Smart Pharma
CONSULTING

The French Biosimilars Market

Market Insights

Situation Analysis

&

2027 Perspectives

February 2024

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Leveraging its expertise and experience re. biosimilars market specificities, Smart Pharma Consulting has analyzed the current French situation and estimated its likely evolution

Introduction

Smart Pharma Consulting expertise regarding the biosimilars market

- Strategic and management missions carried out regarding the biosimilars business of 12 pharma companies in France and abroad:
  - Accord Healthcare – Amgen – Biogen – Fresenius Kabi
  - Gedeon Richter – Hospira – Mundipharma
  - Organon – Pfizer – Sandoz – Teva – Viatris
- Position papers and reports published about biosimilars:
  - The French Healthcare System & Pharmaceutical Market (2012 – 2013 – 2014 – 2015 – 2017)
  - The Global Biosimilars Market Outlooks (2015)
  - The French Generics Market (incl. Biosimilars) (2018)
  - French Biosimilars Market – Key success factors (2019)
  - The French Pharma Market Prospects (2019 – 2021 – 2023)

Context – Objective – Methodology

- As it has been the case with generics over the past 25 years, the French government intents – cautiously – to facilitate the development of the biosimilars market by:
  - Encouraging physicians' prescriptions with incentives
  - Expending the number of substitutable biological drugs by retail pharmacists
- This position paper analyzes the current biosimilars market situation with a differentiation of the hospital and retail segments and…
- … estimates their 2027 gross and net sales perspectives
- To do so, the consultants have capitalized on their long experience and strong expertise re. this strategic segment

Sources: Smart Pharma Consulting

So far, the development of the biosimilars market has been mostly driven by the prescription of physicians which is encouraged by health authorities and certain hospital managers

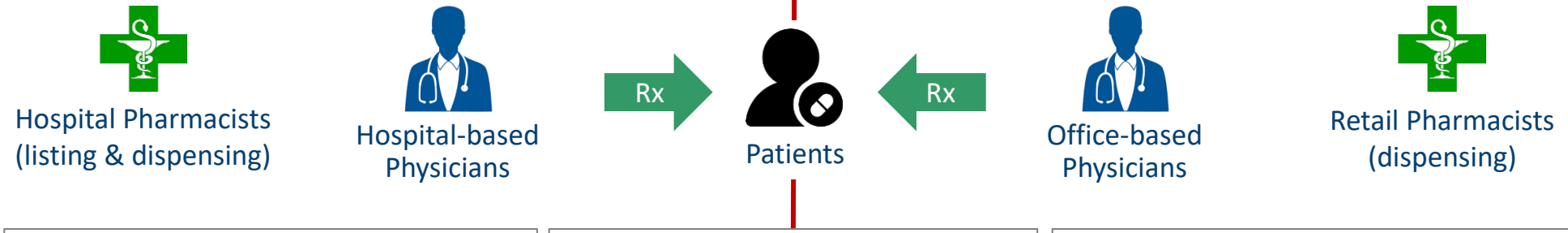
Stakeholders involved in the French biosimilars market

Health Authorities & Payers[1]

- Health authorities and payers have introduced a series of measures to convince hospital and office-based physicians to prescribe more biosimilars, either as an initial treatment or as a switch

Hospital market segment

Retail market segment



- Hospital pharmacists play a key role in:
  - Listing biosimilars
  - Purchasing biosimilars, being responsible for calls for tenders

- Physicians' Rx of biosimilars vary according to the products
- Patients and PAGs still wary re. the Rx of biosimilars

- Retail pharmacists are divided re. the substitution of biological drugs…
- … which is only allowed for filgrastim and pegfilgrastim as of February 2024

Sources: Smart Pharma Consulting

[1] *National Health Insurance Fund*

The French biosimilars market is split in two different segments that require, from pharma companies, different strategies, tactics and organizational models to succeed

Specificities of biosimilars market segments

Hospital market segment		Retail market segment
▪ Prescribed, purchased and delivered at hospital (e.g., bevacizumab, infliximab IV, rituximab, trastuzumab)	Definition	▪ Prescribed by hospital and/or office-based specialists, purchased and delivered by retail pharmacies only (e.g., follitropin alfa, somatropin) or by hospital pharmacies too (e.g., epoetin, filgrastim)
▪ Free pricing for drugs included in the T2A system[1] ▪ Responsibility tariff set by the CEPS[2] at -30% for drugs on-top of the T2A list[3] (e.g., infliximab IV, rituximab)	Pricing	▪ Ex-factory price initially set by the CEPS at -40% below the price of the original biologic before its price is cut, following biosimilars entry
▪ Mainly purchased through tenders or to a lower extent through negotiated agreements ▪ Possibility to grant rebates to hospitals ▪ Strong price pressure	Purchasing	▪ The level of rebates to retail pharmacies is legally limited to a maximum of 2.5% of the ex-factory price which is in general granted by wholesalers[4] ▪ Limited price pressure on retail sales
▪ Medical activity carried out by MSLs to reassure prescribers about the quality of the biosimilars ▪ Key account management activity carried out by KAMs to win tenders and set up a follow up plan	Medico-marketing activities	▪ Medical activity carried out by MSLs to reassure prescribers about the quality of the biosimilars ▪ Promotional activity carried out by marketers and med reps to be prescribed to in- and out-patients

Sources: Smart Pharma Consulting analyses

[1] Activity-based costing system similar to a diagnosis-related group-based funding system – [2] Drug pricing committee – [3] Includes the most expensive drugs for which the CEPS sets a maximum reimbursed price called "Responsibility tariff" which is 30% (for hospital-only drugs) below the price of the original biologic before its price is cut, following biosimilars entry – [4] Pharma companies are not used to giving discounts to retail pharmacists for their biosimilars

Biosimilars prices on the hospital market are either free or set by the drug pricing committee (CEPS), while on the ambulatory market they are always regulated

Biosimilars price regulation – The CEPS Doctrine

Hospital market segment

- If the reference biological drug is included in the T2A (activity-based costing system), thus its price, as well as its corresponding biosimilars ones, will be unregulated
- If the original biologic is on:
  - The top of T2A hospital drug list[1] or
  - The reassigned drug list[2]

  The CEPS applies the following pricing principles, when the first biosimilar enters the market:
  - A 30% price cut for the original biologic and its biosimilars
  - 24 months and 48 months later, 10% to 30% additional price cuts depending on differences observed between actual net prices and prices set by the CEPS

Retail market segment

- At the entry date of biosimilars:
  - The CEPS sets the price of biosimilars 40% below the price of the originator
  - The original biologic is imposed a price cut of 20%
- 24 months and 42 months after the entry of the first biosimilar:
  - Additional price cuts from 5% to 15% aimed at price convergence…
  - … and depending on the respective market shares of the original biologic and of its biosimilars

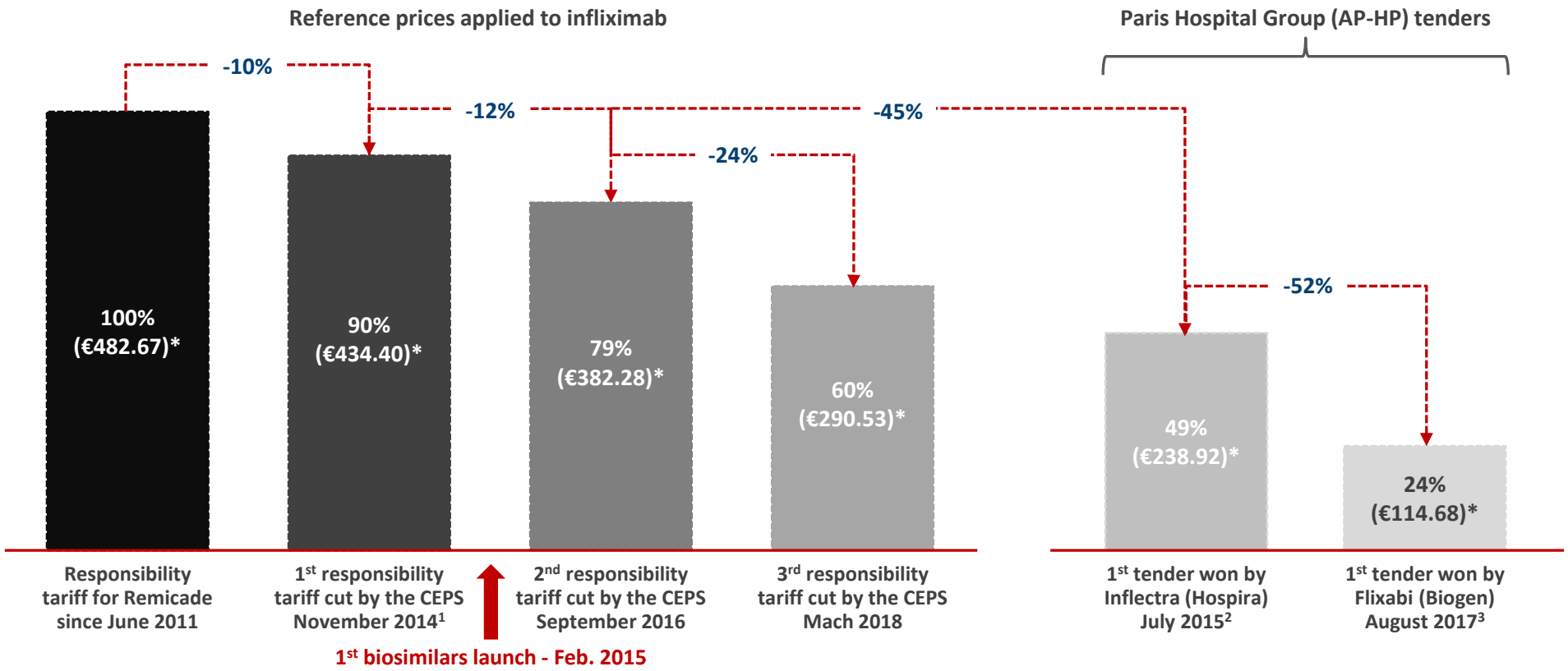
  will be imposed

Sources: CEPS Activity Reports – LEEM – IRDES – Decree of March 25th, 2016, regarding modalities of inscription to the on top of T2A list – Smart Pharma Consulting analyses

[1]This list includes expensive products which are funded on top of the hospital service tariffs (hospital budget) to improve patients access to innovation – [2] These products, which are on the retrocession list, can be sold to outpatients by the hospital pharmacies and, in such a case, are funded by the National Health Insurance Fund

2.5 years after the entry of the first biosimilars, the net price of infliximab (ex-factory price minus hospital rebates) has been reduced by ~76%

Hospital biosimilars pricing: Example of infliximab (Remicade)



Note: Infliximab being on the top of T2A hospital drug list, has a maximum reimbursed price called "Responsibility tariff" set by the CEPS (drug pricing committee) – As of February 2024, the responsibility tariff is set at 109.9€*

** Per unit*

Sources: Desk research, APM News, Business Intelligence, Smart Pharma Consulting analyses

[1] Applied to all infliximab, including biosimilars – [2] In 2015, the average level of discounts for biosimilars was estimated at 30% at the national level – [3] This discount rate was estimated to reach 50% in 2018 for the original biologic and the biosimilar manufacturers. This explained why the penetration of biosimilars was still quite limited 3.5 years after biosimilars entry

Substitution of biosimilars by retail pharmacists is allowed for two products (filgrastim and pegfilgrastim) since April 2022

Regulations related to biosimilars

Biosimilar drugs[1]

- A biosimilar drug is any biological drug that has the **same qualitative** and **quantitative** composition of **active substance** and the same pharmaceutical **form** as an original biologic…
- … but does not fulfill the conditions for being regarded as a generic due to differences related to **raw material variability** or **manufacturing processes** requiring the achievement of additional **preclinical** and **clinical data** under regulatory conditions…
- … demonstrating that the biosimilar:
  - Is **similar** to the original biologic
  - **Does not differ** significantly from the originator in terms of **quality**, **efficacy** and **safety**

Inter-changeability	▪ The ANSM has specified in **May 2016** that **inter-changeability** was **possible** between biologic drugs belonging to the **same similar biologic group**
Biosimilar register	▪ The ANSM[2] has created in 2017 **similar biologic groups**, each of them defined by an **original biologic** and its corresponding **biosimilars**, listed by brand name
Biosimilar substitution right	▪ France **allowed** the **substitution** of biosimilars, in **December 2013**, but in the absence of implementation decrees, this law has never been implemented ▪ After having been abrogated in 2020, the substitution right has been reintroduced in 2022, with a decree authorizing the substitution by retail pharmacists of 2 products: **filgrastim** and **pegfilgrastim** ▪ The Article 54 of the PLFSS 2024 stipulates that **two years after** the publication of the **reimbursement** listing of the **first biosimilar**, in a given group, a **decree** will **authorize** the **substitution by retail pharmacists** within this group, **unless the ANSM issues** an **opinion to the contrary** before the end of these two years ▪ **Substitution** is possible, provided: – The biological products belong to the **same similar biologic group** – The **prescriber** has **not explicitly prohibited**, in writing, the substitution of the prescribed drug – The **retail pharmacist** has **informed the prescriber, the patient** and **recorded the details** of the biosimilar delivered – The biological product delivered **does not induce higher costs**[3]

Sources: Public Health Code – Official Gazette – ANSM – Smart Pharma Consulting analyses

[1] A specific legal framework for biosimilars was introduced in Europe on March 31st, 2004, and the first biosimilar was authorized by the European Commission in April 2006 – [2] "Agence nationale de sécurité du médicament": National Agency for the Safety of Medicines and Health Products – [3] For the National Health Insurance Fund

Health Authorities are strongly determined to accelerate the penetration of biosimilars, but remain relatively cautious to avoid any potential public health issue

Health Authorities measures to boost biosimilars

2017 – Ministerial Order

- The DGOS[1], DSS[2], DGS[3] and the UNCAM[4] published an order on October 12th, 2017, to require the Regional Health Agencies (ARS) to promote the use of biosimilar drugs
- To do so, ARS are invited to:
  - Inform patients about biosimilars
  - Harmonize prescribers' practices in favor of biosimilars
  - Help hospitals organize tenders as soon as biosimilars are on the market
  - Develop financial tools to measure the savings related to biosimilars
- The DGOS has indicated that physicians are authorized to switch one biological drug by another similar one during a treatment

LFSS 2018 – Focus on the CAQES

- Since January 2018, CAQES[5], signed between hospitals, ARS and the local branch of the National Health Insurance Fund, have set prescription targets for biosimilars

Objective

- Achieve a 70% biosimilars penetration in units at hospital, at national level[6]

Implementation

- Promotion of biosimilars prescriptions in the reference list
- Remuneration of hospitals: 20% of the price difference between the original biologic and its biosimilars

LFSS 2018 – Article 51

- In August 2018, the Ministry of Health launched a call for application to foster the hospital prescription of biosimilars delivered in retail pharmacies

Objective

- 15-points increase in Rx rates in the 45 experimental vs. non-experimental hospitals

Implementation

- Duration: 3 years
- Scope: etanercept and insulin glargine at national level[7]
- Remuneration of hospital services: 30% of the price difference between the original biologic and its biosimilars

ROSP[8] (since 2017)	▪ Bonus program encouraging office-based physicians to comply with "best prescribing practices", and thus to prescribe the insulin glargine biosimilar
9th amendment of the medical Convention (2021)	▪ Incentives for office-based physicians to Rx seven biosimilars through initiations or switches: adalimumab, enoxaparin, etanercept, follitropin alpha, insulin aspartate, ranibizumab and teriparatide ▪ Maximum threshold incentive per office-based physician: € 7,000 p.a.

Sources: Decree related to CAQES and setting quality and efficiency reference objectives – Smart Pharma Consulting analyses

[1] Directorate of Health Care Supply – [2] Directorate of Social Security – [3] Directorate General for Health – [4] National Union of Health Insurance Fund – [5] Contract for healthcare quality and efficiency enhancement. For 2023-2024 new CAQES have been set and objectives are now determined at regional levels only – [6] In December 2017, the government had set the global (hospital and retail markets) objective of a 80% biosimilar penetration by 2022 – [7] Adalimumab has entered in the scope of the experiment in the second quarter 2019, involving 40 hospitals – [8] Remuneration on public health objectives for a better efficacy/cost ratio

The outcomes of the "Borne Mission", published in August 2023, made several recommendations to the government to boost the use of biosimilars in the retail market

" Borne Mission"[1] recommendations re. the retail biosimilars market

Current situation

- Penetration: 80% on the hospital market but only 31% on the retail market[2]

Objective

- To actively boost the use of biosimilars on the retail market – while considering patients' expectations – to reach a level similar to the hospital one

Recommendations

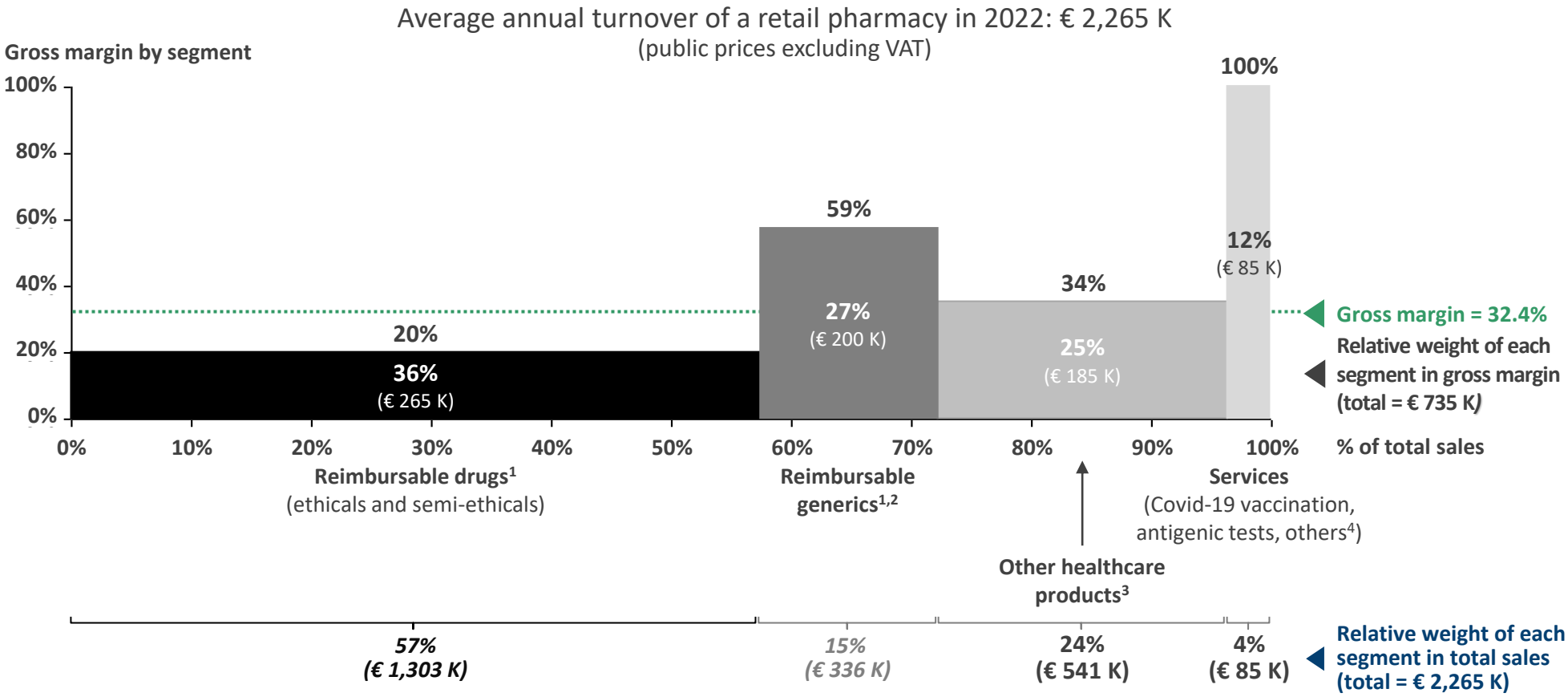
- Initiations by GPs could be accelerated through a binding mechanism
- Substitution should be decided on a case-basis, depending on the disease, the patient, the traceability
- Fees paid to retail pharmacists should come from a reallocation of incentives yet given for generics, and capped
- Extension of the substitutable biosimilars list decided by the ANSM in conjunction with the Leem, physicians' associations and PAGs[3]
- The biosimilars margin made by retail pharmacists should be equalized to that of originators until the penetration objective is reached
- Retail pharmacists should be committed to ensure the continuity of delivered biosimilars, especially in case of chronic diseases
- Information campaign targeted at retail pharmacists first, and then at patients, should be launched
- Information of GPs about the existing financial incentives that will be maintained
- Previous consent to be obtained from the National Health Insurance Fund when a treatment is initiated by an original biologic although biosimilars are available

Sources: Report of the "Mission Borne" August 2023 – Smart Pharma Consulting analyses

[1] Properly named "Healthcare products regulation" mission – [2] Based on interviews carried out by the working group – [3] To do so, the ANSM has set up a working group in February 2024

The preferred generics suppliers, contributing to ~27% of retail pharmacies total gross margin, are the best positioned to take advantage of the substitution right granted to biosimilars

Weight of generics in the economic structure of retail pharmacies (2022)*



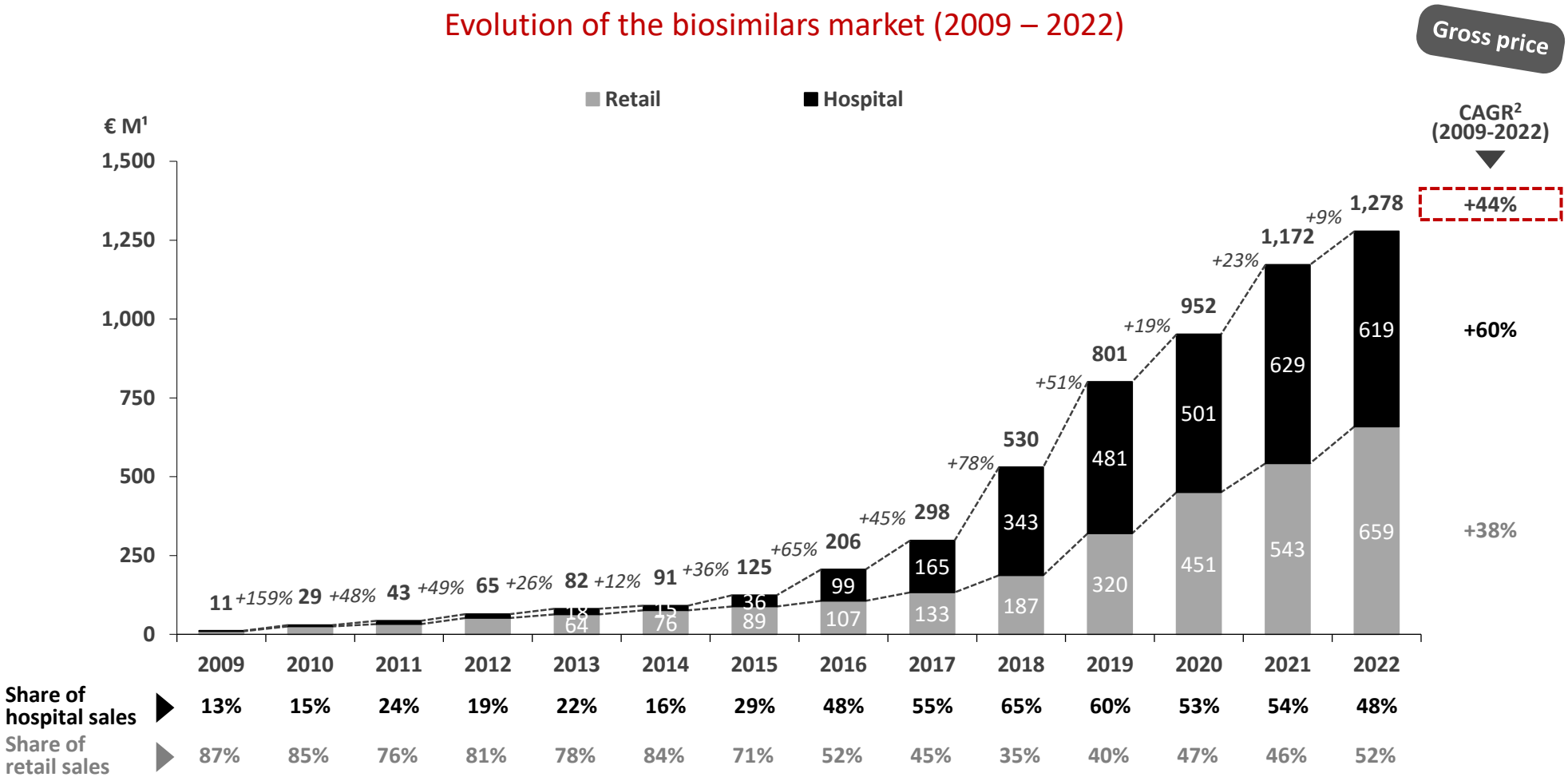
** Data estimated based on a sample of 1,807 retail pharmacies*

Sources : CGP Experts Comptables (2023) – External interviews with accounting experts (July 2023) – Smart Pharma Consulting estimates

[1] Including dispensing fee – [2] Including commercial cooperation with generic companies. The preferred generics supplier ensures ~90% of total segment, making him the 1st contributor to the retail pharmacies' profits – [3] Including OTC and "lifestyle" Rx products, medical devices, food supplements, para-pharmacy products, etc. – [4] Remuneration for services corresponding to public health objectives (ROSP), new missions, etc.

Biosimilars, whose first products were launched in France in 2007, achieved gross sales of € 1.3 B in 2022, almost equally split between the hospital and the retail market segments

Evolution of the biosimilars market (2009 – 2022)

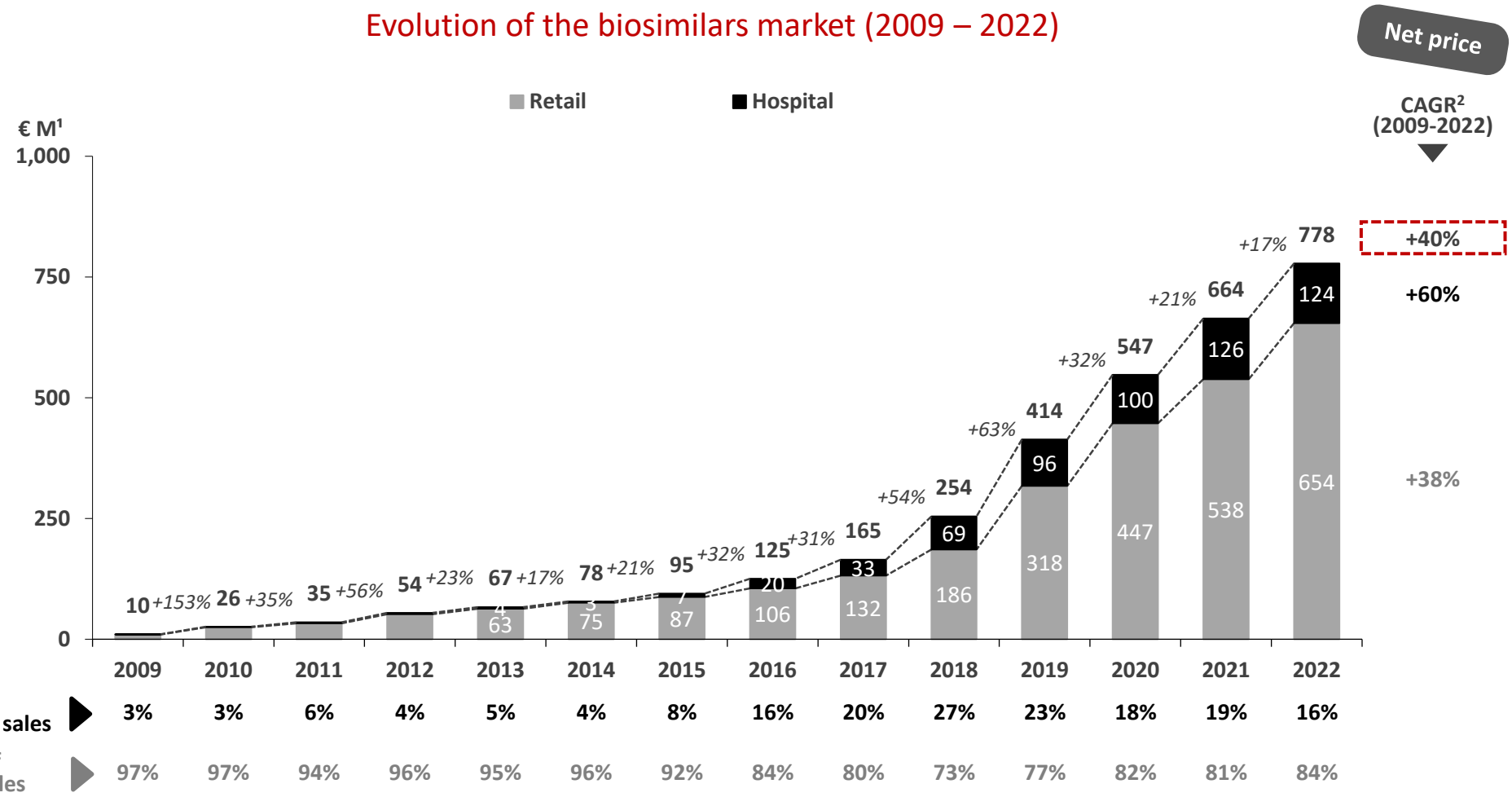


Sources: GERS – Smart Pharma Consulting analyses

¹ Ex-factory prices before rebates and taxes – ² Compound annual growth rate

After rebates, the biosimilars market reached € 778 M in 2022, with retail sales accounting for ~84% of the total market in net value, reflecting the low profitability of the hospital market

Evolution of the biosimilars market (2009 – 2022)

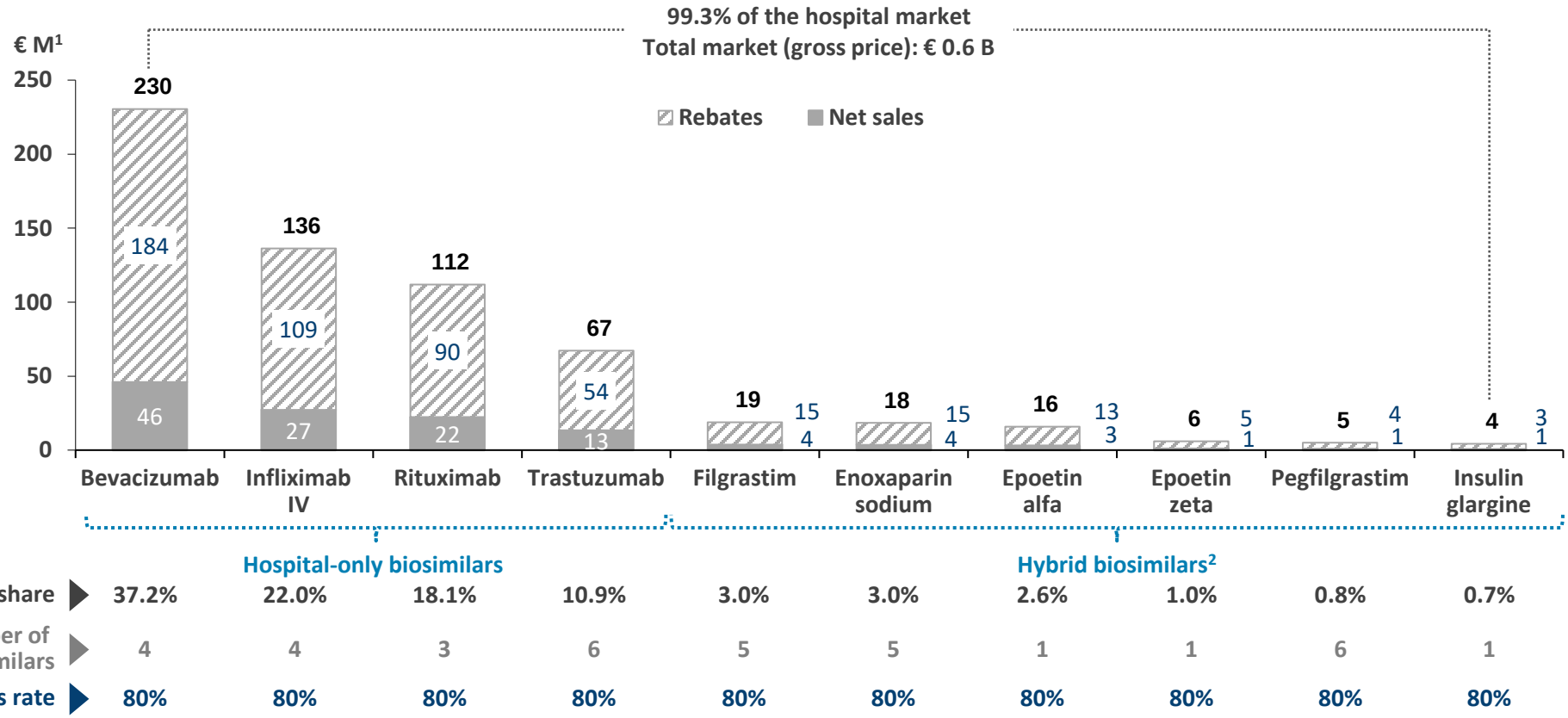


Sources: GERS – Smart Pharma Consulting analyses

¹ Ex-factory prices after estimated rebates and before taxes – ² Compound annual growth rate

In 2022, hospital-only drugs (i.e., bevacizumab, infliximab IV, rituximab and trastuzumab) accounted together for ~88% of the hospital biosimilars market in value

Top 10 INNs – Hospital biosimilars market (2022)



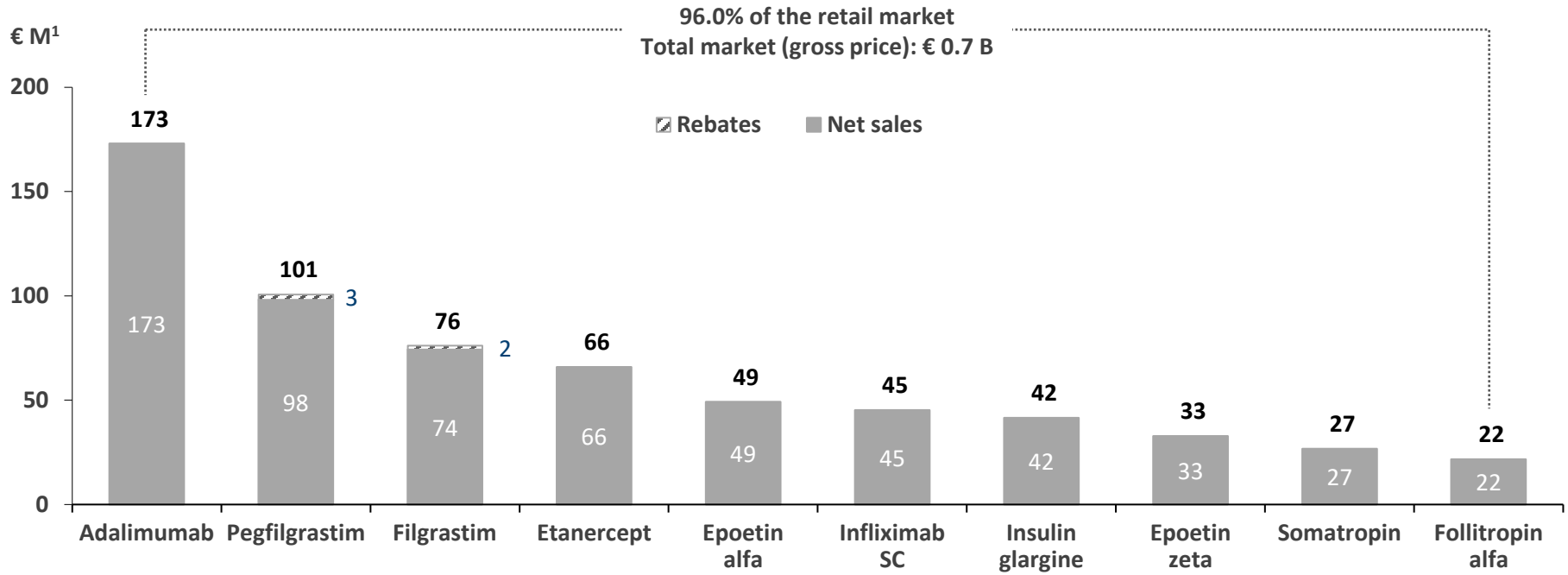
Note: Additional biosimilars available on the hospital market, as of February 2024: eculizumab, follitropin alpha, insulin aspartate, ranibizumab, somatropin, teriparatide

Sources: GERS – Assurance Maladie (Dec. 31, 2023) – Smart Pharma Consulting analyses

[1] Ex-factory prices before taxes – [2] Products delivered whether at hospital or in retail pharmacies

In 2022, adalimumab, pegfilgrastim and filgrastim led the French biosimilars retail market, accounting together for ~53% of the market in value

Top 10 INNs – Retail biosimilars market (2022)



Note: Additional biosimilars available on the retail market as of February 2024: enoxaparin sodium, insulin aspartate, ranibizumab, teriparatide

Sources: GERS – Assurance Maladie (Dec. 31, 2023) – Smart Pharma Consulting analyses

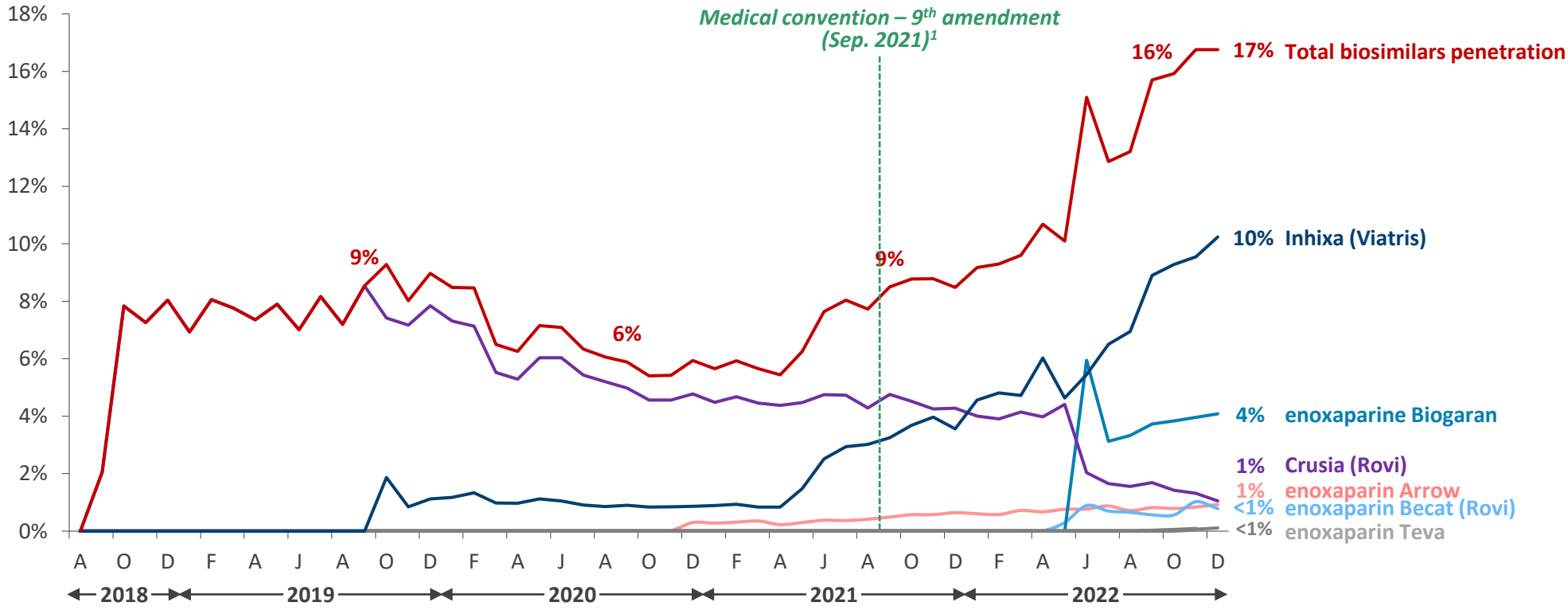
[1] Ex-factory prices before taxes

4 years after the 1st enoxaparin biosimilar entry, the biosimilar penetration remains limited to 17% with Viatris and Biogaran accounting together for 83% of the biosimilars market in Dec. 2022

Enoxaparin biosimilars penetration – (Hospital* & retails markets)

Biosimilars and generic market penetration
(as a % sales in volume)

Illustrative



** The hospital market segment accounted for ~51% of the volume sold in 2022*

Sources: GERS (December 2022) – Smart Pharma Consulting analyses

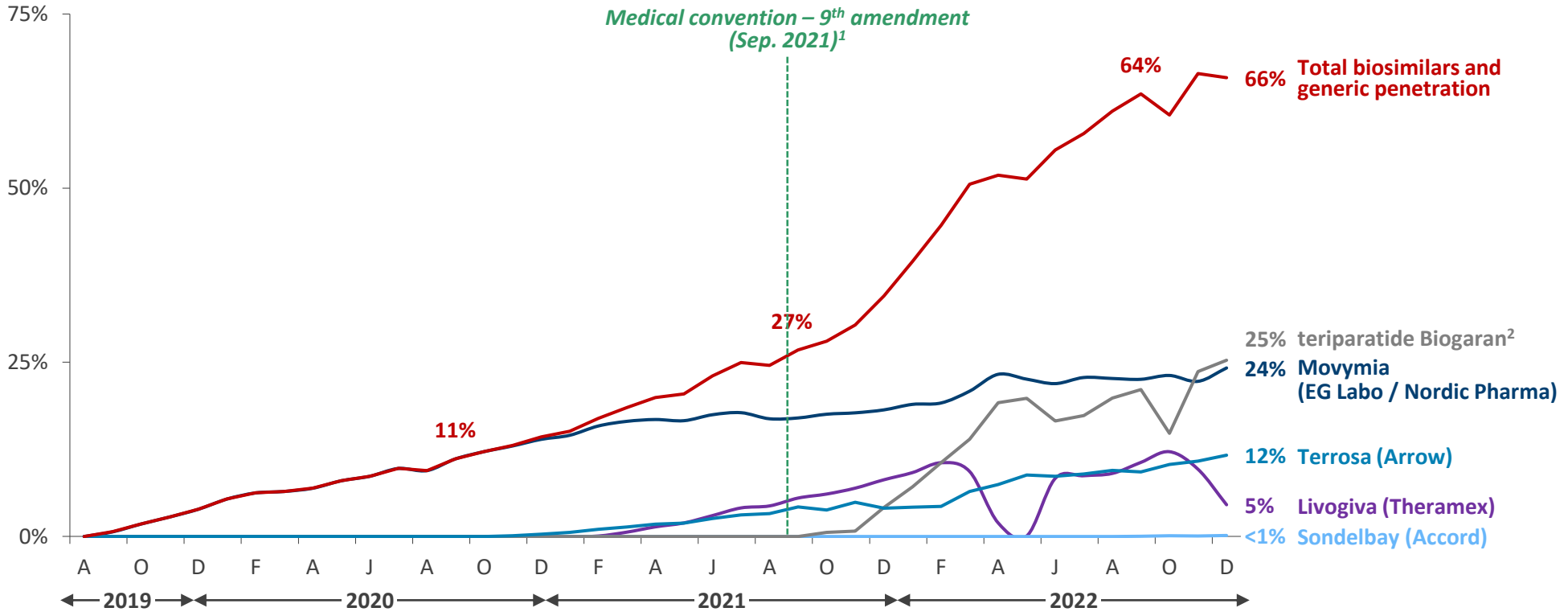
[1] Incentives introduced to encourage office-based physicians' prescription of enoxaparin biosimilars

~3 years after the 1st teriparatide biosimilar entry, biosimilar and generic penetration share reached together 66% in Dec. 2022, with Biogaran generic and Movymia leading the market

Teriparatide biosimilars and generic penetration – (Hospital* & retails markets)

Biosimilars and generic market penetration
(as a % sales in volume)

Illustrative



** The hospital market segment accounted for ~4% of the volume sold in 2022*

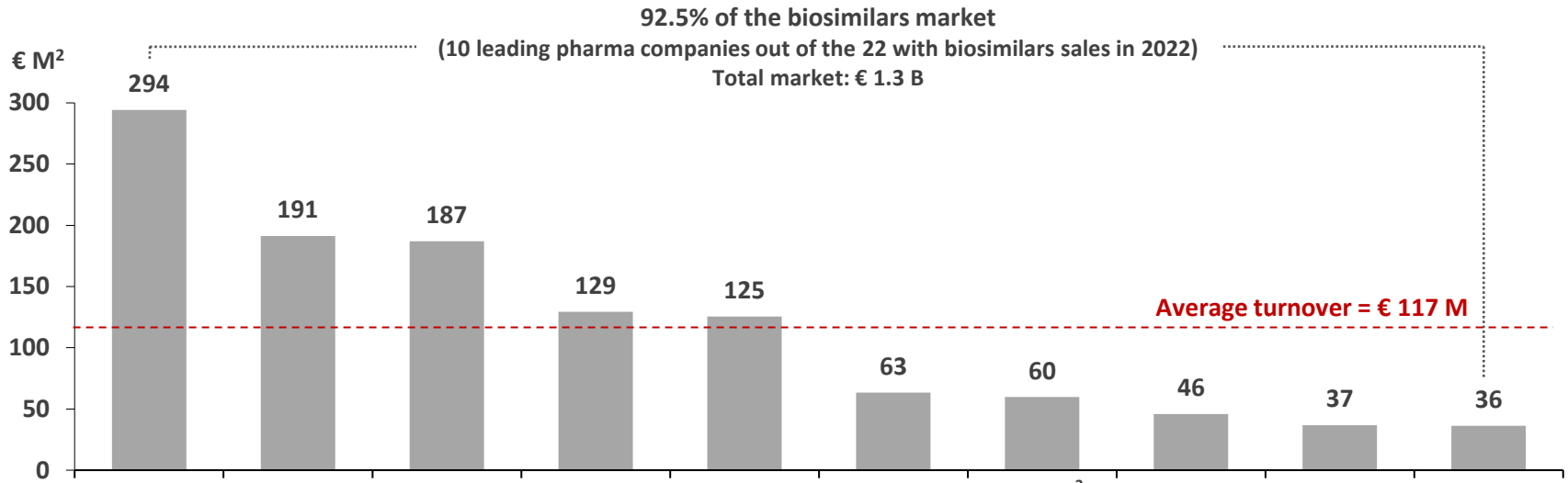
Sources: GERS (December 2022) – Smart Pharma Consulting analyses

[1] Incentives introduced to encourage office-based physicians' prescription of teriparatide biosimilars –
[2] Generic in shortage since beginning of 2023

In 2022, Sandoz, Amgen, Pfizer, Celltrion and Biogen generated individually more than € 100 M sales and represented together ~73% of the French biosimilars market in value

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

Gross price



	Sandoz	Amgen	Pfizer	Celltrion	Biogen	Organon	Viatris[3]	Lilly	Accord Healthcare	Mundipharma
Market share	23.0%	15.0%	14.6%	10.1%	9.8%	5.0%	4.7%	3.6%	2.9%	2.8%
Biosimilars weight in the portfolio	36.1%	23.2%	12.0%	100.0%	27.0%	21.7%	2.4%	8.1%	8.7%	65.4%
2021-2022 evolution	+16.85	+16.4%	-19.8%	-2.6%	+5.5%	+29.8%	+46.4%	+14.4%	+8.7%	-19.1%

Note: Additional companies operating on the French biosimilars market as of February 2024: Arrow, Biocon, Biogaran, EG Labo, Fresenius Kabi, Gedeon Richter, Rovi, Samsung Bioepis, Sanofi, Teva, Theramex, Zentiva

Sources: GERS – Assurance Maladie (Dec. 31, 2023) – Smart Pharma Consulting analyses

[1] Both retail and hospital sales – [2] Ex-factory price, before taxes and rebates – [3] Company founded in November 2020 by the merger of Mylan, Mylan Medical and Pfizer Upjohn activities. In December 2023, Viatris transferred its biosimilars portfolio to Biocon Biologics (excluding Inhixa, its biosimilar of enoxaparin sodium)

As of December 2023, 22 pharma companies were operating in the biosimilars market, of which six are R&D-based companies, with no or little business interactions with retail pharmacists

Biosimilars portfolio structure of pharma companies (2023) – (1/2)

Pharma Companies	Ada	Beva*	Eculi*	Enoxa	EPO	Etan	Fol α	Inflix*	Insul aspart	Insul glarg	Insul lispro	Ranib	Ritux*	Soma	Teri	Trastu*	Filgras	Peg Filgras	Total
Accord Healthcare															X	X	X	X	4
Amgen°	X	X	X													X			4
Arrow¤				X											X				2
Biocon Biologics	X[1]	X[1]				X[1]										X[1]		X[1]	5
Biogaran¤				X											[2]		X	X	3
Biogen°	X					X		X											3
Celltrion Healthcare	X	X						X					X			X			5
EG Labo¤	X	X										X			X[3]				4
Fresenius Kabi	X																		1
Gedeon Richter							X												1
Lilly°										X									1

** Hospital-only biological molecules – ° R&D-based companies with no or limited activity at retail pharmacies level – ¤ Generics companies with an important activity at retail pharmacies level*

Sources: GERS (December 2023) – Assurance Maladie (December 2023) – Smart Pharma Consulting analyses

[1] Business acquired from Viatris in December 2023 – [2] Biogaran markets a teriparatide version having the status of generics that can benefit from retail pharmacists' substitution – [3] In partnership with Nordic Pharma

Pfizer and Sandoz have the broader biosimilars portfolio, ahead of Biocon Biologics (which has recently acquired Viatris brands) and Celltrion Healthcare

Biosimilars portfolio structure of pharma companies (2023) – (2/2)

Pharma Companies	Ada	Beva*	Eculi*	Enoxa	EPO	Etan	Fol α	Inflix*	Insul aspart	Insul glarg	Insul lispro	Ranib	Ritux*	Soma	Teri	Trastu*	Filgras	Peg Filgras	Total
Mundi-pharma																		X	1
Organon°		X														X			2
Pfizer°	X	X			X			X					X			X	X	X	8
Rovi				X															1
Sanofi°									X		X[1]								2
Samsung Bioepis[2]			X[3]									X							2
Sandoz¤	X				X	X		X					X	X			X	X	8
Teva¤				X								X					X	X[4]	4
Theramex							X								X				2
Viatris¤	5	5		X		5										5		5	1
Zentiva¤		X																X	2
Total ▶	8	7	2	5	2	3	2	4	1	1	1	3	3	1	4	6	5	8	66

**** Hospital-only biological molecules – ° R&D-based companies with no or limited activity at retail pharmacies level – ¤ Generics companies with an important activity at retail pharmacies level***

Sources: GERS (December 2023) – Assurance Maladie (December 2023) – Smart Pharma Consulting analyses

[1] No sales as of December 2023 – [2] Samsung Bioepis was initially a joint-venture between Samsung Biologics and Biogen. Since 2022, it is fully owned by Samsung Biologics – [3] In partnership with Alloga – [4] Stimufend belonging to Fresenius Kabi but marketed by Teva – [5] Business transferred to Biocon Biologics in December 2023

The biosimilars market will be mainly driven by high sales original biologics' LOE[1], by new health authorities' measures to boost HCPs prescriptions and by additional substitutable biological drugs

Drivers & limiters of the French biosimilars market (2022 –2027)

	Drivers	Limiters
Authorities & Payers	▪ Biosimilars can increase access to treatments by: – Decreasing the overall treatment costs … – … and thus, increasing affordability (treatment of larger populations) ▪ Increasing body of evidence showing the reliability, efficacy and quality of biosimilars	▪ "Precaution principle": high cautiousness due to major public health issues in the past (e.g., blood transfusions contaminated with HIV, growth hormone case, sudden increase of Pure Red Cell Aplasia (PRCA) with Eprex[2]) ▪ Substitution permitted for only for two biological molecules since April 2022 (filgrastim and pegfilgrastim)
HCPs	▪ Biosimilars contribute to improve hospitals financial balance ▪ Objective of penetration by ARS[3] at hospital level (CAQES[4]) ▪ Financial incentives proposed by heath authorities for prescribing biosimilars at both hospital- and office-based levels ▪ For physicians, biosimilars are an alternative to list products (in case of shortage for instance)	▪ No guarantee of perfect equivalence with the original biologic (however, in practice, no specific nor significant issues have been reported following the prescription of biosimilars) ▪ Physicians have often established close relationships for many years with original biologic companies, which may slowdown the use of biosimilars by some of them
Patients	▪ None, except in cases where patients might have to bear (totally or partially) the cost of biological drugs[5]	▪ Preference for original biologic, in principle, especially in the case of serious and/or chronic diseases
Biosimilar companies	▪ Increasing number of biosimilar products per molecule accelerates market penetration and reduces hospital prices ▪ ~14 original biologics representing together € 2.6 B sales in 2022 will lose their market exclusivity by the end of 2027	▪ The intensification of competition drives hospital biosimilar prices down and jeopardizes biosimilar companies' profits… ▪ … making the market much less attractive for new market players

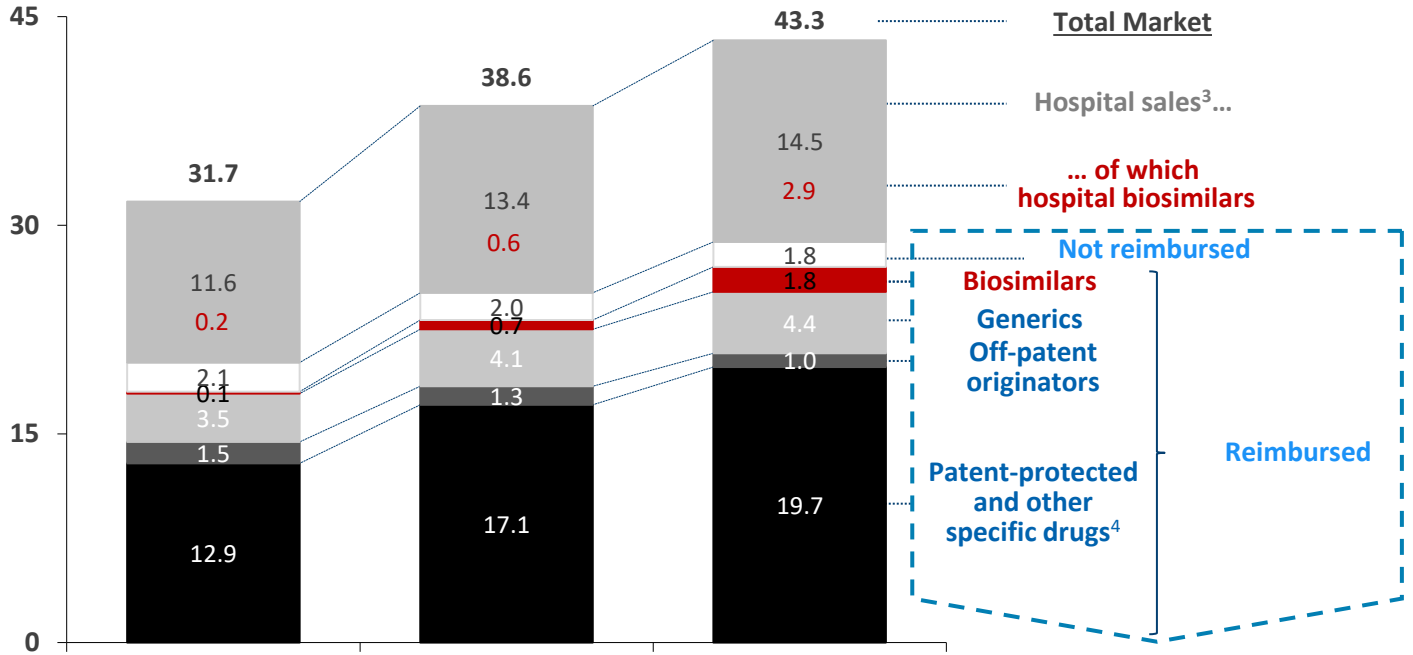
Sources: List of biologics patent expiring between 2022 and 2027, GreyB (2021) – Legifrance (2024) – Smart Pharma Consulting analyses based on external interviews

[1] Loss of exclusivity – [2] Increase in PRCA explained by an increase in the immunogenicity of Eprex following a formulation change in 1998, in which the human serum albumin stabilizer was replaced with polysorbate 80 and glycine – [3] Regional Health Agencies – [4] Contracts for healthcare quality and efficiency enhancement. In the new CAQES (2023 – 2024), there is no national objectives. However, at regional level, ARS can set prescription rate objectives for biosimilars – [5] Which does not apply to the French context, so far

The biosimilars market evolution over the 2022 – 2027 period – expressed in gross price – will strongly depend on patent expiries of original biologics and price cuts of the CEPS[1]

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

Gross price



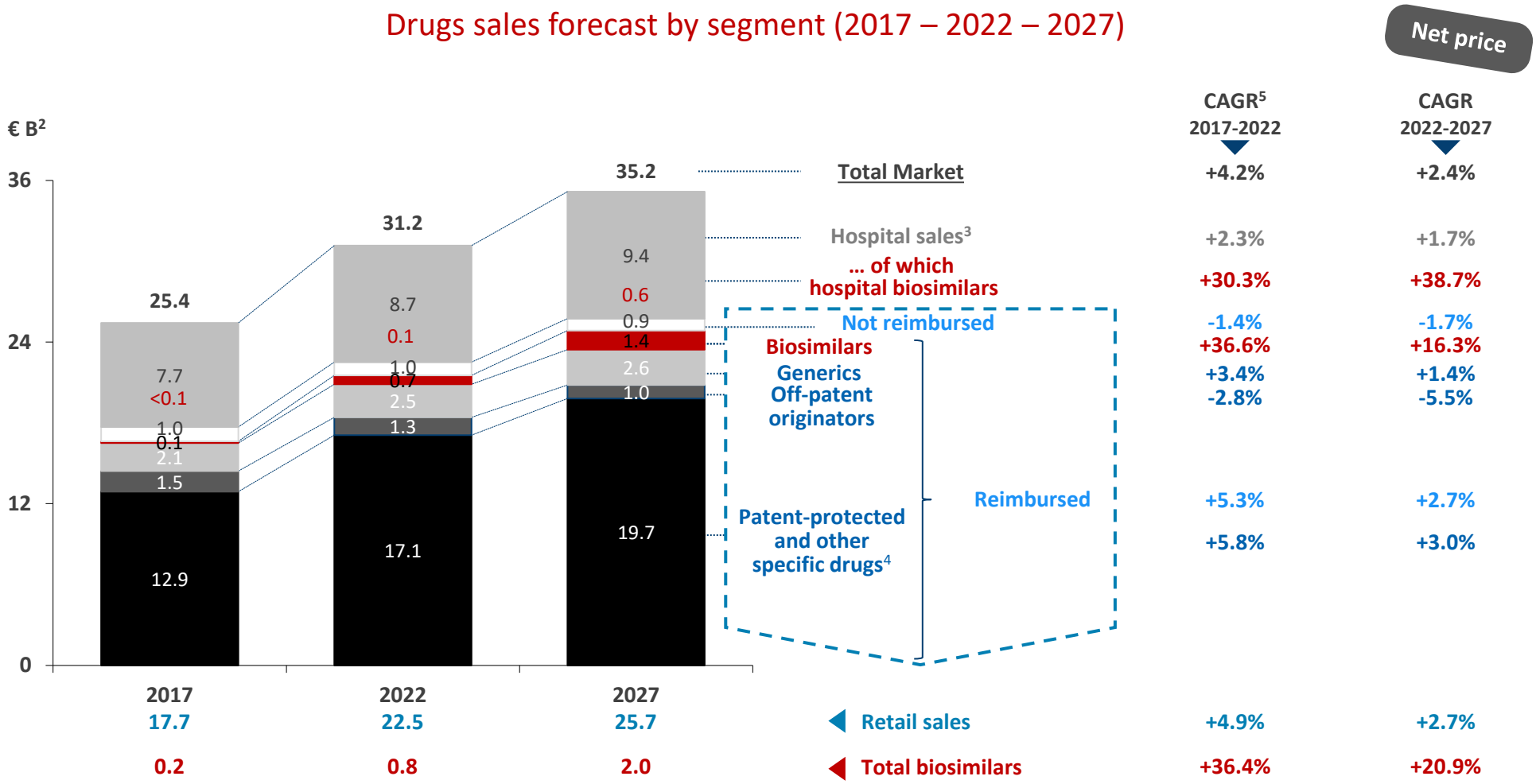
	CAGR[5] 2017-2022	CAGR 2022-2027
Total Market	+4.0%	+2.3%
Hospital sales[3]…	+3.0%	+1.5%
… of which hospital biosimilars	+30.3%	+36.3%
Not reimbursed	-1.4%	-1.7%
Biosimilars	+36.6%	+22.3%
Generics	+3.4%	+1.4%
Off-patent originators	-2.8%	-5.5%
Reimbursed	+5.2%	+2.6%
Patent-protected and other specific drugs[4]	+5.8%	+3.0%
Retail sales	+4.5%	+2.8%
Total biosimilars	+33.8%	+29.7%
20.1	25.1	28.8
0.3	1.3	4.7

Sources: GERS dashboards – Smart Pharma Consulting estimates

[1] Drug pricing committee – [2] Constant ex-factory prices, before rebates and taxes – [3] Including hospital sales of biosimilars, products invoiced on top of "T2A" and retroceded medicines – [4] Sales of drugs whose patents have not expired and of other specific products (calcium, sodium, potassium, paracetamol, etc.) – [5] Compound annual growth rate

It is estimated that the total average net prices of biosimilars in 2027 will be 57% below their list prices considering hospital and retail pharmacies[1] rebates granted by pharma companies

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



Sources: GERS dashboards – Smart Pharma Consulting estimates

[1] Assuming that by 2027, pharma companies will authorized to offer rebates to retail pharmacists of up to 20% of their biosimilars ex-factory prices – [2] Constant ex-factory prices, before rebates and taxes – [3] Including hospital sales of biosimilars, products invoiced on top of "T2A" and retroceded medicines – [4] Sales of drugs whose patents have not expired and of other specific products (calcium, sodium, potassium, paracetamol, etc.) – [5] Compound annual growth rate

The most important success factor on the hospital market is to be the 1st entrant, and on the retail market to be a leading generics player with a broad portfolio of substitutable biosimilars

Key success factors on the hospital and retail biosimilars markets

#1 – Be the 1st entrant

- Historical analysis shows that first entrants have a bigger market share than the followers, especially on the hospital market segment
- When a biosimilar benefits from a temporary period of monopoly, its probability to win hospital tenders vs. the original biologic is very high
- Once a market has been won, it is locked for two to three years and the following biosimilars must wait

#2 – Offer the best price

- The lowest the price offer, the highest the probability to win tenders, especially for hospital-only products
- Superior product attributes and/or services may help a biosimilar product win a tender, in certain cases, only if the price offered is not superior to 10% to 15% than the lowest bidder
- On the retail market, to offer the maximum rebates to pharmacists is a must have to benefit from substitution, and in this respect, leading generics players have an important competitive advantage

KSFs

#3 – Propose a better product & larger portfolio

- There may be some possibilities to differentiate biosimilars amongst themselves and vs. the corresponding original biologic:
  - Amgevita (Amgen) proposes a citrate-free version of adalimumab, as Humira (AbbVie)[1] does since 2018, associated with less injection site-related pain[2]
  - Benepali (Biogen), has shown in a European study[3] that its autoinjector was more convenient than the Enbrel (Pfizer) one
- Pharma companies having a broader portfolio of substitutable biosimilars are likely to be preferred by retail pharmacists

#4 – Develop services

- Services proposed to hospital pharmacists, physicians, nurses and patients to facilitate the procurement, the prescription, the patient education and the drug usage may play a significant role to get preferred by hospital HCPs[4]
- Market insights (knowledge and understanding) of in-field collaborators are a prerequisite to deliver highly valued services
- The quality of services will reinforce the reputation of the biosimilars company and preference of HCPs for its products

Sources: Smart Pharma Consulting interviews with 5 General Managers of companies operating in the biosimilars market – Smart Pharma Consulting analyses

[1] Which is not the case for Imraldi (Biogen) and Hyrimoz (Sandoz), for instance – [2] Peter Nash, Rheumatol Ther (2016) 3:257-270 – [3] Kunal Thaku, Rheumatol Ther (2016) 3:77-89 – [4] Especially for products that are used in home care (e.g., subcutaneous anti-TNFs). It is essential at the launch phase to put in place observational studies in the key centers to boost the adoption of the biosimilar brand by the HCPs

The biosimilars market size will speed up, but its profitability will remain very low on the hospital segment and is likely to deteriorate on the retail segment, if higher rebates are allowed

Key Takeaways

1. Biosimilars market structure and dynamics

- The biosimilar penetration on the hospital and retail markets are in the range of 80% and 30%, respectively
- Certain hospital-only biosimilars, such as antineoplastics, can reach 95% or more market share
- From 2017 to 2022, biosimilars have grown by +36.4% p.a.[1]

2. French regulatory environment

- Health authorities have multiplied initiatives to boost the biosimilars market and…
- … set a doctrine re. biosimilars price cuts over time
- New measures are targeted at the retail market, including incentives for prescribers and pharmacists, along with the extension of the number of substitutable biosimilars

3. 2022 – 2027 market growth

- The market should increase by € 1.2 B and € 3.4 B, respectively expressed in gross and net prices, thanks to the LOE of blockbusters (e.g., RoActemra, Stelara, Eylea, Simponi, Nplate, Perjeta, Cosentyx) and the increasing market penetration of biosimilars recently launched (e.g., eculizumab, ranibizumab)

FRENCH BIOSIMILARS MARKET

4. Customers behaviors

- Hospital listing and prescribing depend mainly on price and product attributes
- In the absence of financial incentives, retail pharmacists have, so far, no interest to substitute biosimilars and…
- … physicians remain the key market driver

5. Competitive landscape

- Pharma companies having a strong presence on the retail market exhibit attractive margins because rebates are capped at 2.5% of biosimilars ex-factory prices[2]…
- … which is not the case on the hospital market[3]

6. Key success factors

- Enter first the hospital market and be the lowest-priced bidder or offer a better product
- Be a leading generics player with a broad portfolio of substitutable biosimilars (e.g., Sandoz, Teva)

Sources: Smart Pharma Consulting

[1] In net value – [2] However, health authorities are likely to increase the capping in the short-term, at probably ~20% of ex-factory prices – [3] The rebates are not capped per se. The limit is the sale below cost which is forbidden

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The French Biosimilars Market

Situation Analysis & 2027 Perspectives

This position paper analyzes the current market segment situation and estimates its perspectives of evolution

Thus, the following topics are covered:

- Regulatory framework
- Key stakeholders' analysis (health authorities / payers – HCPs – competitors)
- Market drivers and limiters
- Review and estimates of hospital and retail market sales in gross and net value (2017 – 2022 – 2027)

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Best regards

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