implementing
By collecting Precise – Reliable Relevant Facts & Figures	By carrying out In-depth & Robust Analyses	By proposing Innovative & Easy-to-implement Solutions	By providing Specific Monitoring Tools To guarantee the Quality of Execution

Sources: Smart Pharma Consulting

Smart Pharma Consulting has published the "Pharma Marketing Toolbox" which is a book specifically designed for Pharma Marketers

Introduction

Publications: Marketing book[1]

Author: Jean-Michel Peny is President of Smart Pharma Consulting, Faculty Director of Smart Pharma Institute of Management, Lecturer in Pharmaceutical Strategy & Marketing at the ESSEC business school, at the Faculty of Pharmaceutical Sciences (Paris XI)

Editor: Smart Pharma Consulting – 246 pages

Presentation

The book provides a clear, precise and concise review of the most relevant and useful concepts in the context of pharmaceutical marketing

The author presents:

- Innovative marketing approaches
- Specific analyses
- Practical tools

This user-friendly "toolbox" has been structured to encourage the rigor and relevance of marketing thinking of pharmaceutical executives

Brief Content

Sources: Smart Pharma Consulting

[1] *See our website: www.smart-pharma.com where you can order this book*

All programs are led by Jean-Michel Peny, President of Smart Pharma Consulting and Program Faculty Director of the Smart Pharma Institute of Management

Introduction

Jean-Michel Peny

- **Experience:**
  - 1 year as pharmacist at Begin hospital blood bank
  - 7 years as General Manager for pharma companies:
    - 3 years in Sri Lanka (Servier)
    - 3 years in India (Servier)
    - 1 year in France (Novartis Generics)
  - 32 years as Consultant specialized in Strategy and Management in the pharmaceutical sector (Bain & Co, Arthur D. Little, Kearney, ISO Health Care Consulting, Smart Pharma Consulting)
  - 33 years of teaching activity:
    - Lecturer: ESCP B-School, ESSEC B-School, Paris Pharmaceutical and Medical Universities
    - Former affiliate Professor of Strategy & Marketing at HEC B-School
    - 1992-2001: Master “Pharma & Biotech Management” – ESCP B-School
  - 23 years of training activity:
    - Intra-company programs since 2002
    - Inter-company programs since 2006
- **Education:**
  - Pharm. D. – Nantes University
  - MBA – HEC Business School
  - Executive programs:
    - Strategic Marketing – Harvard Business School
    - Corporate Strategy – Sloan School of Management
    - Management of small corporations – Stanford B-School
  - Master 2, International Trade – IAE Lyon 3 University
  - Master 2, Pharmaceutical Marketing – Paris 5 University
- **Publications:**
  - 7 books
  - 43 articles
  - ~150 position papers

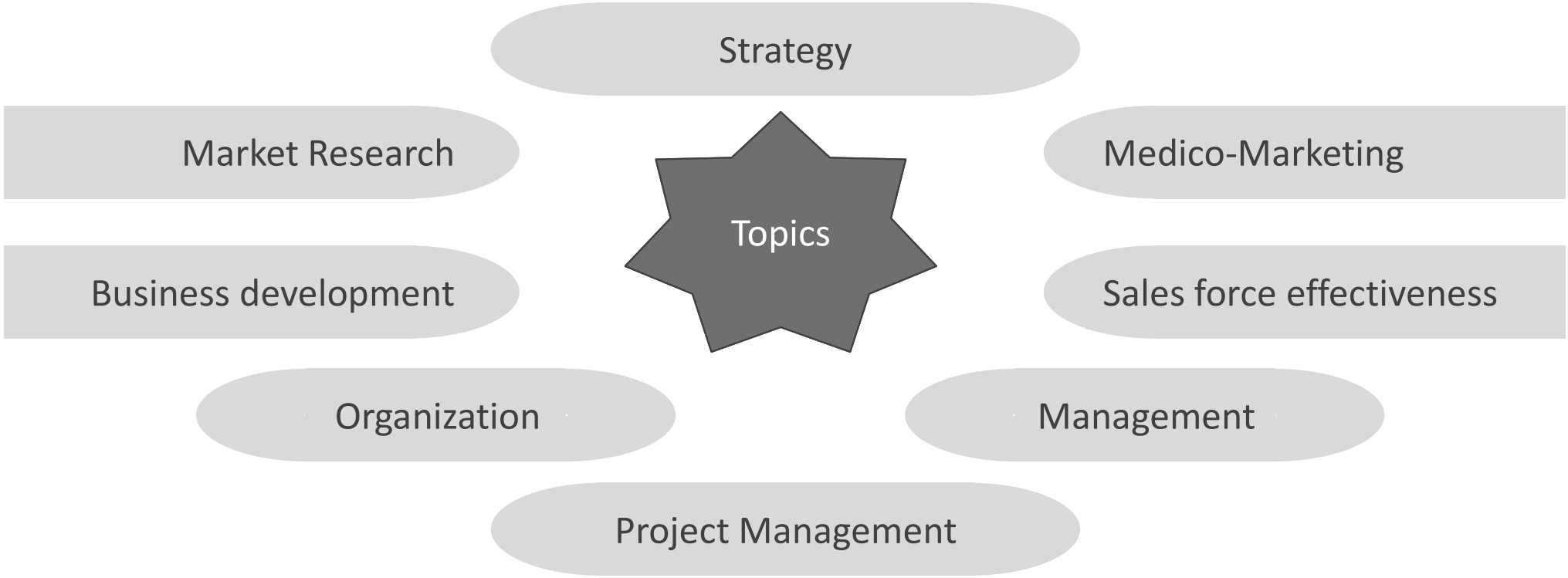
Sources: Smart Pharma Consulting

Our training programs are developed and carried out by the Smart Pharma Institute of Management which is our professional training center, registered since 2002

Training Programs

Key topics covered

- We disseminate insights through our training programs which cover eight key topics:



Sources: Smart Pharma Consulting

We propose a 5-day seminar for high potential and seasoned marketers who want to reinforce their strategic and operational marketing skills

Training Programs – Inter-companies

Seminar[1]: Pharma Strategy & Marketing

2025 session in French in Paris
October 13 to 17

Day 1: Strategic thinking applied to companies

- Worldwide biopharma market trends
- French pharma outlooks (2021 – 2025)
- Analysis of Big Pharma strategies
- Future of Digital Therapeutics

Day 2: Marketing strategic thinking

- Brand value optimization: Brand Preference Mix (BPM) approach
- Dynamic prescribers' segmentation: Behavioral Prescribers Segmentation (BPS) approach
- What strategy for what ambition?
- Brand plans: the 5 pitfalls to avoid

Day 3: Marketing tactical thinking

- Definition of customer journeys
- What patient services for what benefit?
- Digital marketing and omni-channel approach
- Medical-marketing-sales investments optimization
- Activities monitoring (KPIs[2] and KEIs[3])

Day 4: Specialized market segment analysis

- Marketing of hospital and orphan drugs
- Marketing of generics and biosimilar products
- Management of mature products

Day 5: Development of managerial skills

- What future for medical calls?
- How to boost sales force efficiency?
- Medical-marketing-sales teams management
- Corporate behavior

Target Audience

- **Marketing executive** (e.g., marketing managers, group product managers, product managers)
- **Market research executives**
- **Strategic planners**
- **Medical executives** (e.g., MSLs, medical managers)
- **Sales forces executives** (e.g., sales force managers, area managers)

Sources: Smart Pharma Consulting

[1] Program proposed both in English and in French. Since 2006, 177 experienced executives from 50 companies have attended this seminar – [2] Key Performance Indicators – [3] Key Execution Indicators

We propose a 5-day seminar for sales managers of pharma companies wishing to become "High Performers"

Training Programs – Inter-companies

Seminar[1]: High Performance Sales Manager

2025 session in French in Paris

Day 1: Recent changes in the environment and implications

- The healthcare system: national, regional and local (hospitals and other institutions)
- Strategic, tactical and organizational implications for sales forces

Day 2: Sales force performance – Strategy

- Dynamic and individual customer segmentation
- Search for customer preference
- Creating high impact interactions with customers

Day 3: Sales force performance – Organization

- Adapt activities and strengthen skills required
- Define a flexible structure adapted to targeted customers
- Craft procedures to facilitate the cooperation between medical, marketing and sales departments
- Establish a culture of commitment and excellence

Day 4: Best-in-class Leaders & Managers

- Develop and share a vision and values
- Stimulate collaborators passion for their job
- Manage according to the "mutual benefits" principle
- Organize and monitor sales forces activities

Day 5: Specific development of collaborators

- Use methods and tools to improve customers insights
- Analyze performance and set priorities
- Support the crafting of pragmatic action plans
- Improve cross-functional collaboration

Target Audience

- **Marketing & Sales Managers**
- **Sales force Managers**
- **Commercial Managers**
- **Area Managers**

Sources: Smart Pharma Consulting

[1] *Program proposed both in English and in French*

We have specifically designed Masterclasses to offer in-depth trainings to pharma company executives on a specific topic

Training Programs – Intra-companies

Masterclass[1]: **Principles**

Concept

- Masterclasses offer participants the opportunity to focus on a specific subject and apply innovative concepts, useful methods and practical tools to real-life situations, to learn by doing
- Masterclasses are moderated by Jean-Michel Peny, who has been, for 28 years:
  - Teaching students at the best French Business Schools and Universities of Pharmacy and Medicine
  - Training executives from the pharma industry
- Each Masterclass is limited to a maximum of 12 participants and lasts from 1 to 4 days

Organization

- Pre-Masterclass session
  - Participants will receive a specific documentation including concepts, methods and tools
- Masterclass session (1 to 4 days)[2]
  - Part 1: Review of the concepts, methods and tools that will be used
  - Part 2: Lecture by and discussion with a "guest speaker" expert in the topic covered
  - Part 3: Implementation of the concepts, methods and tools through real-life case studies
  - Part 4: Co-development with participants of key learnings
- Post-Masterclass
  - Structuration of the key learnings of the Masterclass session to be sent to participants

Sources: Smart Pharma Consulting

[1] Programs proposed both in English and in French. –
[2] Time allocation: Part 1: 10% - Part 2: 5% - Part 3: 80% - Part 4: 5%

The "Strategic Marketing Excellence" masterclass focuses on high-performance positioning and segmentation case studies calling on creativity and rigor

Training Programs – Intra-companies

Masterclass[1]: **Strategic Marketing Excellence**

Day 1	
9:00	Introduction to the masterclass
9:10	Review and discussion of conventional and innovative strategic marketing concepts, methods and tools sent to participants as a pre-read
10:30	Lecture by and discussion with an expert: "How to create a sustainably attractive brand? – Lessons from non-pharma industries"
11:45	*Break*
12:00	Case study #1: Development and implementation of a Brand Preference strategy for: - A secondary care brand (working group A) - A primary care brand (working group B)[2]
13:00	*Lunch*
14:00	Case study #1: cont.
16:00	*Break*
16:15	Presentation of the working groups A & B outputs, discussion and agreement on key learnings
17:45	End of day 1

Day 2	
9:00	Introduction to the 2nd day
9:10	Case study #2: Development and implementation of an optimized customer segmentation applied to: - Individual prescribers (working group C) - Individual hospital departments (working group D)[3]
11:10	*Break*
11:30	Presentation of the working groups C & D outputs, discussion and agreement on key learnings
13:00	*Lunch*
14:00	Case study #3: Development and implementation of an Individual Prescriber Plan for: - Individual prescribers (working group E) - Individual hospital departments (working group F)[3]
15:30	*Break*
15:45	Presentation of the working groups E & F outputs, discussion and agreement on key learnings
16:45	Co-development with participants of key learnings
17:45	End of the masterclass

Sources: Smart Pharma Consulting

[1] Program proposed both in English and in French – [2] According to the attendees, a non-Rx-bound could be chosen instead – [3] According to the attendees, individual retail pharmacists and/or purchasing groups could be studied as well

The "Tactical Marketing Excellence" masterclass proposes attendees to work on case studies dedicated to best practices re. the execution of marketing initiatives

Training Programs – Intra-companies

Masterclass[1]: **Tactical Marketing Excellence**

Day 1	
9:00	Introduction to the masterclass
9:10	Review and discussion of conventional and innovative tactical marketing concepts, methods and tools sent to participants as a pre-read
10:30	Lecture by and discussion with an expert: "What is the real value of digital marketing initiatives? – Lessons from best-in-class pharma companies"
11:45	*Break*
12:00	Case study #1: Development and implementation of conventional and digital multichannel initiatives to: - Individual prescribers (working group A) - Individual hospital departments (working group B)[2]
13:00	*Lunch*
14:00	Case study #1: cont.
16:00	*Break*
16:15	Presentation of the working groups A & B outputs, discussion and agreement on key learnings
17:45	End of day 1

Day 2	
9:00	Introduction to the 2nd day
9:10	Case study #2: Marketing sensitivity to investment and resource allocation optimization at: - Individual prescribers (working group C) - Individual hospital departments (working group D)[2]
11:10	*Break*
11:30	Presentation of the working groups C & D outputs, discussion and agreement on key learnings
13:00	*Lunch*
14:00	Case study #3: Development and implementation of action plans and monitoring tools (KEIs[3] & KPIs[4]) for: - Individual prescribers (working group E) - Individual hospital departments (working group F)[2]
15:30	*Break*
15:45	Presentation of the working groups E & F outputs, discussion and agreement on key learnings
16:45	Co-development with participants of key learnings
17:45	End of the masterclass

Sources: Smart Pharma Consulting

[1] Program proposed both in English and in French – [2] According to the attendees, individual retail pharmacists and/or purchasing groups could be studied as well – [3] Key execution indicators to measure the quality of execution – [4] Key performance indicators to measure the impact of the tactics (medico-marketing and sales activities)

The "Market Analysis & Forecasting" masterclass has been designed for participants looking for robust and simple tools, and wishing to strengthen their analytical skills

Training Programs – Intra-companies

Masterclass[1]: **Market Analysis & Forecasting**

Day 1: Market Analysis	
9:00	Introduction to the masterclass
9:10	Review and discussion of analytical concepts, methods and tools sent to participants as a pre-read
10:30	Lecture by and discussion with an expert: "Review of the most advanced market analyses – Lessons from non-pharma markets"
11:45	*Break*
12:00	Case study #1: Market & brand dynamics evaluation: - Stakeholders' behaviors analysis[2] - Key market drivers & barriers analysis - Sensitivity of brands to operational[3] investments - From data analysis to decision making
13:00	*Lunch*
14:00	Case study #1: cont.
16:00	*Break*
16:15	Presentation of the case study outputs, discussion and agreement on key learnings
17:45	End of day 1

Day 2: Forecasting	
8:30	Introduction to the 2nd day
8:40	Review and discussion of sales forecasting concepts, methods and tools sent to participants as a pre-read
10:00	*Break*
10:15	Case study #2 part 1: Baseline & scenario building: - Historical trends evaluation - Determination of future events and of their impact
12:30	Lecture by and discussion with an expert: "What is the business value of sales forecasting?"
13:00	*Lunch*
14:00	Case study #2 part 2: Sales forecast modeling: - Patient-based forecasting - Lifecycle based forecasting (new, growing, mature)
16:00	*Break*
16:15	Presentation of the case study (parts 1 & 2) outputs, discussion and agreement on key learnings
16:45	Co-development with participants of key learnings
17:45	End of the masterclass

Sources: Smart Pharma Consulting

[1] Program proposed both in English and in French – [2] Health authorities, payers, physicians, pharmacists, patients, patient advocacy groups, competitors, etc. – [3] Medico-marketing and sales

This masterclass helps med reps better understand how they must build and then use action plans to improve the efficiency and efficacy of their daily activities

Training Programs – Intra-companies

Masterclass[1]: **Action Plans for Med Reps**

Day 1	
9:00	Introduction to the masterclass
9:10	Review and discussion of activity planning objective, concepts, methods and tools sent to participants as a pre-read
10:30	Lecture by and discussion with an expert: "How to build useful action plans benefiting primarily to the med reps?"
11:45	*Break*
12:00	Case study #1: Analysis of the situation at territory level – External & Internal analysis: - Primary care brand (group A) - Secondary care brand (group B)
13:00	*Lunch*
14:00	Case study #1: cont.
16:00	*Break*
16:15	Presentation of the working groups A & B outputs, discussion and agreement on key learnings
17:45	End of day 1

Day 2	
9:00	Introduction to the 2nd day
9:10	Case study #2: Objective setting and strategy crafting: - Primary care brand (group A) - Secondary care brand (group B)
11:10	*Break*
11:30	Presentation of the working groups A & B outputs, discussion and agreement on key learnings
13:00	*Lunch*
14:00	Case study #3: Development of specific actions to support the territory strategy previously set and selection of activity and performance indicators: - Primary care brand (group A) - Secondary care brand (group B)
15:30	*Break*
15:45	Presentation of the working groups A & B outputs, discussion and agreement on key learnings
16:45	Co-development with participants of key learnings
17:45	End of the masterclass

Sources: Smart Pharma Consulting

[1] Program proposed both in English and in French

We propose four-day sessions to familiarize participants (med reps and/or their manager) with the four pillars supporting the ELITE Program[1]

Training Programs – Intra-companies

Masterclass[2]: **ELITE Program for Med Reps (1/2)**

Day 1 – Pillar #1: Prescriber Insight	
9:00	Introduction to the session
9:10	Review and discussion of the concept, methods and tools sent to participants as a pre-read
10:30	Lecture by and discussion with an expert: "Customer Insight – Lessons from FMCG[3] companies"
11:45	*Break*
12:00	Case study: Application of the "Seeker Portrait" Model developed by Smart Pharma Consulting to: - Individual prescribers (group A) - Individual hospital departments (group B)
13:00	*Lunch*
14:00	Case study: cont.
16:00	*Break*
16:15	Presentation of the working groups A & B outputs, discussion and agreement on key learnings
17:45	End of day 1

Day 2 – Pillar #2: Brand Preference Tactic	
9:00	Introduction to the session
9:10	Review and discussion of the concept, methods and tools sent to participants as a pre-read
10:30	Lecture by and discussion with an expert: "How do non-pharma companies proceed to strengthen customer preference to their brands?"
11:45	*Break*
12:00	Case study: Application of the "Brand Preference Mix" approach by med reps at: - Individual prescriber level (group A) - Individual hospital department level (group B)
13:00	*Lunch*
14:00	Case study: cont.
16:00	*Break*
16:15	Presentation of the working groups A & B outputs, discussion and agreement on key learnings
17:45	End of day 2

Sources: Smart Pharma Consulting

[1] See on our website www.smart-pharma.com the position paper "Best-in-Class Medical Reps… apply the ELITE Program" – [2] Program proposed both in English and in French – [3] Fast Moving Consumer Goods

We propose four-day sessions to familiarize participants (med reps and/or their manager) with the four pillars supporting the ELITE Program[1]

Training Programs – Intra-companies

Masterclass[2]: **ELITE Program for Med Reps (2/2)**

Day 3 – Pillar #3: High Impact Interactions	
9:00	Introduction to the session
9:10	Review and discussion of the concept, methods and tools sent to participants as a pre-read
10:30	Lecture by and discussion with an expert: "How to create unique touchpoints with customers? – Lessons from FMCG[3] companies"
11:45	*Break*
12:00	Case study: Application of the "H2I"[4] Program developed by Smart Pharma Consulting to: - Individual prescribers (group A) - Individual hospital departments (group B)
13:00	*Lunch*
14:00	Case study: cont.
16:00	*Break*
16:15	Presentation of the working groups A & B outputs, discussion and agreement on key learnings
17:45	End of day 3

Day 4 – Pillar #4: Job Passion	
9:00	Introduction to the session
9:10	Review and discussion of the concept, methods and tools sent to participants as a pre-read
10:30	Lecture by and discussion with an expert: "How to boost your passion for your work? – A practical approach"
11:45	*Break*
12:00	Case study: Identification of the drivers likely to stimulate the passion of med reps for their job: - Job-related drivers (group A) - Company-related drivers (group B)
13:00	*Lunch*
14:00	Case study: cont.
16:00	*Break*
16:15	Presentation of the working groups A & B outputs, discussion and agreement on key learnings
17:45	End of the masterclass

Sources: Smart Pharma Consulting

[1] See on our website www.smart-pharma.com the position paper "Best-in-Class Medical Reps… apply the ELITE Program" – [2] Program proposed both in English and in French – [3] Fast Moving Consumer Goods – [4] High Impact Interactions

This masterclass provides a method and tools to help MSLs increase their efficacy and efficiency, especially when interacting with KOLs

Training Programs – Intra-companies

Masterclass[1]: **Best-in-Class MSLs**

Day 1	
9:00	Introduction
9:15	Reminder of MSLs role & responsibilities taking into account the national regulatory framework
10:00	Presentation: MSLs issues & challenges
10:30	Presentation: Recruitment and Management of KOLs
11:15	*Break*
11:30	Workshop #1: "KOLs mapping"
12:30	*Lunch*
13:30	Workshop #2: "KOLs relationship management"
14:30	Workshop #3: "Creation of high impact interactions"
15:30	*Break*
15:45	Workshop #4: "Contribution of the MSL to the enhancement of pharma company's reputation"
16:45	Plenary discussion: "How to improve collaboration with medical reps and KAMs?"
17:30	Conclusion
18:00	End of day 1

Day 2	
9:00	Introduction
9:15	Presentation: MSLs' strategic & operational plans (best practices – models)
10:00	Presentation: Changes in the healthcare system and in the pharma market by 2020
10:45	Workshop #5: "Analysis of the regional environment" (ARS, KOLs, hospital services, healthcare networks)
11:30	*Break*
11:45	Workshop #6: "Analysis of the regional activities of MSLs" (partnerships, projects, quality of interactions with KOLs)
12:15	Presentation & practical exercises "SWOT analysis in the scope of MSLs"
13:00	*Lunch*
14:00	Workshop #7: "Objectives setting, definition of a strategy and of operational activities monitoring"
16:00	*Break*
16:15	Conclusion
17:00	End of the masterclass

Sources: Smart Pharma Consulting

[1] Program proposed both in English or in French

The ambition of this masterclass is to provide participants with a unique experience during which they will boost their BD&L[1] knowledge and thinking process

Training Programs – Intra-companies

Masterclass[2]: **BD&L best practices**

Day 1	
9:00	Introduction (objectives, organization of the day, specific requests from participants)
9:15	Lecture / discussion #1: BD&L objective and basic principles
10:00	Exercise #1 in plenary session: Would BD&L deals make sense at your affiliate / region level? And why?
10:40	Break
11:00	Exercise #2 in working groups: Draw the list of relevant information to be collected to evaluate BD&L opportunities, the corresponding sources and their level of reliability
11:50	Debrief of the exercise #2 and key takeaways
13:00	Lunch
14:00	Lecture & discussion #2: Market, product and company data analyses: best practices
15:00	Case study #1: Opportunity assessment Rx-driven product – OTC product and/or Medical device
16:15	Break
16:30	Debrief of the case study #1 and key takeaways
17:30	Conclusions of the day
17:45	End of day 1

Day 2	
9:00	Lecture & discussion #3: Method and Tools to select most attractive opportunities (charts, ID cards, valuation techniques)
9:40	Case study #2: Best candidate(s) selection
11:00	Break
11:15	Debrief of the case study #2 and key takeaways
12:15	Lecture & discussion #4: Definition of the best deal structure (e.g. in-licensing, JV, acquisition)
12:35	Case study #3 in plenary session: Which deal structure to favor according to the situation?
13:00	Lunch
14:00	Lecture & discussion #5: How to approach and negotiate a BD&L opportunity?
14:45	Case study #4: Approach & Negotiation
15:45	Break
16:00	Debrief of the case study #4 and key takeaways
16:45	Lecture & discussion #6: Alliance management best practices
17:15	Conclusions of the session
17:45	End of the masterclass

Sources: Smart Pharma Consulting

[1] Business Development and Licensing – [2] Program proposed both in English and in French

This masterclass provides Good Managers with tips to become Smart Managers and thus boost their performance and the performance of their collaborators

Training Programs – Intra-companies

Masterclass[1]: **Smart vs. Good Managers**

Day 1	
9:00	Introduction to the masterclass
9:10	Review of and discussion about the seven tips to be mastered to become a Smart Manager (pre-read sent to participants)
10:30	Lecture by and discussion with an expert: "Managers vs. Leaders"
11:45	*Break*
12:00	Workshop #1: Purpose – Mission – Values – Vision
13:00	*Lunch*
14:00	Workshop #2: Strategy crafting
15:00	Workshop #3: Management by mutual benefits
16:30	*Break*
16:45	Workshop #4: Use of the Smart Index
18:15	End of day 1

Day 2	
9:00	Introduction to the 2nd day
9:10	Workshop #4: Use of the Smart Index (cont.)
10:45	*Break*
11:00	Workshop #5: Dynamic management of collaborators
13:00	*Lunch*
14:00	Workshop #6: Stimulation of job passion
15:30	*Break*
15:45	Workshop #7: Management model selection
17:15	Conclusion of the masterclass
18:00	End of the masterclass

Sources: Smart Pharma Consulting

[1] Program proposed both in English and in French

This program helps participants significantly improve their time management through the application of simple and effective good practices

Training Programs – Intra-companies

Masterclass[1]: **Time Management**

Day 1	
9:00	Introduction to the masterclass
9:10	Review of and discussion about the 8 tips to better manage time at work (pre-read sent to participants)
10:30	"Why is your time at work so precious?"
11:45	*Break*
12:00	Workshop #1: How well do you manage your time? – Express Self-diagnosis
13:00	*Lunch*
14:00	Workshop #2: Situation analysis: Time wasters identification
15:30	*Break*
16:00	Workshop #3: Management of time wasters
17:30	End of day 1

Day 2	
9:00	Introduction to the 2nd day
9:10	Workshop #3: Management of time wasters (cont.)
10:45	*Break*
11:00	Workshop #4: Planning and implementation
12:00	Workshop #5: Tracking & sharing outcomes
13:00	*Lunch*
14:00	Case study #1: "Manager Time"
15:30	*Break*
15:45	Case study #2: "Pharma Time"
17:15	Conclusion of the masterclass
17:30	End of the masterclass

Sources: Smart Pharma Consulting

[1] Program proposed both in English and in French

This program helps participants significantly improve their project management through the application of simple and effective good practices

Training Programs – Intra-companies

Masterclass[1]: **Project management**

Content & Organization

- The program will include basic principles, key tools, practical exercises and case studies relative to the pharmaceutical industry
- The program content will be customized according to the specific needs of the clients
- The program duration will be of one day, one day and a half or two days, according to the clients needs and desire

Target Audience

- Any collaborators from pharmaceutical companies having the responsibility to manage projects that are more or less complex
- Participants can be part of the medical, marketing, commercial, market research, strategic,… departments

Example of a One-Day Program

9:00	Introduction to the program
9:10	Review of the basic principles and key tools to properly manage projects
10:40	*Break*
11:00	Exercises: Familiarization with the key tools
12:30	*Lunch*
13:30	Case study #1: Application to a simple project
15:00	*Break*
15:20	Case study #2: Application to a moderately complex project
16:50	Conclusion and key takeaways
17:30	End of the program

Sources: Smart Pharma Consulting

[1] Program proposed both in English and in French

This one-day program will help participants define relevant KPIs (key performance indicators) and KEIs (key execution indicators) for a better efficacy and efficiency

Training Programs – Intra-companies

Masterclass[1]: **KPIs & KEIs**

Content & Organization

- The program will include basic definitions, recommendations, key tools, practical exercises and case studies relative to the pharmaceutical industry
- The program content will be customized according to the specific needs of the clients
- The program duration will be of one day, one day and a half or two days, according to the client needs and desire

Target Audience

- Any collaborators from pharmaceutical companies, whatever their level of responsibility and seniority
- Participants can be part of the medical, marketing, commercial, market research, strategic,… departments

Example of a One-Day Program

9:00	Introduction to the program
9:10	Review definitions and basic principles related to KPIs and KEIs, in general and in the context of the pharma business
10:40	*Break*
11:00	Exercises: Indicators selection – Data collection – Data analysis – Dashboard design – Action taking
12:30	*Lunch*
13:30	Case study #1: Practical implementation
15:00	*Break*
15:20	Case study #2: Practical implementation
16:50	Conclusion and key takeaways
17:30	End of the program

Sources: Smart Pharma Consulting

[1] Program proposed both in English and in French

This program will help participants get familiar with the basic principles and methods to tell stories to connect with and influence audiences

Training Programs – Intra-companies

Masterclass[1]: **Storytelling in Business**

Content & Organization

- The program will include basic definitions, recommendations, key tools, practical exercises and case studies related to the pharmaceutical industry
- The program content will be customized according to the specific needs of the client
- The program duration will be of one day, one day and a half or two days, according to the client needs and desire

Target Audience

- Any collaborators from pharmaceutical companies, whatever their level of responsibility and seniority
- Participants can be part of the medical, marketing, commercial, market research, strategic,… departments

Example of a One-Day Program

9:00	Introduction to the program
9:10	Review definitions and basic principles related to storytelling, in general and in the context of the pharma business
10:40	*Break*
11:00	Exercises: Know your audience – Define the right message – Be authentic – Keep it simple & visual – Involve the audience
12:30	*Lunch*
13:30	Case study #1: Practical implementation
15:00	*Break*
15:20	Case study #2: Practical implementation
16:50	Conclusion and key takeaways
17:30	End of the program

Sources: Smart Pharma Consulting

[1] Program proposed both in English and in French

The Physician Experience Program will provide participants with ready-to-implement solutions for in-field and back-office collaborators of pharma companies

Training Programs – Intra-companies

Masterclass[1]: **Implementing a Physician Experience Program**

Content & Organization

- The program will include basic definitions, recommendations, key tools, practical exercises and case studies related to the pharmaceutical industry
- The program content will be customized according to the specific needs of the client
- The program duration will be of one day, one day and a half or two days, according to the client needs and desire

Target Audience

- Any collaborators from pharmaceutical companies, whatever their level of responsibility and seniority
- Participants can be part of the medical, marketing, commercial, market research, strategic,… departments

Example of a One-Day Program

9:00	Introduction to the program
9:10	Definitions, concepts, methods, tools related to Experience
10:40	*Break*
11:00	Exercises: Defining a shared vision & ambition – Crafting a strategy – Mapping physician journeys and selecting the most relevant
12:30	*Lunch*
13:30	Case study #1: Rethinking medical calls experiences
15:00	*Break*
15:20	Case study #2: Rethinking medical meetings
16:50	Conclusion and key takeaways
17:30	End of the program

Sources: Smart Pharma Consulting

[1] Program proposed both in English and in French

This program specially designed for medical reps will help them find solutions to secure access to physicians and boost their preference for the brands they promote

Training Programs – Intra-companies

Masterclass[1]: From Promotional- to Service-led Medical Calls

Content & Organization

- The program will include basic definitions, recommendations, key tools, practical exercises and case studies related to the pharmaceutical industry
- The program content will be customized according to the specific needs of the client
- The program duration will be of one day, one day and a half or two days, according to the client needs and desire

Target Audience

- Medical reps and their managers
- Area Managers
- Sales Force Managers

Example of a One-Day Program

9:00	Introduction to the program
9:10	Definitions, concepts, methods, tools related to Service-led Medical Calls
10:40	*Break*
11:00	Case study #1: Defining the medical calls likely to create a unique and memorable positive experience for physicians
12:30	*Lunch*
13:30	Case study #2: Preparing service-led medical calls
15:00	*Break*
15:20	Case study #3: Executing and following-up service-led medical calls
16:50	Conclusion and key takeaways
17:30	End of the program

Sources: Smart Pharma Consulting

[1] Program proposed both in English and in French

Smart Pharma
CONSULTING

26 Pharma Conferences
for Management Teams

- Market Insights
- Strategic & Tactical Thoughts
- Management Best Practices
- Organizational Models

CATALOGUE January 2025

Pharma Conferences for Management Teams – Introduction

- **Smart Pharma Consulting** proposes **26 unique pharma conferences** to:
  - Develop the **knowledge**
  - Strengthen the **understanding**
  - Improve the **decision-making** process

  of **Management Teams** of pharma companies
- During these conferences, we will share **up-to-date data**, **robust analyses**, **innovative concepts, practical methods** and **tools** regarding:
  1. **Market insights**
  2. **Strategic** & **tactical** thoughts
  3. **Management** best practices
  4. **Organizational** models

- Our presentations which can be **adjusted** to **each pharma company needs** are based on our:
  - **100+ publications** (books, articles, reports, position papers)
  - **39 years** of **experience** in the **pharma sector**
- We **propose several options** for each selected topic:
  - 1- to 2-hour sessions: lecture + Q&A
  - 2- to 4-hour sessions: lecture + Q&A + workshops

I will facilitate these conferences so that to stimulate exchanges – challenge the status quo – provide new practical ideas

Jean-Michel Peny

Pharma Conferences for Management Teams – Topics

Pharma Conferences for Management Teams – Topics

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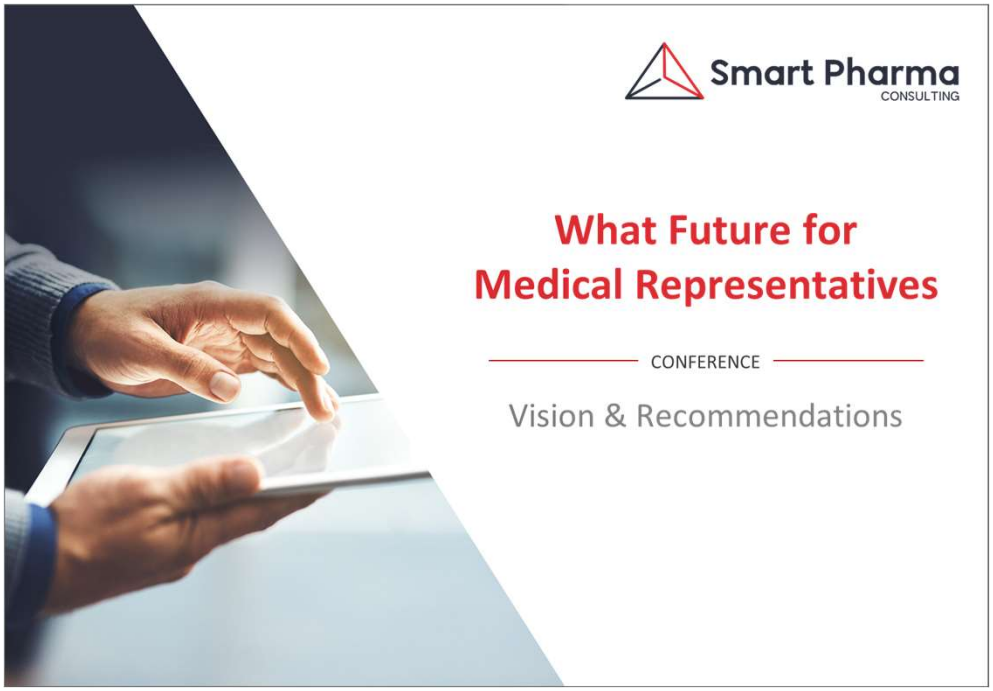


Pharma Conferences for Management Teams – Topics

9. Smart Pharma Care

Smart Pharma
CONSULTING

Smart Pharma Care
Programs

Humanitarian Engagements

Smart Pharma Consulting has been partnering with four reputable NGOs on projects in Africa and runs its own project in Nepal to protect and raise the most disadvantaged children

Protecting & Raising Children

- We are strongly engaged, through our "Smart Pharma Care" department, to help the world's most vulnerable children
- This engagement is a pilar of our societal commitment to redistribute opportunities and wealth

African Programs

We partner, since 2005, with four NGOs to protect children against violence, diseases; and to secure their access to water and food

Smart Pharma CARE

MEDECINS SANS FRONTIERES

SOLIDARITÉS INTERNATIONAL

handicap international humanité & inclusion

ACTION AGAINST HUNGER

Nepalese Program

- In 2006, we started our own program in Nepal to protect and educate children at risk
- The project is founded and managed by Smart Pharma, with the help of FSNB Health & Care[1]
- The Nepalese NGO Saathi ensures the operational activities of this project including ~200 children

Saathi साथी

FSNB HEALTH & CARE

"Our ambition is to protect and help children build a better future"

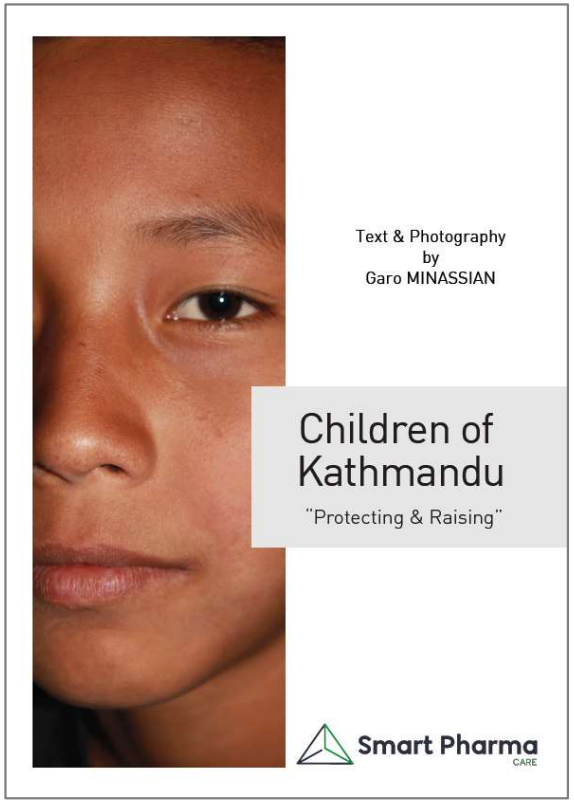
Sources: Smart Pharma Consulting

[1] *A consulting firm founded and directed by François Sarkozy*

For 18 years, Smart Pharma Consulting, has managed and funded the “Children of Kathmandu”, program, which protects and raises children abandoned, subject to extreme poverty or violence

Protecting & Raising Children

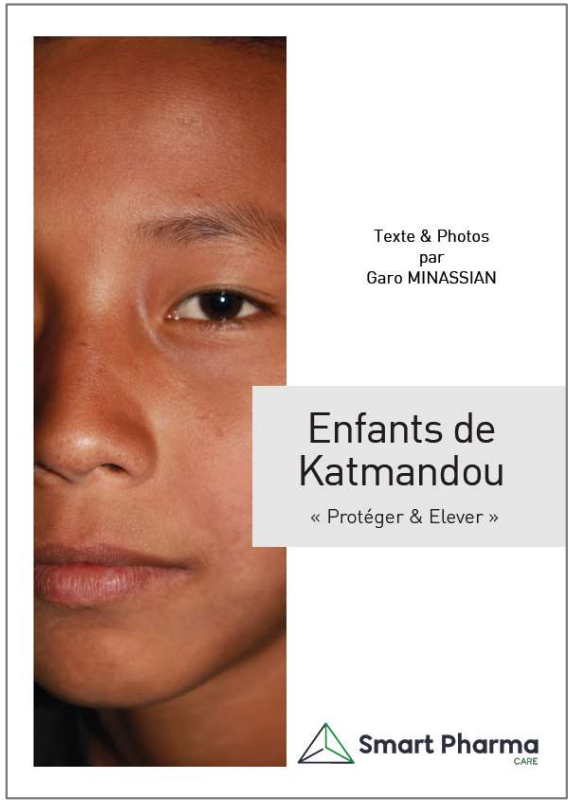
Children of Kathmandu Project



- Our "Smart Pharma Care" department is dedicated to help the world's most vulnerable children
- This engagement is a pillar of our commitment to redistribute opportunities and wealth

Smart Pharma CARE

“Click on the pictures to discover these ~200 children of Kathmandu we support to offer them a chance to build a better future”



Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Smart Pharma Care
Programs

Professional Transition
Free Support

Smart Pharma Consulting provides – for free – executives in professional transition a desktop in its office and the possibility to exchange and ask its consultants for advice

Professional Transition Free Support

- You are not yet or not anymore employed
- You are looking for a job in the pharma business
- You would like to have access to a working environment

Smart Pharma GIVES YOU FOR FREE

- Access to a separate workstation (for 3 to 6 months)
- Advice to position or reposition yourself for a new job
- Opportunities to exchange with its consultants
- Tea and coffee 😉

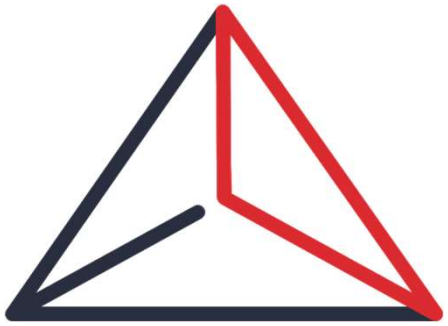
Sources: Smart Pharma Consulting

Smart Pharma
CONSULTING

Consulting firm dedicated to the pharma & MedTech sectors operating in the complementary fields of strategy, management and organization

1 Strategy

- **Assessing the attractiveness of markets** (Hospital / retail innovative products - Vaccines - OTC - Generics)
- **Growth strategy**
  - Optimization of marketing / sales investments
  - Development of a company in the hospital market Business
  - Valuation for acquisition
  - Portfolio / franchise assessment
- **Extension of product life cycle performance**
  - Improvement mature products performance
  - Adaptation of price strategy
- **Defense strategies vs. new entrants**
- **Competitive strategies in the hospital market**
- **Strategic partnerships companies / pharmacies**



2 Management

- **Facilitation and structuring of strategic thinking for multidisciplinary product teams**
  - Key challenges identification
  - Strategic options formalization
  - Resource allocation optimization program
- **Training of marketing and market research teams to sales forecast techniques (modeling and scenarios development)**
- **Development and implementation of a "coaching program" for area managers**
  - Sales reps coaching
  - Regional action plans roll-out
- **Development and implementation of a "sales efficiency program" for medical representatives (ELITE program))**

3 Organization

- **Rethink of operational units' organization**
- **Improvement of sales force effectiveness**
- **Improvement of the distribution channels covering the hospital and retail markets**
- **Development of a strategic planning process**

1, rue Houdart de Lamotte – 75015 Paris – France • +33 6 11 96 33 78 • jmpeny@smart-pharma.com • www.smart-pharma.com