

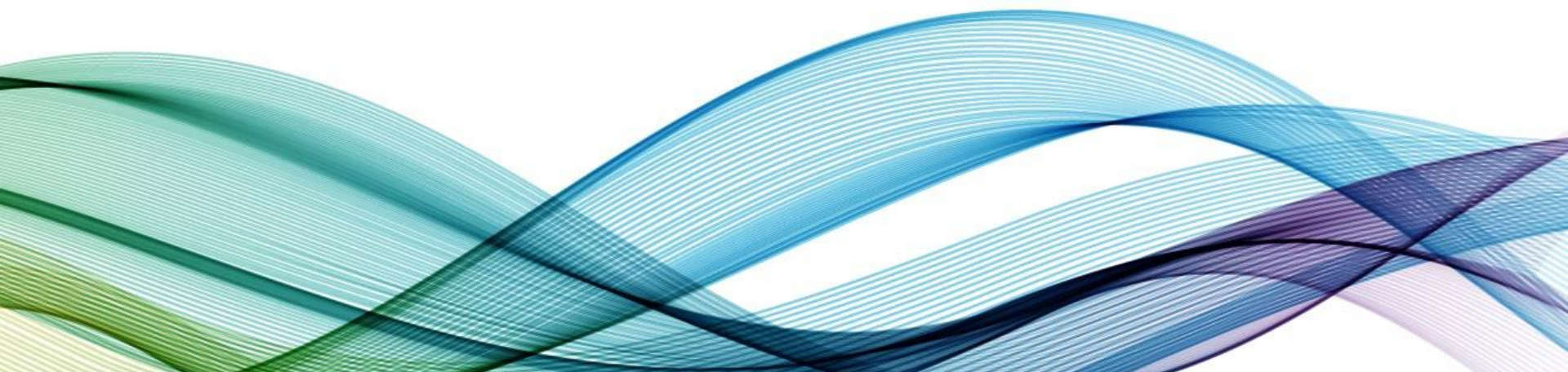


QuintilesIMS™

Pharma market outlook in the background of stabilization observed in 2016

8th of February 2017

Demidov Nickolai,
GM QuintilesIMS, Russia&CIS

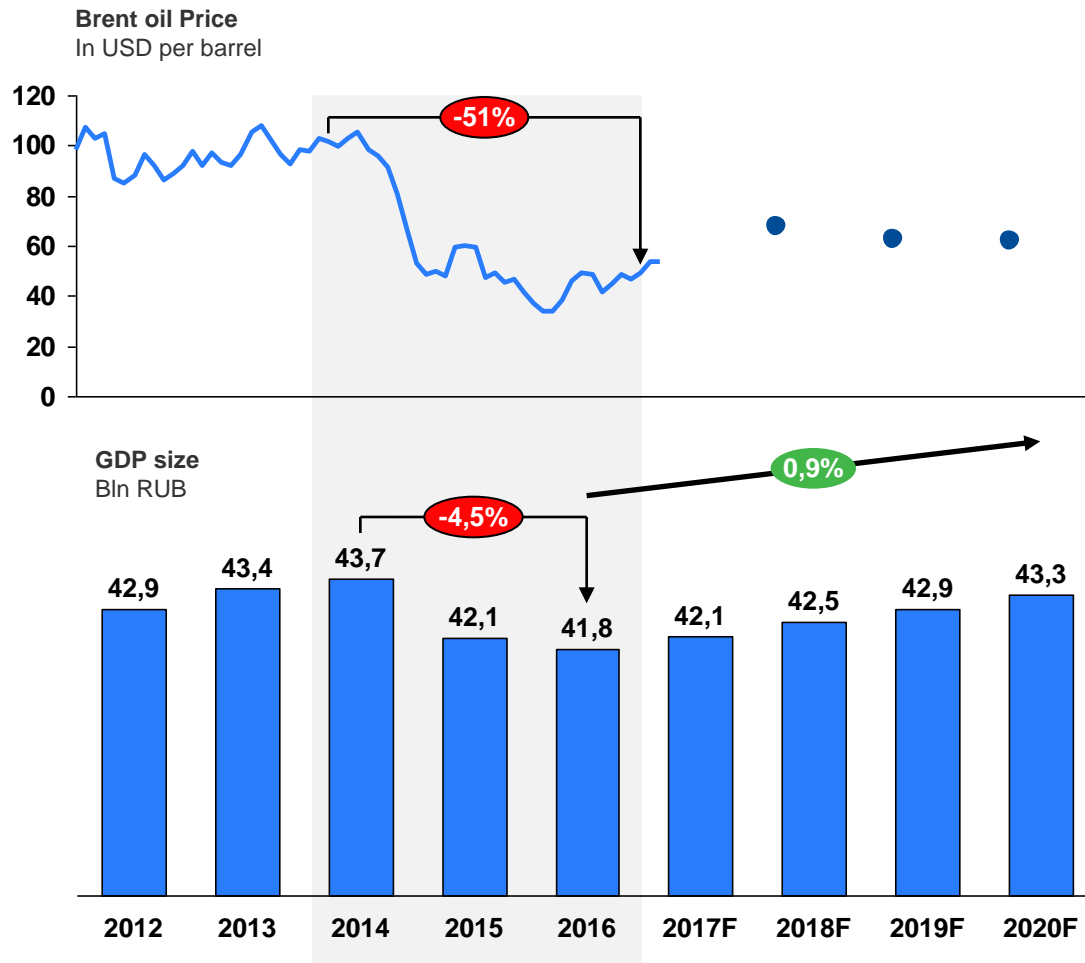


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- Key macro factors and environment change,
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Russian economy contracted as oil prices fall back, but modest rebound is expected from 2017

Connection between oil prices and Russian GDP size

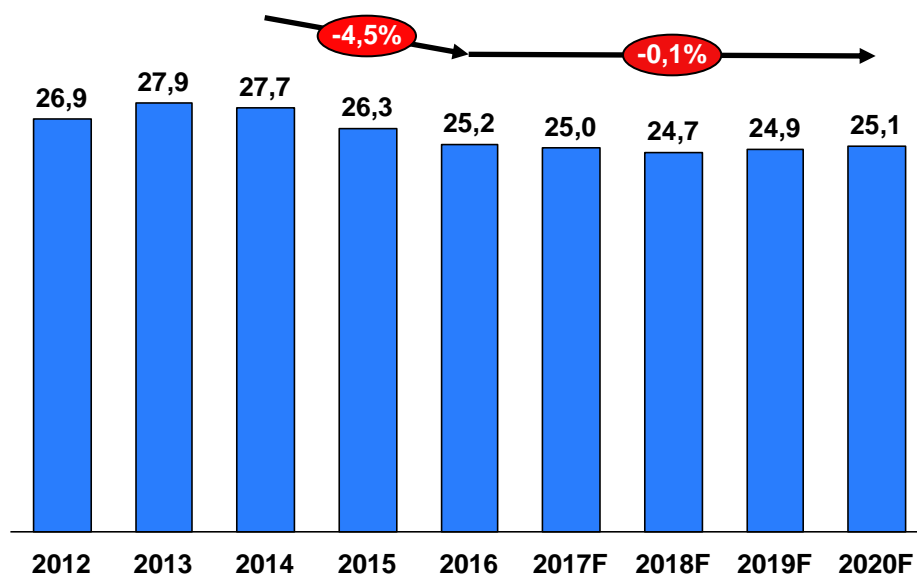


- Though change of budget income structure dependence on oil export remains for close future;
- In 2016 the stabilization came with designating improvement of oil prices, also brought decrease of inflation
- Expectations on GDP recovery in next 4 years are quite moderate
- Though some restrained optimism about Russian economy geopolitical tensions will remain a serious concern; the economic sanctions are not going to be lifted in 2017

Decrease in disposable incomes forced population to adopt crisis strategy

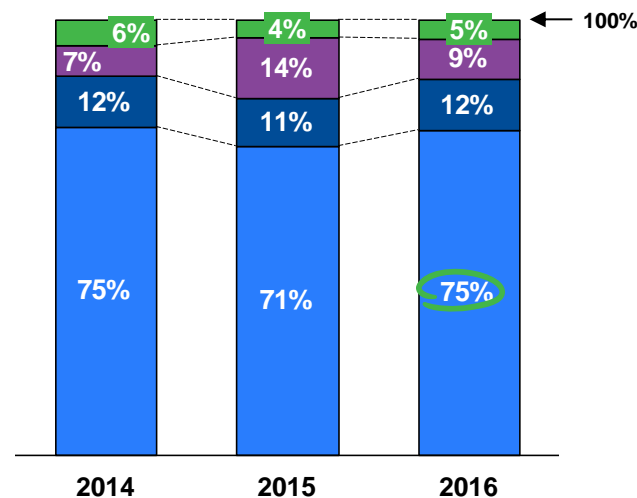
Connection between income and spending

Real monthly disposable income per capita and inflation rate
Ths RUB in 2014 prices



Real disposable income spending structure
In percent

■ Currency ■ Payment of compulsory payments
■ Savings ■ Goods and Services

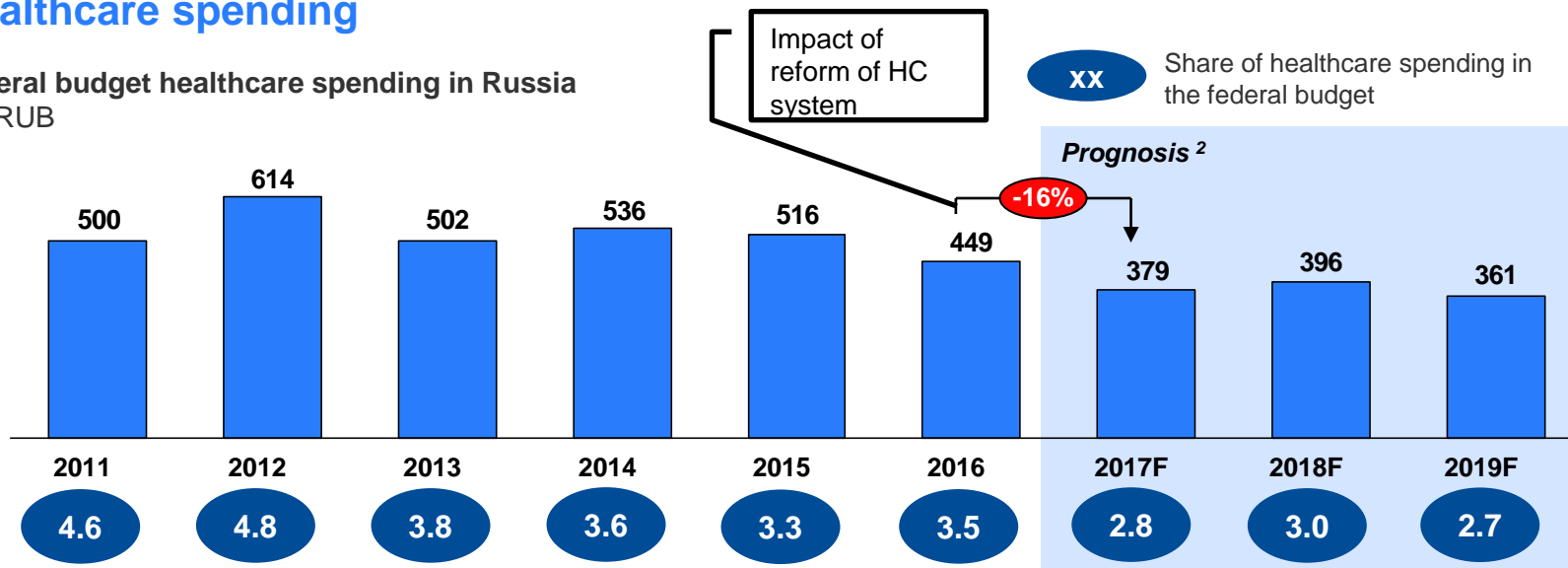


- Real incomes are expected to decline further in 2017-2018 as pensions and salaries in state institutions will be frozen
- In 2015 people tended to increase various types of savings and cut consumption.
- However, the situation in 2016 recovered, consumption turned back to growth

Federal budget spending is expected to decline in 2017-2019 to confront budget deficit based on decrease of rent provided by oil-gas exports

Healthcare spending

Federal budget healthcare spending in Russia
Bln RUB

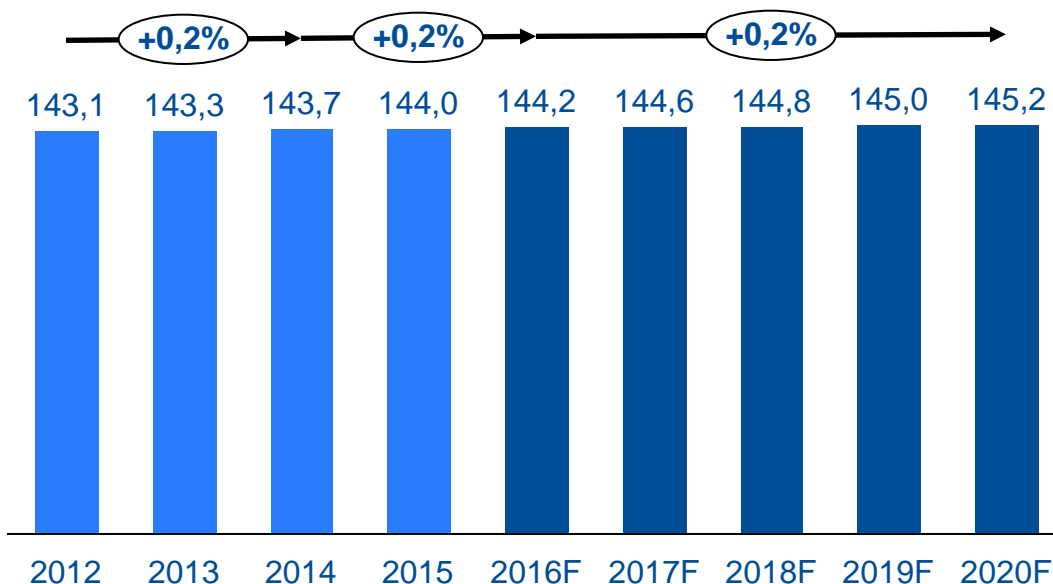


- The total healthcare spending in Russia consists of three streams – Federal Budget, Regional budgets and Compulsory Medical Insurance Fund
- In the projected spending plan of total healthcare on 2017-2019, only federal spending will decrease significantly. Spending of other streams will grow or stay the same
- ONLS and 7 Nosologies are 2 government drug supply programs covered by Federal budget. Despite a substantial decrease of budget spending the programs budgets willn't change:
 - Planned annual spending of 7 Nosologies on 2017-2019 : ~43 bln RUB
 - Planned annual spending on AIDS and HIV treatment on 2017-2019: ~ 17 bln RUB

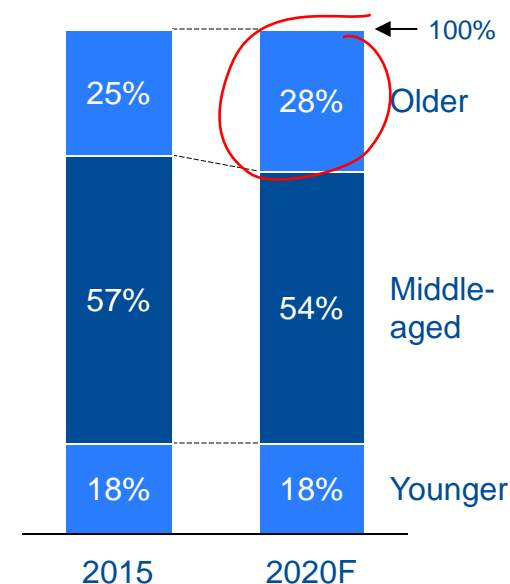
Note: (1) TRD prices: for out-of-pocket – pharmacy sell-in, for other channels – tender/contract prices;
(2) based on the FZ "Federal budget 2017 and planed federal budget 2018,2019 (9 December, 2016)

Country population is expected to stabilize, increasing share of older generations will increase demand and spending on treatment

Total population in Russia
Mln people, without Crimea



Population structure by age, %

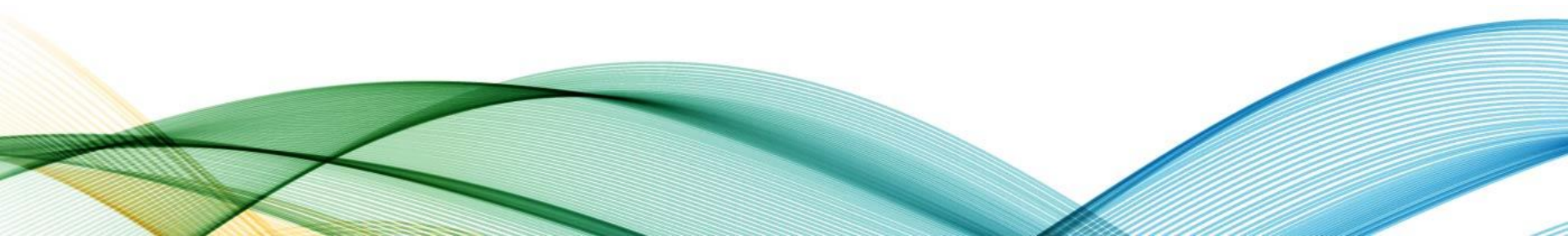


Russian population decreased significantly during 1995-2010 period, but currently experience modest rebound thanks to increased life expectancy and stabilized birth rate










Older – above working age, younger – below working age
Source: Federal State Statistic forecast, IMS analysis

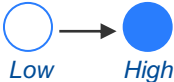
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Common pharmaceutical EEU market creation will have a significant impact on both Out-of-pocket and Reimbursement segments

ISSUES	IMPLICATION	IMPACT	
		Out-of-pocket	Reimbursement
 Registration procedure harmonization	<ul style="list-style-type: none"> Harmonization of registration procedure will simplify market entrance for manufactures Currently non-balanced number of registered trade names in EEU-member states will lead to market volume enlargement in long term 		
 Local status for drugs manufactured in EEU-member countries	<ul style="list-style-type: none"> Preferences for local products established in Russian tendering market will open additional opportunities for products manufactured in other EEU countries¹ 		
 Parallel import (PI)	<ul style="list-style-type: none"> PI opportunities will significantly decrease overall EEU price level for pharmaceuticals and drive additional competition PI will grant access to new markets for EEU wholesalers 		



 Low → High

Note: 1 – preferences for local products are not expected to be launched in EEU member-states except Russia

Last updates from legal side shows good progress in EEU introduction

Key legal documents have been signed at the end of the year (as of November 3, 2016)

GMP Rules across EEU
Member States

Rules of good
distribution practice

Rules for Registration and examination of drugs for
medical use

Procedure for
organization and control
of a single register of
registered drugs

Rules of good clinical
practice in EEU incl.
unique procedure for
conducting clinical trials
and clinical trials
recognition across EEU
countries

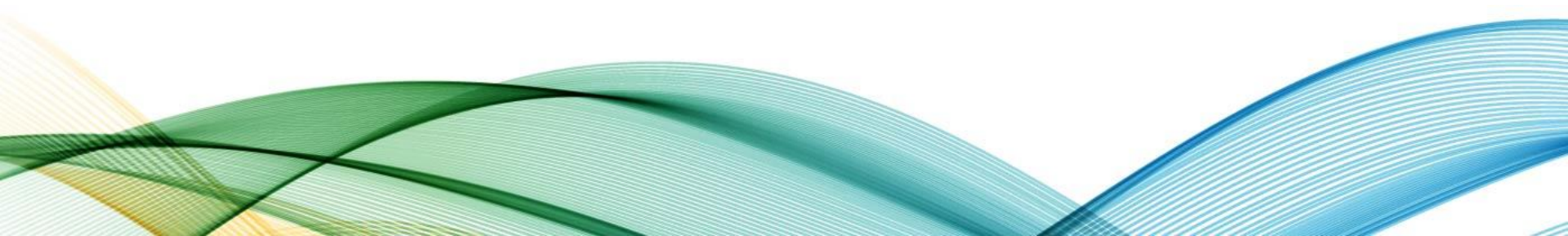
- Before December 31, 2020 registration could be granted based on EEU Rules or local country legislation
- Registration granted before January 1, 2016 could be extended until December 31, 2025
- Registration issued by EEU Member State admitted to trading only on the territory of State

Procedure for
conducting joint
pharmaceutical
inspection

Also EEU countries may
conduct a procedure for
determination of
medicines replaceability
which does not affect
further drugs circulation

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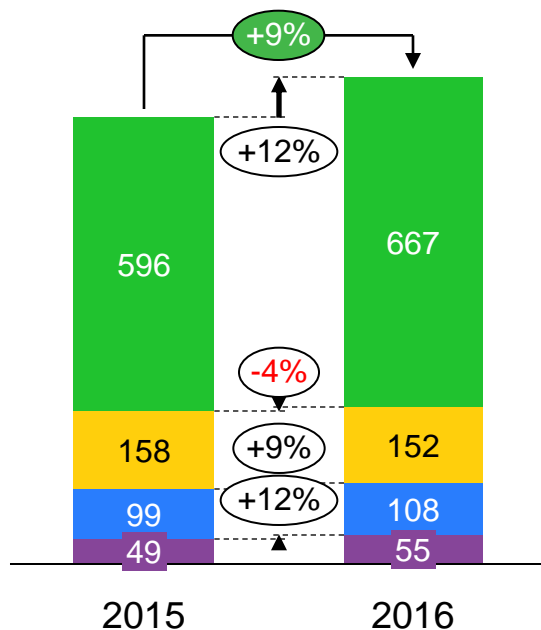
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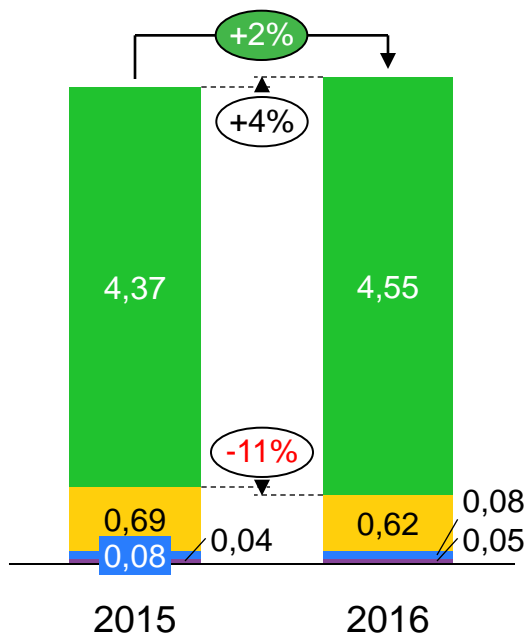
In 2016 Russian pharma market grew by 9% in value

retail market headed the improvement, while hospital remained fault in negative trend

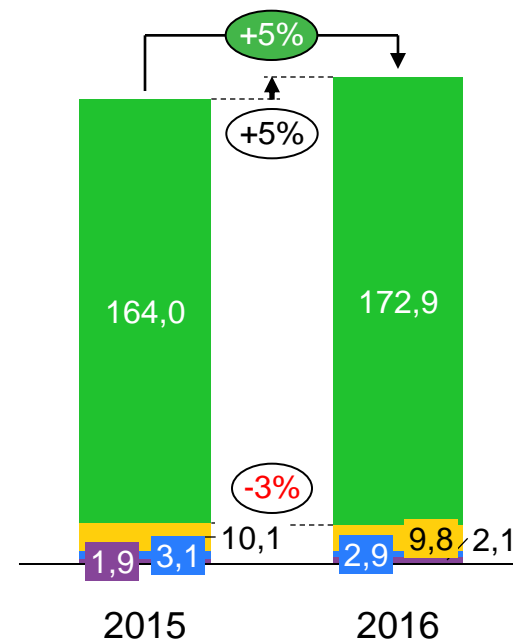
Total Sales* by Value
Bln RUB



Total Sales* by Volume
Bln Packs



Total Sales* by Volume
Bln SU



■ OOP**
 ■ Hospital
 ■ Federal Reimb
 ■ Regional Reimb

Indicator	RUB	\$	EURO	Packs	SU
Value 2016, Bln.	982,38	14,73	13,33	5,30	187,71
Growth , %	▲ 9%	▼ -1%	0%	▲ 2%	▲ 5%

*Sales in TRD prices – final prices of wholesaler

**OOP – out-of-pocket

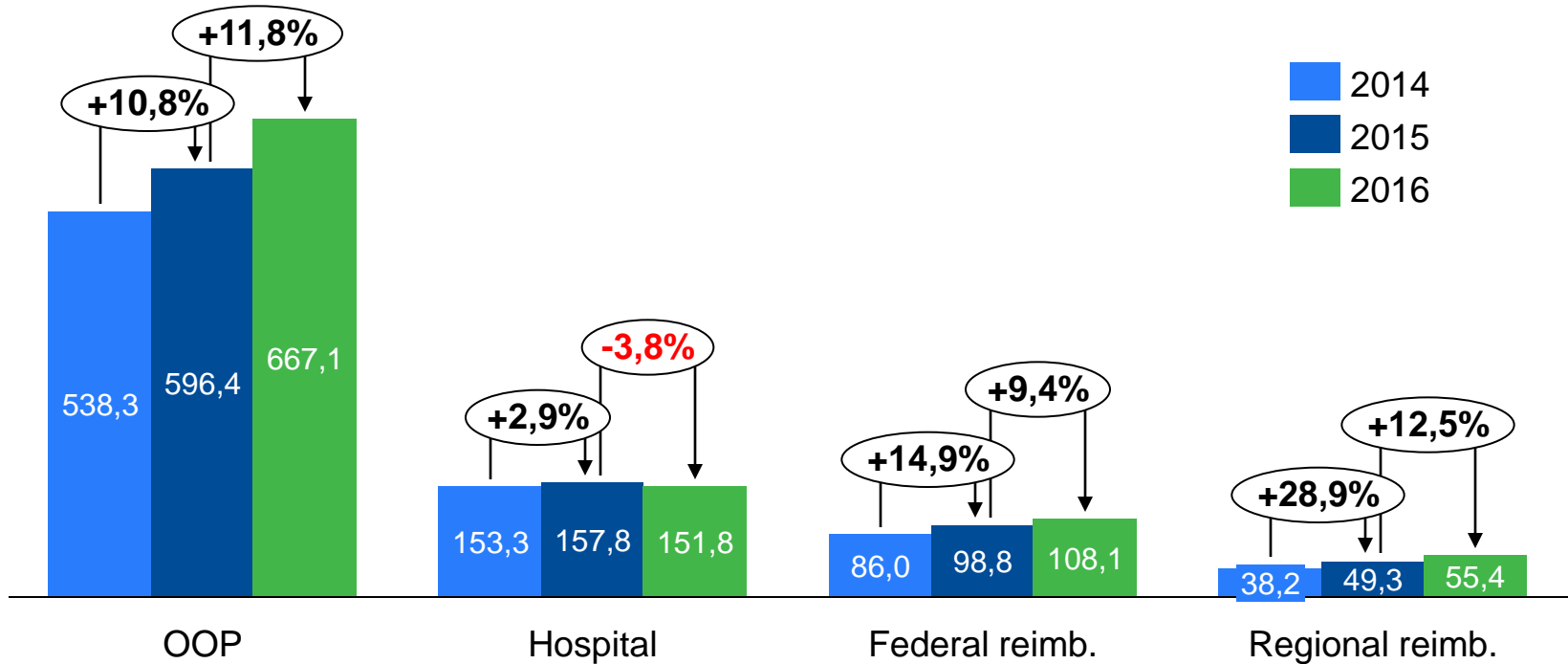
Top-10 Corporation, Top-10 Trade Names on Pharma market (OOP + budget segments)

Top -10 Corporations				Top-10 Trade Name	
Rank	Company	MS,%	Growth, PY%	Rank	Trade Name
1	SANOFI	4,7%	0%	1	REVLIMIDE (CELGENE)
2	BAYER HEALTHCARE	3,7%	+14%	2	LANTUS SOLOSTAR (SANOFI)
3	SERVIER	2,5%	+4%	3	SOLIRIS (ALEXION PHARMA SW)
4	SANDOZ	2,5%	+4%	4	NATRIUM CHLORIDUM (DIFFERENT)
5	NYCOMED/TAKEDA	2,4%	+2%	5	KAGOCEL (NIARMEDIK PLUS RF)
6	GLAXOSMITHKLINE	2,3%	0%	6	INGAVIRIN (VALENTA)
7	PFIZER	2,3%	0%	7	ESSENTIALE N (SANOFI)
8	J&J	2,3%	+8%	8	ACELLBIA (BIOCAD RF)
9	OTCPHARM	2,2%	+29%	9	KALETRA (ABBVIE)
10	TEVA	2,2%	-11%	10	ACTOVEGIN (NYCOMED/TAKEDA)
Total Top-10					
		26,9%	+4%		

- Market was mainly driven by those out of TOP-10
 - only 2 out of TOP-10 grew faster then the market – Bayer and OTCPharm
- Biggests multinational keep suffering from shrinking demand, under attack of competition with cheaper generics and by replacement in reimbursement
- New era in DLO mixed up the TOP brands list – all new vs list of 2014.

Market Segments performance in 2014/2016, (OOP+Budget segments*)

moderate improvement of OOP/retail growth on a background of budgets segments stabilization



- Retail (OOP) improved based on inflation, recovery of consumer health and overall consumption
- Budget segments had a negative inertia of growth after splash shown in 2015. It mainly caused by optimization, control measures and reforms revealed already in 2014
- Decline of hospital and ambulatorium purchases are expected to last over next years as a result of reform and continues budget optimisation

Key trends observed in 2015/16 for each of the channels

OOP/Retail

- Inflation reduction on background of ex-rate stabilization;
- Restore of volume growth across the retail products;
- Boom of local generics and OTC;
- BUT blurring the boundaries between local and international
- Phenomenon of company-branded generics
- Channel supply “headache”:
 - wholesaling in “turbulence”;
 - decrease of financial discipline across the whls and retail;
- Doing marketing with chains
 - increased competition between chains for budgets
 - new models are booming pushing the common chains for mergers
 - marketing with chains got absolutely crucial for those retail oriented with major concerns:
 - effectiveness (sales vs. cost)
 - control
 - scalability and retranslation of standards

Key topics
for 2017

Budget

DLO

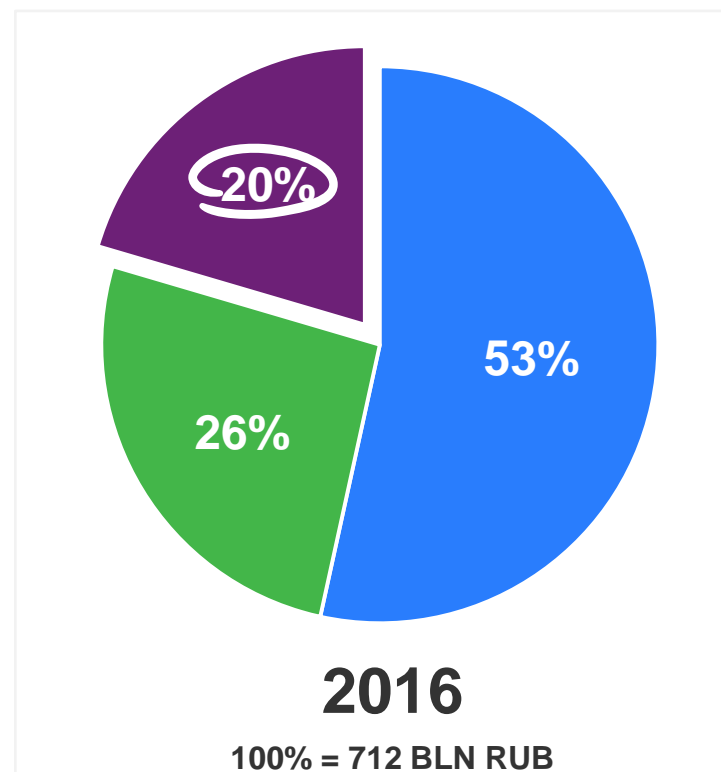
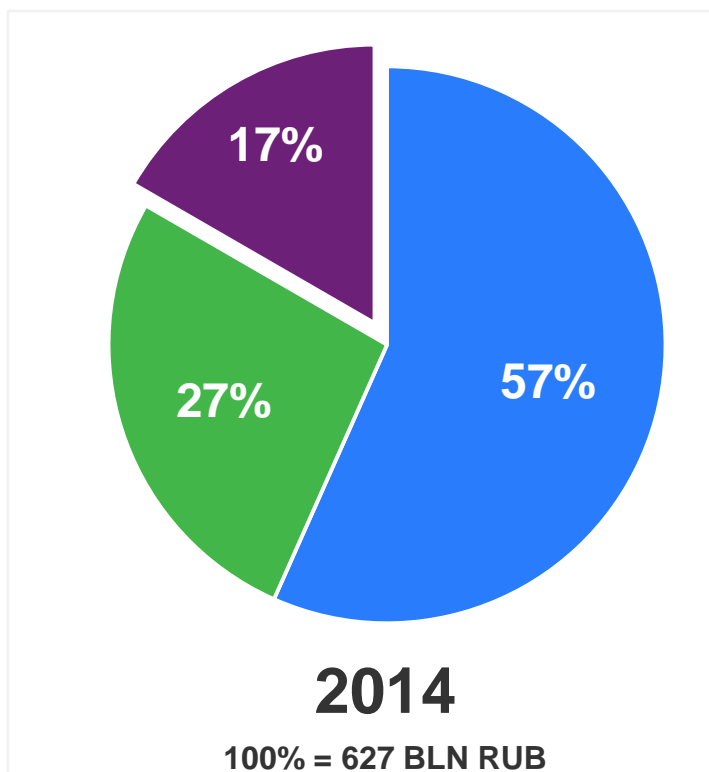
RLO

Hospital

- Moderate growth of spends and supply in general preserved;
- Savings generated on price decreased allowed to maintain the consumption and widen up the list of products;
- Accelerated expansion of local biosimilar in DLO (7N);
- New innovative products launch and successful development in DLO/RLO;
- Reforming of HC and regulation of purchases affecting the purchases for hospital use.

Local companies increased their share in the total sales in value among the pharma leaders over the last two years

Top 100 companies sales in value structure by company type



■ Multinational Originators ■ Foreign Generics ■ Local

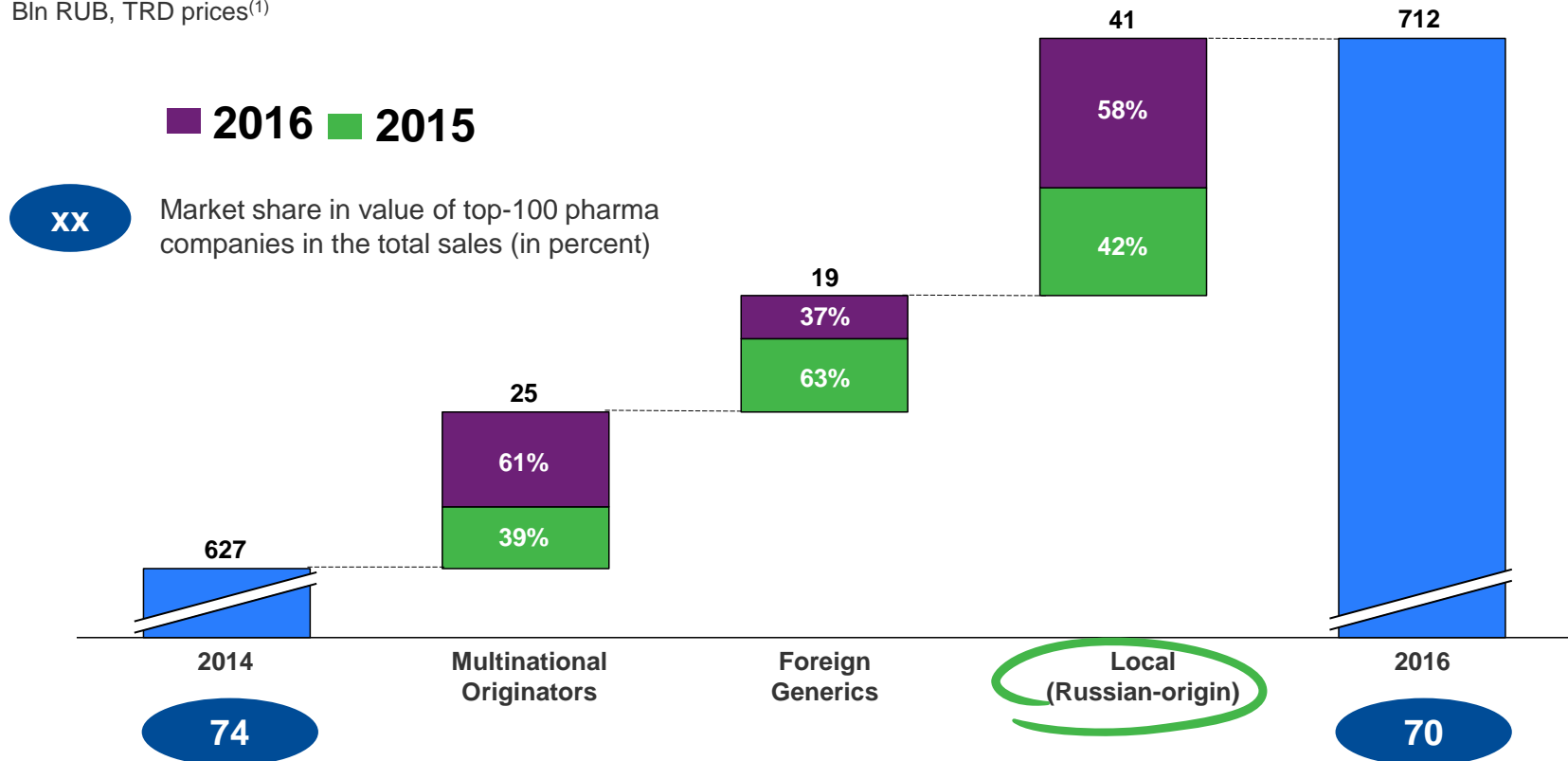
Note Multinational originators – international pharma companies which revenue **primarily** consists of sales of **original** drugs
Foreign Generics – international pharma companies which revenue **primarily** consists of sales of **generic** drugs
Local (Russian-origin) – Russian pharma companies which revenue **primarily** consists of sales in **Russia**

Having just 20% of sales value, Local companies contributed ~50% to Russian pharma market growth over the last two years

Top 100 companies sales growth components and evolution over 2015/2016

Total sales of TOP 100 corporations by company type

Bln RUB, TRD prices⁽¹⁾



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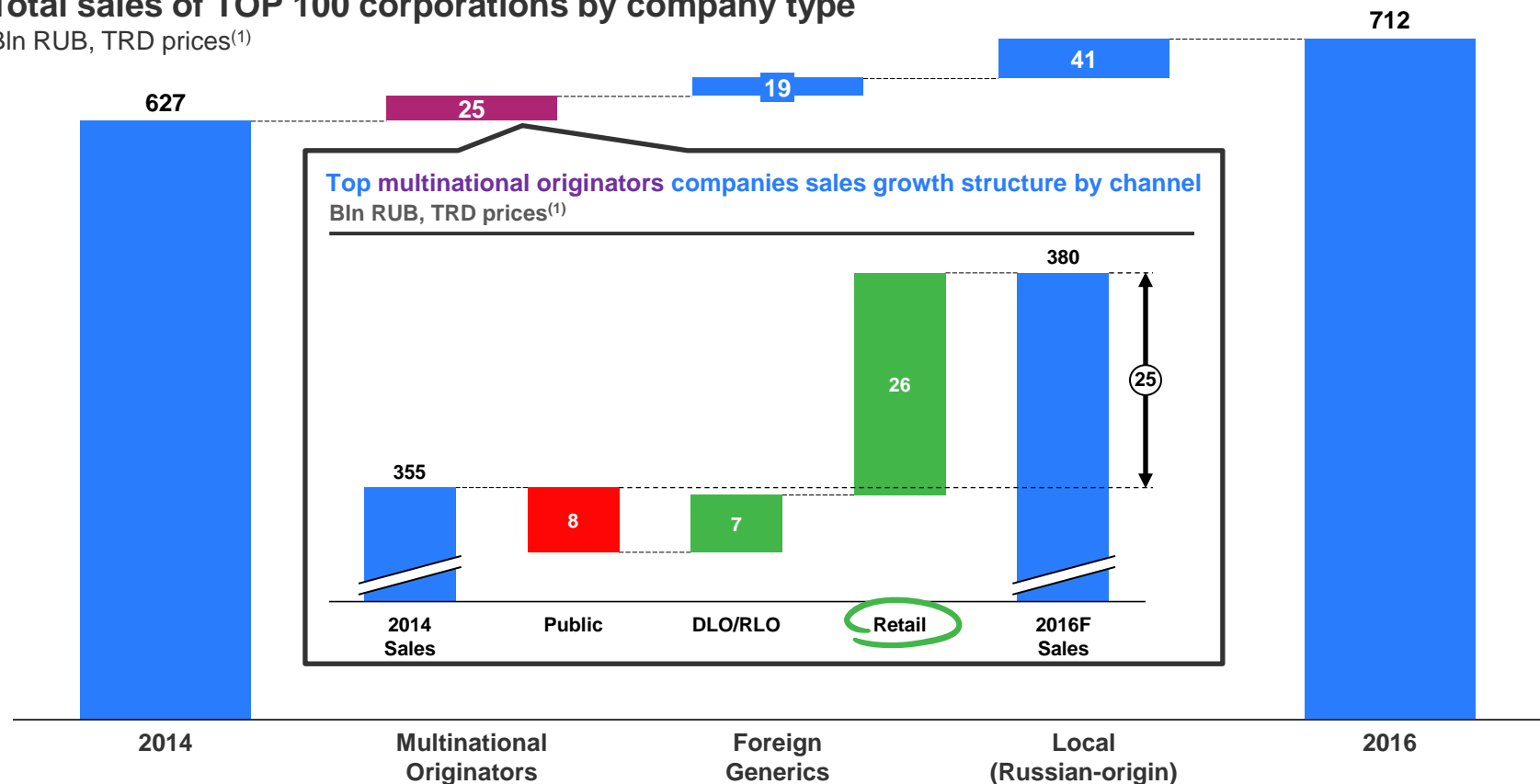
Local (Russian-origin) – Russian pharma companies which revenue **primarily** consists of sales in **Russia**

For multinational companies retail was the main driver of growth, while success in DLO&RLO (new launches!) was overshadowed by recent replacements and deeper losses in hospital

Top 100 companies sales growth structure by channel

Total sales of TOP 100 corporations by company type

Bln RUB, TRD prices⁽¹⁾



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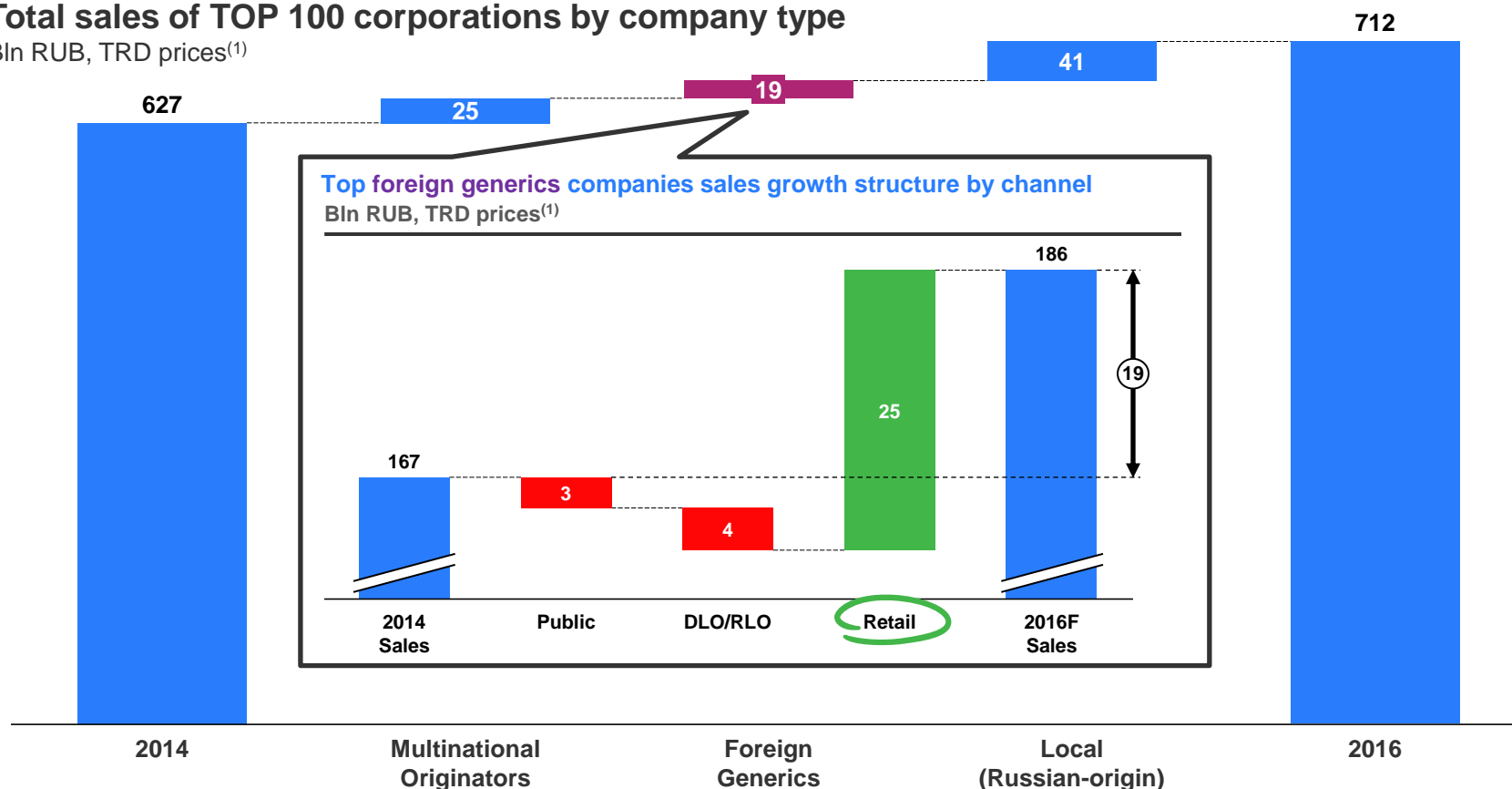
Local (Russian-origin) – Russian pharma companies which revenue **primarily** consists of sales in **Russia**

Foreign generics companies gained biggest part of their retail “fortune” in 2015 while in 2016 they reduced the rates

Top 100 companies sales growth structure by channel

Total sales of TOP 100 corporations by company type

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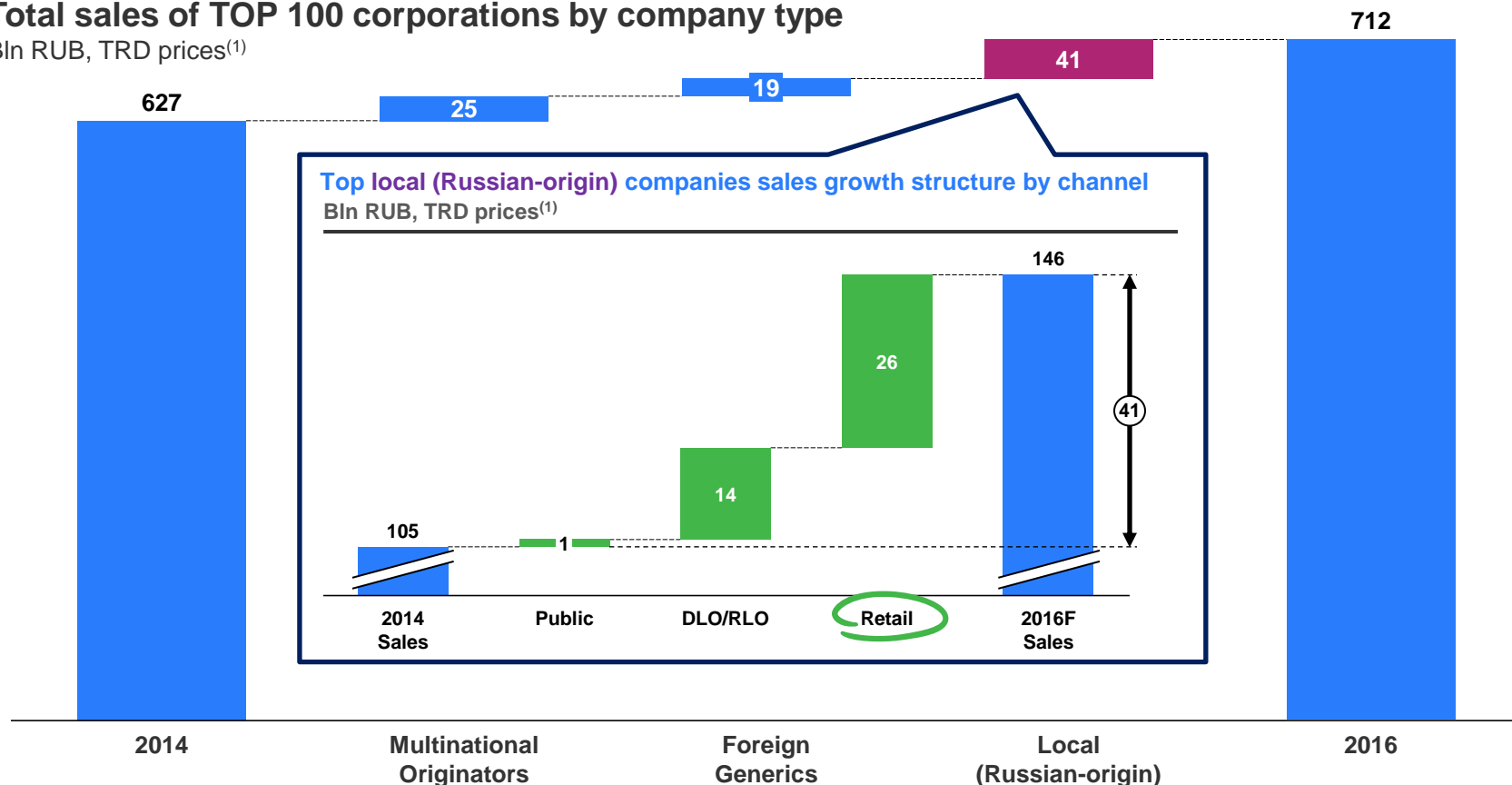
Local (Russian-origin) – Russian pharma companies which revenue **primarily** consists of sales in **Russia**

Just a couple of new products in DLO/RLO and vs. tens of TMs (Rx/OTC) in retail allowed locals to outperform all other types of players

Top 100 companies sales growth structure by channel

Total sales of TOP 100 corporations by company type

Bln RUB, TRD prices⁽¹⁾



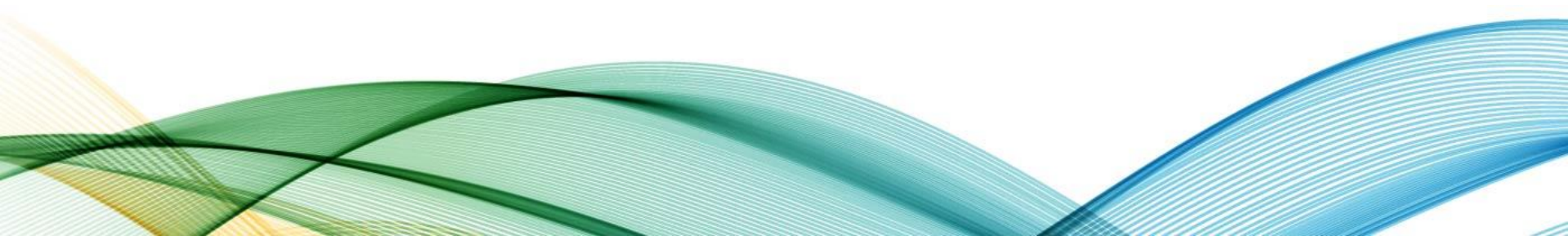
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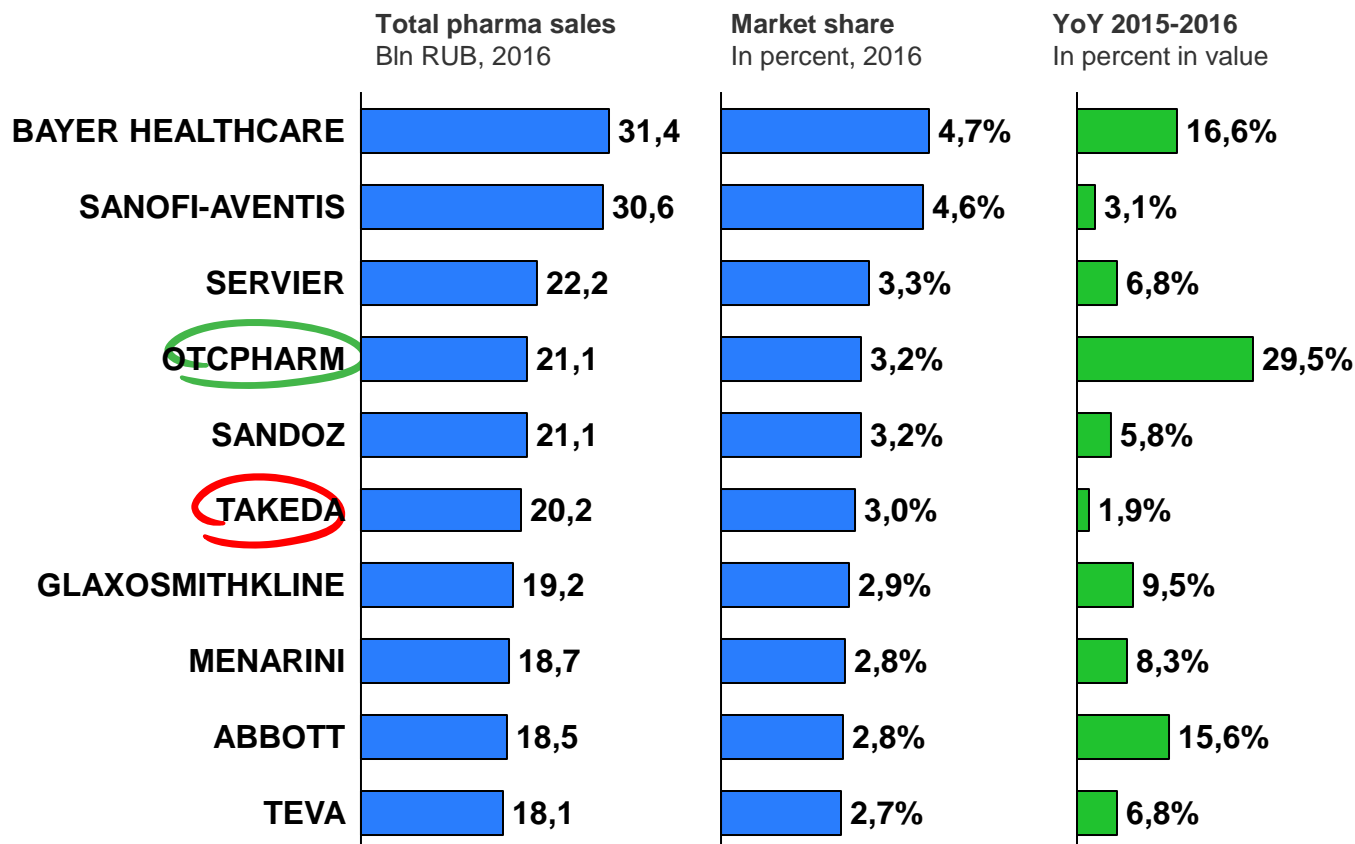
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Bayer Healthcare and Sanofi secured leadership in OOP by sales value; top-10 leaders cover ~33% of the market

Top-10 corporations in the retail market



Total Values
for Top-10

221

33,1

+10%

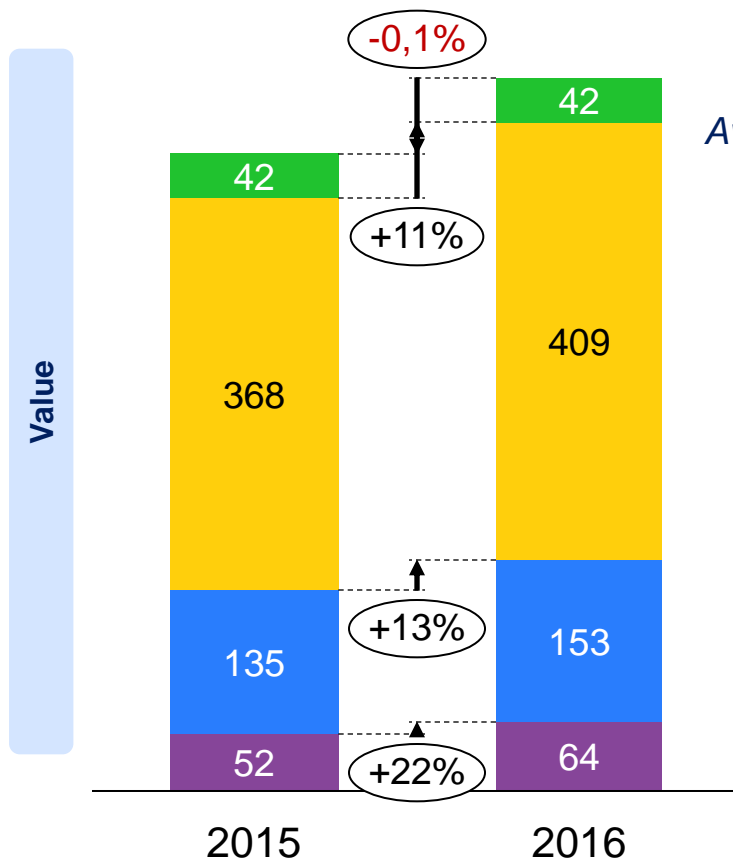
vs. +12% for
total OOP

- **Bayer Healthcare** is the leader in the retail segment. There are the main products of growth
 - **Xarelto** (oral, direct factor Xa inhibitor)
 - **Yaz/Yaz Plus** (oral female contraceptive)
- **OTC-Pharm** increased their sales mainly due to three products
 - **Arbidol** (anti-flu)
 - **Mycoderil** (antifungal agent)
 - **Magnelis B6** (magnesium citrate and Vitamin B6)
 - **Amixin** (anti-cold drug)
- **Nycomed/Takeda** decreased the growth of sales mainly due to significant deep drop in sales of
 - **Actovegin** (infusion for skin regeneration)
 - **Xymelin** (nasal spray)

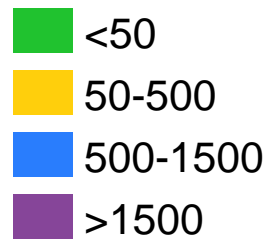
Price Segmentation in OOP Market in 2016

the growth rate increases as the price range gets bigger due to stronger influence of inflation and faster restore of consumption

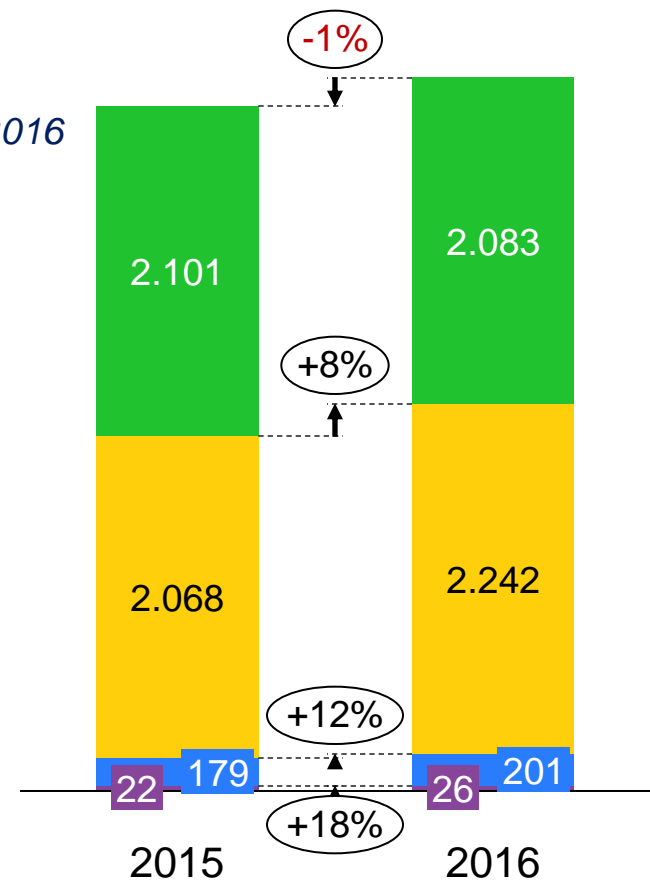
Total OOP Sales by Value
Bln RUB



Average Trd price in 2016

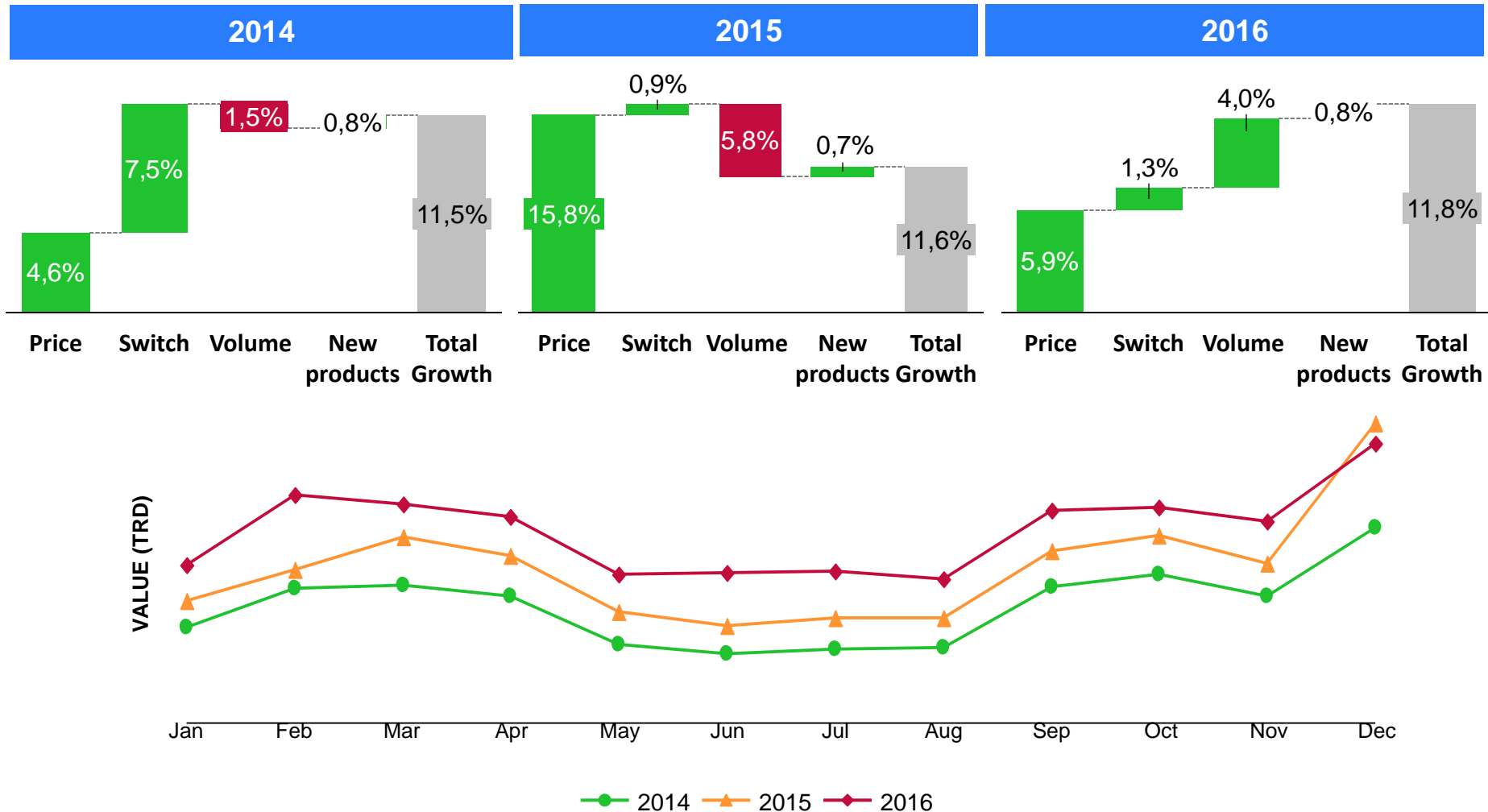


Total OOP Sales by Volume
Mln Packs



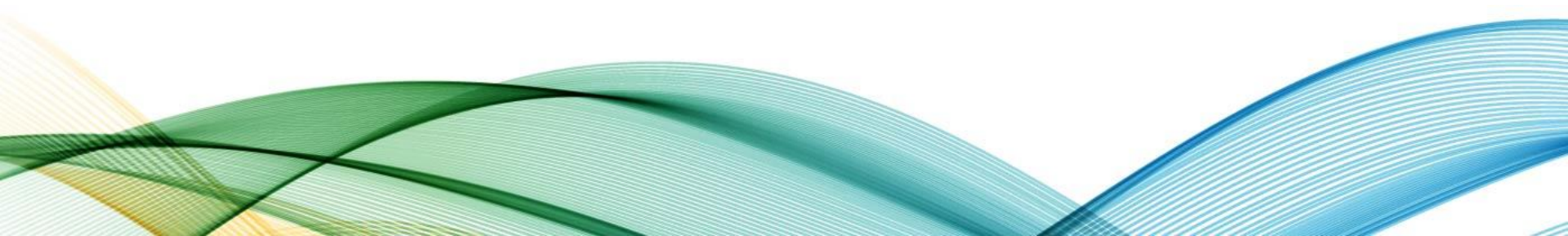
Stabilization in the light of retail market growth components evolution in 2014-2016

in terms of growth components OOP seems to get closer to 2014, mainly because of smooth inflation. But factor of “switch to modern pharma/OTC” remains very weak



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More than 60% of market players are presented on Public procurement

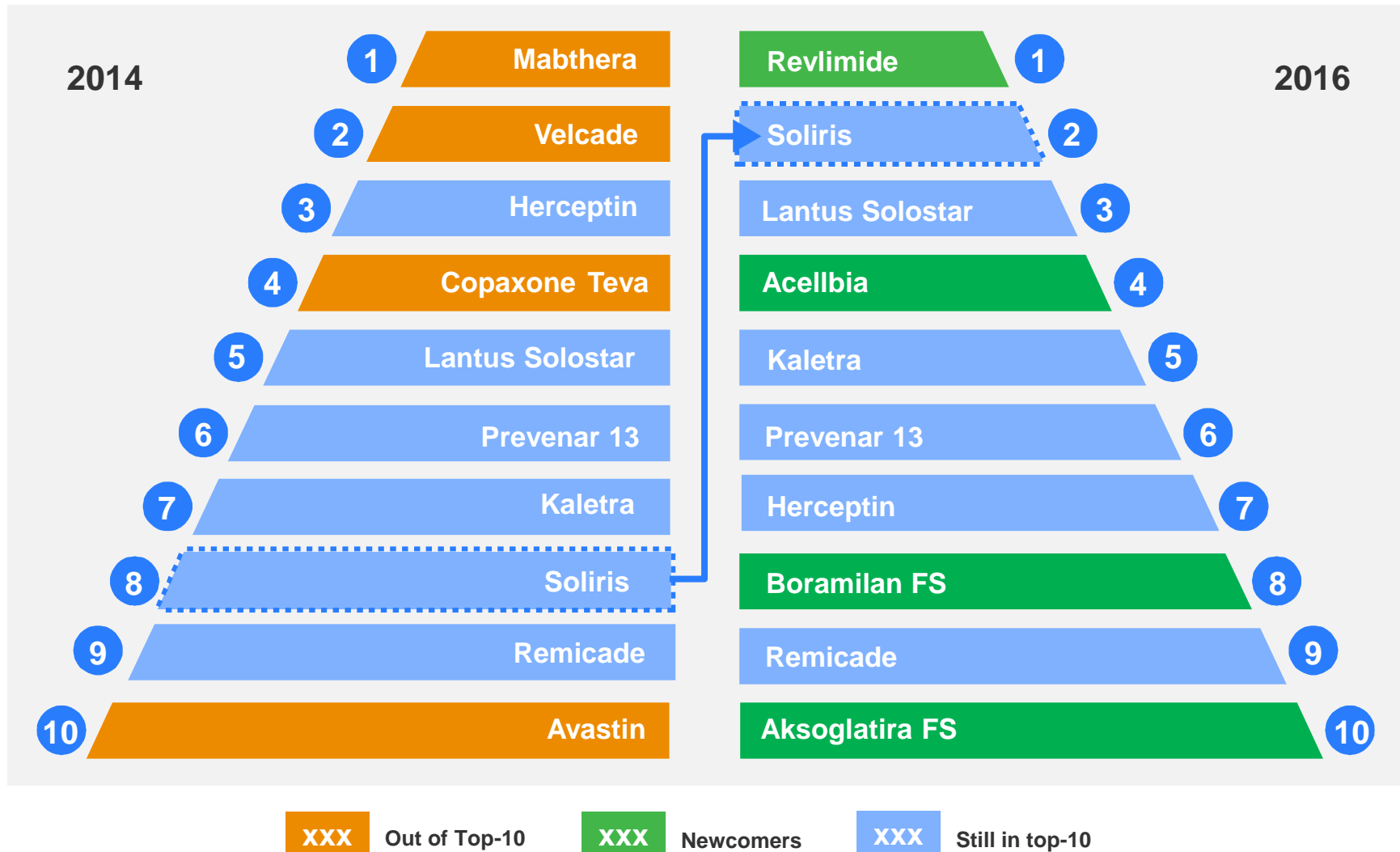
Quantities characteristics of governmental purchases participants remains stable

If to compare **2014** with **2016**:

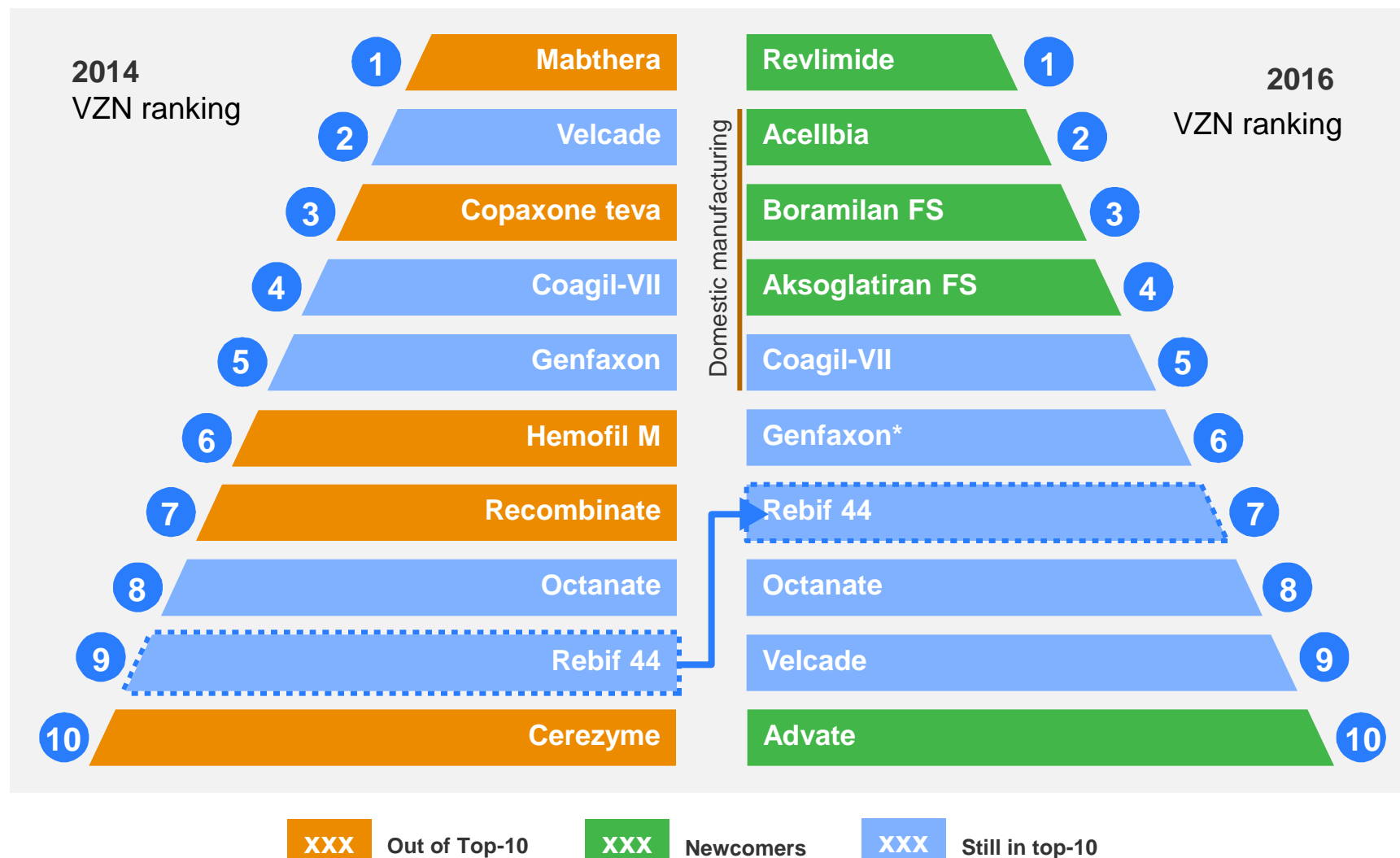
- number of new Trade names grew by **2%**,
- number of corporations presented grew by **1%**

	Total Market	Public procurement	Official register (GRLS)
Trade names	~7000	6100	11000
Molecules	~3000	2600	3100
Corporation	~1800	1400	2500

Nearly half of the TOP 15 in 2014, got out in 2016, replaced by both Gx and innovative products



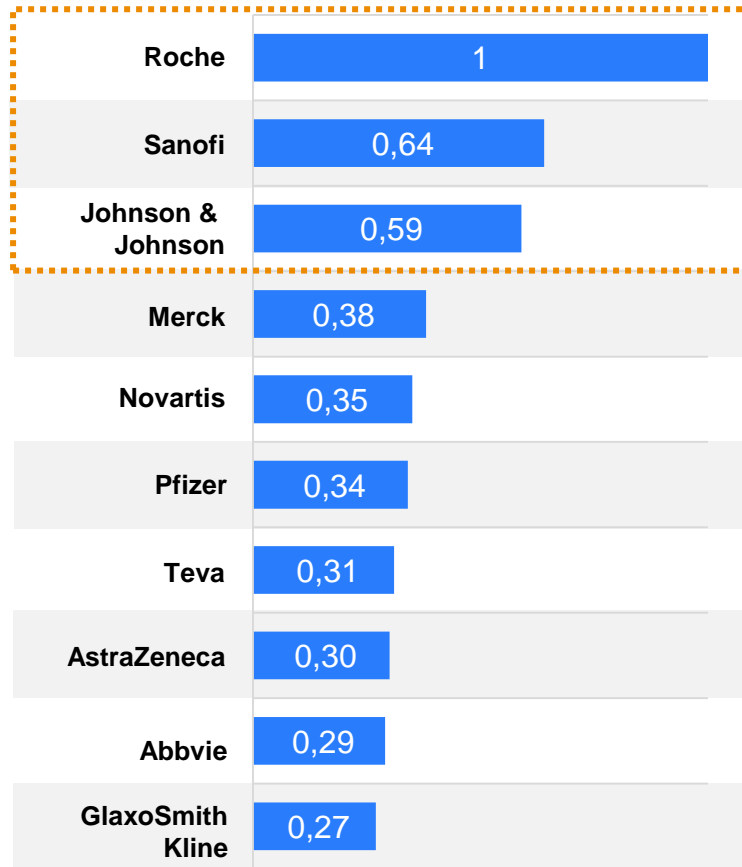
In “7 nosologies” TOP 3 products in 2014 went out of patent protection and were replaced by generics in the program



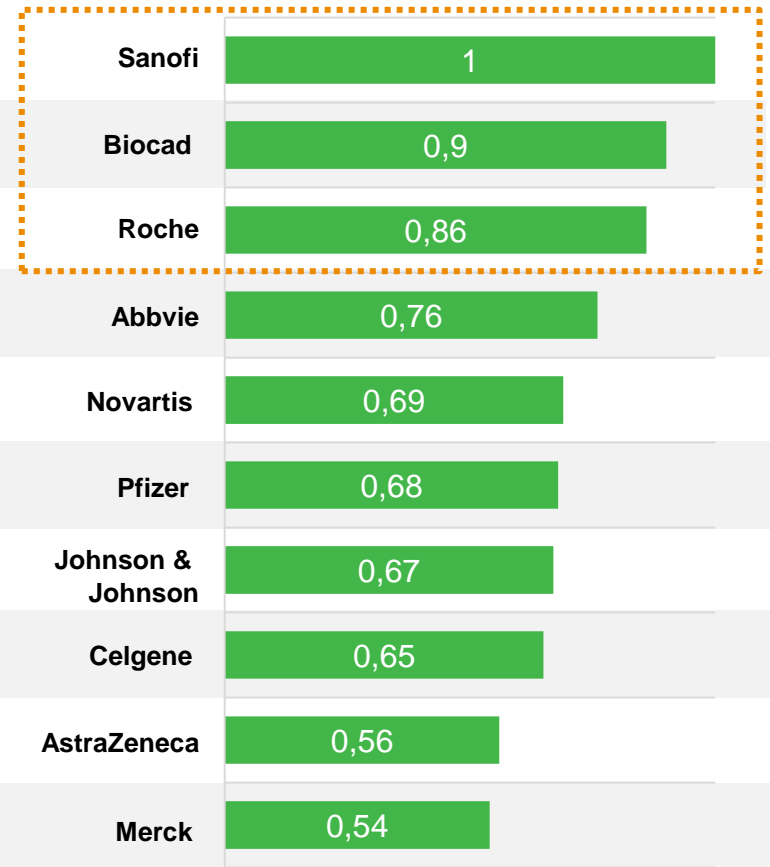
*local brand packed in Russia

Overwhelming leadership of one company remained in past – loose of patent, change of budget purchases profile and regulation pressed the difference between different players in TOP-10








2014 company ranking



2016 company ranking

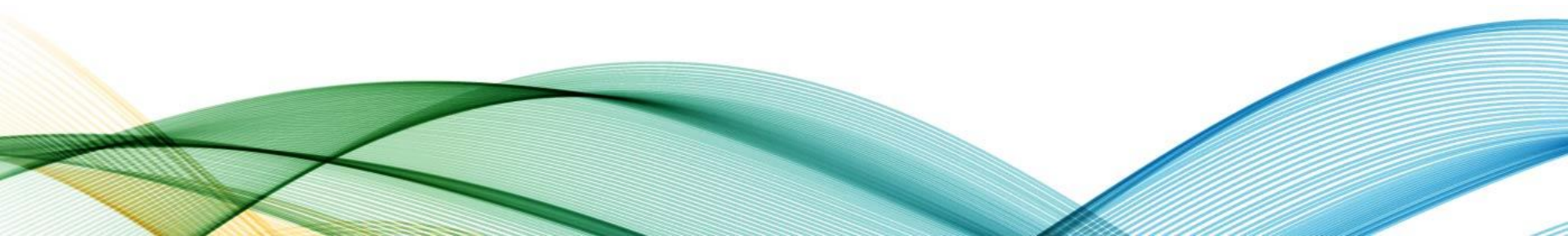


Increasing number of market players is not necessarily leads to strong price decrease for INN

INN	Price increase/decrease, 2014/2016, %	Number of players 2014	Number of players 2016
Lenalidomide	- 10 	1	1
Rituximab	- 6 	2	3
Bortezomib	- 28 	1	3
Trastuzumab	- 11 	1	2
Eculizumab	15 	1	1
Insulin glargine	- 4 	1	1
Factor VIII	2 	5	7
Lopinavir*ritonavir	6 	1	1
Interferon Beta-1A	0	4	4
Glatiramer Acetate	- 23 	1	3
Infliximab	3 	1	2
Budesonide*Formoterol	6 	2	3
Eptacog alfa (activated)	3 	2	2
Insulin human isophane	- 3 	9	10
Bevacizumab	-50 	1	2

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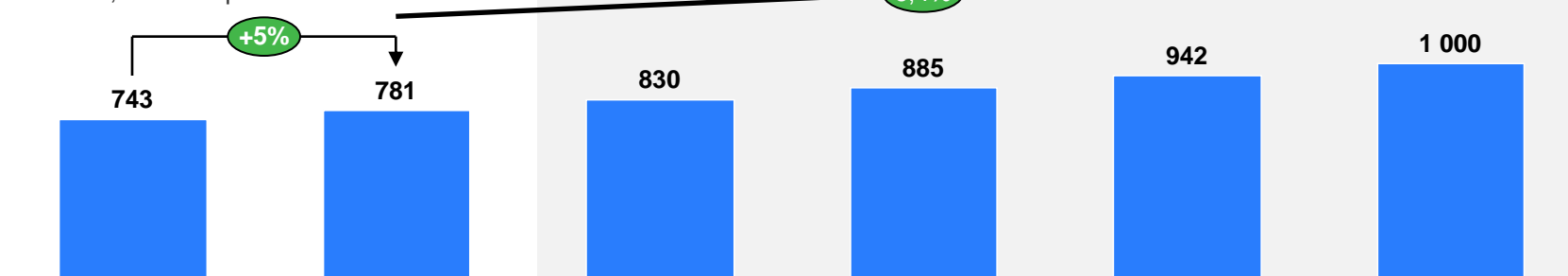


Russian pharma market suffered a deep crisis in 2015. Slow restoration started in 2016 and is expected to continue till 2020

Dynamics of sales in pharma will slightly decrease in the next years

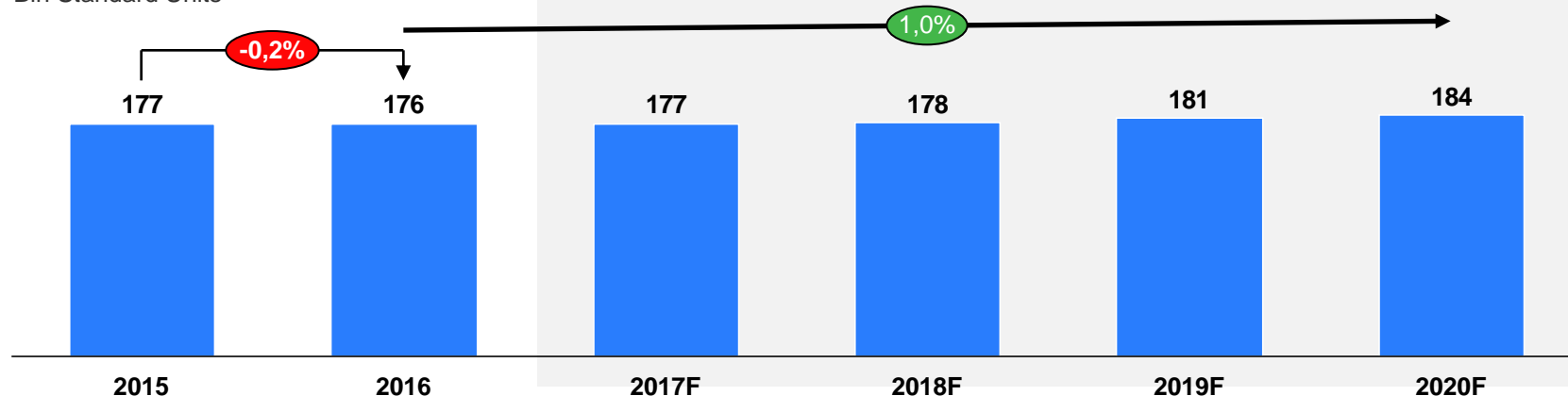
Total pharma sales

Bln RUB, Contract prices



Total pharma sales

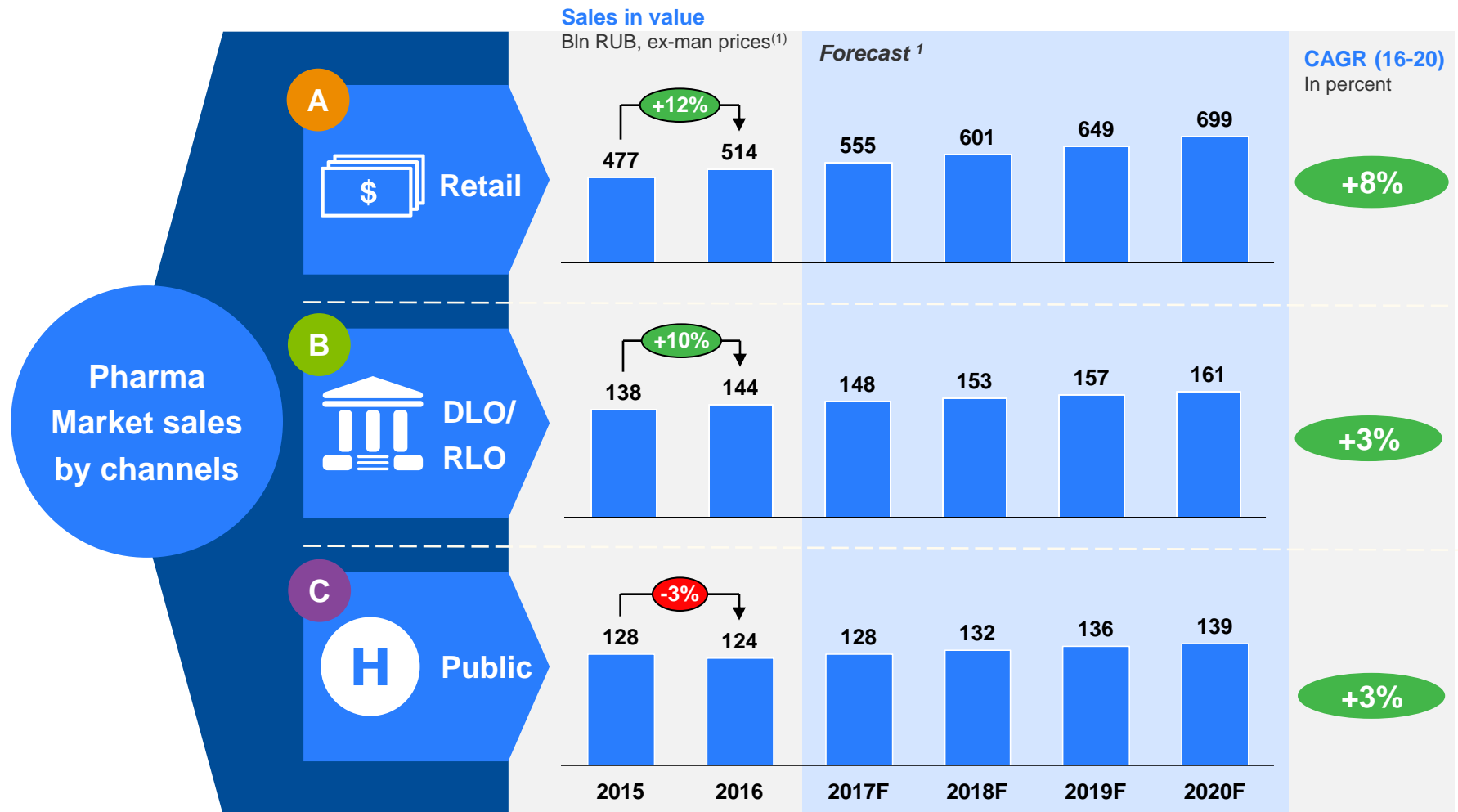
Bln Standard Units⁽²⁾



Note: (1) 2016 seasonally pro-rated; 2017-20 as per QuintilesIMS Market prognosis Oct 2016

(2) Standard units are used as a measure of volume. There are the number of dose units, such as the number of tablets, the number of doses, or the number of vials, sold for a particular product

In 2017-2020 the market is expected to remain under stress.
The forecasted growth of market was forecasted as +7% (+9%).
High probability of 2017-2020 forecast revision.



Note: (1) 2016 seasonally pro-rated; 2017-20 as per QuintilesIMS Market prognosis Oct 2016