The Best of Smart Pharma

2017

Concepts

Methods

Tools



1. Business Reports (Excerpts)

- French Pharma Market
- French Generics Market

2. Smart Manager Series

- Be a Smart Manager
- Time Optimization

3. Best-in-class Series

- Medical Science Liaisons
- Pharma Marketers
- Medical Reps
- Hospital KAMs
- Pharma BD&L

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	French Pharma Market 2016 – 2022	p. 6	Medical Science Liaisons (MSLs)	p. 91
2.	French Generics Market 2016 – 2022 (including Biosimilars)	p. 32	Pharma Marketers	p. 123
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	Be a Smart Manager, not just a Good one		Hospital KAMs	p. 177
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"Becoming Smarter is our ambition – Delivering Smarter Services our mission – Being Innovative our obsession"

Key features —

- For the past 17 years, becoming Smarter has been our corporate ambition...
- ... and providing our clients with Smarter services has been our corporate mission
- Smart Pharma Consulting has strived to allocate its resources and to develop its capabilities to:
 - 1. Generate and disseminate high quality insights regarding healthcare environment and pharmaceutical market
 - 2. Share knowledge and thoughts through consulting, training and teaching activities, as well as through **numerous publications** such as reports, books, articles, position papers
 - 3. Offer innovative viewpoints, concepts, methods, tools and solutions that outperform mainstream ones

Sources: Smart Pharma Consulting

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

- 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 robust fact-based analyses and recommendations
- Our teaching method, based on educative challenge¹, is acclaimed by executives² and students³ since 1992
- We are aware of pharma executive training and consulting needs (i.e. business knowledge and analytics, solution development, ideas structuring, etc.)

Sources: Smart Pharma Consulting

Market Strategic & Research **Management Studies** Consulting **Training & Teaching Programs**

The quality of our recommendations is supported by:

- Our strong academic background
- Our past 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, 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 Consulting is officially registered as a training organization by the French government since 2002

¹ Challenge of participants (e.g. analytical rigor, relevance of recommendations, quality of the oral presentations, etc.) – ² ~935 executives trained – ³ More than 1.830 students trained

The following selection of concepts / methods, tools and opinions, that are available on our website¹, illustrates our "innovative power"

Smart Pharma Consulting innovations

	Concepts / Methods	Tools	Opinions
Strategy & Management	 4Ws (What, Why, so What, What to do?) Preference-driven Strategy Pharma Corporate Reputation The Smart Manager 	 Development Strategy Matrix Corporate ID Card Advanced SWOT Customer Preference Card Pharma Reputation Index 	■ The mirage of the BRICs²
Marketing & Sales	 4Ws Brand Booster Program Segmentation KAM Expert Wheel The ELITE Program 	 Brand Preference Mix Index Behavioral Prescriber Segmentation (BPS) KEIs³ vs. KPIs⁴ Portfolio Strategic Matrix High Impact Interactions (H2I) 	 Brand preference supersedes brand satisfaction Med reps are key to drive physician preference
Medical	• 4Ws	 KOL ID Card KOL Partnership Plan (K2P) Integrated Regional Strategic Plan 	■ NA

Sources: Smart Pharma Consulting analysis

¹ www.smart-pharma.com – ² Brazil, Russia, India, China – ³ Key execution indicators – ⁴ Key performance indicators



Introduction

- International healthcare expenditure
- Global pharma market (2016 2022)

Section 1. The French healthcare system

1.1. Key stakeholders

- · Mapping of key stakeholders
- Policy makers and regulators
- Overall reimbursement and pricing processes
- · Parliament and Ministry of Health
- ANSM
- HAS (CEESP CT)
- CEPS
- National and regional market access in a nutshell
- Community hospitable territory (GHT)
- Market access to new drugs International comparisons
- National health insurance fund instances
- Complementary health cover organizations
- Regional health bodies
- · Healthcare professionals and facilities
- Hospital financing systems
- Drug distribution channels
- Economy of retail pharmacies
- Voluntary trade organizations
- On-line sales of pharmaceutical products
- Patients' confidence in drugs

1.2. Recent reforms

- The French Sunshine Act
- New regulations towards generics and biosimilars
- Measures to limit the financial impact of expensive drugs
- LFSS 2015 key articles regarding drugs and pharma companies
- LFSS 2016 key articles regarding drugs and pharma companies
- Health System Modernization Act (incl. GHT)
- LFSS 2017 key articles regarding drugs and pharma companies
- LFSS 2018 key articles regarding drugs and pharma companies
- LFSS 2018 main savings measures

1.3. Healthcare expenditure

- Relation between healthcare expenditure and GDP
- · Supply, consumption and funding of healthcare
- Social Security & national health insurance fund balances
- ONDAM
- Hospital expenses
- Expenditure by age group
- Breakdown of healthcare expenditure and coverage
- Evolution of the reimbursement system
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Section 2. The French pharmaceutical market

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- Evolution of drug sales by segment (2012 2016)
- Hospital drug market dynamics (2012 2016)
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- Top 10 therapeutic areas retail & hospital (2016)
- Top 10 products retail & hospital
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- Evolution of reimbursable generics penetration in the retail market
- Public objectives of prescription within the generics Directory (2016)
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- Evolution of the biosimilar market (2007 2016)
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- Evolution of drug sales by segment (2012 2016 2022)
- Factors driving the evolution of drug sales by market segment (2016 -2022)
- Drivers & limiters of biosimilars use by key stakeholders
- Determinants to biosimilar sales forecasts
- Evolution of the biosimilars market in France (2016)
- Market value of classes/INN impacted by biosimilars (2016 2022)
- Originators and biosimilars' sales forecasts Retail and hospital markets (2016 - 2022)

Section 3. Strategic priorities for pharma companies

3.1. Introduction (7 Ps)

3.2. Policy makers & Payers

- 2016-2022 trends
- **Driving factors**
- **Implications**
- Strategic priorities

3.3. Physicians

- 2016-2022 trends
- **Driving factors**
- **Implications**
- · Strategic priorities

3.4. Pharmacists

- Levers and solutions to improve the economy of pharmacies
- 2016-2022 trends
- **Driving factors**
- **Implications**
- Strategic priorities

Conclusion

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3.5. Patients & PAGs

- 2016-2022 trends
- **Driving factors**
- **Implications**
- Strategic priorities

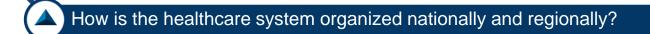
3.6. Pharma competitors

- 2016-2022 trends
- **Driving factors**
- **Implications**
- Strategic priorities

This report analyzes the current situation and the key trends of the French Pharma market by the end of 2022 to provide pharma companies with key strategic insights

2016 - 2022 French pharma market prospects & strategic implications

- Despite an ever tougher environment, the French pharma market will remain a key priority for pharma companies
- Smart Pharma Consulting proposes pharma companies to address the following key issues related to the French healthcare system and pharma market evolution by the end of 2022, to better grasp its strategic impacts



Who are the key stakeholders in the healthcare system and what are their respective role and influence?

What are the major categories of healthcare expenditure?

How does France stand in comparison with other countries?

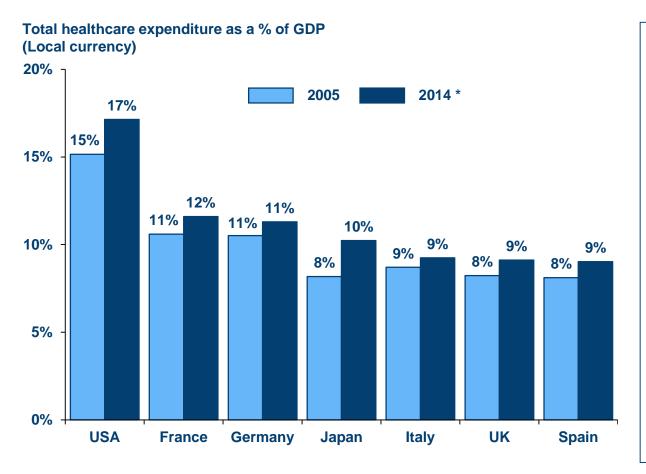
What are the recent evolutions of therapeutic classes, drugs and pharma companies sales?

What are the estimated sales forecasts by strategic segment by 2022?

What could be the strategic implications for pharma companies by 2022?

Healthcare expenditure will 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



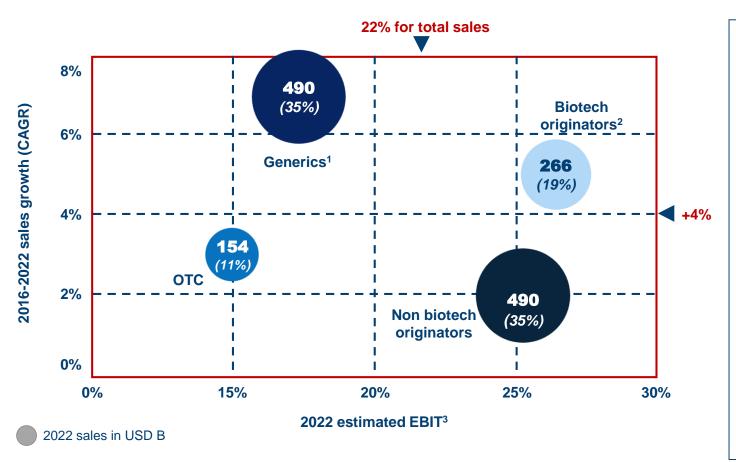
- Healthcare expenditure represented one of the largest public spending items in most developed economies: 1st (USA), 2nd (France, Germany, Japan, and UK)¹ and 3rd (Italy and Spain)²
- At best, governments and payers will manage to slow down the rise of healthcare expenditure as a percentage of GDP but would not be able to stop it
- There is no optimal ratio of healthcare expenditure over GDP, it primarily results from:
 - Public health conditions
 - Governments investment prioritization
 - Citizens willingness to seek for care
 - Healthcare cost

Sources: World Bank, as of September 2017 – OECD, as of September 2017 – Smart Pharma Consulting analyses

¹ After social protection – ² After social protection and general public services * Note: 2014 data excepted for France and the USA, 2015

By 2022, the sales growth of pharma companies should be essentially driven by generic and innovative biologic drugs, but they should lose two points of profitability

Global pharmaceutical market attractiveness per strategic segment (2016 - 2022)



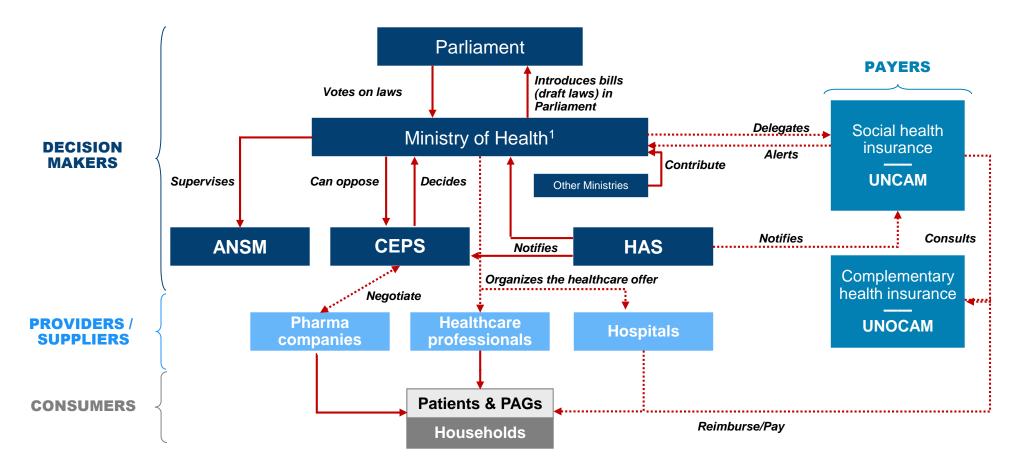
- By 2022, the sales (incl. human drugs only for the non-OTC segments and medical devices and food supplements for the OTC segment) should reach USD 1,400 B and grow at a pace of +4% p.a.
- Pharma companies EBIT should decrease from ~24% to ~22% over the period due to increased price pressure
- The OTC segment appears to be the least attractive
- The biotech segment will remain very attractive but biosimilar competition will ramp up

Sources: Outlook for Global Medicines through 2021, Quintiles IMS (December 2016) – Global OTC Drugs Market, Mordor Intelligence (August 2016) – Global economic prospects, World Bank (June 2017) – Smart Pharma Consulting estimates

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

Stakeholders in the French healthcare system can be split according to their role as decision maker, payer, provider / supplier or consumer

Mapping of key stakeholders

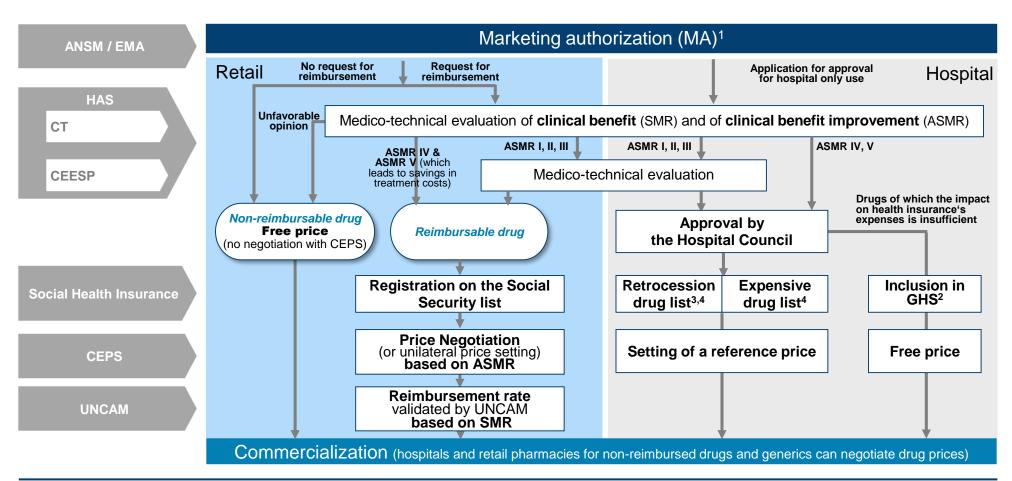


Sources: Smart Pharma Consulting analyses

1 The exact name of this ministry is: Ministry of Health and Solidarity,
that will be named in this report Ministry of Health

Price and reimbursement settings depend on the status and on the clinical benefit of the drugs

Overall reimbursement and pricing processes



Sources: Directive "Transparence" 89/105/CEE and updates – www.ansm.sante.fr – www.leem.org – Smart Pharma Consulting analyses

¹ After a favorable opinion of the MA commission (national level) or the EMA (European level) – ² Similar to Diagnosis-related groups (DRGs) – ³ These drugs can be dispensed to outpatients by hospital pharmacies – ⁴ The cost of these drugs is not covered by the hospital but by the Social Health Insurance

1.1. Key stakeholders

When compared to the other EU5 countries, a wider array of indicators could be used by French health authorities to evaluate the economic value of drugs

CEESP – Health economic evaluations: Submission requirements in Europe

Therapeutic benefit	Cost- effectiveness modeling	Budget impact modeling	HRQoL¹ data	Data vs. SoC²	Innovation	Comments
~	~	~	*	*	*	Cost-effectiveness taken into account since 2013 with the creation of the CEESP (Economic committee for healthcare products)
~		~	~	*		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

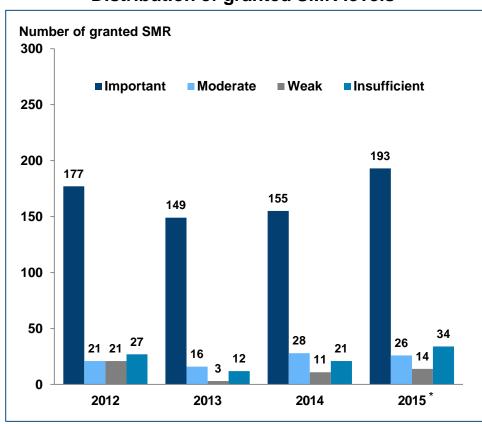
Sources: "An Introduction to European Market Access", PRMA Consulting – Smart Pharma Consulting updates

¹ Heath-Related Quality of Life – ² Standard of Care

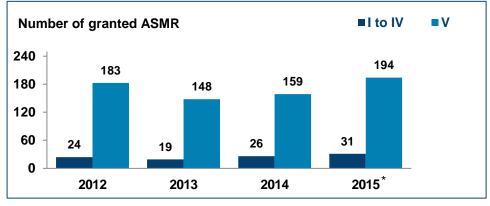
French health authorities will keep on limiting the number of ASMR I, II & III to quantum leap innovations in order to contain the cost of reimbursed drugs

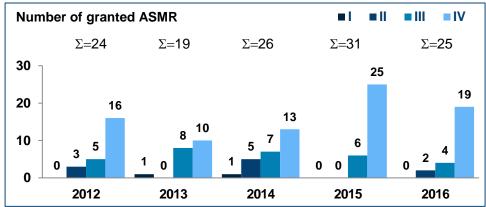
CT - SMR and ASMR granting over time (2012 - 2016)

Distribution of granted SMR levels¹



Distribution of granted ASMR levels¹





*2016 data not available in September 2017

¹ Applications for first registration only, all procedures combined. An application may result in several different SMR / ASMR, depending on the considered indications

Sources: HAS Annual Activity Reports (2011-2016) – Smart Pharma Consulting analyses

The criteria for the inclusion of a hospital drug on the list for invoicing on top of "T2A1" are well defined since March 2016

— CEPS – Criteria for inscription on / radiation of the list of Off-T2A¹ expensive hospital drugs —

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 Clinical Benefit (important SMR)

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 a Clinical Added Value (ASMR I to III)

- Suggesting that the drug is innovative vs. available alternatives
- An exception can be made for products with ASMR IV with no therapeutic alternatives
- For equity reasons, when a product receives an ASMR IV or V and its comparators are already listed, the product will also be listed, despite its poor ASMR

Criterion n°4

The cost of the drug is incompatible with the T2A system

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

Indication per indication

Criteria for radiation of the list

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

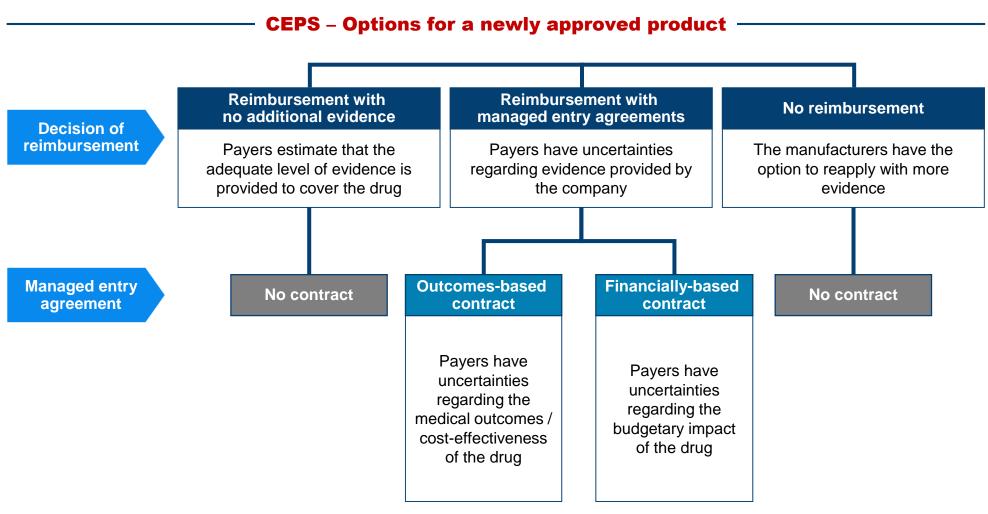
- When there is a reevaluation by the HAS of the SMR / ASMR
- When prices have decreased enough to make the product compatible with the T2A system

Sources: Decree of March 25th, 2016 regarding modalities of inscription to the "liste en sus" – Smart Pharma Consulting analyses

¹ Activity-based costing system similar to a Diagnosis related group-based funding



Managed entry agreements may be considered by the CEPS when the level of medical evidence is too low and/or the financial impact is too high



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

The implementation of managed entry agreements are most often time-consuming and costly for payers and/or pharma companies, outweighing their benefits

CEPS – Pros & Cons of managed entry agreements

Pros

- Potential to re-evaluate the effectiveness of drugs at a later stage and re-negotiate the price based on real-world evidence
- Help address post-licensing uncertainty by offering flexibility in dealing with new and often expensive treatments
- Improve the cost-effectiveness through a discount or a payback agreement for non-responders
- Enable different types of schemes addressing different needs, both financial and non financial

Cons

- Additional efforts required to make a new drug available to patients, such as negotiation time, monitoring of patient response, data gathering, development of registries, etc.
- Threat that manufacturers could start proposing higher entry prices in the expectancy of having to engage managed entry agreements
- Limited capacity to implement and assess evidence. notably if implementation takes place at regional/hospital level

- Speed up pricing negotiations and reimbursement
- Potential to benefit from a better corporate reputation as a result of the willingness to take responsibility for the use of the drug in real-life
- Potential to reinforce the long-term collaboration between payers, health authorities and pharmaceutical companies
- Enable discounts without impacting list prices

- Costs related to the implementation of the managed entry agreement can, in some cases, totally outweigh benefits
- Concessions required such as refunds for nonrespondent patients, discounts, gathering of additional data
- Voluntary versus no voluntary nature of such contracts leading to a variability in stakeholders' perception

CEPS

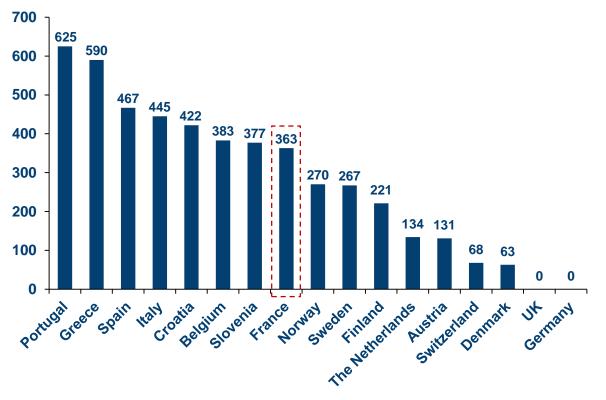
Pharma companies

Sources: "Managed entry agreements for pharmaceuticals: the European experience", Alessandra Ferrario and Panos Kanavos, April 2013 - Smart Pharma Consulting analyses

In eight European countries, including France, pharma companies and patients must wait, one year or more, after marketing authorization, to get a new drug reimbursed¹

Average time to market vs. European countries





- 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 France, Italy 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 revenues¹
- The UK and Germany have no delay since the price and reimbursement negotiations occur once the product has reached the market

¹ Excluding early access programs for breakthrough innovations (e.g. ATU / post-ATU in France) – ² For drugs receiving their first marketing authorization between 2011 and 2014



If mutual funds are in a greater number, they are often smaller than private insurance companies and provident funds in terms of activity

Complementary health cover organizations

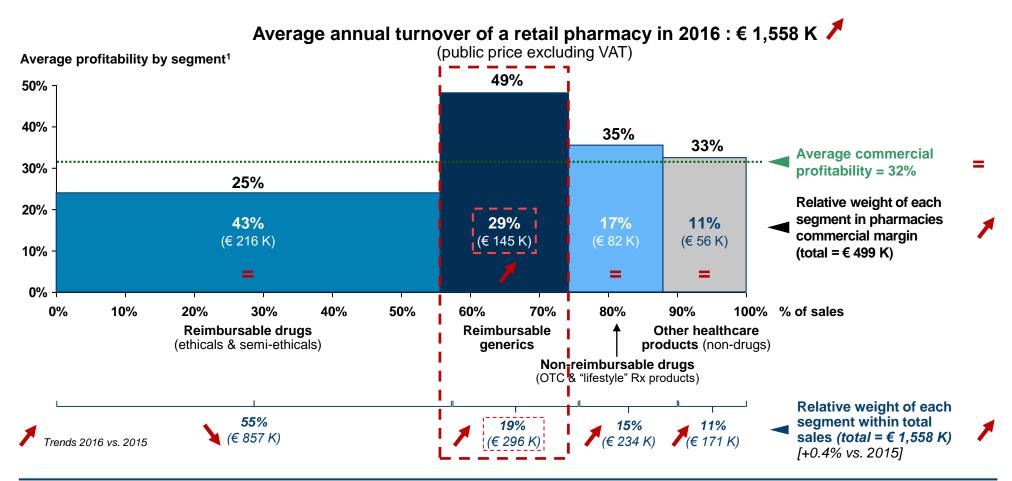
	Private organizations			Public schemes		
	Mutual fund	Provident funds	Private insurers	CMU Fund ¹	State medical assistance (AME)	
Legal status	Private non-profit organization Private non-profit organization		Private for-profit organization	Public institution of administrative nature	Private non-profit organizations (managed by the CPAM ⁴)	
Applicable law	Mutual societies code	Social Security code	Insurance code	Social Security code	Social Action and Families code	
Description • No discrimination based on health so the person • Level of contributindependent of the health status of the person • The complementate health cover according to the complementate of the cover according to the contribution of the person • The complementate of the cover according to t	 Level of contributions independent of the health status of the person The complementary health cover accounts for 2/3 of the activity of the 	 Equal management (employee members and employer/company representatives) They are based on a collective company agreement Subscription of employees is not always mandatory 	 Non-participatory management No social mission Underwriting Amount of variable premiums based on the individual risk of the participant Optional membership on an individual or collective basis 	 Financing of the CMU-C² and ACS³: Support the out of pocket of a basket of goods and health services for CMU beneficiaries with a lower level of resources ceiling CMU-C and ACS are agreed for one year 	 Financing 100% of maternity care and disease (excluding treatments with low medical service) The AME is granted to foreigners in an irregular situation living in France for at least three months under the same conditions of resources than the 	
% of organizations	74%	6%	20%		CMU-C and after the payment of an annual	
% of insured people	58%	17%	25%		fee of € 30	

Sources: "La protection sociale complémentaire en France", Irdes (July 2017) – Fonds CMU (www.cmu.fr) – Smart Pharma Consulting

¹ Universal Medical Coverage (for people regularly and stably living in France and not entitled to Health Insurance) – ² Complementary universal health cover – ³ Help for a complementary fund, for people exceeding the ceiling of CMU-C within the limit of 26% – ⁴ Local Healthcare Insurance Body

In 2016, generics accounted for 19% of the retail pharmacies' sales on average and for 29% of their margin, due to the high rebates offered by generics companies

Economic structure of retail pharmacies in France (2016)



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.)

Sources: KPMG (2016) – Smart Pharma Consulting analyses

Former Health Minister, Marisol Touraine, made the Health System Modernization Act be enacted from January 26th, 2016

Health System Modernization Act

"One objective: equality. Only one method: innovation", Marisol Touraine

Priority 1: "Innovate to better prevent"

Prevention should be at the heart of the healthcare system

- Measure 1: Deploy a health education pathway from kindergarten to high school
- Measure 2: Refer to GPs for children (up to 16 years)
- Measure 3: Strengthen nutrition information on food packaging
- Measure 4: Reduce the phenomenon of massive alcoholism among young people
- Measure 5: Actively fight against smoking
- Measure 6: Improve screening for sexually transmitted infections
- Measure 7: Encourage risk reduction among drug users
- 7 other secondary measures, including the access to emergency contraception for secondary level schools

Priority 2: "Innovate to better care in close proximity"

Redirecting the health system on community-based care

- Measure 8: Develop a community-based care around GPs
- Measure 9: Set up a third-party payment system for physicians
- Measure 10: Create a national helpline to call on-call physicians
- Measure 11: Expand the competencies of selected health professions
- Measure 12: Relaunch the "shared medical record"
- Measure 13: Strengthen the "public hospital service"
- 4 other secondary measures, including the creation of GHT¹

Priority 3: "Innovate to strengthen patients rights and safety"

New concrete rights to patients, progression of health democracy and reinforced patients' safety

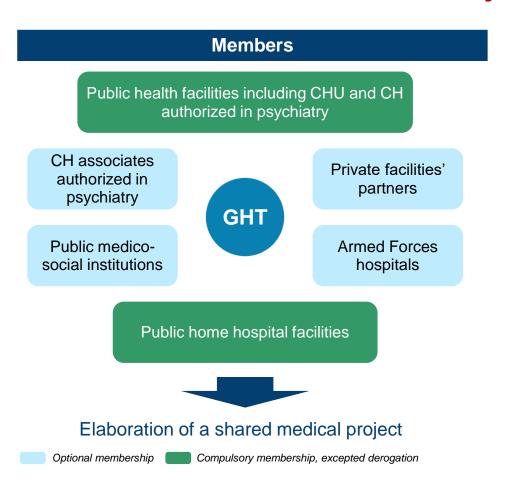
- Measure 14: Creating a right to oblivion for former patients with serious diseases
- Measure 15: Allowing "class action" in healthcare
- Measure 16: Improve access to abortion throughout the country
- Measure 17: Open access to health data
- Measure 18: Ensuring more transparency on links of interest in health
- Measure 19: Increasing the safety of medicines and medical devices
- 6 other secondary measures

Sources: Press kit "Loi de Modernisation de notre système de Santé", French Health ministry January 28th, 2016 – Smartt Pharma Consulting Analyses

¹ GHT: "Groupement Hospitalier de Territoire": grouping which governs cooperation between several public health establishments in the same territory. 135 GHTs were created on July 5th, 2017

The shared medical project is the heart of the GHT because it guarantees a proximity and a reference offer

GHT – Community hospitable territory



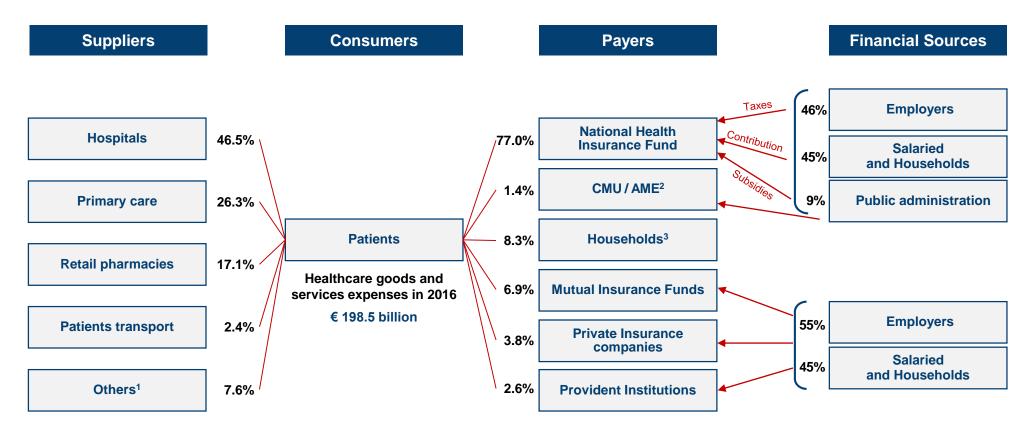
Organization & Governance

- Each GHT is attached to a teaching hospital (CHU)¹
- A support institution is designated to provide shared functions on behalf of all participating institutions:
 - Hospital information system
 - Department of Medical Information
 - Purchasing function
 - School, formation, ongoing professional development
- A constitutive convention adopted for 10 years and approved by the general director of the ARS describes:
 - The shared medical project
 - The operating method of the GHT
- The governance is ensured by different instances:
 - The strategic committee
 - The medical board or medical committee of the grouping
 - The CSIRMT²
 - The territorial committee of local representatives
 - The users committee or commission
 - The conference on territorial cohesion

Sources: "Rapport intermédiaire de Jacqueline Hubert et de Frédéric Martineau sur les GHT", May 2015 – Smart Pharma Consulting Analyses ¹ A CHU may be part of a GHT and be associated with several other GHTs – ² CSIRMT "Commission des Soins Infirmiers, de Rééducation et Médico-Techniques": Commission on nursing, rehabilitation and medico-technical care

In 2016, total expenditure for healthcare goods and services amounted to € 199 billion (of which ~47% from hospitals) and was mostly funded by the Social Security

Supply, consumption and funding of healthcare and medical goods in 2016



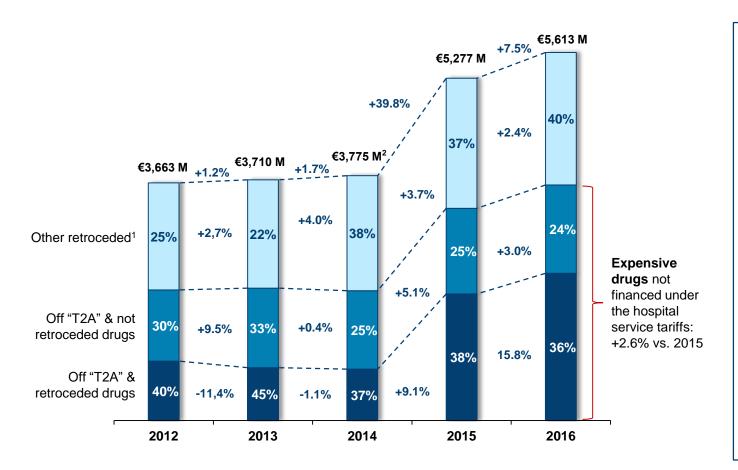
Sources: "Comptes nationaux de la santé 2016", DRESS – "Programme de qualité et d'efficience : Financement", Sécurité sociale 2017 – Smart Pharma Consulting analyses

Optics, prostheses, small devices, hygiene and first aid, etc. – ² CMU / AME: "Couverture Médicale Universelle Complémentaire / Aide Médicale d'Etat": Complementary universal medical coverage / State medical assistance – ³ Non reimbursed, deductible, etc.

Sources: "Tableau de bord" GERS SAS - Smart Pharma Consulting analyses

The increase of on top of "T2A" drug sales was mainly driven by the growth of Imnovid, Imbruvica, Viekirax, Keytruda and Entyvio

Sales of drugs on top of "T2A" (2012 – 2016)



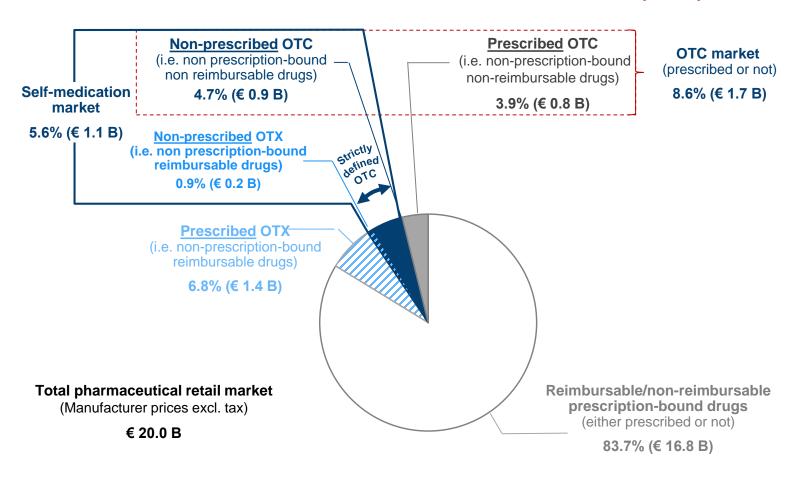
- Imnovid (Pomalidomid), monoclonal antibody used for multiple myeloma in relapse and refractory in adult patients, marketed by Celgene
- Imbruvica (Ibrutinib), monoclonal antibody for adults with leukemia marketed by Janssen
- Viekirax (Ombitasvir + Paritaprevir + Ritonavir), antiviral complex indicated for chronic hepatitis in adults, marketed by AbbVie
- Keytruda (Pembrolizumab), humanized monoclonal antibody for adult patients suffering from advanced melanoma and non-smallcell lung cancer, marketed by MSD
- Entyvio (Vedolizumab), humanized monoclonal antibody indicated for the treatment ulcerative colitis and Crohn's disease, marketed by Takeda

¹ Drugs retroceded and which can also be purchased at retail pharmacies (double channel) such as for: hepatic antiviral drugs, anti-HIV drugs and certain oncology products – ² Excluding new hepatic antiviral drugs accounting for € 1096 M in 2014

2.1. Evolution of drug sales

In 2016, the self-medication market accounted for 5.6% of the retail pharmaceutical market and included both reimbursable and non-reimbursable non prescribed drugs

OTC market size and structure (2016)



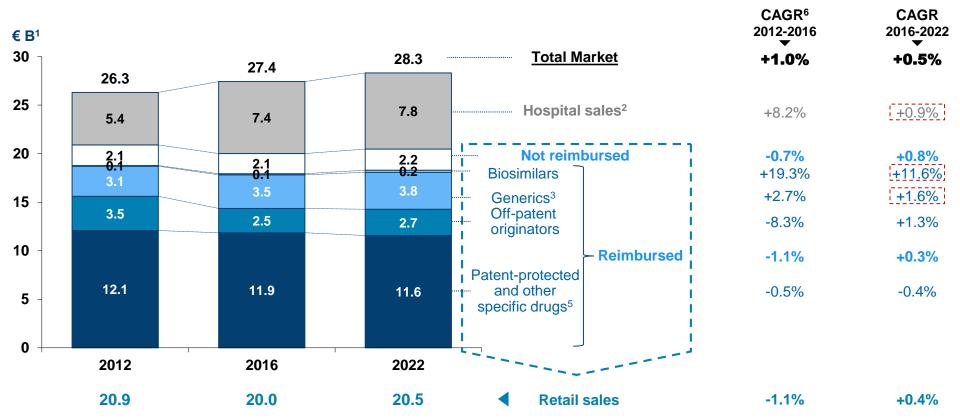
- The strictly defined OTC market accounts for 82% of the self medication market
- OTX or semiethical drugs (nonprescription-bound, reimbursed only if prescribed) are massively prescribed by physicians (sometimes on patient request), which limits the growth of the reconstituted selfmedication sales

Sources: Smart Pharma Consulting estimates based on data from GERS and pharmastat-IMS heath

2.3. Future market trends

By 2022, the pharmaceutical market should be mainly driven by innovative hospital products, biosimilars and generics

Evolution of drug sales by segment (2012 – 2016 – 2022)



^{*} Hospital rebates are estimated to -30% of total hospital sales

Sources: GERS and Top GERS data – Smart Pharma Consulting analyses ¹ Constant ex-factory prices – ² Estimated rebated sales including hospital sales of biosimilars, 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 medicines whose patents have not expired and of other specific products (calcium, sodium, potassium, paracetamol, etc.) – ⁶ Compound Annual Growth Rate

Pharmaceutical companies' strategic priorities by 2022 will be linked with the behavior of the "7 Ps" stakeholders

The 7 Ps Policy makers Pharma competitors **Pharma Pharmacists Physicians** company Patients & PAGs¹ **Payers**

Sources: Smart Pharma Consulting analyses

¹ Patients Advocacy Groups

Policy makers & Payers will work jointly to secure the sustainability of the healthcare system, implying its redesign and the introduction of new measures and new taxes

Stakeholder behavioral trends: Policy makers & Payers (1/4)

2016 - 2022 Trends

Global cost optimization

- Research of new funding mechanisms to ensure a better sustainability of the healthcare system
- Reorganization of the healthcare system to improve its efficacy and efficiency
- Reduction / prevention of National Health Insurance Fund deficit
- Capping of the mid to long term healthcare expenditure objective by the government at \leq +2.3% p.a. on average by the end of 2022

Sources: LFSS 2018 - Smart Pharma Consulting analyses

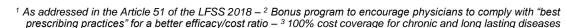
Driving factors

- Ageing of population associated to low economic growth leading to larger deficits over the 2017-2022 period, and beyond
- ~2/3 of the National Health Insurance Fund revenues generated by social contributions (linked to national economy and employment)
- French GDP is expected to grow by 1.6% p.a. until 2022 (source OFCE)
- National Health Insurance Fund cumulated deficit reaching a total of € 70 B, over the 2007-2016 period
- Willingness of the new government to reduce the national public deficit to reach 3.0% of the GDP as per EU objective (3.6% in 2015 and 3.4% in 2016 have been achieved)

Implications

- Increase of the CSG and possibility to introduce new taxes to reduce dependency on social contributions and thus, on the employment
- Redesign of the healthcare system:
 - Shift from hospital to home care
 - Improve hospital / open care markets coordination
 - Develop effective patient journeys
 - Set up a new framework for funding innovation in the healthcare system¹
- Introduction of measures and tools:
 - Tighter control of hospital costs
 - Increase price pressure on reimbursed drugs
 - Reinforcement of the ROSP² contracts plan for physicians
 - Limit access to ALD3
 - **Budgeting control generalization**

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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

Behavioral trends

- 1 Stricter control of reimbursed drug expenditure
- Measures to boost generics & biosimilars

Shift from hospital to ambulatory care

Promotion of R&D investments in France

Strategic priorities for pharma companies

Enhance their global value proposition (incl. corporate identity, product and service offering) through:

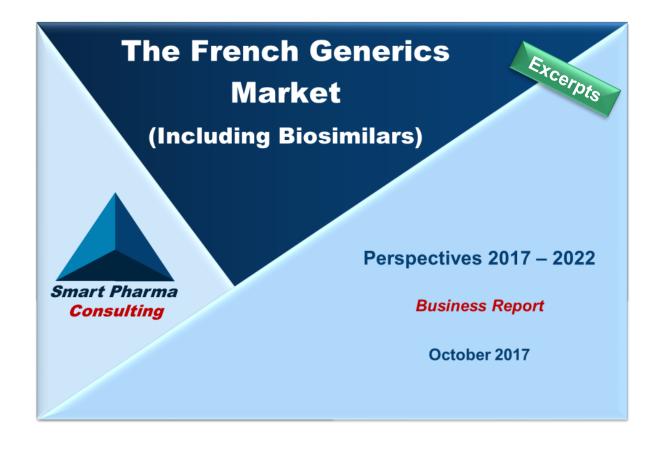
- Dedicated corporate reputation programs targeted at policy makers and government
- Generation of RWD (Real Word Data) and ...
- ... high quality medico-economic studies (if relevant)
- Initiation / support of specific projects to improve patient care

Participate to working groups with health authorities and other stakeholders to:

- Facilitate the change management
- Ensure this change will have a positive, or at least a neutral effect, on pharma company performance

Increase or maintain R&D activities in France to be in a more favorable position vis-à-vis health authorities to get reimbursement and to negotiate price of drugs

Sources: Smart Pharma Consulting analyses



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This report describes and explains the dynamics of the French generics and biosimilars markets and evaluates their attractiveness by 2022

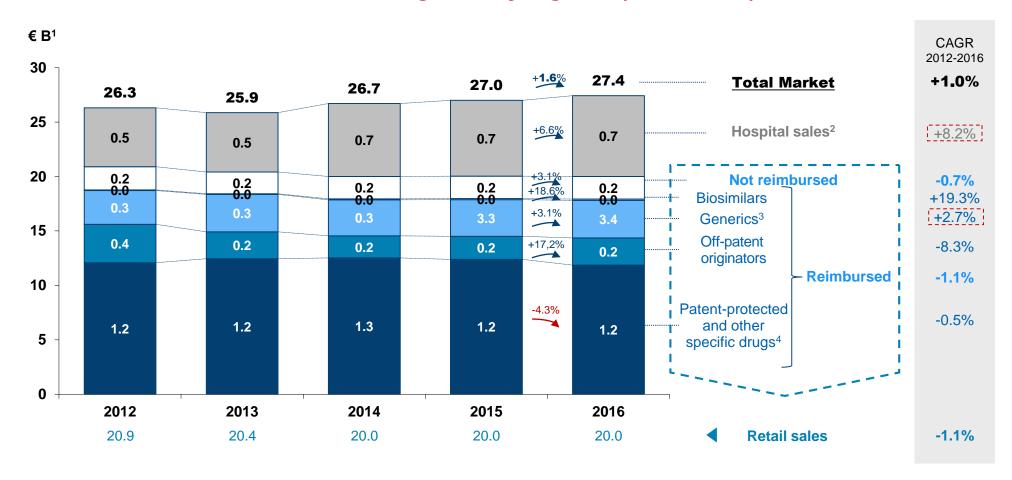
Context & objectives -

- In this report, Smart Pharma Consulting proposes to cover the following questions:
 - What is the definition and status of generics and biosimilars in France?
 - What are the recent dynamics, changes and trends on the retail and hospital markets?
 - What are the behaviors of the different stakeholders towards generics and biosimilars?
 - How should these behaviors evolve by 2022?
 - What are essentially similar drugs and what is their performance?
 - What is the performance of generics and biosimilars?
 - Who are the major generics and biosimilars manufacturers and their competitive position?
 - What are the main opportunities and threats on generics and biosimilars markets?
 - What would the French generics and biosimilars markets look like in 2022?

Sources: Smart Pharma Consulting

Spending on drugs is mainly driven by hospital sales and by generics sold in retail pharmacies

Evolution of drug sales by segment (2012 – 2016)



Sources: GERS and Top Pharma data – Smart Pharma Consulting analyses ¹ Constant ex-factory prices – ² Estimated rebated sales including hospital sales of biosimilars and products invoiced ion 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.)



Substitution of biosimilars by retail pharmacists, at treatment initiation, is legal since 2014, but the absence of the corresponding decree does not allow its implementation

Characteristics of the four status of "copies" in France

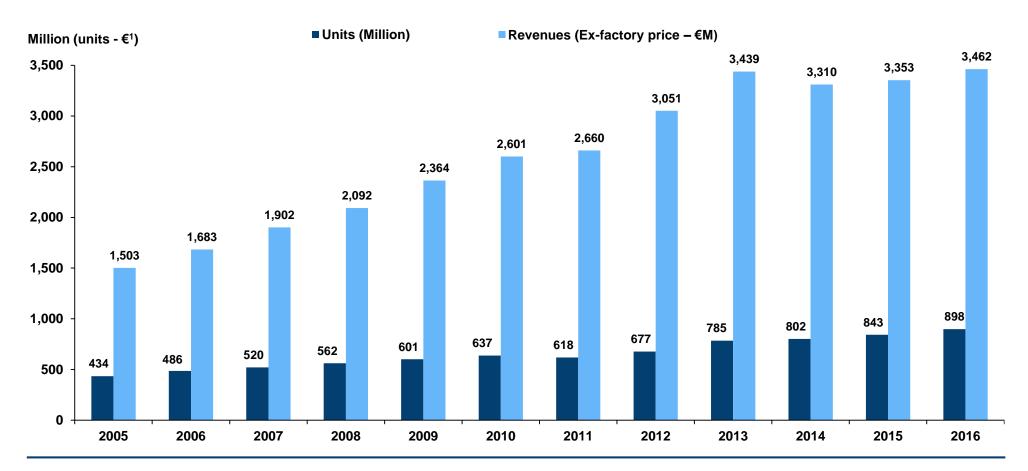
	Generics	Quasi-generics / Generic FOLM¹	Essentially similar drugs	Biosimilar drugs
Description	Copies of synthetic drugsBioequivalence has been proven	 Copies of oral modified release form drugs Bioequivalence (has not or) cannot be proven 	 Copies of synthetic drugs Bioequivalence (has not or) cannot be proven 	Copies of biotech productsBioequivalence cannot be proven
Market approval requirements	 Abridged procedure with simplified dossier reproducing original brand's clinical outcome 	 Same as for generics Necessity to respect the modified form of the originator (i.e. prolonged, delayed or sequential) 	 Minimal clinical development to document safety/ efficacy profile (e.g. with specific device used) 	 Complete clinical development (excluding phase 2 studies)
Substitution ²	Allowed	Allowed	To be allowed only at treatment initiation, pending application decree ³	To be allowed only at treatment initiation, pending application decree
Examples	OMEPRAZOLE MYLAN (generic of MOPRAL)	ESOMEPRAZOLE BIOGARAN (Quasi-generic of INEXIUM)	VITALOGINK (Essentially similar of TANAKAN)	BINOCRIT (Biosimilar of EPREX)

Sources: Legifrance, Article L.5125-23 CSP – Senate, November 2016 – LFSS 2017 – Smart Pharma Consulting analyses

^{1 &}quot;Formes orales à libération modifiée" = Modified-release oral forms – 2 Substitution of original brands by their generic / essentially similar / biosimilar drug, in retail pharmacies – 3 For anti-asthmatic drugs only

In 2016, sales of reimbursable generics reached € 3,462 million and 898 million units in the retail market...

Evolution of reimbursable generics' sales in the retail market



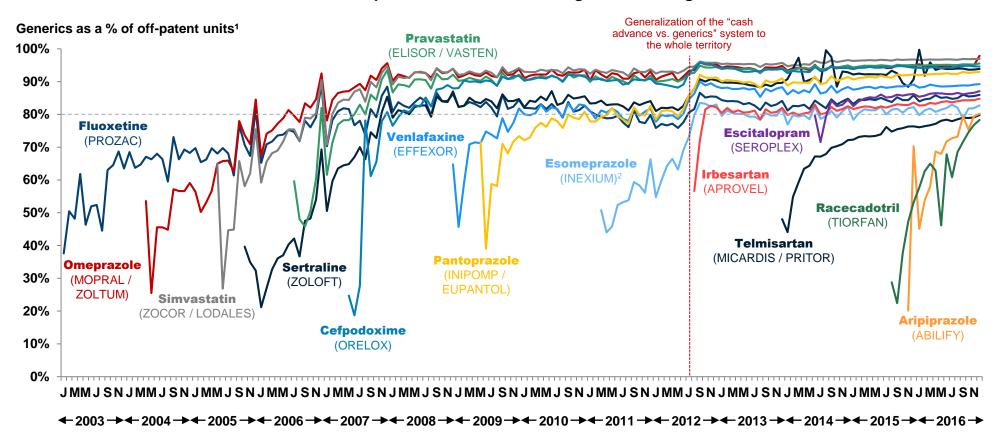
Sources: GERS dashboard (December 2016) - Smart Pharma Consulting analyses

¹ Ex-factory prices

The speed of penetration has accelerated since 2003, reaching ~80% within a few months for brands with no particular difficulties of substitution

Generics penetration trends on the retail market

Generics penetration for selected high volume drugs

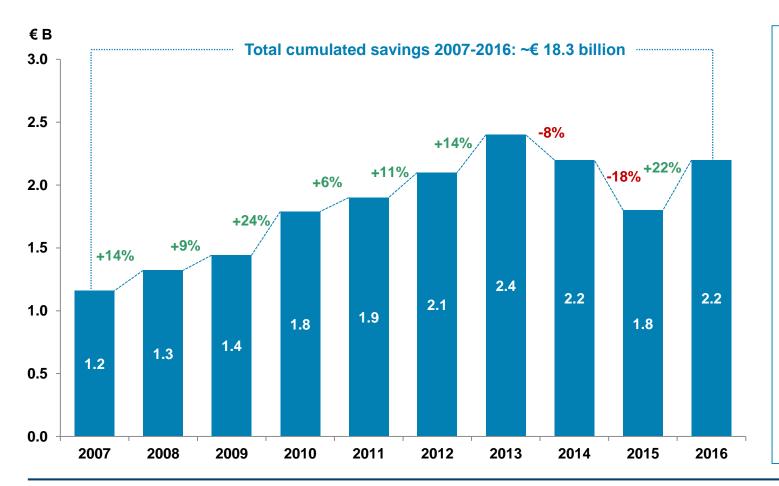


Sources: GERS - Smart Pharma Consulting analyses

¹ Compounded average of the different forms and dosages – ² Quasi-generics

Savings generated by the use of generics reached ~€ 2.2 billion in 2016 and accounted for a cumulated ~€ 18.3 billion over the 2007 - 2016 period

Savings generated by generics (2007 – 2016)



- In 2014, the launch of new generic medicines enabled the market to maintain an upward dynamic in volume (+ 2%) and a fall in value (-4%) due to price cuts on generics over the period (~ € 220 million)
- Nevertheless, price cuts have impacted even more reimbursable originators, reducing the price differential between originators and generics, and for the first time in 2014, the savings generated by generics decreased (-8%)
- The trend of price cuts in 2015 led to a further decline in savings (-18%) to € 1.8 b, i.e. the level of 2010 but was reversed in 2016 to reach the level of 2014

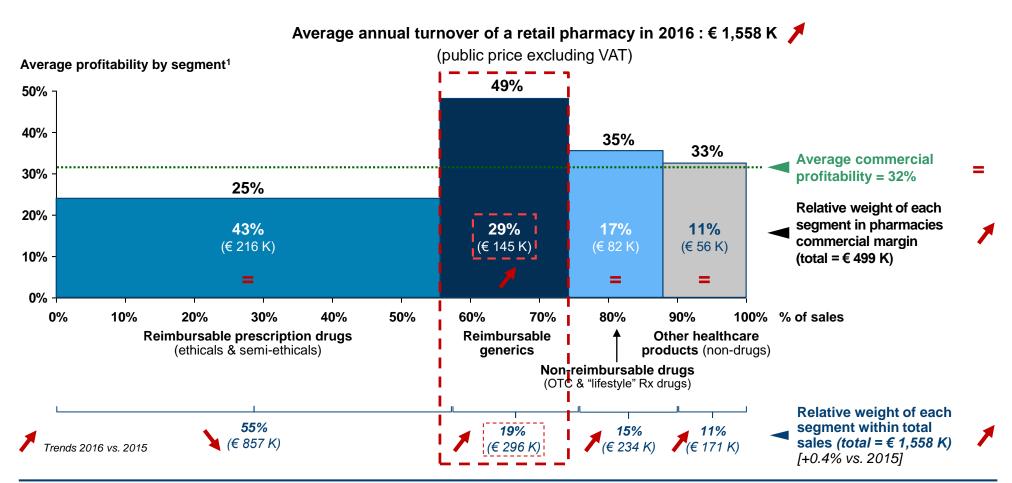
Sources: GEMME1 - Smart Pharma Consulting analyses

1 "Générique, Même Médicament": association gathering the main generic companies in France

January 2018 The Best of Smart Pharma 2017 40

In 2016, generics accounted for 19% of retail pharmacies' sales on average, and for 29% of their margin, due to the high rebates offered by generics companies

Economic structure of retail pharmacies in France (2016)



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.)

Sources: KPMG (2016) - Smart Pharma Consulting analyses

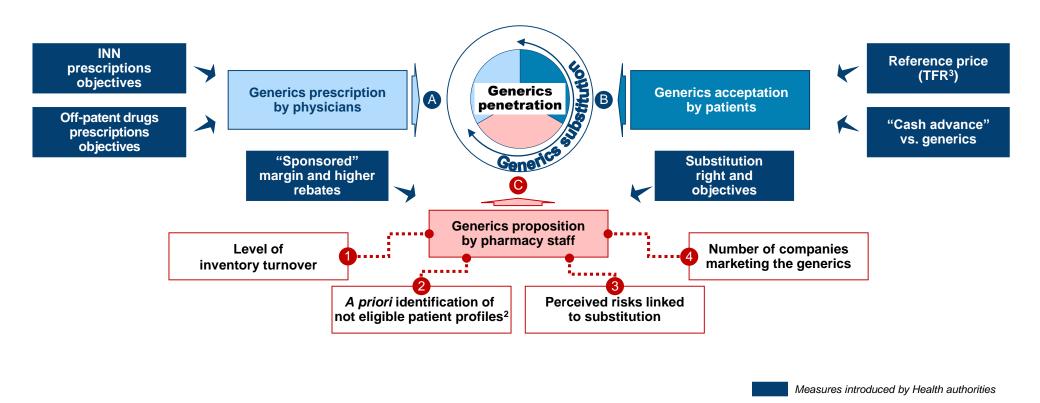
Sources: Smart Pharma Consulting analyses

2.3. The retail generics market

Generics penetration is facilitated by INN¹ prescription and substitution, both of which are enhanced by a favorable support from health authorities

Key drivers of generics penetration on the retail market

Health authorities measures supporting generics penetration

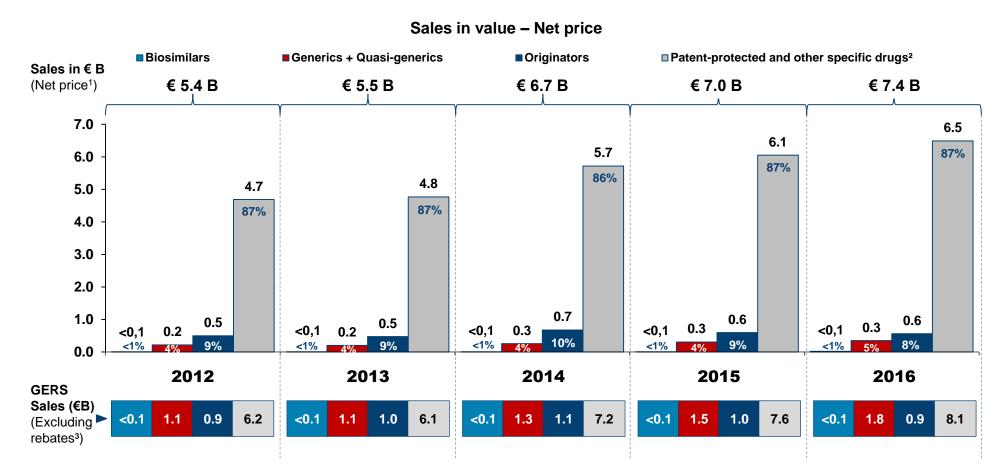


¹ International non-proprietary name – ² To whom substitution will not be proposed (e.g. patients having refused substitution several times) – ³ "Tarif forfaitaire de responsabilité": single reimbursement price for a generic group as a whole, based on the cheapest generic price

Sources: GERS - Smart Pharma Consulting analyses

The share of generics in the hospital market in value weights for 4-5% and has been relatively stable since 2012

Hospital market dynamics



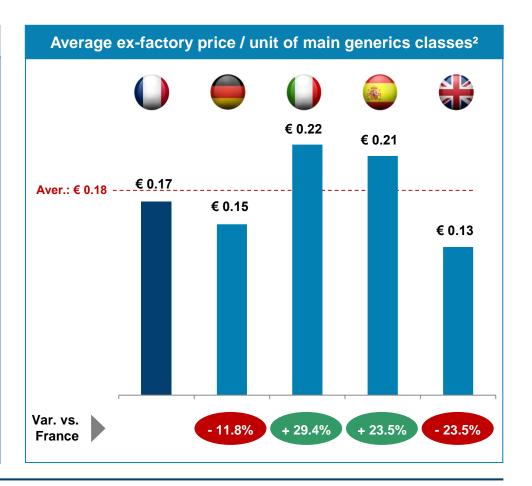
¹ Net sales estimated based on GERS sales on which theoretical discounts have been applied: 20% for patent-protected and other specific drugs, 40% for originators and 80% for generics and biosimilars – ² Drugs not listed in the ANSM generics Directory, including particular products (calcium, sodium, morphine, etc.) – ³ GERS price excluding taxes and rebates



With an average price of generics of € 0.17 per standard unit, France is now on average with its European neighbors

Comparative study of generics prices – Overall result

Scope of the study					
Studied reference countries	 Germany Spain France Italy United Kingdom # 				
Studied generics classes	 4 studied classes: statins, proton pump inhibitors (PPI), angiotensin-converting enzyme (ACE) inhibitors and sartans In 2014, these classes represented a turnover of € 735 M in France, i.e. 21% of the generics market 				
Selected samples	Generics marketed in retail				
Data sources used	 For France, the data come from the GERS and the price base of the CEPS (taking into account the price cuts achieved in 2015) For the 4 other reference countries, the 2014 data come from the IMS MIDAS database (price data) 				
Unit of measure used	The unit of measure of the price is the average ex-factory price (in standard unit) charged in a country weighted by the French units in order to neutralize the structural effects				

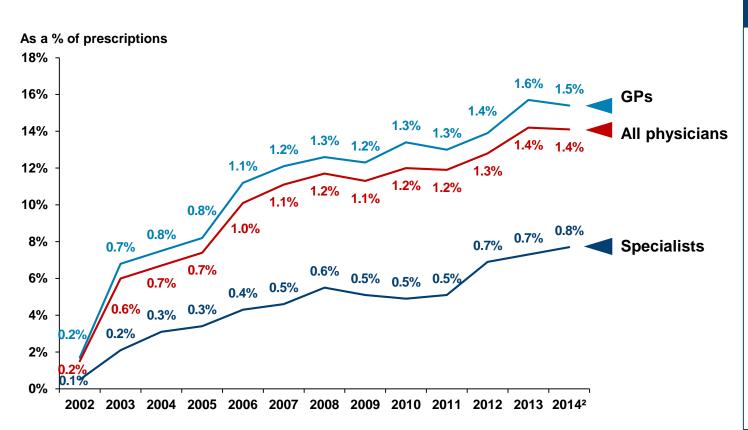


Sources: Annual report of CEPS 2014/2015 (September 2015) - Smart Pharma Consulting analyses

¹ Average price of 4 studied generics classes (statins, PPI, ACE inhibitors, sartans)

Since physicians' INN¹ prescription rates are relatively low, generics penetration is mainly due to substitution in retail pharmacies

Evolution of the INN¹ prescription rate (2002-2014)



Mesures affecting INN prescriptions

- LFSS 2009: imposes physicians to mention the INN for generic drugs prescriptions (measure not well respected)
- Medical agreement signed with the National Health Insurance, July 2011: provides a remuneration based on physicians' performance on, among other things, generics prescription objectives
- "Bertrand law", December 2011: stipulates that all the prescriptions must mention the INN from January 2015. However, the prescription can be supplemented by the brand name
- 2015 : Mandatory INN prescription

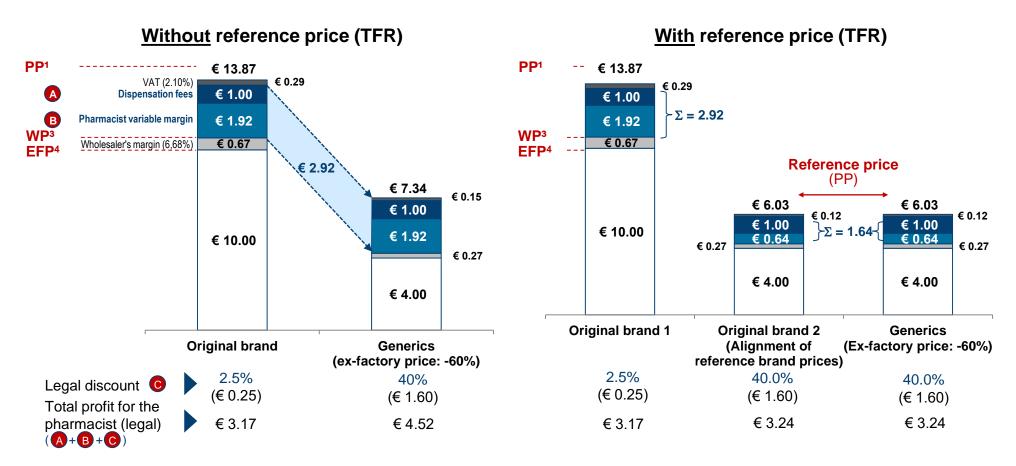
Sources: "Baromètre de la prescription en DCI", Mutualité française based on IMS data – Smart Pharma Consulting analyses

¹ International non-proprietary name, without associated brand name
² Moving Annual Total as of August 2014 (No update since)

Sources: Smart Pharma Consulting analyses

The levels of margins and rebates set by the CEPS for drugs sold on the retail market contribute to regulate the evolution of cost of reimbursed drugs

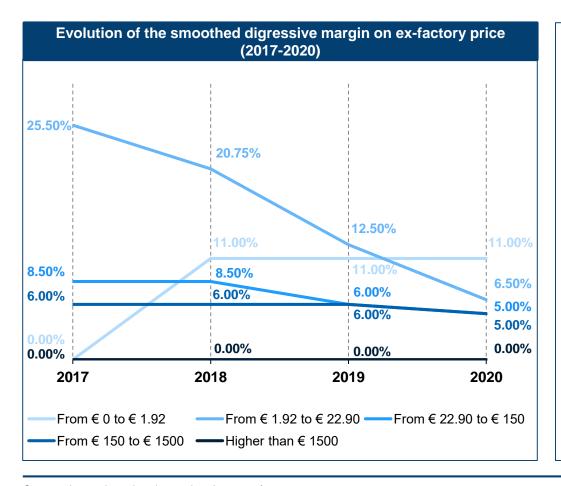
Legal margins and discounts for reimbursed generics (2018)



¹ Public price, incl. taxes and dispensing fees –² Dispensing fee as applicable since January 1st, 2016, i.e. € 1.02 incl. taxes – ³ Wholesaler price, excl. taxes – ⁴ Ex-factory price, excl. taxes

The 11th amendment to the National Pharmaceutical Agreement provides for reducing margin on ex-factory price of drugs over the 2018-2020 period for pharmacists

The 11th amendement to the National Pharmaceutical Agreement



- The main priority of the 11th amendment¹ to the National Pharmaceutical Agreement is to change the remuneration of pharmacies and make them less dependent on the price and volume of reimbursable drugs
- Thus, it proposes progressive transfer of a significant part of the regulated margin on the price of medicines to new forms of remuneration related to dispensing and to the improvement of patients' management
- Thus, three successive waves of margins on price decreases are expected in January of each year from 2018 to 2020
- The creation of 3 new dispensing fees will only be settled from 2019 and only 2 of the 3 fees are expected to be re-evaluated in 2020:

New dispensing fee	2019 ²	2020 ²
Fees for the delivery of a prescription	€ 0.51	€ 0.51
Fees related to the age of the patient (youth children and elderly people)	€ 0.51	€ 1.58
Fees for the delivery of specific drugs (e.g. immunosuppressive drugs)	€ 2.04	€ 3.57

Sources: Le moniteur des pharmacies, August 26th, 2017 – 11th amendment to the National Pharmaceutical Agreement

¹ The 11th amendment was signed on July 20th, 2017 by only one of the three French pharmaceutical unions – ² All taxes included

The resistance of some drugs to generics substitution can be explained by several factors such as the complexity of the pathology and the narrow therapeutic margin

Main limiters of substitution for selected drugs

	Complexity / Severity of pathology	Narrow therapeutic margin	Low inventory rotations	Frequent "not substitutable" scrips	Difference of chemical forms in comparison with generics	Protection of an indication
Durogesic (fentanyl)	✓	\checkmark	✓			
Levothyrox (levothyroxine)	✓	\checkmark				
Epitomax (topiramate)	✓			✓		
Neurontin (gabapentin)	✓			✓		
Plavix (clopidogrel)				✓	✓	\checkmark
Risperdal (risperidone)	✓			✓		

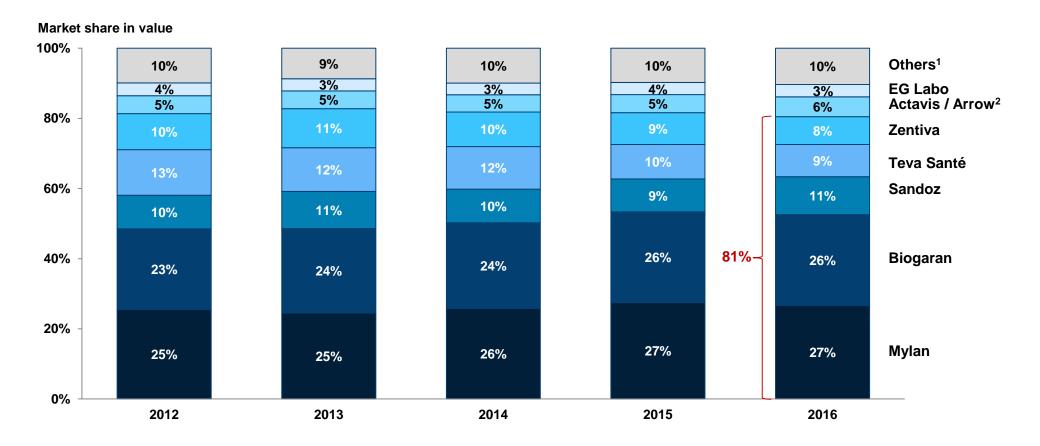
- For those drugs with specific conditions, in order to limit prosecutions engaging their responsibility, pharmacists tend to:
 - Follow the ANSM¹ recommendations regarding narrow therapeutic margins
 - Respect generic groups as defined in the ANSM Directory
 - Respect substitution rules regarding protected indications (protection of intellectual property)

Sources: Phone interviews with 21 pharmacists (April 2011) and 50 pharmacists (May 2010) – Smart Pharma Consulting analyses

^{1 &}quot;Agence nationale de sécurité du médicament": National Agency for the Safety of Medicines and Health Products

The French generics market is concentrated with 81% of the sales captured by the top 5 players, whose market shares are relatively stable

Market share of generics companies in the retail market (2012 – 2016)

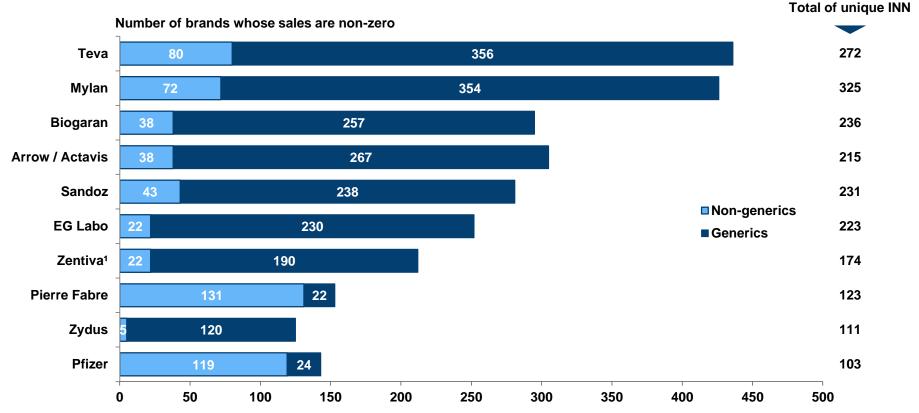


Sources: GERS - Smart Pharma Consulting analyses

¹ Mostly Pierre Fabre, Pfizer, Cristers and Zydus – ² Acquired by Teva on August 2nd, 2016

The scope of the portfolio proposed by the generics companies is a determining factor in their referencing with retail pharmacies

Product portfolio of generics companies in retail pharmacies (2016)



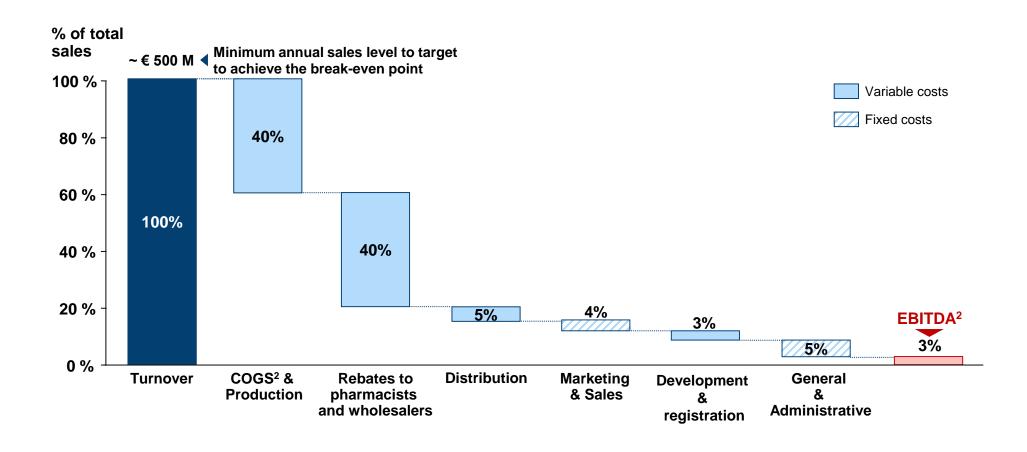
Notes: The ANSM Directory contains 483 different INNs in December 2016 Some INNs may be registered as generic or non-generic depending on the presentation (dosage, packaging, form)

Sources: GERS - ANSM - Smart Pharma Consulting analyses

¹ The Zentiva group includes all the generic products of Sanofi

The average turnover to generate operating profitability (EBITDA¹) is estimated at ~ € 500 M for generics companies operating in the retail market

Estimated cost structure of generics companies in France



¹ Earnings before interests, taxes, depreciation and amortization - 2 Cost of goods sold

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Sources: Smart Pharma Consulting analyses and estimates



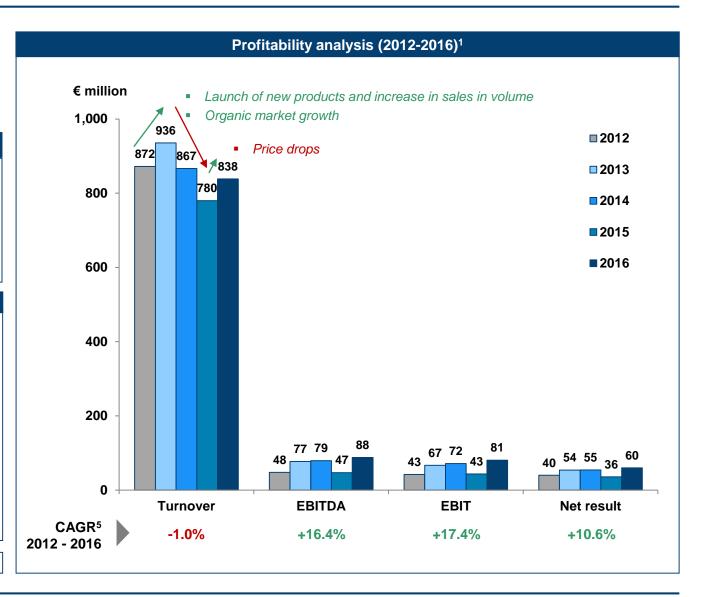
Key data for the French affiliate

Key financial data (2012-2016) ¹						
€ million	2016	2015	2014	2013	2012	
Turnover	838	780	867	936	872	
EBITDA/Turnover	10.5%	6.1%	9.1%	8.3%	5.5%	
EBIT/Turnover	9.6%	5.6%	8.3%	7.1%	4.9%	
Net result/Turnover	7.1%	4.6%	6.3%	5.8%	4.6%	

Sales data (2016) ^{2,3}							
	Sales	YoY	Share of				
	(€ million)	change	turnover				
Generics	1,594	+4.9%	86.6%				
Quasi-generics	30	+5.2%	1.6%				
Biosimilars	0	N/A	N/A				
Princeps	218	+11.7%	11.8%				
Total	1,842	+5.7%	100.0%				
Top 3 generics therapeutic areas ⁴							
Injectable corticoste	eroids 88	+29.0%	4.8%				
2. Proton pump inhibit	ors 71	+9.3%	3.9%				
Non-narcotics anti-pyretics	67	+0.4%	3.6%				



Sources: societe.com - GERS - Smart Pharma Consulting analyses

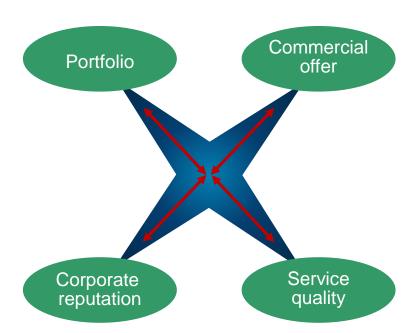


¹ Data from company financial statements – ² Ex-factory prices, excluding taxes and rebates – ³ Including Mylan Medical – ⁴ EphMRA level 4 – ⁵ Compound Annual Growth Rate

The Generics Preference Mix allows generics companies to identify and evaluate the drivers of pharmacists' preference at the time of listing and handing out generics

Generic Preference Mix: Description

The 4 components of the Generic Preference Mix

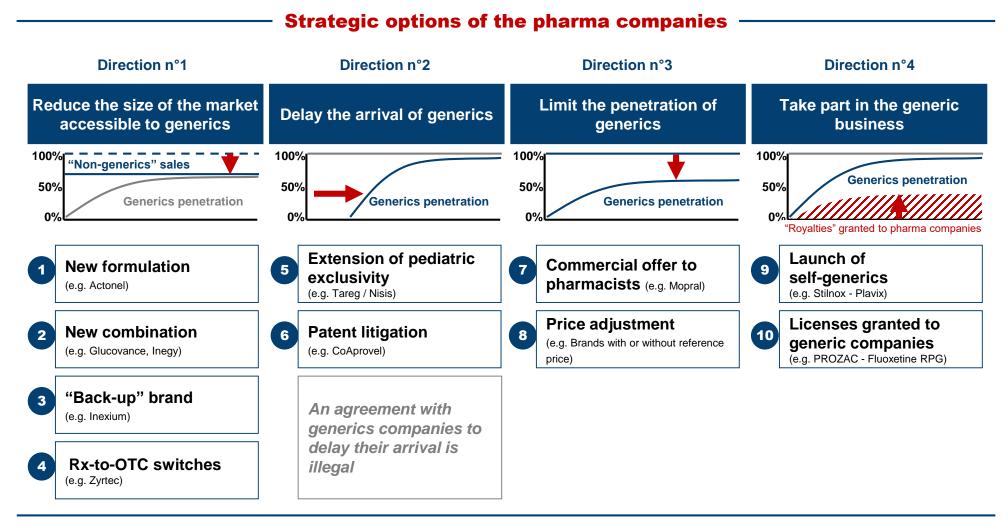


- The Generics Preference Mix (GPM) has been developed by Smart Pharma Consulting
- To the extent that retail pharmacists generally focus the great majority of their generics orders on a single supplier and that they have an increasingly important role through counseling and the right of substitution ...
- ... it is essential for generics companies to increase the preference of pharmacists for their brands
- To develop and strengthen pharmacists' preference for their products, generics companies must seek to optimize their Generics Preference Mix, which relies on pharmacists' perception of:
 - The breadth and quality of their product portfolio
 - The attractiveness of their commercial offer
 - The quality and the interest of their offered services
 - Their reputation

 The links between the 4 components of the Generic Preference Mix should be well established in the minds of clients



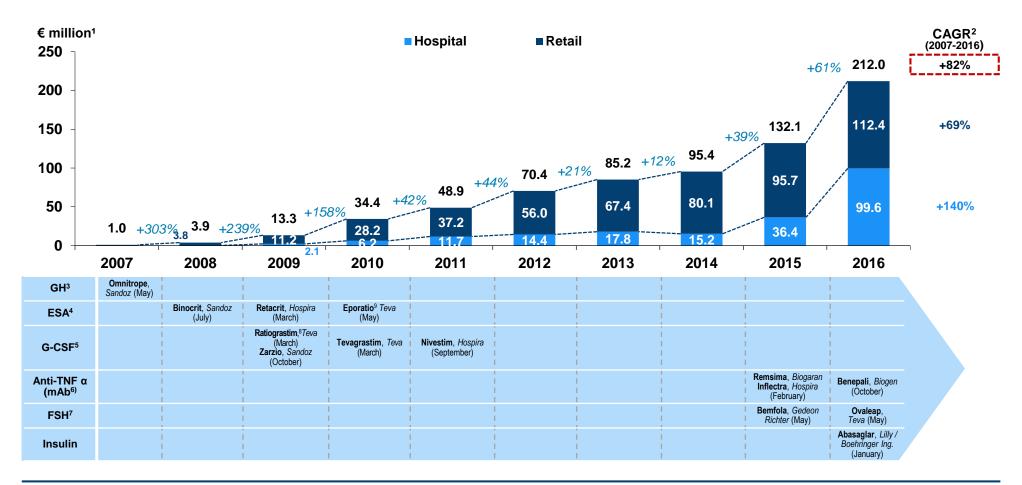
Pharma companies can follow 4 directions and use 10 strategic levers to protect the value of their brand despite the arrival of generics



Sources: Smart Pharma Consulting analyses

Sales of biosimilars, which were launched in 2007 and belonged to six types of products in 2016, reached a total ~ € 212 million on the total market in 2016

Evolution of the biosimilars market (2007 – 2016)



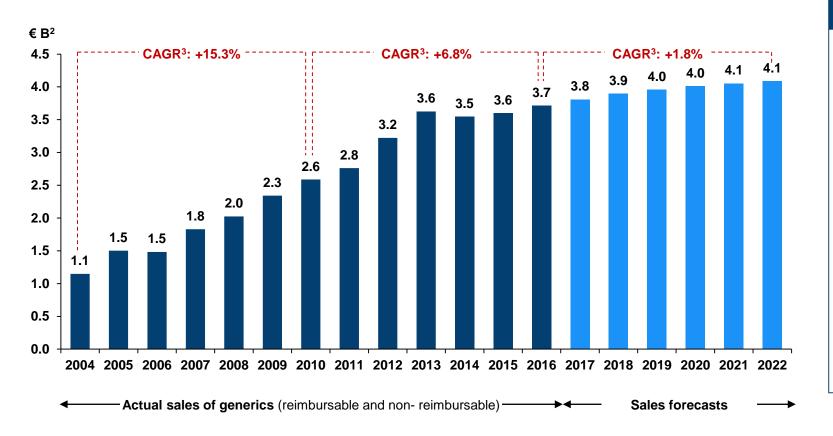
Sources: GERS - Smart Pharma Consulting analyses

¹ Ex-factory prices excluding rebates – 2 Compound annual growth rate – 3 GH: Growth hormones – 4 ESA: Erythropoiesis stimulating agents – 5 G-CSF: Granulocyte colony stimulating factors – 6 mAb: Monoclonal antibodies – 7 FSH: Follicle Stimulating Hormone – 8 Ratiogastrim was removed from market in 2016 – 9 Eporatio is not a biosimilar per se but is rather a « me-too » product. It was first launched by Ratiopharm, before to be acquired by Teva in March 2010

Sources: GERS retail - Smart Pharma Consulting forecasts

The average annual growth in value of the generics retail market is expected to remain below 2% by 2020, in particular as a result of price cuts

Forecasts of generics sales¹ in the retail market – Value



Comments

- The low CAGR in value, estimated at 1.8% between 2016 and 2022 can be explained by two factors:
- The number of molecules with high potential for the generics market that will lose their patents during the period will be relatively limited
- The authorities will continue to regularly impose drastic price cuts

¹ Reimbursable and non-reimbursable – ² Ex-factory price – ³ CAGR: Compound annual growth rate



Authorities and payers will continue to lower the prices of reimbursed drugs, generics or non-generics, and promote the use of generics



Position of health authorities and payers

2017 - 2022 Trends

Optimization

- New initiatives to stimulate generics growth
 - Substitution of inhaled drugs^{1,3} and biosimilars^{2,3}
 - Extension of the generic Directory to inhaled respiratory drugs as well as for drugs of plant or mineral origin
 - Prescription objectives within the generics Directory at hospital
 - Simplification of generics instruction and notification processes
 - Prioritization of the generics' dossier instruction
- Continuous price pressure in reimbursed drugs, originators and generics (price cut, reference prices (TFR⁴))
- Toughening of reimbursement and price attribution rules for originators (e.g. comparative studies, medico-economics data)

Rationale

- The "pact of responsibility", launched in January 2014, foresees savings of € 3.5 billion over the period 2015 2017 due to lower drug prices and the development of generics. However, generics will also be subject to price cuts, tariff convergences with originators and new TFRs
- Health expenditure objectives set by the government at an average of + 2.0% per year by 2020
- Drugs accounted for only 17.4% of healthcare expenditure in 2015, but since price cuts have no negative political and social impact and are easy to implement, they are used as an adjustment variable

Quality control of drugs

 Control of generics quality, particularly best-selling drugs, in comparison to originators

Sources: Smart Pharma Consulting analyses



 The objective is to show the safety of generics present on the French market, these controls being part of the national action plan for the promotion of generics 2015-2017

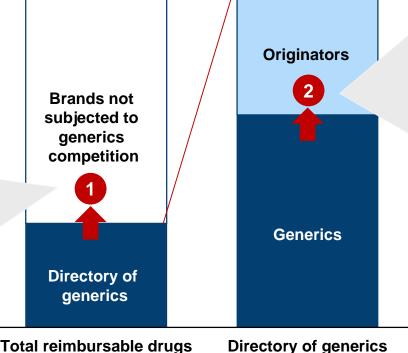
¹ According to LFSS 2015, substitution may be allowed (at initiation only) for inhaled device – ² According to LFSS 2014 and PLFSS 2015, biosimilars substitution could be allowed – ³ According to several institutional sources, implementing decrees should not be published in the short term – ⁴ "Tarif forfaitaire de responsabilité": single reimbursement price for a generic group as a whole, based on the cheapest generic price

... these measures follow two distinct axes: the expansion of the Directory of generics and the gain of market shares of generics against originators

Possible government measures¹ to boost the generic market

- Broadening of the Directory of generics by including inhaled sprays, mineral and vegetable substances as provided in the LFSS 2015, or even the various salts. esters, ethers, etc.
- Financial incentives for physicians to increase their prescriptions in the Directory and / or prescribe in INN and introduction of "jumbo classes"2

Sources: Smart Pharma Consulting analyses



Total reimbursable drugs market

- Obligation and financial incentives for physicians to prescribe in INN
- Penalties for physicians writing "Not Substitutable" without adequate reason
- Initiatives in prescribing software to automatically record on each prescription that the pharmacist is authorized to supply generics for substitutable drugs
- Controls to demonstrate the safety of generics present on the French market to reassure prescribers and patients
- General public campaign on generics over time from the Ministry of Health and Solidarity, National Health Insurance or GEMME
- Reduction of health insurance contributions against 100% coverage of generics
- Automatic substitution by restricting the "cash advance vs. generics" system³
- Removal of the rebates of generics companies to increase competition
- Indemnities for pharmacists for the denunciations of non-substitutable mentions4

1 Non-exhaustive list - 2 Drugs are grouped into broad classes in which the products are presumed to have an equivalent benefit for patients and can thus claim the same rate of reimbursement - 3 Measure on the initiative of the CPAM of the Tarn but which meets the hostility of the three trade unions of pharmacists – 4 Proposal by the National Health Insurance Fund decried by the National Union of Pharmacies of France

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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

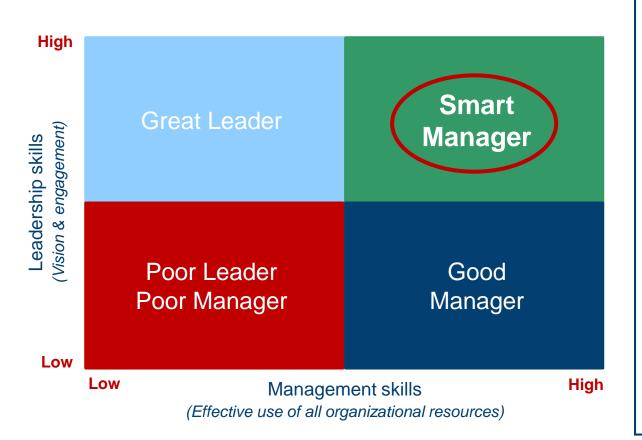
Introduction -

- 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

The Smart Manager is a visionary who has the ability to 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 are able to 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

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

Smart Managers

A Smart Manager knows and understands the environment, is able to 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

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 responsibility¹...
- 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?)

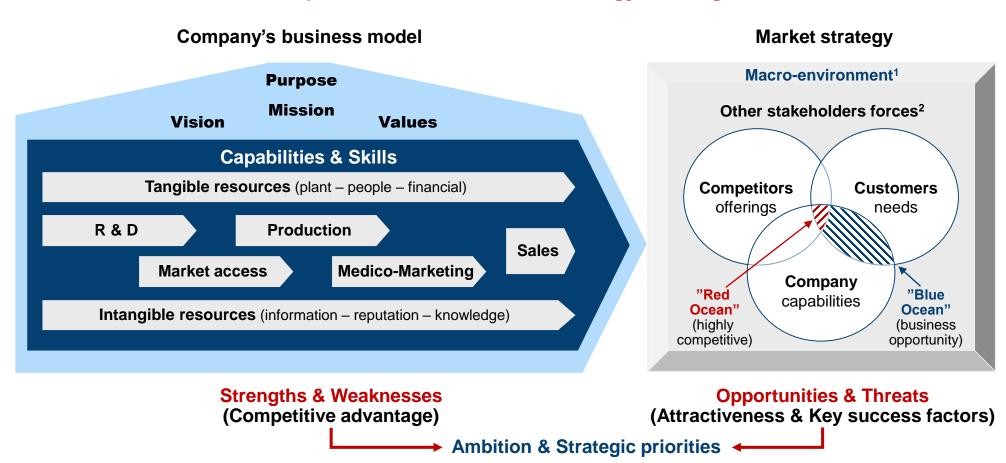
Vision² (What we aspire to become?)

Values
(What we believe in and how we want to behave?)

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



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

MBO¹ (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

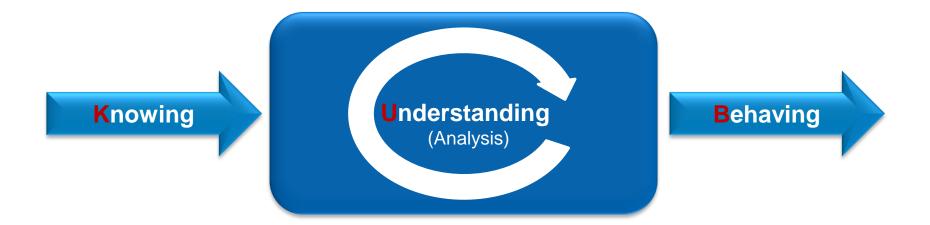
¹ The term was coined by Peter Drucker in 1954 in the book "The practice of Management"

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

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

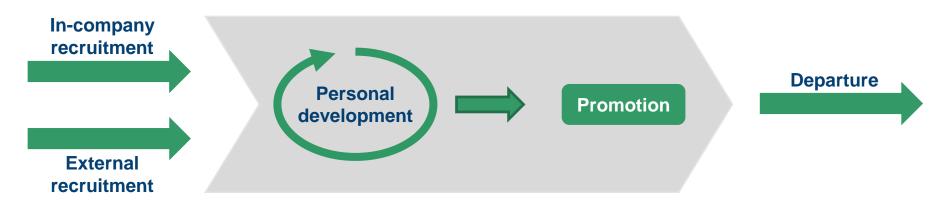
Behaving

Planning, Organizing, Directing & Monitoring

to guarantee the quality of execution and keep collaborators engaged

The Smart Manager is able to 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

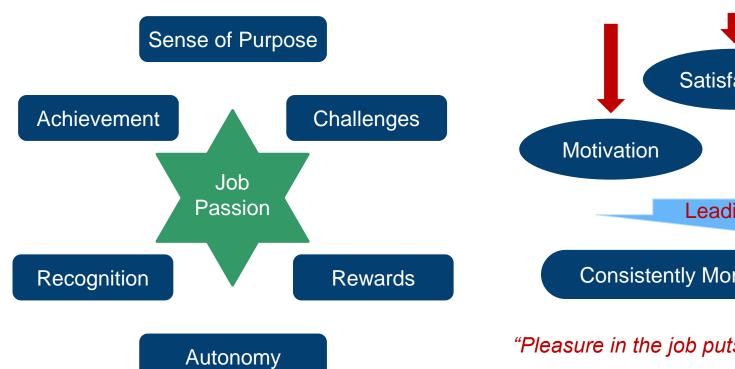
"Alone we go faster, together we go further" – African proverb

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

The Smart Manager will adopt a management model taking into account the business constraints, the company's goal, the strategic priorities and the collaborators' skills

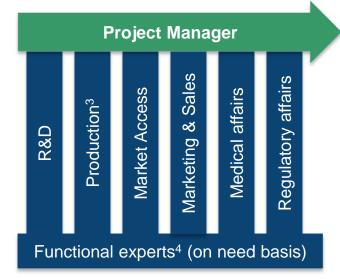
Tip #7 - Adopt the right management model - Typology

Vertical Management Model¹ (Hierarchical management)

Horizontal Management Model¹ (Transversal management)

Concentric Management Model² (Decentralized management)







Effective but too rigid to adapt to situational changes

Sources: Smart Pharma Consulting

Adapted to multifunctional tasks but problems of prioritization

Adapted to fast-moving situations but requires a change in mindset

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 decisionmaking 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

Top 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 departments¹

Middle managers 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

First Line managers

- 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, on a daily basis, of their subordinates

Sources: Smart Pharma Consulting 1 R&D, Production, Market Access, Marketing & Sales, Medical affairs, Regulatory affairs, Finance, Human resources, procurement, etc.

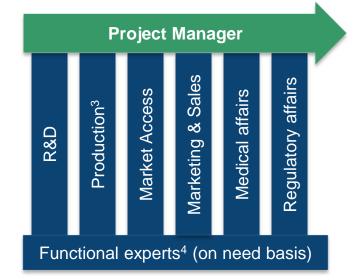
Project managers role is to specify, organize and plan the execution of projects, while creating and sustaining the engagement of team members until their closing

Tip #7 – Adopt the right management model - Horizontal Management Model¹

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 departments² 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 course of 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)



¹ This type of organization is also called matrix organization − ² R&D, Production, Market Access, Marketing & Sources: Smart Pharma Consulting Sales, Medical affairs, Regulatory affairs, Finance, Human resources, procurement, etc. – 3 Including logistics

Concentric management model, like holacracy, is an 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

Holacracy¹



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-today 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

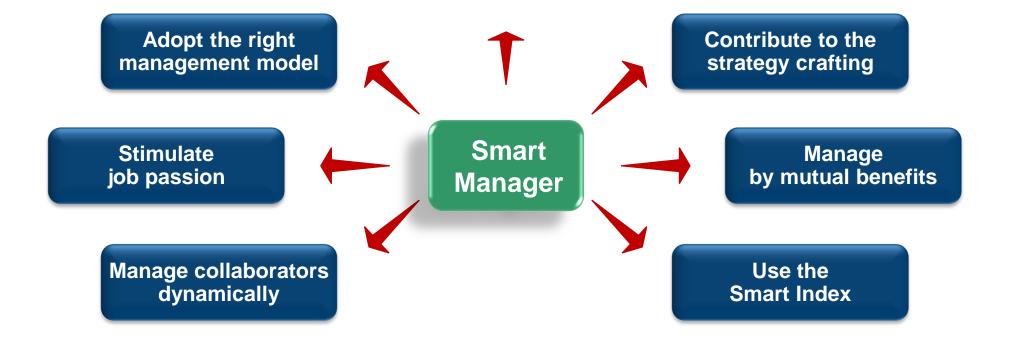
¹ The term holacracy comes from holarchy which has been coined by Arthur Koestler to describe the way the nature is organized (i.e. a whole being a part of a larger whole like an organ being a part of the body)

Sources: E. Bernstein et al. HBR 2016, David Allen 2016, B. J. Robertson 2015

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

Participate to setting
Purpose – Mission – Values – Vision



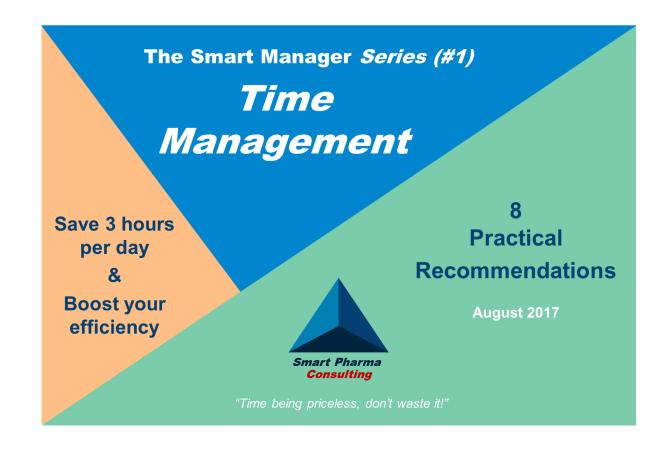
Sources: Smart Pharma Consulting

Smart Pharma Consulting can help pharma companies transform Good Managers into Smart Managers through various modes of collaboration

How can Smart Pharma Consulting help Managers become Smarter?



Sources: Smart Pharma Consulting





Introduction

Time is a limited resource which must be used efficiently to achieve the objectives set

Time at work

- Employees of companies receive a salary in exchange for their competence...
- ... which will be expressed during a finite period of time¹
- 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"

The Best of Smart Pharma 2017



Express Self-diagnosis

If one of these six statements reflects your situation, then read this document

How well do you manage your time?

- I am regularly stressed and exhausted by my workload
- I work ~11 hours a day, and work regularly at home in the evening and during the week-ends
 - Due to lack of time, the quality of my work is not always up to the mark
- Is that your case?
- I don't have enough time to work on critical tasks¹

- 2. I have to spend too much time on non-important tasks
- I often complete tasks at the last moment and fail to meet deadlines



Method to Optimize your Time

To better manage your working time, implement the following method

A four-step easy-to-implement method

4. Tracking & sharing outcomes

Systematically track the impact of the applied solutions and convince your colleagues to adopt the same method

3 2

1. Situation analysis

During the first step, you will identify the main time wasters

3. Planning & implementation

The solutions selected to improve time management will be carefully planned and rigorously applied

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

Sources: Smart Pharma Consulting



1. Situation Analysis

You must carefully identify the main time wasters

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

Suboptimal organization

A significant time is lost as a result of:

- Multitasking
- Little or no delegation
- Clutter / Poor IT maintenance
- Unhealthy life style



Procrastination occurs when you put off activities that are important and urgent but you cannot decide yourself to start

You are subject to several distractions:

- Phone calls, e-mails, text messages¹
- Urgent demands from colleagues²
- Meetings of low value and/or too long
- Crisis management time

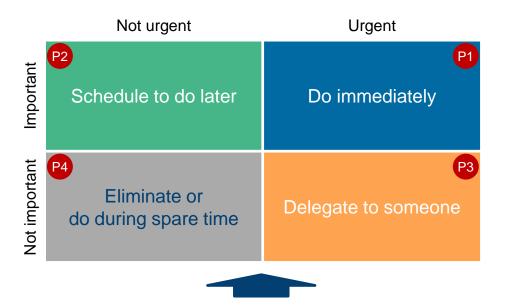
Sources: Smart Pharma Consulting

¹ As well as phone notification, social networks, etc. – ² Including hierarchy, peers, subordinates



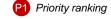
The Eisenhower Matrix helps selecting activities to focus on and those to eliminate

1. Prioritization of activities: Eisenhower¹ 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



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

The Best of Smart Pharma 2017



By putting off priority tasks, you will miss deadlines and impair quality of outcomes

2. Avoidance of procrastination

Be determined Tackle tough activities first Procrastination is a habit requiring Start your day with the most important tasks, when your level of energy and a strong determination to get rid of motivation is high and make sure not A firm decision to accomplish an to be distracted activity, either you enjoy it or not, will let you get it done Just do it Now! Break the task into pieces Get started immediately Break the task into smaller steps to By having started a task, you have already invested some time which will reduce reluctance (e.g. unpleasant, lack of interest) or fear (e.g. to fail) to start it 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 NICTs¹ and meetings should free 3 hours per day

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





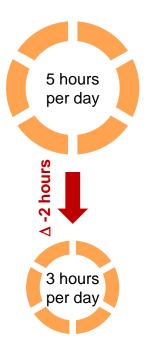


Save one hour per day by better managing electronic time wasters, as follows:

- Unplug (switch off phones, disconnect instant messaging, close the door³, 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 content⁴
- Don't feel obliged to pick phone calls⁴

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 offtopic discussions, time-keeping)



Sources: Smart Pharma Consulting

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



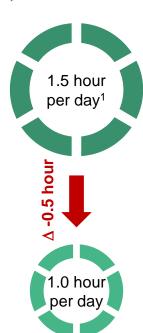
A proper management of unplanned demands or events could save 1 hour per day

3. Reduction of key distractions

Urgent demands from hierarchy, peers, subordinates, etc.



Crisis management time



Sources: Smart Pharma Consulting

- 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 it²
- 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



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

4. Getting better organized¹

Avoid multitasking





- Studies have shown that multitasking increases the time required to accomplish different tasks when compared to doing them in a sequential manner
- Actually, switching one task to another impairs:
 - Productivity

Sources: Smart Pharma Consulting

- 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, 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

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 life style contribute to improve work efficiency

4. Getting better organized1

Eliminate clutter / maintain your equipment



Keep a healthy balance between work and home life

- 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

- 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...

¹By 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

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3. Planning & Implementation

Take time to plan carefully your activities and you will end up saving time

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
<u><</u> 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			<u>></u> 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 challenging² 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 device³), ideally, at the end of the previous week or day, accordingly, which should not take more than 10-15 minutes

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

Sources: Smart Pharma Consulting



4. Tracking & sharing outcomes

Time management is an ongoing process which should involve all employees

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 proposed¹, 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 addedvalue 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



Our 8 Practical Recommendations...



... to help you save more than 3 hours per day & boost your efficiency

Avoid meetings before 10:30 am to focus on your key activities requiring the greatest concentration¹

Avoid meetings after 5:30 - 6:00 pm to keep time available to answer your phone calls, e-mails, etc.,

Do not attend meetings if you are not essential or if it doesn't contribute to meet your goals²

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

3 Shorten the usual one-hour meetings to 45 minutes and suggest your colleagues to do the same

Keep 10 minutes, at the end of the day, to organize your next working day

Batch similar tasks together (e.g. e-mails reply, administrative work, etc.)

Impose yourself strict rules to minimize the time spent dealing with unsolicited or irrelevant messages

¹ Unless your peak concentration is at another moment of the day. In such a case, you adopt your schedule

"By saving 3 hours per day, you will get the equivalent of 1.5 more day per week"

Sources: Smart Pharma Consulting 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



How can Smart Pharma Consulting help you?

We propose intra-company services to better manage time

Three Time Management services

Training seminars¹

- We organize one- to two-day intracompany 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.



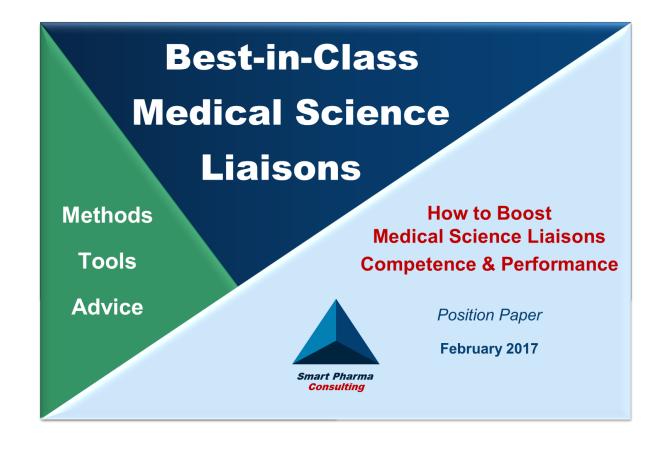
- We help companies set customized rules and develop specific means to optimize the time management at global, affiliate, department or functional level
- We produce guidelines and support tools regarding the management of projects, meetings and distractions; internal and external communication (incl. writing of e-mails and text messages, phone calls, etc.)



- 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



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 KOLs¹ 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 HCPs² but also of health authorities, PAGs³, 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

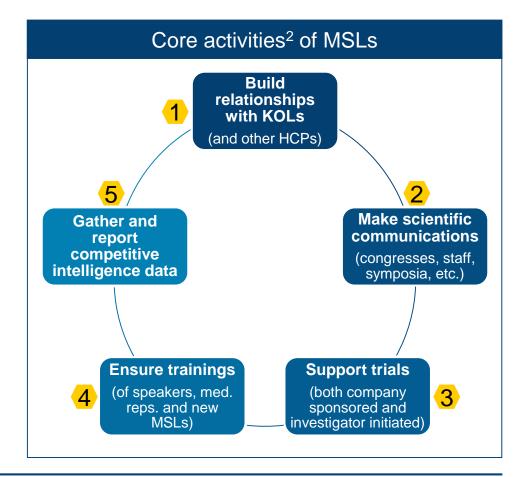
Sources: Smart Pharma Consulting analysis

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: Medical Science Liaisons¹

- 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)



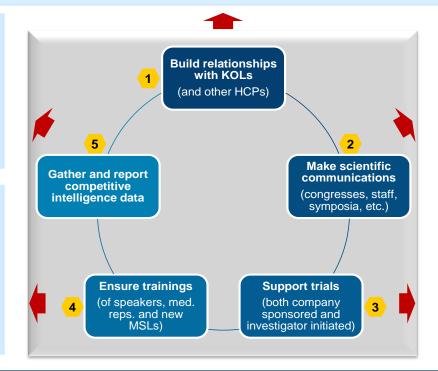
Sources: MSL Society – "An insight into the emerging role of regional medical advisor in the pharmaceutical industry", Perspectives in Clinical Research, 2013 – Smart Pharma Consulting analysis

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

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 medicoeconomic 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&O²



- 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

MSLs must support KIMs¹ who facilitate regional market access, KAMs² who ensure listing of products at hospital level and marketing and sales reps who promote them

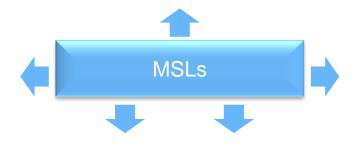
The transversal role of MSLs

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. companysponsored clinical trials and IIS1
- 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 TA²

Key interactions with sales team

- Medical information: Answers to scientific questions / objections
- Local scientific events: staffs and scientific meetings coorganization (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?

Distinction from sales / marketing

Disconnection with corporate initiatives

Distraction from core activities

Extensive geographical zones

Complex regulatory environment

Trend towards specialization

- Role confusion persists in the mind of some HCPs / KOLs
- Initiatives initiated by corporate (clinical trials, etc.) not coordinated with MSLs teams
- MSLs, for being well trained and effective professionals, cannot contribute to tasks such as health economics, outcomes research, etc.
- MSLs teams being small; they have to cover large geographic areas and must undertake frequent travels
- Government agencies keep on scrutinizing on how products are promoted by pharma companies
- The development of secondary care products and the increasing complexity of science lead to major training requirements for MSLs

- Information campaigns to be carried out to inform stakeholders of the specific role of MSLs
- Information should be provided through calls
- The coordination should be improved by implementing standard communication processes and rules
- MSLs' responsibilities and objectives should be clearly defined and internally communicated through information campaigns
- Alternative communication technologies such as web conferencing, e-mailing, teleconferences, etc., should be considered
- Pharma companies should focus on MSLs' compliance with local regulations...
- ... which should be carefully monitored
- 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

- Excellent scientific knowledge and understanding to carry out peerto-peer discussions during interactions with KOLs
- Strong communication skills to properly position:
 - The company's therapeutic expertise
 - A given product at pre- or post-launch stage
- Ability to manage projects with KOLs (e.g. while supporting investigators-initiated studies or company-sponsored clinical trials)
- Ability to train / teach and / or develop support documents for companies' collaborators and / or HCPs
- Capture and share insight gathered through interactions between KOLs' and all customer-facing teams
- Cooperate and coordinate activities with other customer-facing collaborators and corporate teams interacting with KOLs
- Comply with national regulations and ethical considerations regarding disseminated information (e.g. off-label)
- Ability to manage time, set priorities and adjust unforeseen changes inherent to MSLs' job

Expected outputs

- Ability to inform, challenge and / or convince KOLs based on robust and updated scientific evidence
- Convince KOLs to carry out research or clinical studies
- Convince KOLs to support the company's products
- Identification of clinical research opportunities with KOLs
- Effective implementation of clinical research trials
- Improvement of participants' knowledge, understanding of the disease area and of the benefits of the company's products
- Profiling and selecting the relevant KOLs to partner with
- Fulfilling of KOLs needs related to MSL activities
- MSLs being the preferential contact of KOLs, they will ensure consistent interactions and address potential issues
- Prevent the company to be sued and to be fined
- 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

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MSLs' activities should be integrated in a Regional Strategic Plan to ensure synergies with marketing, sales, market access and patient adherence departments' activities¹

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, PAGs², etc.
- Key objectives: facilitate the hospital listing, and improve patient adherence
- Key activities: development of medicoeconomic 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 IIS¹ 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 analysis²
- 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: KOL Partnership Model 2016 by 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 (1/3) –

MSL Advanced SWOT

Opportunities	Relative importance¹
What regional changes are likely to favor the medical environment?	
National & regional regulations relating to MSLs' activities (e.g. off-label communication, invitation process to congresses, grants, etc.)	
KOLs' opinion & position re. the company and its products, KOL's level of influence	
Scientific events: regional congresses, other meetings	

	Relative importance¹	
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	

Threats	Relative importance ¹
What regional changes are likely to disfavor the medical environment?	
National & regional regulations relating to MSLs' activities (e.g. off-label communication, invitation process to congresses, grants, etc.)	
KOLs' opinion & position re. the company and its products, KOL's level of influence	
Scientific events: regional congresses, other meetings	

Weaknesses	Relative importance¹
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	
Scientific communications: congresses, staff meetings, symposia, etc.	
3 Support to trials: company-sponsored trials and IIS2	
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 =

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 (2/3)



Sources: Smart Pharma Consulting

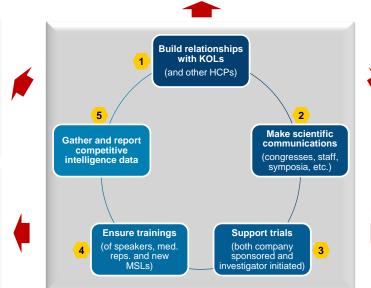
¹ To support the corresponding strategic priority

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 (3/3)

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 people trained
- Qualitative feedbacks of trained people



- Number of speeches delivered
- Number of articles authored
- Number of attendees
- Qualitative feedbacks of attendees
- Number of IIS¹ and / or companysponsored clinical trials submitted / completed
- Number of investigators or patients included in company sponsoredclinical trials

Sources: Interviews with 5 MSLs - Smart Pharma Consulting analysis

¹ Investigator initiated studies

Guidelines for recruitment

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

Recruitment

Management

The 4 key steps

- Objective setting

 What to expect from KOLs?
 What does the KOL expect from us?

 Who are the KOLs that should be selected and why?

 Targeting

 Which actions/interactions should be carried out with KOLs?
 - 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, have to be set for each of them

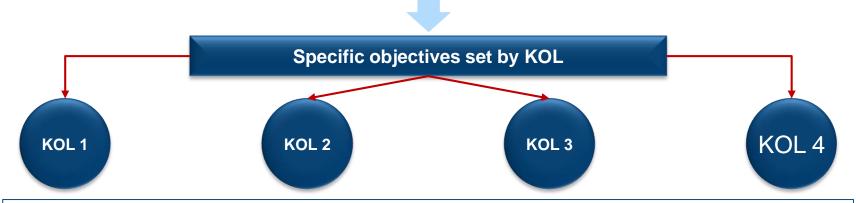
1

Objective setting

Partnerships with KOLs should be part of a global strategy, including also market access, medico-marketing and sales initiatives

Global objective

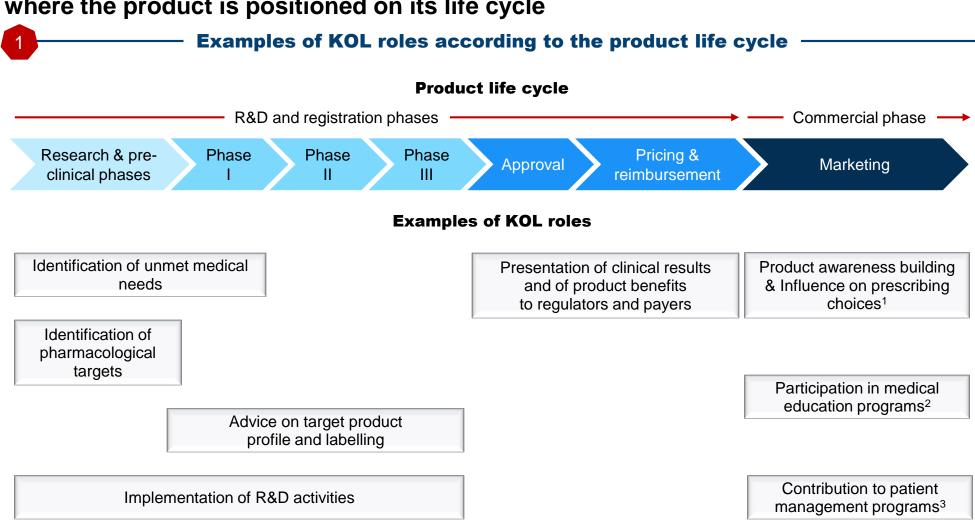
Define precisely what is expected from the partnership with KOLs, in terms of direct or indirect benefits for the product under development or marketed by the pharma company



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 stand point

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



Sources: Adapted from GBI Research, Market Rx, by Smart Pharma Consulting

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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) -

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

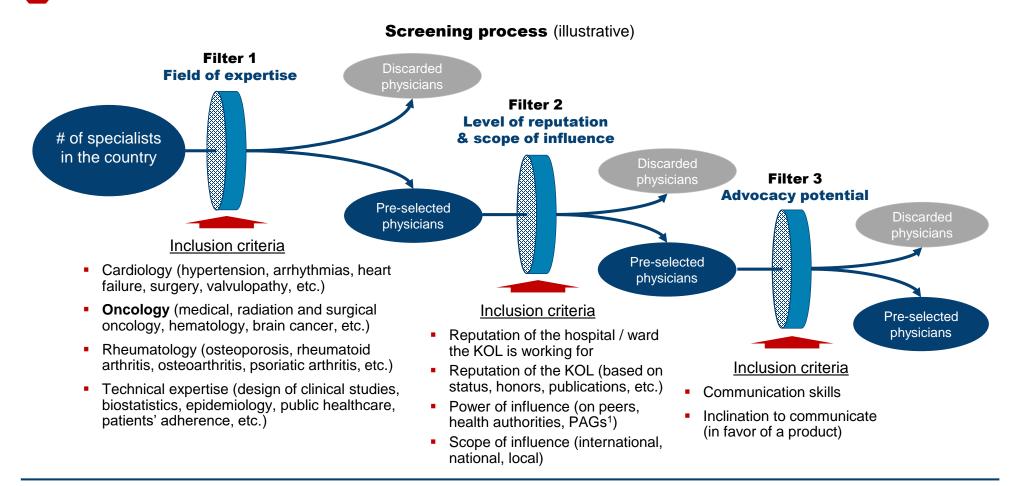
Sources: Smart Pharma Consulting



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

2

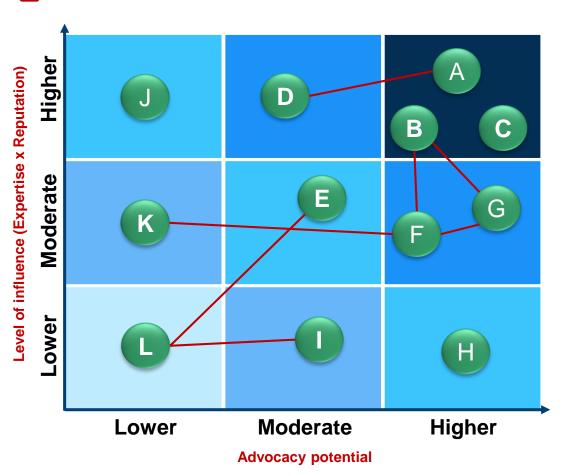
KOLs targeting – Methodology (2/2)



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



- 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 take into account:
 - The life cycle of the product
 - The networks of influence of the KOLs

Priority 3 Priority 2 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)

2

Sources: Smart Pharma Consulting

How to qualify KOLs? -

	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 factor², peer-/ non peer reviewed journals, position as an author) # of trainings p.a. (CME³) 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

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 take into account their expectations and to highlight the benefits they will draw from it, in terms of professional development

How to convince KOLs to partner?

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 into 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 programs¹, 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

2

Tool to facilitate the recruitment process: KOL ID card

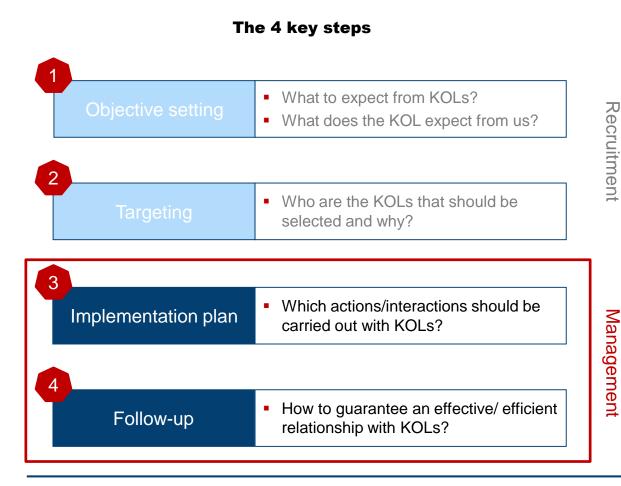
KOL na	(First name – surnam	2)	edical tatus	MD – head of medical department – professor of medicine, etc.	Location	Address & City
Specia	(Oncology – cardiology,	etc.) Medical setting		Private hospital – public hospital – teaching hospital – private office	Country	
Specific of	objectives for the pharma company	•				
S	Specific benefits for the KOL	•				
	Items	Assessment ¹		Facts / Rationale		Source
	Field of expertise/interest in the therapeutic area					
KOL Profile	Level of reputation	Low -Medium-High	•			
Prome	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 and to develop a precise action plan along with monitoring tools

Recruitment & Management process of 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

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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

3

Services proposed to & activities carried out by KOLs

Services proposed to KOLs (Illustrative)

KOL Digital Platform (2.0)1

Access to scientific information

(e.g. articles, databases, expert reports, clinical cases)

Technical support to publish articles

(e.g. medical writing, proof reading, peer pre-review)

Slide kits for training/teaching programs

Ad hoc support on demand basis

Organization of peer

meetings with top

international KOLs

(e.g. congresses,

symposiums, forums, etc.)

Technical & funding

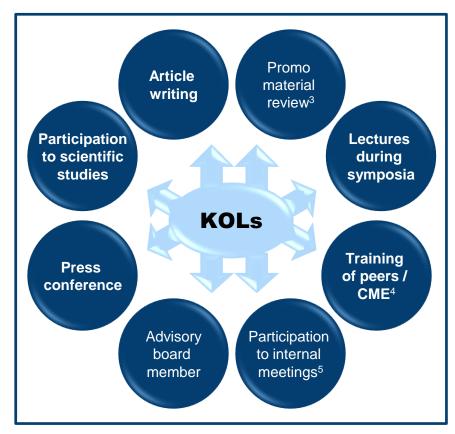
support for Investigator

Initiated Studies

(e.g. media training, training on statistics, change management in a ward)

KOL Customer Manager²

Activities carried out by KOLs (Illustrative)



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.

Sources: Smart Pharma Consulting



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

3

Potential value of KOL activities (1/2)



- 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



- 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

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

Training of peers / CME¹

- 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

A Smart Pharma Consulting

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

3

Potential value of KOL activities (2/2)

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

The development of a "KOL Partnership Plan" or K2P is a centerpiece to maximize the probability of success while partnering with KOLs



KOL Partnership Plan (K2P) – Why?



- The development of a clear precise concise and shared implementation plan, called "KOL Partnership Plan" or K2P – between KOLs and pharmaceutical companies – will ensure that:
 - The objectives of the collaboration is well understood and agreed upon
 - The reciprocal expectations are well defined and accepted
 - The respective commitments are fulfilled and in due time
- The preparation of an implementation plan increases the probability of success of the partnership over time...
- ... and minimizes the risks of mutual disappointments
- The KOL Partnership Plan (K2P) will facilitate the coordination and the communication across the pharmaceutical company and thus optimize synergies across market access, medical, marketing and sales departments

Sources: Smart Pharma Consulting

Guidelines for management



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?



- 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 Director¹
- 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 card¹, specify the objectives of the partnership, its scope and duration

3

Sources: Smart Pharma Consulting

KOL Partnership Plan (K2P) - Model: Introduction -

KOL name	KOL name (First name – surname)			edical department – f medicine, etc.	Medical setting	Private clinic – private hospital – public hospital – teaching hospital			
Interest/ Expertise	(a d Pulmonology cardiology atc.)		Reputation/ Influence Private hospita teaching hosp		Advocacy potential	Address & City & Country			
KOL Customer Manager	(First name – surname – position in the company)	Role	(Describe briefly the K		Coordination with (Indicates the other collaborate whom to coordinate)				
Objectives of the partnership									
Specific sco of the partners				•		•			
Duration of t	he	ng date		Ending date					
partnership		•				•			

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 ————————————————————————————————————	
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Service or Activity #1	Pharma company objective	KOL objective	Key step description	Timing
•	•	•	•	•

Quality of exec	ution Indicators	Expected impact Indicators		Comments
Expected	Achieved	Expected	Achieved	Confinents
•	•	•	•	•
•	•	•	•	

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

4

Examples of tool to monitor partnerships with KOLs -

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 IIS¹ Slide kits for training/teaching programs Ad hoc support on demand basis 	 Interest (10-point scale) Utility (10-point scale) Practicality (10-point scale) Implementation² (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 symposiaTraining of peers	 Interest (10-point scale) Utility (10-point scale) Practicality (10-point scale) Implementation² (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 writingPress conference	 Acceptance by recognized journals (scientific, medical, or in lay press, etc.) Post on highly regarded websites Number of journalists and quality of articles 	 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
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

- Clarify MSLs' roles and responsibilities to avoid confusion with medical representatives
- Maintain a high scientific knowledge and understanding to guarantee high quality interactions and relationships with KOLs
- MSLs' activities should be consistent with their ambition and their strategic priorities, as defined both at national and regional levels
- Develop an Integrated Regional Strategic Plan¹ including a Medical section formalizing MSLs' ambition, strategic priorities and key activities, in line with marketing, sales, market access and adherence departments priorities
- Define quantitative and qualitative metrics to monitor MSLs' activities and identify potential corrective measures to be introduced
- 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
 - Build the relationship on the basis of 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
 - Make the best use of the KOL limited time by organizing useful exchanges
 - g. Assign a KOL Customer Manager (e.g. a 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
- Define internal guidelines and a control process to prevent any compliance issues that could damage the corporate reputation

Sources: Smart Pharma Consulting ¹ Taking into account national regulations and internal company's rules

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

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

Proposed approach



The Brand Booster Program includes specific concepts, methods and tools which have been designed to develop Pharma Marketers competence and performance

Context ·

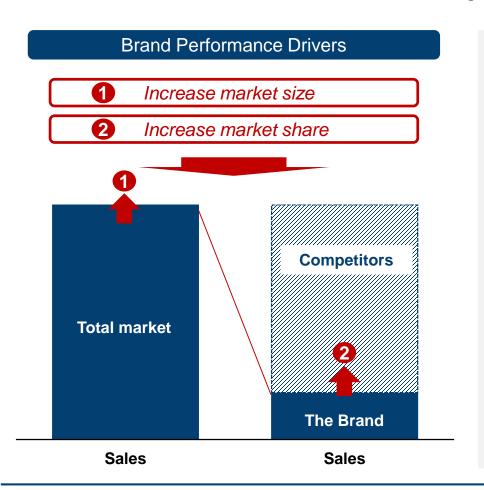
- Over the past decade, pharma marketing functions have decreased in importance due to:
 - External factors:
 - → Health authorities have raised regulatory barriers restricting the scope of possible marketing initiatives
 - → Healthcare professionals have reduced the number of interactions with marketing and sales people and have become less and less sensitive to operational¹ 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



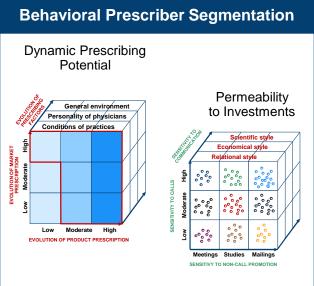
- The slowdown in the pharma market growth leads pharma companies to focus on gaining market shares
- The Brand Booster Program (BBP), which has been developed to help pharma companies achieve this objective, is based on three frameworks:
 - The Brand Preference Mix (BPM) driving market share gain
 - The Behavioral Prescriber Segmentation (BPS), which improves the efficacy and efficiency of marketing investments
 - The Individual Prescriber Plan (IPP), which formalizes tailor-made operational¹ activities for an optimal efficiency
- The Brand Booster Program guarantees consistency between market reality and marketing activities to be implemented to boost brands sales

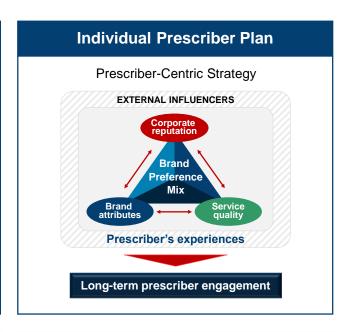
Sources: Smart Pharma Consulting 1 Medico-marketing-sales

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







- 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
- The Behavioral Prescriber Segmentation is built on 3 dimensions:
 - Factors that drive the dynamics of prescribers' prescriptions¹
 - Prescribers' personalities
 - Prescribers' permeability to investments²
- 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

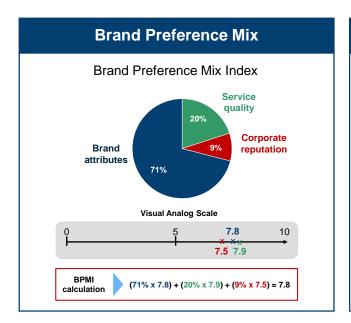
Sources: Smart Pharma Consulting

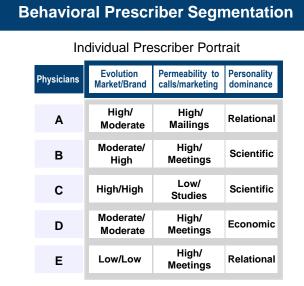
¹ By market (competitors + brand) and by brand – ² Medico-marketing-sales investments



The tools supporting the Brand Booster Program are pragmatic and user-friendly, which facilitates their use by pharma marketers

Executive Summary – Tools





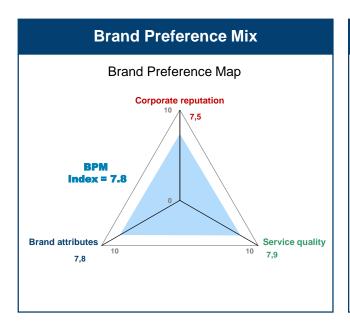


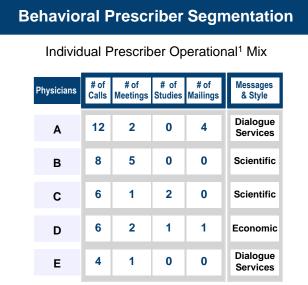
- The Brand Preference Mix Index is a practical measurement tool that can be used at national level, at hospital/ department level, or at individual prescriber level through face-to-face or phone interviews
- The Behavioral Prescriber Segmentation tracks by prescriber:
 - The evolution of its prescriptions
 - The dominant traits of its personality
 - Its permeability (accessibility + sensitivity) to operational¹ investments
- 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 (KEIs² KPIs³)

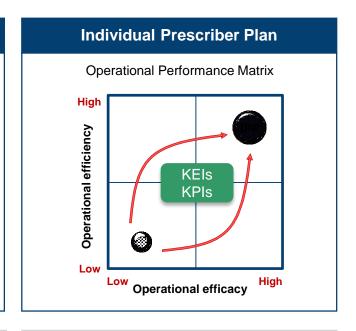
Sources: Smart Pharma Consulting ¹ Medico-marketing-sales – ² Key Execution Indicators – ³ Key Performance Indicators

The Brand Booster Program helps to determine the optimal level and nature (channel, message, tone) of operational¹ resources to be allocated per physician

Executive Summary – Benefits







- 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
- The Behavioral Prescriber
 Segmentation provides a behavioral
 portrait for each prescriber, allowing a
 more effective/efficient targeting and a
 customized allocation of operational¹
 resources for each prescriber
- The Individual Prescriber Plan improves operational efficacy/efficiency through:
 - A rigorous planning of operational activities
 - A systematic monitoring of the execution and impact of activities¹ with specific indicators (KEIs² – KPIs³)

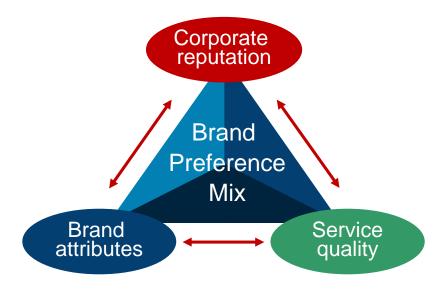
Sources: Smart Pharma Consulting

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

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)

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

- Corporate reputation

 Brand
 Preference
 Mix

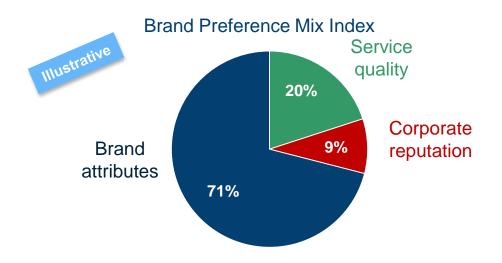
 Brand
 attributes

 Service quality
- 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

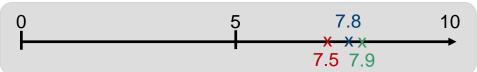
Sources: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

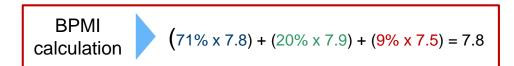
The Brand Preference Mix Index (BPMI) enables to evaluate the brand performance on each of its preference components, over time and compared to its competitors

Tool



Visual Analog Scale





- 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 customer¹, 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 activities², quality of services offered, communication strategy, etc.)

Sources: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

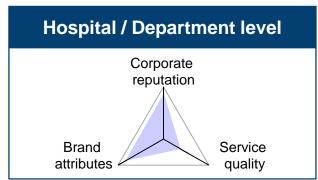
¹ Physicians, patients, pharmacists, nurses, payers, health authorities, etc.

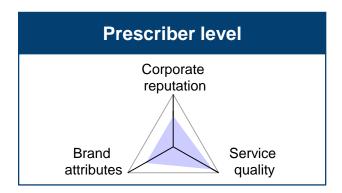
– ² Medico-marketing-sales

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

Method (1/2)







- The Brand Preference Mix Index (BPM Index) should be measured, at the national level, through face-toface 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

- 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 companies¹
- 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

- 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

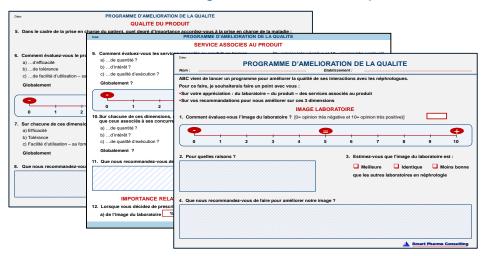
Sources: Smart Pharma Consulting

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

Method (2/2)

Assessment guide for medical reps



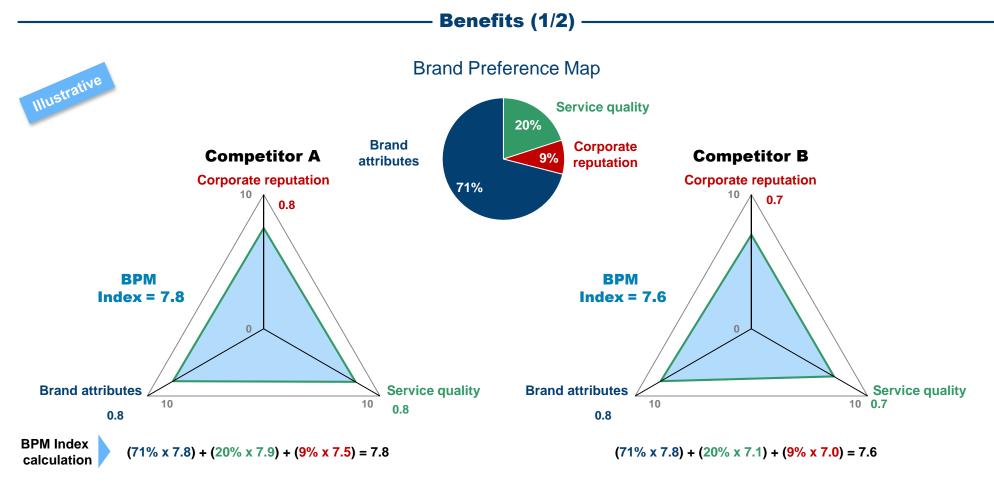
From observation to decision: The 4 Ws approach

WHAT?	WHY?	SO WHAT?	WHAT TO DO?
What are the	Why did the	What are the	What should be
scores of the	physician give	implications of	done to reinforce
brand by each	these scores?	his assessment	the preference to
physician?		for the brand?	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

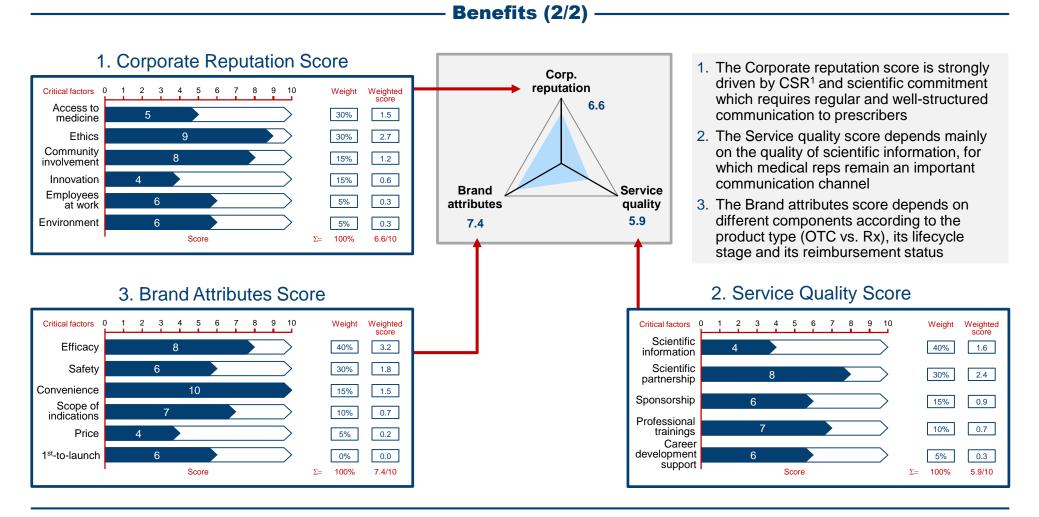
The Brand Preference Mix Index permits to track the performance of each brand on the three dimensions of the Brand Preference Mix, down to the individual prescriber



Number of respondents: 31 hospital gastroenterologists

Sources: Smart Pharma Consulting analyses

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



Sources: Smart Pharma Consulting analyses

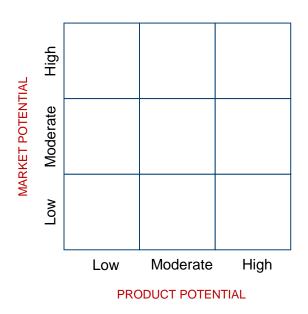
¹ Corporate Social Responsibility

The replacement of a static profiling of physicians by a dynamic one, enables to capture more relevant and accurate insights regarding their prescribing potential

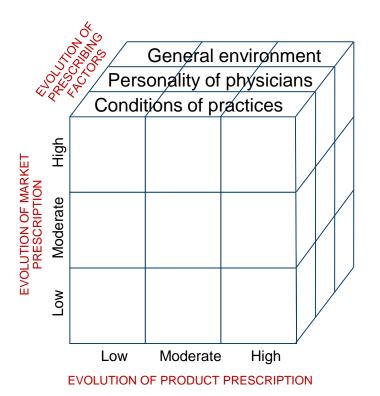
Framework (1/2)

Static physician segmentation

Dynamic physician segmentation



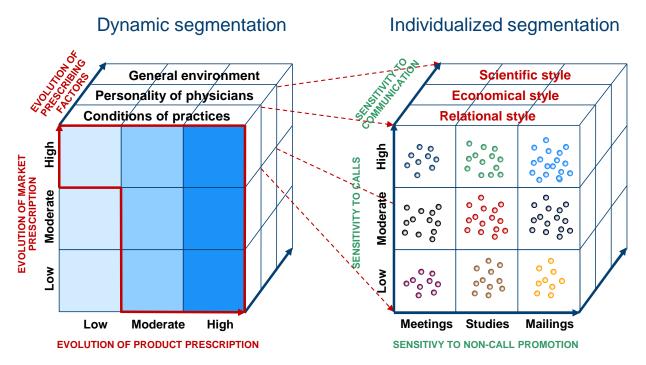




Sources: "Pharma Marketing Tool box", J.-M. Peny, Smart Pharma Consulting, 2015, 246 p.

The Behavioral Prescriber Segmentation is based on the dynamic assessment of the prescription potential and on the permeability to investment per individual prescriber





- * Key factors that determine the evolution of market² 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 operational¹ investments targeted at each prescriber
- The BPS consists in identifying:
 - The evolution of market² 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)

¹ Medico-marketing-sales – ² Market includes the brand of the pharmaceutical company and the competitors' ones

Sources: "Pharma Marketing Tool box", J.-M. Peny, Smart Pharma Consulting, 2015, 246 p.

The Individual Prescriber Portrait keeps a track record of sales potential dynamics, permeability to operational¹ activities and personality dominance for each prescriber

Tool

Individual Prescriber Portrait

Physicians	Evolution Market/Brand	Permeability to calls/marketing ²	Personality dominance
А	High/ Moderate	High/Mailings	Relational
В	Moderate/ High	High/Meetings	Scientific
С	High/High	Low/Studies	Scientific
D	Moderate/ Moderate	High/Meetings	Economic
Е	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 operations¹:
 - 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 operational¹ activities for each prescriber depend on his specific profile which should be mainly documented by medical representatives²

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-marketingsales 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

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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)

Sources: "Pharma Marketing Tool box", J.-M. Peny, Smart Pharma Consulting, 2015, 246 p.



The Behavioral Prescriber Segmentation permits to adjust medico-marketing and sales activities to the respective sensitivity and personality of each physician

Benefits

Individual Prescriber Portrait

Individual Prescriber Operational Mix

Physicians	Evolution Market/Brand			Personality dominance # of Calls I		# of Studies	# of Mailings	Messages & Style
Α	High/ Moderate	High/ Mailings	Relational	12	2	0	4	Dialogue Services
В	Moderate/ High	High/ Meetings	Scientific	8	5	0	0	Scientific
С	High/High	Low/ Studies	Scientific	6	1	2	0	Scientific
D	Moderate/ Moderate	High/ Meetings	Economic	6	2	1	1	Economic
E	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)

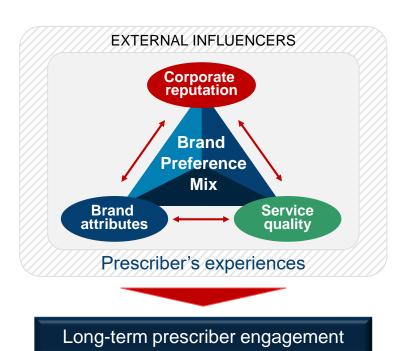
Sources: "Pharma Marketing Tool box", J.-M. Peny, Smart Pharma Consulting, 2008, 213 p.



The Individual Prescriber Plan is essential to structure and formalize a Prescriber-Centric Strategy to secure Brand Preference and long-term engagement

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 longterm 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

Tool

Prescriber-Centric Brand Plan

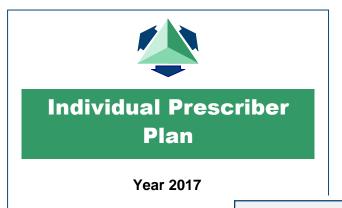


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Situation analysis by prescriber

- Evolution of market/brand prescription
- Key factors determining that evolution
- Permeability (accessibility and sensitivity) to operation
- Personality dominance
- Individual Prescriber Portrait
- Prescriber-centric SWOT

Objective by prescriber (qualitative / quantitative) Strategy and tactics by prescriber

- Strategic priorities
- Individual Prescriber operational Mix
- Monitoring tools (KEIs¹ KPIs²)

- 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
- KEIs¹ and KPIs² 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 operations¹ at targeted prescribers, expected impact should be clearly defined, as well as execution and performance indicators

Tool

Check-list to support operational investment decisions

Illustrative

What is the objective of the action?

- 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 prescriber or of other customers

What are the KEIs²?

- % of the target covered by the action
- % of the target exposed to the action
- % of the target impacted by the action
- % of the target having a positive opinion of the action (usefulness, Interest, practicality, quality of execution)
- Implementation time required vs. planned
- Actual vs. budgeted cost

What are the KPIs³?

- Brand Preference Mix index
- Preference Ladder step
- Key message memorization rate
- Share of prescription
- Sales evolution
- Variation in the number of treatment initiations
- Profit evolution in euros
- % of hospitals having listed the brand
- Return on investment

Sources: "Pharma Marketing Tool box", J.-M. Peny, Smart Pharma Consulting, 2008, 213 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

Tool

A priori assessment tool



A posteriori assessment tool

Target (HCPs, patients)

Evaluation**

Sustainability f - M - F

f – M - F

Magnitude

Link to the product

Barriers		Rationale	(Key performance indicators)	(Key execution indicators)		Decision	Description			Objective							
Technical		Implementation		•	GO		Po	erceived v	alue by the target			Exclu	sivity				
Regulatory		Compliance		No GO	No G	No GO					Evaluati	ation* Rationale			Evaluati	ion	Ration
Economic	0	Estimated cost and return					No GO		Interest	1 2 3 4 5			Total				
							Usefulness	1 2 3 4 5									
							Convenience	1 2 3 4 5			Partial	\checkmark					
							Execution	12345									

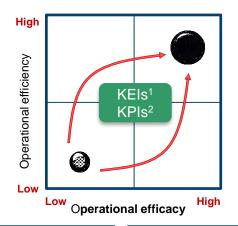
Total	1 2 3 4 5								
Impact on brand preference		Rationale			Solutions Initiatives	to reinforce to	reinforce toe preferential power Evaluation		
High			1						
Moderate	✓		2	2					
Low			3	3					
None			4						

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

Benefits

Operational Performance Matrix



Key Execution Indicators (KEIs1)

- Level and mix of operational activities (medicomarketing-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 (KPIs²)

- 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 operational³ 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 Plan¹ should be precisely elaborated by a team of collaborators interacting, on a regular basis, with the concerned prescribers

Method

Exploring Individual Prescriber insight²

- 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

Sources: Smart Pharma Consulting

- 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 prescribers³

Crafting Individual Prescriber strategy & tactics

- Prescriber insight must be translated into effective operational⁴ 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
 - Understand individual prescriber needs, brand preferences, behaviors
 - 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 Plan²

- 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

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 market¹ 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 finetune operational¹ investments per prescriber...
- ... by identifying:
 - His capability/willingness to prescribe the competing brands
 - The driving forces influencing his prescribing behavior
 - His permeability² 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

¹ Medico-marketing-sales activities – ² Accessibility and sensitivity to different channels

Sources: Smart Pharma Consulting

Smart Pharma Consulting services related to Marketing include consulting support, organization of specific marketing training and regular publications

Overview

Marketing Consulting

- Our consulting services range from presentations at seminars to implementation of conventional or innovative marketing strategies
- We help Marketers:

Sources: Smart Pharma Consulting

- Craft robust brand strategies and...
- ... translate them into relevant tactics
- Ensure the appropriate monitoring of tactics with KEIs¹ and KPIs² to optimize the resource allocation (we have worked on more than 70 brands belonging to 16 therapeutic areas)
- We also provide support with enhanced methodologies and tools to help optimize the management of product portfolio

Marketing Training

 Trainings are developed and carried out by our training center:

Smart Pharma Institute of Management

- Inter-company programs
 - A comprehensive 5-day seminar:
 "Pharma Strategy & Marketing"
 - 2-day masterclasses, of which three are specifically dedicated to marketing topics
- Intra-company programs
 - Customized programs to match the specific needs and expectations of marketing executives
 - In general 1- or 2-day programs

Marketing Publishing

- Book
 - The Pharma Marketing Tool Box
- Articles
 - 30 published in specialized journals since 1993
- Position papers
 - 17 since 2010
- Reports
 - The French generics market (2015 2020)
 - Distribution & économie de l'officine en France (2014 - 2020)
 - Global biosimilar drugs market outlooks
 - Le marché de l'automédication en France
 - Etc.

¹ Key execution indicators to measure the quality of execution – ³ Key performance indicators to measure the impact of the tactics (medico-marketing and sales activities)

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

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-marketingsales 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 a 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 brand teams with robust methodologies, practical tools and a challenging attitude

Brand Teams Support & Challenge -

Smart Pharma Experience & Approach

Support to 70 brands in 16 different disease areas:

1.	Addictology	9.	Metabolism / D

2. Allergy

3. Cardiology

4. Dermatology

5. Gastroenterology

6. Gynecology

Sources: Smart Pharma Consulting

Infectious diseases

8. Metabolism / Diabetes

Metabolism / Diabetes

10. Neurology

11. Nephrology

12. Oncology / Hematology

13. Ophthalmology

14. Pulmonology

15. Psychiatry

16. Rheumatology

- 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 tactics² including the appropriate monitoring tools³
- 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 objectives⁵?
- 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?

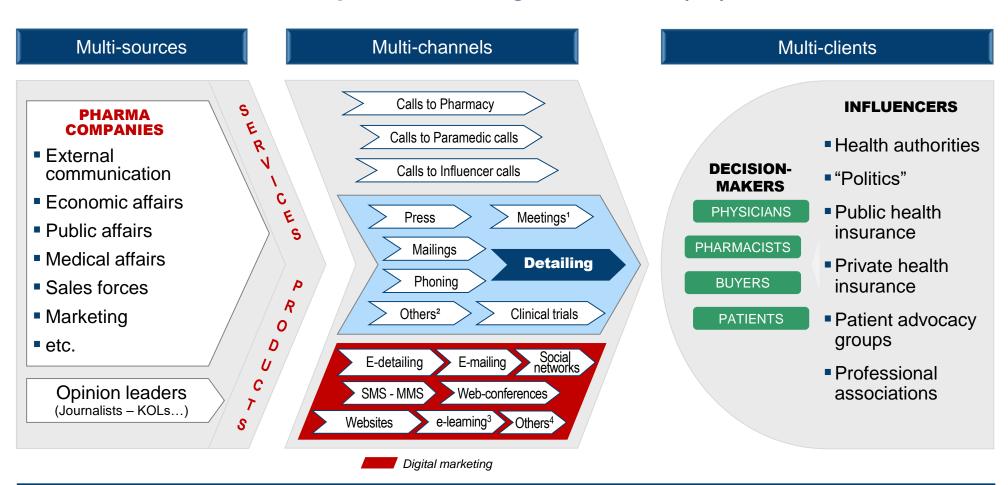
¹Marketing, sales, medical, business excellence, market access, etc. – ² Medico-marketing and sales activities – ³ Key execution indicators and Key performance indicators – ⁴ See Smart Pharma Tool Box – ⁵ See Masterclass "Market Analysis & Forecasting" proposed by Smart Pharma Consulting





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... 3 Continuous medical education through a digital interface – 4 Screen savers, popup windows...

The ELITE Program

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 stakeholders¹ influencing physician prescriptions



- 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 stakeholders¹

Development of CRM² and CLM³ tools enabling a more precise profiling of physicians

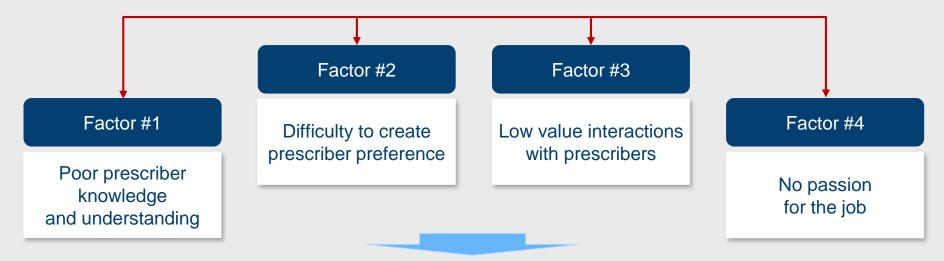
Sources: Smart Pharma Consulting

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

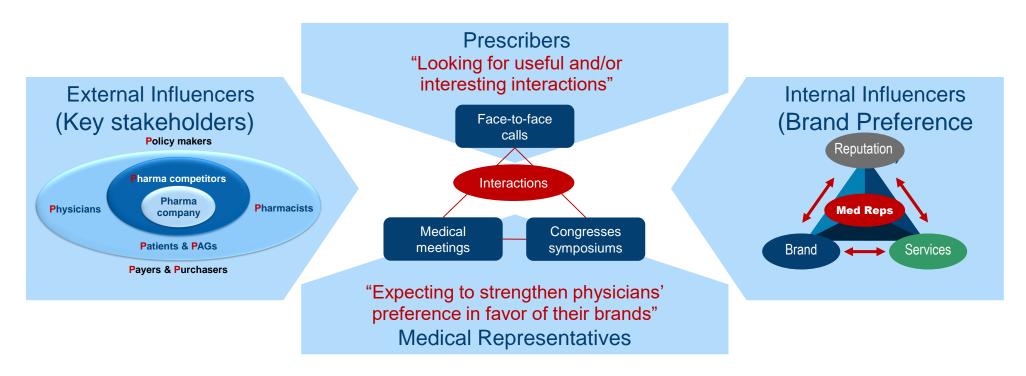
Sources: Smart Pharma Consulting

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The ELITE Program

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)

Sources: Smart Pharma Consulting

Internal influencers (Brand Preference Mix)

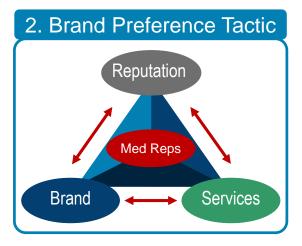
- Their willingness to interact with med reps
- Med reps ability to create highly valued interactions

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

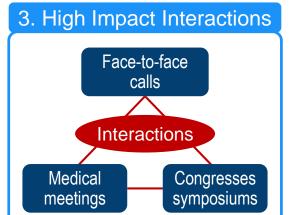
The Four Pillars of the ELITE Program











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

Decision-making

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

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

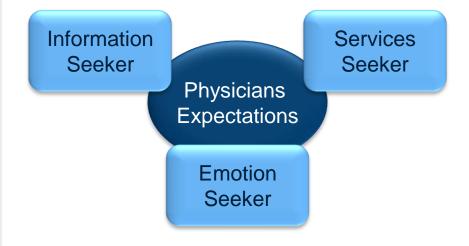
While interacting with med reps, physicians look for: information, services, and/or emotion, knowing that one of these expectations is generally predominant

The "Seeker Portrait" Model - Principle

- Physicians expectations vis-a-vis med reps depend on:
 - External influencers¹
 - Internal influencers (i.e. the history of their interactions with med reps and other collaborators² 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

Sources: Smart Pharma Consulting

- With the brand status (innovative or me-too, new or established)
- With med reps (according to their past interactions)



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 CME¹ 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 upto-date information that will help physicians make better clinical decisions
- They should also be welltrained regarding the healthcare environment



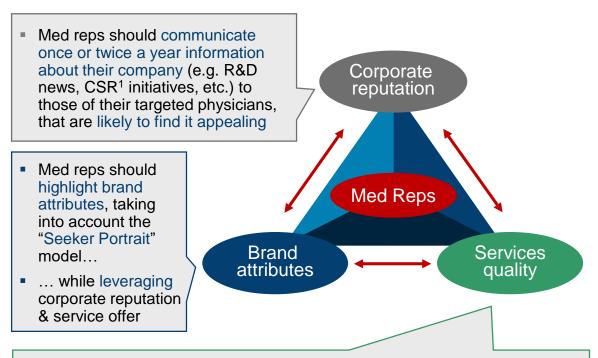
- Med reps should benefit from a high emotional intelligence to perceive and analyze physicians emotions and adapt their behavior accordingly
- Thus, they will have to add emotion to their communication about the attributes (efficacy, safety, convenience) of the brands they promote
- Med reps will contribute 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 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

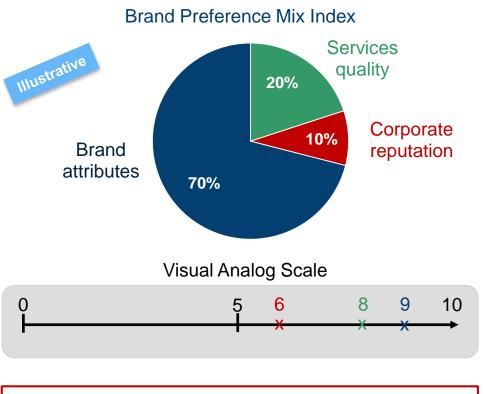
- Prescribers using several brands for a given pathology:
 - The challenge for the med reps is to increase the preference of physicians for their brands
- To do so, med reps must activate the components of the Brand Preference Mix:
 - The perceived value of their brand attributes
 - The perceived quality 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





- 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 customer¹, 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 activities², quality of services offered, communication strategy)

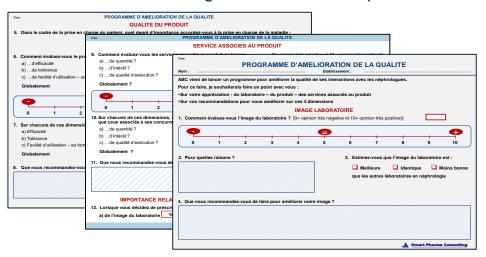
Sources: "Building prescriber loyalty", J.-M. Peny et al., SCRIP Magazine, September 1993 – Smart Pharma Consulting

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	Why did the physician give	What are the implications of	What should be done to reinforce
brand by each	these scores?	his assessment	the preference to

nis assessment for the brand?

What should be lone 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

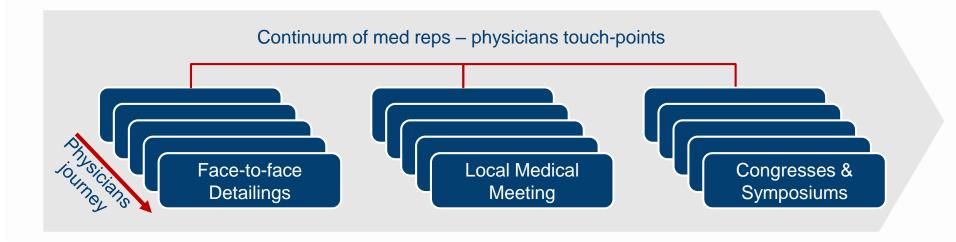
physician?

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 reps¹ 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



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



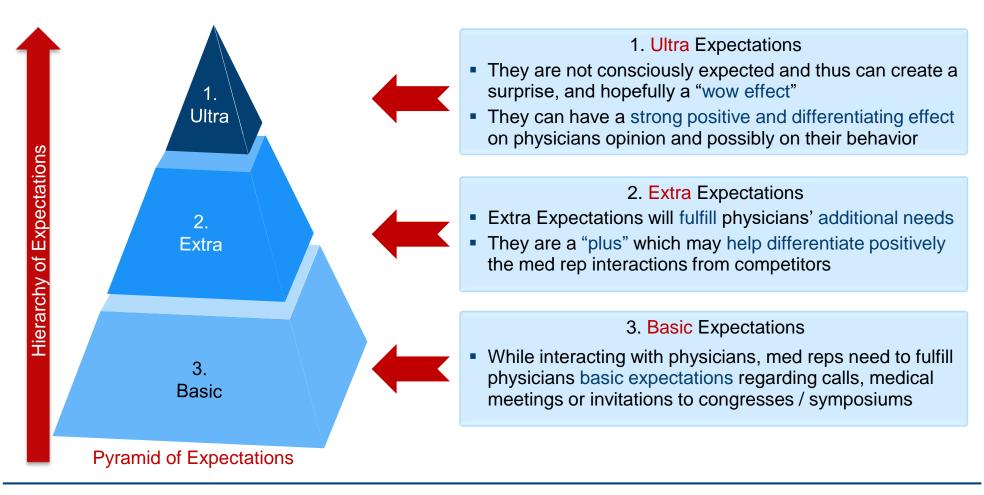




Sources: Smart Pharma Consulting

To create High Impact Interactions, med reps need to move up the pyramid of expectations in an attempt to offer physicians a continuum of unique experiences

High Impact Interactions (H2I) Program - Principles

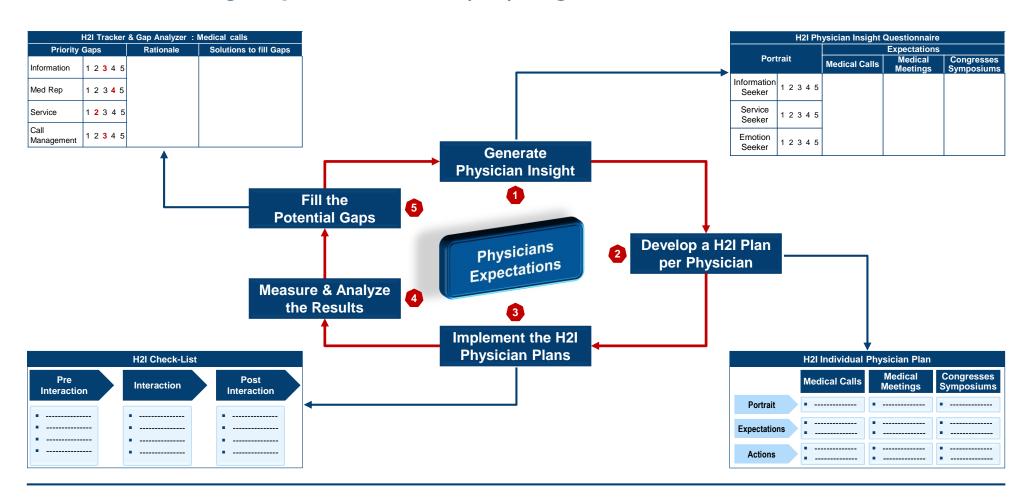


Sources: Smart Pharma Consulting

The ELITE Program

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: Sense of Purpose **Achievement** Challenges Job **Passion** Recognition Rewards Autonomy

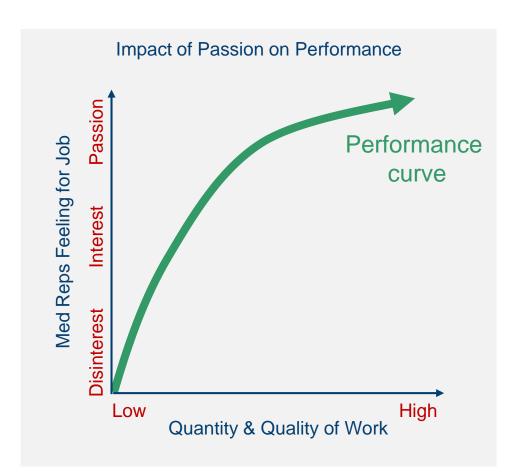


Sources: Smart Pharma Consulting

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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?



- Passionate employees¹ 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?

- 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
- The Six Job Passion Drivers

Sense of Purpose

- 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 advise
- Recognition by prescribers¹ 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

Sources: Smart Pharma Consulting

Achievement Challenges

Job
Passion

Recognition Rewards

"Passionate med reps are more convincing & engaging"

Autonomy

- Autonomy is an important component to favor people passion at work
- Micromanagement and excessive controlling are not compatible with job passion development²
- 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

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 are able to 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



3. Analytical Skills

- Understanding of physicians expectations
- Analysis of interactions with physicians
- Definition of actions to carry out

2. Knowledge

- Healthcare environment
- Disease environment
- Therapeutic approaches
- Promoted brands
- Physicians profiles, fields of interests, needs, wants, etc.

Sources: Smart Pharma Consulting

Smart Pharma Consulting services related to med reps performance include consulting support, organization of specific trainings and regular publications

Overview

Consulting

- Our consulting services related to med reps range from lectures at seminars to implementation of innovative methods such as the ELITE or the STAR¹ programs
- Thus, we help pharma companies improve:
 - Their customer targeting (see "Bestin-Class Pharma Marketing"2)
 - The organization of their sales forces (sizing, territorialization, activity prioritization and planning at national, area, territory levels, etc.)
 - The management of their med reps (motivation, development of collaborators) by their managers

Training

Trainings are developed and carried out by our training center:

Smart Pharma Institute of Management

- Inter-company programs
 - A comprehensive 5-day seminar: "Pharma Strategy & Marketing"³
 - Four Masterclasses, of one or two days dedicated to med reps
- Intra-company programs
 - Customized programs to match the specific needs of pharma companies regarding their sales force
 - In general one- or two-day programs

Publishing

- Books
 - The "Pharma Marketing Tool Box" (2 editions: 2008 and 2015)
 - Pharma Market Insight & Strategy (4 books analyzing the future of the global pharma market and the implications for pharma companies)
- Articles
 - 42 published in specialized journals
- Position papers
 - 50 since 2012 (e.g. organizational benchmarking of in-field collaborators, brand preference mix, creation of high impact interactions, etc.)
- Reports
 - 15 since 2012 (e.g. generics, OTCs, biosimilar markets, digital marketing, distribution and retail pharmacies economic trends, market access, etc.)

¹ Sales Techniques Application for Results – ² http://www.smart-pharma.com – 3 Including sessions about sales force activities and sales force effectiveness

Sources: Smart Pharma Consulting

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As the author of the ELITE Program and considering their operational experience, Smart Pharma consultants are well positioned to facilitate its implementation

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 since 2001 (e.g. 4 in 2016)
- The ELITE Program which has been developed by Smart Pharma Consulting proposes an 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:
- Craft a communication strategy demonstrating to med reps the benefits they will draw from the program
- Design a framework that fits the company ambition and takes into account its current situation
- Create specific and userfriendly tools to facilitate the execution of the four pillars of the ELITE Program by the med reps

Sources: Smart Pharma Consulting



- 4. Develop specific training modules¹ for med reps and their managers to help them master:
 - The concepts
 - The methods
 - The tools

related to each of the four pillars that constitute the ELITE Program

Adjust the organization to best support the execution of the ELITE Program

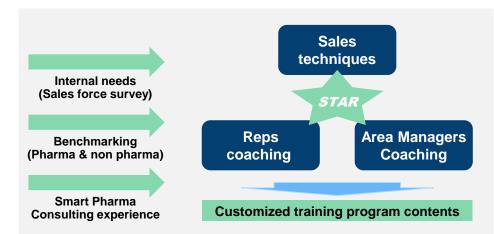
¹ The Smart Pharma Institute of Management, which is the training department of Smart Pharma Consulting, is registered since 2001



The STAR (Sales Techniques Application for Results) program can be entirely customized to pharma companies needs and rolled out in a timely manner

STAR Program Implementation

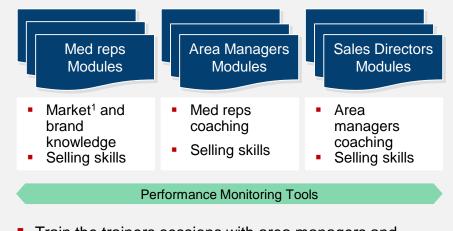
Identification of sales force needs and expectations



- 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

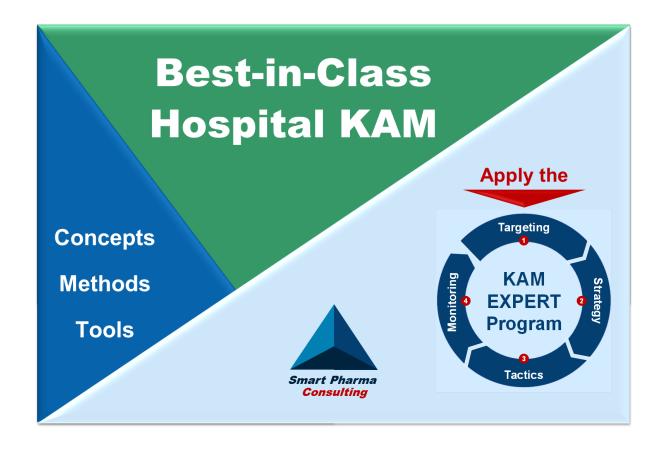
Sources: Smart Pharma Consulting

Program roll-out



- 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

¹ Including the healthcare system, the pathology, the therapeutic alternatives, the physicians called upon, etc.

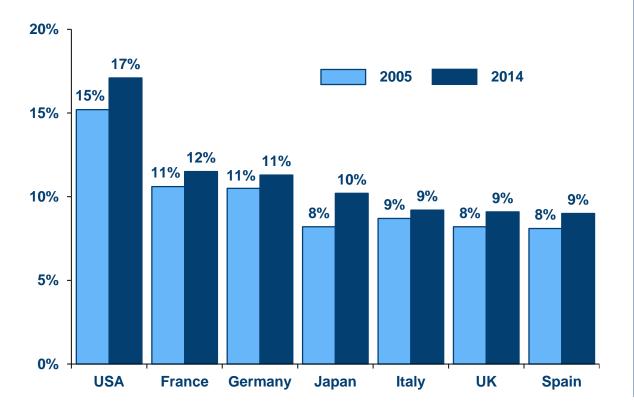


Healthcare expenditure will keep on growing faster than national economies due to demographic factors and willingness of citizens to have better access to healthcare

Healthcare expenditure as a percentage of GDP¹



Sources: World Bank, as of September 2017 - OECD, as of September 20117



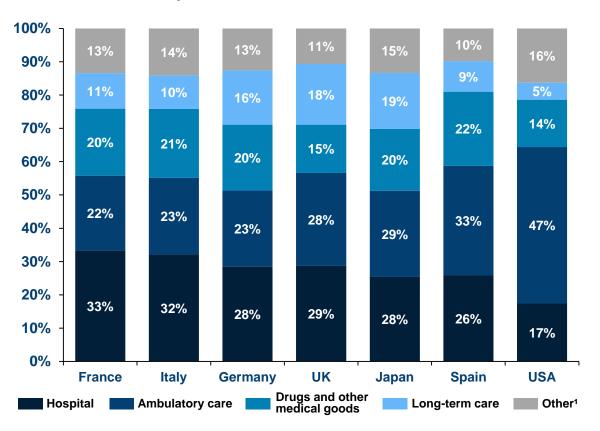
- Healthcare expenditure represented one of the largest public spending items in most developed economies: 1st (USA), 2nd (France, Germany, Japan and UK)² and 3rd (Italy and Spain)³
- At best, governments and payers will manage to slow down the rise of healthcare expenditure as a percentage of GDP but would not be able to stop it
- There is no optimal ratio of healthcare expenditure to GDP, it primarily results from:
 - Public health conditions
 - Governments investment prioritization
 - Citizens willingness to seek for care
 - Healthcare cost

¹ Gross Domestic Product – ² After social protection – ³ After social protection and general public services * Note: 2014 data excepted for France and the USA, 2015

The cost of drugs is far behind that of hospital and ambulatory care, yet this segment is paradoxically targeted by governments because it is easier and quicker to reduce

Breakdown of healthcare expenditure per country (2015) -





- Drugs represent the 3rd largest source of healthcare expenditure in 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
- However, to significantly reduce total healthcare costs, governments will need to apply cost-optimization measures on all healthcare segments, irrespective of their relative importance

Sources: OECD Health Database as of February 2017 (Data 2015 excepted for Japan: 2014)

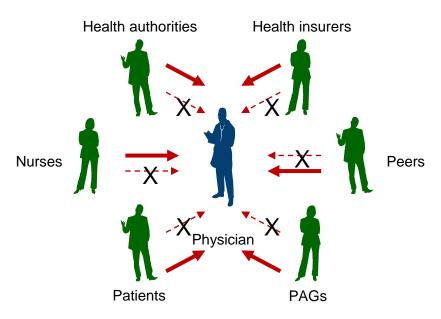
Other expenditure include ancillary services (non-specified by function), preventive care & governance / health system / financing administration



The pharma market is increasingly driven by multiple stakeholders influencing physicians prescriptions and by secondary care drugs mainly prescribed at hospital

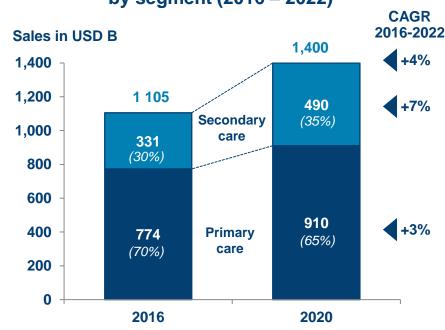
Evolution of the pharma market structure

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, PAGs¹, etc.)

Global pharmaceutical market growth by segment (2016 – 2022)



Secondary care products which are mainly prescribed² in hospital centers should grow faster than primary care products mainly initiated and prescribed by office-based physicians

Sources: Smart Pharma Consulting estimates after: "Outlook for Global Medicines through 2021", Quintiles IMS (December 2016)

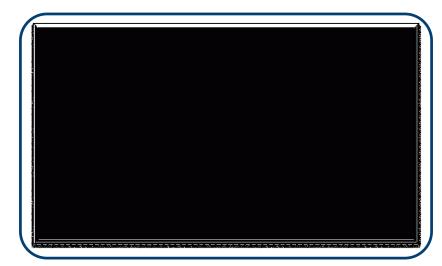
Patient Advocacy Groups – ² Secondary care products could also be initiated by hospital physicians and then renewed by office-based physicians, either specialists or GPs, depending on the treatment. In this case, the prescribing decision made by hospital physicians has a major impact on product sales



To get physicians prefer a brand is becoming more complex, in both hospital and open care markets, due to increased price sensitivity and the multitude of influencers

Complexification and concentration of the business

Hospital market segment





Open care market segment

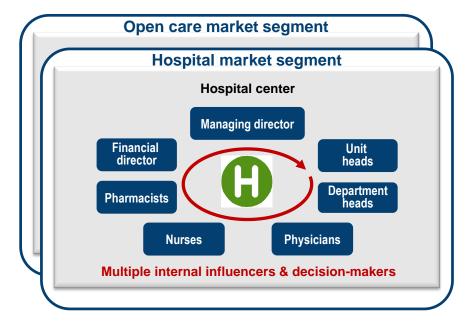
- More and more office-based physicians work in group practice for better efficiency and practicality
- Besides, an increasing number of them belong to networks sharing similar therapeutic approaches and drug choices
- In the open care market, physicians make decisions in concertation with other HCPs or payers

- Within hospital centers, physician prescribing decisions are more and more made in concertation, following protocols, and through the influence and pressure of various stakeholders, including payers
- Hospital centers are also regrouping themselves which increases their business importance and bargaining power

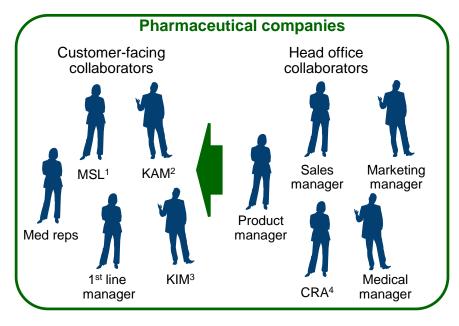
Sources: Smart Pharma Consulting

Pharma companies must adopt an efficient organization to deal with bigger accounts, more and more price-sensitive, in which decision-making processes are complex

Implications for pharma companies







- 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

Sources: Smart Pharma Consulting

- 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

Medical Science Liaison – 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 Assistant

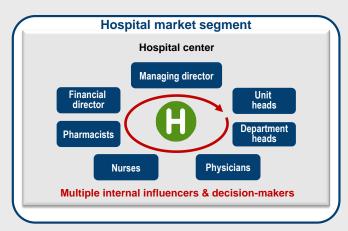
With the consolidation of their customers becoming bigger and more price-sensitive, pharma companies have created KAM positions to better protect their business

Scope & Objective

- Suppliers of the FMCG¹ 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 & payers²
 - Local health centers³

Sources: Smart Pharma Consulting

Pharmacy chains & VTOs⁴



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

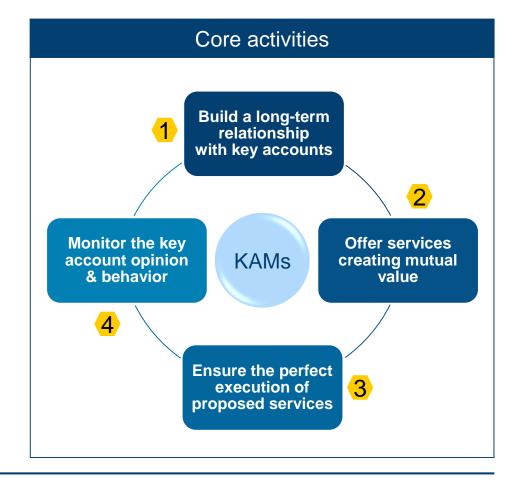
Hospital Key Account Managers role and core activities

Role

- KAMs are one of pharma companies' field teams¹ 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 decisionmakers to meet some of their needs, such as:
 - Become a reference center in a given pathology
 - Attract more patients

Sources: Smart Pharma Consulting

- Improve hospital organization and efficiency (saving cost and time)
- KAMs have most often a background of first-line manager² 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 COO³



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

The KAM Expert Wheel

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-develop¹ 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 have to deal with multiple internal and external stakeholders having different needs and priorities

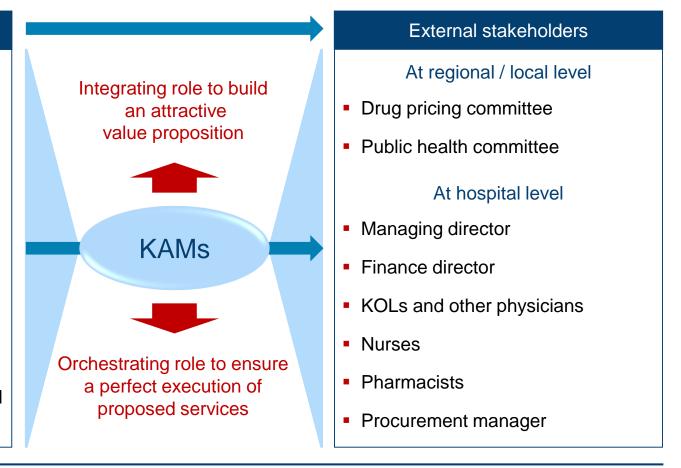
Cross-functional role of Hospital KAMs

Internal stakeholders

- Market access department (e.g. health economic specialists)
- Public affairs department (KIMs¹)
- Commercial department (in charge of responding to tenders)
- Manufacturing and supply chain departments
- Medical affairs department (Medical manager, MSLs², CRAs³)
- Patient program department

Sources: Smart Pharma Consulting

- Marketing department (marketing managers, product managers)
- Sales forces (1st line managers and medical reps)



¹ Key Institution Managers in charge of relations with regional health authorities and payers – 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

Targeting

KAM

EXPERT

WHEEL

Monitoring

- How to assess the quality of execution of the service?
- How to measure the impact of the service on pharma company performance?

- How to select the best service to support the strategy per key account?
- How to ensure the appropriate implementation of the proposed service?

- How to define hospital key accounts?
 - How to qualify and select them?

How to set an objective per hospital key account?

Strategy

How to craft a strategy for each hospital key account?

Sources: Smart Pharma Consulting

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Tactics

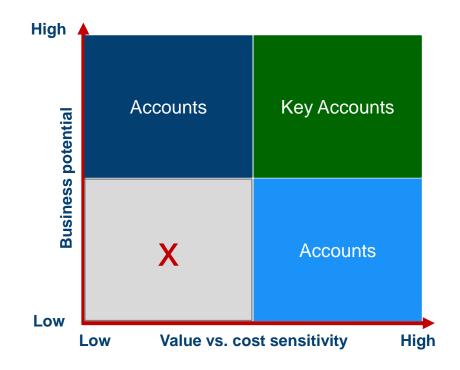
Hospital key accounts should be critical to direct / indirect performance of pharma companies and value specific services associated to drugs, beyond their cost

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 indirect¹ 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 sales¹
 - 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. ROCE¹, DCF² / NPV³, 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



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

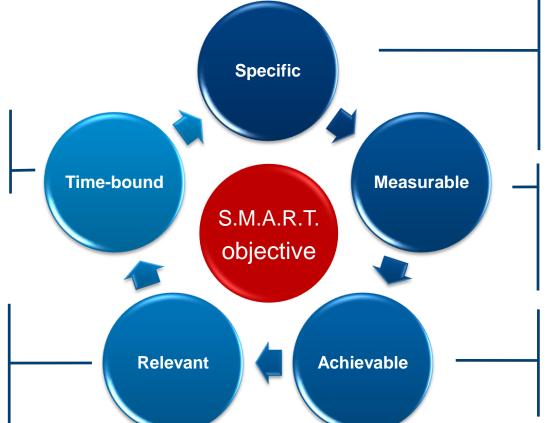
How to set an objective per hospital key account?

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)



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

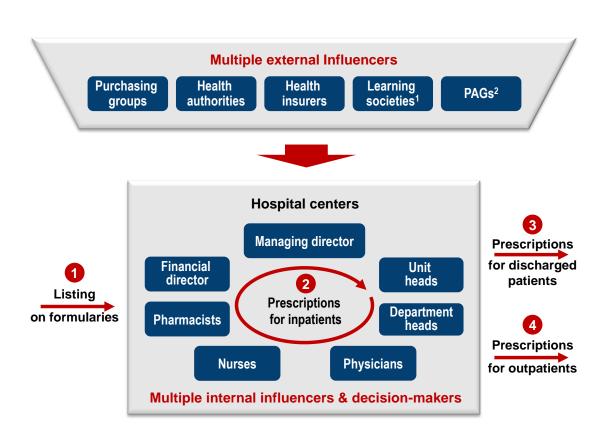
- Stretched to get the best of everyone
- Reasonable to keep everyone motivated

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 formularies³
 - 2. The prescription for inpatients⁴
 - 3. The prescription for discharged patients⁴
 - 4. The prescription for outpatients⁴
- 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

Sources: Smart Pharma Consulting

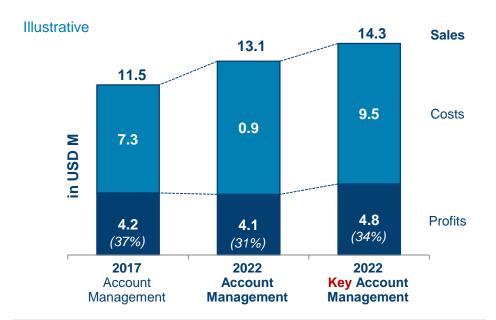
Key performance drivers for pharma companies

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 KEIs¹ and KPIs² 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

MSL¹ 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 authorities², payers², 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 SWOT¹ 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 KEIs² and KPIs³ to monitor the services proposed

Sources: Smart Pharma Consulting — ² Key Execution Indicators — ³ Key Performance Indicators



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

Hospital center



Better

reputation¹

Sources: Smart Pharma Consulting

Examples of needs

- Hospital cost reduction
- Hospital risk reduction
- Better operational efficacy and efficiency
- Better medical efficacy and convenience
- Healthcare savings²



Potential impact of services on pharma company performance



- 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)

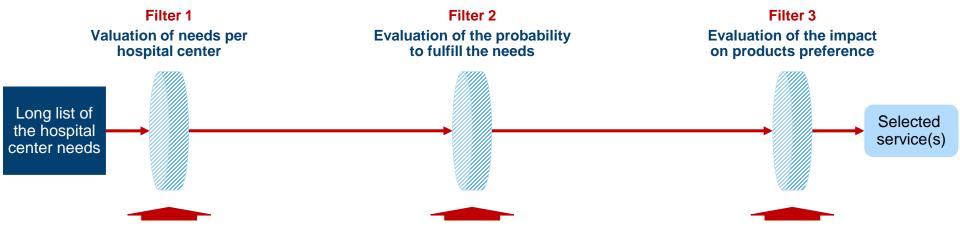
- By offering services fulfilling hospital centers highly valuated needs – pharma companies can expect to:
 - Improve their corporate reputation and
 - Strengthen the perception of their product portfolio and thus, be preferred at the expense of their competitors (i.e. increased likelihood of being listed, better price, higher prescription rate for inpatients and out-patients)

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 needs¹, 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 evaluate¹ 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 services² 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 degree³ 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

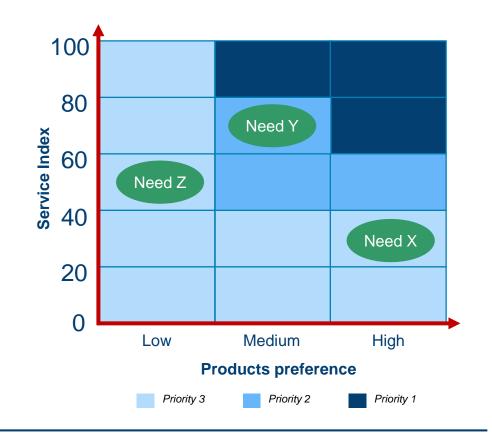
The assessment chart and the selecting map can help KAMs figure out which service they should preferably commit to offer to individual hospital key account

How to select the best services to support the strategy? – Tools

Assessment chart¹

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 process

Planning

- Listing of activities
- Project schedule

Sources: Smart Pharma Consulting

 Resource allocation (roles & responsibilities, budget)

Execution

- Kick-off
- Tasks execution and coordination
- Information sharing

Monitoring

- Execution assessment²
- Gaps identification
- Corrective actions to fill the gaps

Closing

- Outcomes evaluation
- Overall quality assessment
- Agreement on key learnings

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.

Sources: Smart Pharma Consulting

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

address	/ stakeholders	Key issues
Hospital key activities Hospital key proj	ospital center oject manager²	Key needs
Hospital Phar influence	arma company KAM³	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

If several services are proposed for the same hospital center, thus several HSC should be filled up –
 Rev contact point regarding the partnership and the service(s) included in this partnership.

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 cen stakeholde			
Dual valuation by the partners (key hospital stakeholders & pharma company)							
Valuation of the S	Service*	ervice* Rationale Valuation of the Ex		xecution*	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 analys	is	Recommendations	Gap analys	sis	Recommendations		

Sources: Smart Pharma Consulting

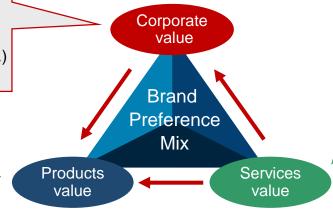
^{* 1 &}amp; 2 below expectations – 3 as per expectations – 4 & 5 above expectations

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 $lue{}$

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, CSR¹ initiatives, specific services delivered, etc.) to the hospital stakeholders
- The direct or indirect² 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

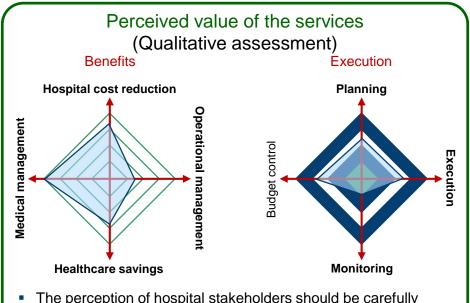
Sources: Smart Pharma Consulting

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)

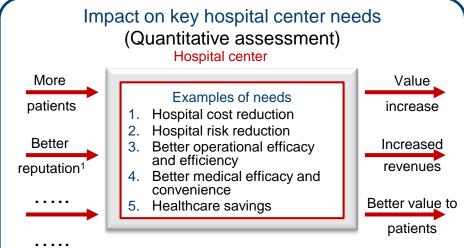
Qualitative and quantitative assessment tools



 The perception of hospital stakeholders should be carefully measured to identify and address the potential weaknesses

Sources: Smart Pharma Consulting

 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



The impact of services² 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:

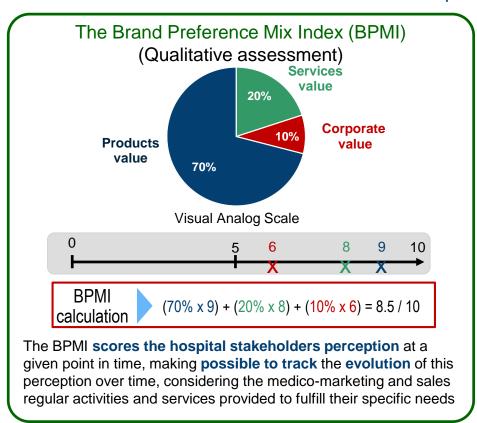
- 1. Cost reduction (e.g. treatment cost per patient, lower wastage)
- 2. Risk reduction (e.g. rate of nosocomial infections, death rate)
- 3. Operational management³ (e.g. shorter patient length of stay)
- 4. Medical management³ (e.g. pain management of patients)
- 5. Healthcare savings⁴ (e.g. improvement of patient adherence)

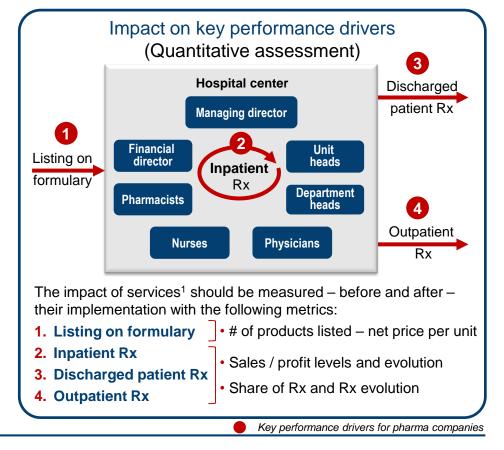
¹ As perceived by: national and regional health authorities, office-based physicians, other hospital centers, healthcare professionals working for the given hospital center and patients – ² As well as the impact of regular medico-marketing and sales activities – ³ Management includes efficacy and efficiency, 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 the impact of services on pharma company performance – Tools (2/2)

Qualitative and quantitative assessment tools





Sources: Smart Pharma Consulting

¹ And of the regular medico-marketing and sales activities

The KAM Expert Wheel

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 collaborators¹ 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, sales people and KIMs (Key Institution Managers)

The Best of Smart Pharma 2017 206 January 2018

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

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:
- Support methodologically and with specific tools the selection of services per hospital key account
- Develop tools to assess the quality of execution of the services proposed...
 ... and to measure their impact on pharma company performance



- Customize the proposed targeting method and tools to the specific context of the pharma company
- 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



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)?

Sources: Smart Pharma Consulting

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

Existing

Market penetration

Existing

Market consolidation

Market

New

Market development

Market development

Diversification

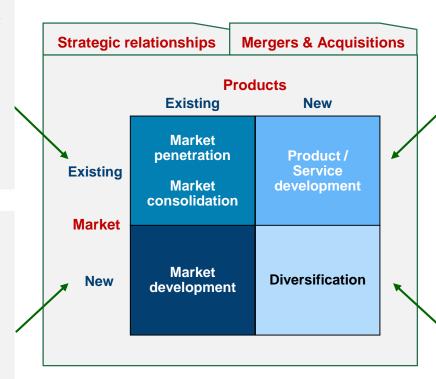
- Modify existing products (e.g. new dosage, form) or launch new products / services to further penetrate existing markets
- Diversify by entering in new strategic segments (e.g. OTCs, generics, medical devices, nutraceuticals)

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, CSO¹) 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 CRO² 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)

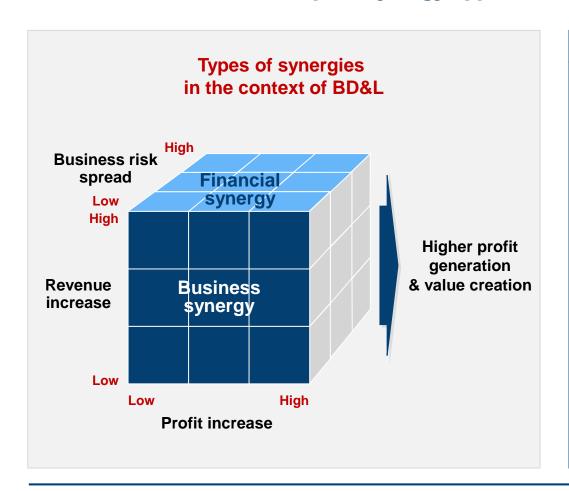
Spread business risk

- 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 analysis

Synergies result from a better mixing and matching of capabilities, and are the greatest when opportunities are in businesses similar to those in which affiliate operates

Concept of synergy applied to business development



Comments

- 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)
 - <u>Financial synergies</u> 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 CSO¹ 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

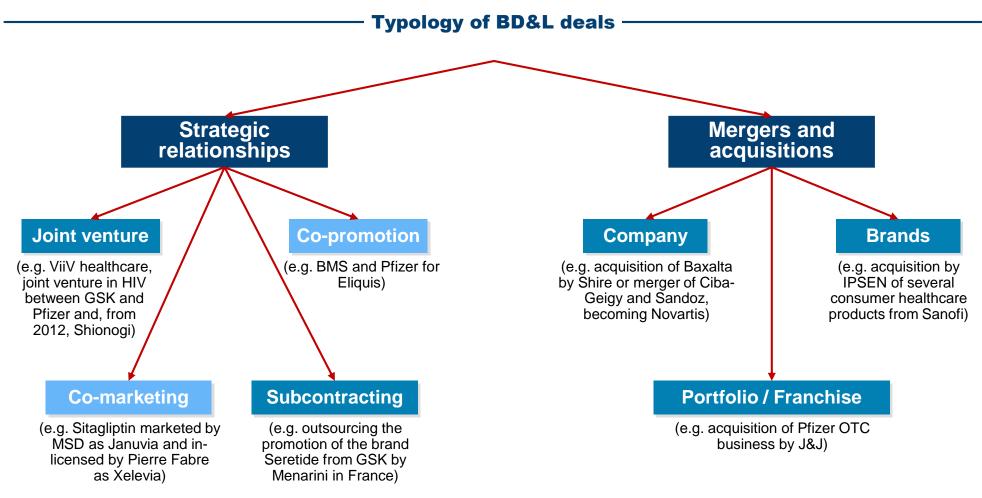
resulting in degradation or destruction of the capabilities that were sought

Note: Capabilities can grow internally by systematizing their replication through the formulation and the implementation of SOPs²

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



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

- 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

Co-promotion

- Higher recognition as a result of resource concentration
- Cost-sharing with co-promoter
- Unique product positioning
- Leverage of partner's reputation

Cons

Pros

- Higher promotional spending (absence of shared costs)
- Competition between co-marketers (cannibalization)

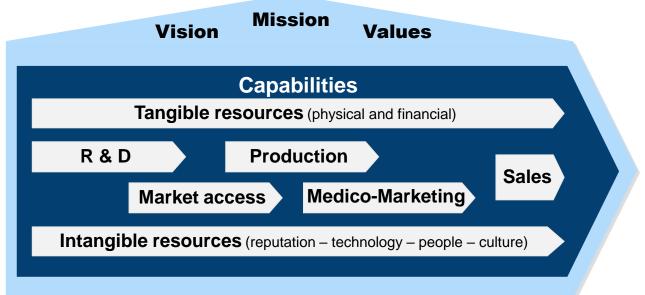
- Difficulty in ascertaining sales credits and reward criteria
- Increased management complexity
- Increasing number of physicians limiting call pressure per brand per annum

Sources: Smart Pharma Consulting analysis

Business opportunity assessment requires to analyze attractiveness / key success factors by strategic segment and corresponding competitive advantage

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)

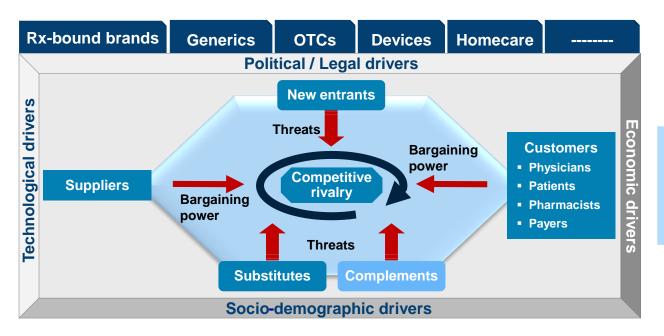
Ambition & Strategic priorities

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

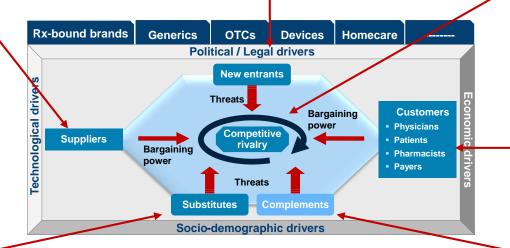
Sources: Adapted by Smart Pharma Consulting from M. Porter 2008

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, API¹ or DDS² 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



- 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

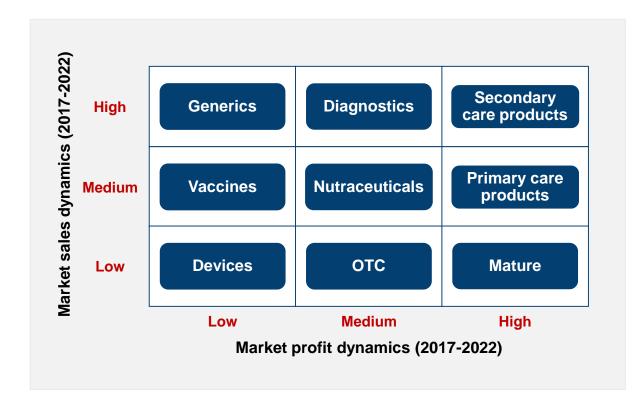
- Competitive rivalry intensifies with:
 - Price discounting
 - New formulations, indications, products
 - Commoditization
 - Service improvement
 - Promotional costs
- Higher pressure from groups of customers:
 - Patient advocacy groups asking for better services
 - Buying groups have increased the distributors' leverage
- Complementary products or services include:
 - Devices (e.g. BGM³)
 - 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 analysis

Key success factors by strategic segment where 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

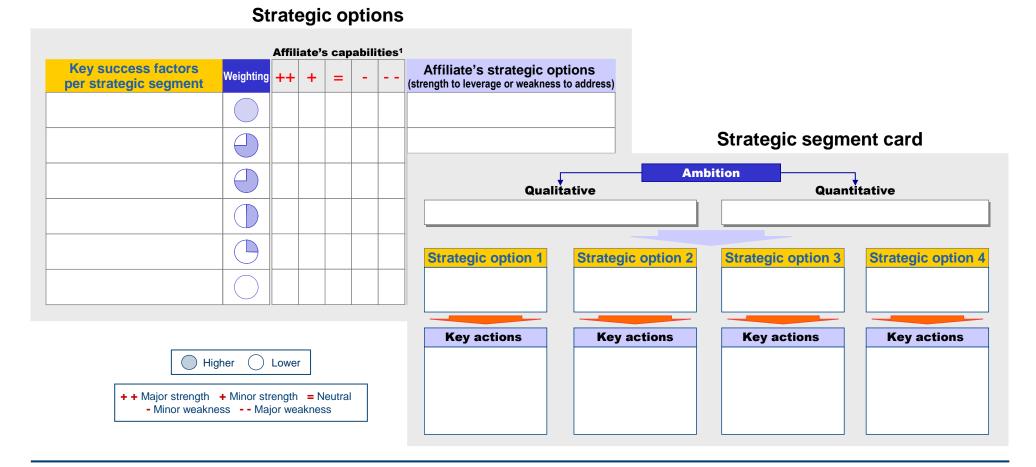
Affiliate assessment **Environment assessment Opportunities Strengths Threats** Weaknesses What environmental changes in targeted strategic What are the affiliate's strategic resources and segments may favor / hinder affiliate's performance? competences relative to its competitors? Macro-environmental drivers (PEST factors) Resources (tangible and intangible)¹ **Capabilities** Competences (skills and abilities) Competitive forces (5+1 forces framework) **⇒** Advantages / disadvantages vs. competitors ⇒ Favorable / unfavorable impacts on stakeholders resulting from environmental changes ⇒ Means to leverage growth / profit reservoirs ⇒ Growth / profit reservoirs **Advanced SWOT** Relative Relative **Opportunities Threats** importance importance Relative Relative **Strengths** Weaknesses importance 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



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?

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?

Feasibility

 The feasibility is concerned with the capabilities of a company to implement a strategy that has been envisaged

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)

Tools

- Return: expected benefit measurement:
 - Profitability (ROCE¹, payback, DCF²)
 - 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)

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

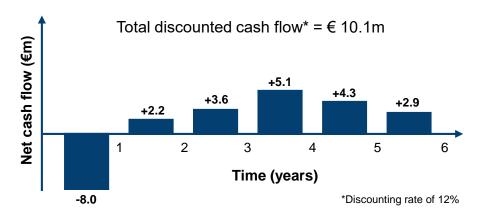
Evaluation of business development opportunities (2/2)

Examples of acceptability criteria

Mustrative

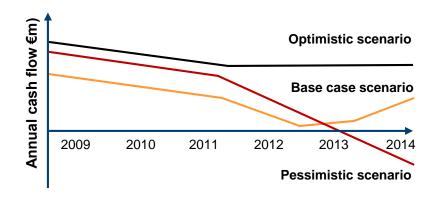
Return: Discounted cash flows (DCF)

- The DCF is an investment appraisal technique that can be used for business development opportunities (e.g. M&A, comarketing, 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



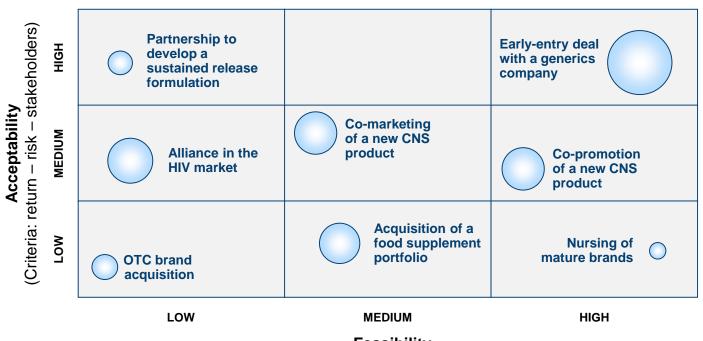
Sources: Adapted by Smart Pharma Consulting from G. Johnson 2008

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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





Bubble size



Suitability

(Criteria: ranking – decision tree – scenarios)

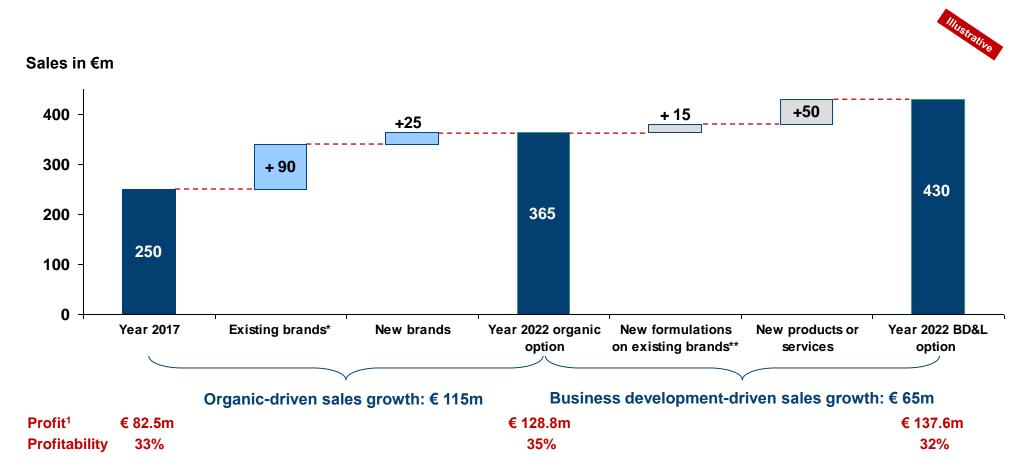
Feasibility

(Criteria: cash flow – resources – competences)

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





Sources: Smart Pharma Consulting analysis

* 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

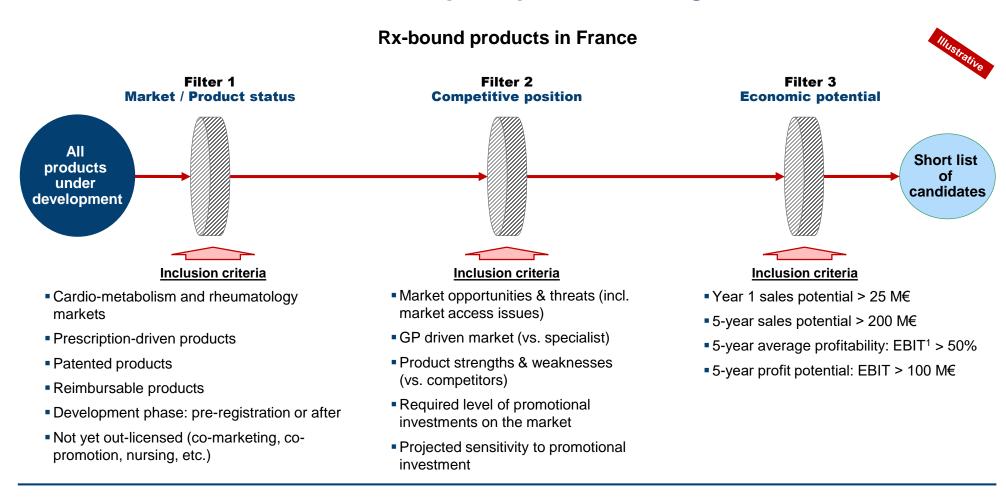
Process to approach target companies -

Select target company / owne	Develop strategy to approach targets	Develop negotiation strategy	Establish negotiation team	Conduct negotiations	Assess targets in detail	7 Create joint memorandum of understanding
 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 taken into account during the negotiation phase) 	 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 	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	Assemble a "core team": - "Business Development champion" - CEO, CFO Assemble "support team": - Strategy and marketing - Medical - Production - Financial, legal, HR, etc. Involve a 3 rd party, as relevant (bankers) Appropriately brief each team member on his specific role	 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 "winwin" agreement 	 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 	 Negotiation wrapup 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 analysis

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



Sources: Smart Pharma Consulting 1 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 Filter 3 Filter 1 Filter 2 Market / Product status **Competitive position Economic potential** AII **Short list** marketed of candidates products Inclusion criteria Inclusion criteria Inclusion criteria Cardio-metabolism and Market opportunities & threats (incl. ■ 2017 sales > 20 M€ rheumatology markets market access issues) 2017-2022 sales evolution: CAGR¹ > 5% Prescription-driven products GP driven market (vs. specialist) • 5-year sales potential > 100 M€ Patented products Product strengths & weaknesses ■ 5-year average profitability: EBIT² > 40% (vs. competitors) Reimbursed products • 5-year profit potential: EBIT > 40 M€ Required level of promotional Not yet out-licensed (co-marketing, investments on the market co-promotion, nursing, etc.) Projected sensitivity to promotional investment

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 -

EU status

Registered (launched in UK

Under development products

Mustrative	
elive	

Molecule	Brand name	Originator	Licensing agreement	Mode of action	Indicati	ions
Vildagliptin	GALVUS	Novartis	No	DPP IV antagonist	Type 2 dial	betes
Saxagliptin	ONGLYZA	BMS	AZ (worldwide) Otsuka (Japan)	DPP IV antagonist	• Type 2 dia	N
Azimilide	STEDICOR	P&G US	Mitsubishi Tanabe- Asia	Potassium channel blocker	• Arrhythmi:	Ro
Lercanidipine + enalapril	ZANERIL ZANITEK	Recordati	Meda (G), Solvay (Austria	ACEI+ CCB	Hypertens	Pi
Olmesartan amlodipine	-	Daiichi- Sankyo	TBD	ARAII+CCB	Hypertens	E
Tolvaptan	SMASKA	Otsuka	No	Vasopressin 2 antagonist		lb
Aliskiren	RASILEZ	Novartis	No	Renin inhibitor	Hypertens	-
Prednisone CR	LODOTRA	Nitec & SkyePharma	Merck-Serono	Immuno- depressant	Rheumatc	Н
Golimumab	-	Centocor (J&J)	Schering Plough (excl. US)	Anti-TNF alpha	Spondylar Psoriasicr Rheumatc	Mo

Marketed products

Molecule	Brand name	Originator	Therapeutic class	Sales 2017	CAGR 2017-2022 ¹	Sales 2017-22	Promotional spend (2017)	Profits 2017-22
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€

Sources: Adisinsight, Septembre 2008 – GERS data 2008 – Analyses Smart Pharma Consulting

¹ Compounded annual growth rate

"ID" cards collecting key facts, figures and analyses related to each candidate product are particularly useful before approaching their respective owner

	сха	mpie or iden	tity card for s	nort-listed can	ididate pro	ducts ——		
Molecule: Brand name: Originat			ator: Therapeutic class:					
	Produ	ct attributes		SWOT analysis				
Sales 2017 CAGR ¹ 12-17 Sales 12-17 Promo spend ² Profits 12-17			Market Opport	unities	Market	threats		
M€	%	M€	M€	•		•	· <u> </u>	
Indications	Side effects	s S	Status	•		•		
1.	1.	• Patent expiry	v date:	•				
		 Reimbursem 	ent level:%	Product stre	ngths	Product w	veaknesses	
2.	2.	• Price: a:	b:	•		•		
3.	3.	Promotional sensitivity:		•		•		
				•		•		
			Recommandations					
Value for the acq	uirer Val	lue for the owner			Preferred t	ypes of deals		
			X GO	X Exclusive market	ing license	X Co-marketing	Co-promotion	
			NO GO	Non exclusive ma	arketing license	Nursing	Acquisition	
					Other:			

Sources: Smart Pharma Consulting

Note: = hig



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 similar to 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 analyses

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 analyses

Smart Pharma Consulting has helped pharma companies and private equity companies assess business opportunities in various therapeutic areas

Experience & 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 midsized pharma companies or for private equity firms:
 - Pharmaceutical companies such as:

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ALK – Amgen – Chiesi – Esteve – Ethypharm (CMO/Drug delivery company) – IPSEN – NextPharma (CMO) – Nordic Pharma – Polymedic (CMO) – Pierre Fabre – Roche – Schering-Plough – Servier – Synerlab (CMO) – Schwabe – UCB Pharma
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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 analyses

Smart Pharma Consulting has carried out several business development projects & Strategic Due Diligences on numerous international markets

Examples of Business Development Projects & Strategic Due Diligences

- **2017** Value assessment of a new respiratory product in a co-promotion perspective
- 2017 Search of a worldwide pharma partner to market a dermatological product range
- **2016** Screening of target companies involved in the OTC business
- 2015 Evaluation of a "therapeutic" vaccine in HIV on EU5 and US markets
- **2015** Value assessment of a new product in osteoporosis in EU5 markets
- 2015 Preparation of a value dossier for "super-generics" and screening of mid pharma companies for licensing-in agreements
- 2015 Opportunity assessment of products to be acquired or in-licensed at the European level
- **2014** Evaluation of an existing brand in lipodystrophy
- **2014** Evaluation of the potential of a new treatment for psoriasis in the five largest European markets
- **2014** Evaluation of the potential of a new treatment for severe osteoporosis in seven European markets
- 2013 Identification of primary care developing and existing product candidates for the French market
- **2012** Identification of hospital and secondary care developing and existing product candidates for the French market
- 2010 Estimate of the sales potential of an oncology portfolio in: Iran, Iraq, Belorussia and Kazakhstan
- 2008 10-year sales forecasts for a leading anti-diabetic drug in ten countries, including the USA
- 2007 Sales potential estimate for an ophthalmology franchise in four major European countries
- **2007** Sales potential estimates for a biosimilar in six European countries
- 2007 5-year sales forecasts for a range of products in endocrinology in eight European countries
- 2006 Strategic Due Diligence estimating the potential of a 10-product portfolio in Spain, USA, France and UK

Sources: Smart Pharma Consulting analyses

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Consulting firm dedicated to the pharmaceutical sector operating in the complementary domains of strategy, management and organization

The Smart Pharma Publications

- Our publications have in common to:
 - Be well-documented and propose in-depth analyses
 - Share innovative concepts, methods and tools

The Best of Smart Pharma 2017

- This e-book is the "best-of" our 2017 publications which have been dedicated to the development of executives
- Thus, we have published:
 - 2 Business reports:
 - The French healthcare system and pharma market
 - The French generics and biosimilar markets
 - 2 position papers in the "Smart Manager Series":
 - Be a Smart Manager, not just a good one
 - Time optimization
 - 5 position papers in the "Best-in-Class Series":
 - MSLs
 - Pharma Marketers
 - Medical Reps
 - Hospital KAMs
 - Pharma BD&L

Smart Pharma Consulting Editions



- Besides our consulting activities which take 85% of our time, we are engaged in sharing our knowledge and thoughts through our:
 - Publication of articles, booklets, books and business reports
 - Teaching and training activities
- Smart Pharma Consulting has published;
 - 17 business reports regarding:
 - The French healthcare system and pharma market
 - The French generics and biosimilar markets
 - The French pharma distribution
 - The French OTC market
 - The market access and drug valuation
 - The global biosimilars drugs market
 - The best performing pharma companies
 - The pharma digital marketing
 - 42 articles dedicated pharma business issues
 - >60 position papers incl. Concepts, Methods and Tools

Best regards,

Jean-Michel Peny