2015 ANNUAL REPORT

GROUP DSM

Russian farmaceutical market:
Results of 2015 year

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Analytical Report
RUSSIAN Pharmaceutical Market
Results of 2015

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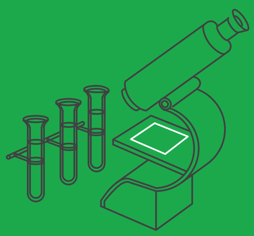

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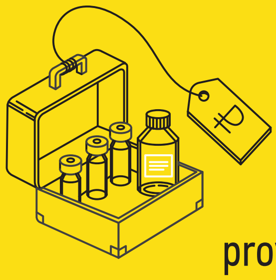

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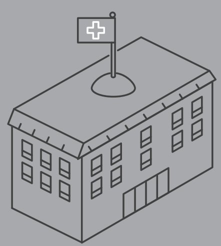

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Summary

For pharmaceutical market the 2015 was full of events which influenced its development in some way or another, and actions which we're still to determine.

The main attention was paid to the influence of crisis tendencies on the parameters of drug consumption. In 2015, the pharmaceutical market demonstrated an opposite tendency with the increase of dollar and euro rates: the higher was the currency as a ruble, the lower was the gain of the pharmaceutical market to the same period of 2015. The lowest point for the market was in the 4th quarter of 2015 when the parameters even in the price parameter were lower than in the 4th quarter of 2014. In 2015, the volume of the Russian pharmaceutical market reached 1,259 billion rubles, which is 9.3% higher than the previous year. In 2015, the volume of drug sales in the natural way continued to decrease and reduced by 4.2% and amounted to 5.1 billion of units, such fall of the parameter was last observed in 2009.

Within contingency measures legally stated in Decree of the Government of the Russian Federation N 98-p from January 27, 2015 "On approving plan of primary measures for providing sustainable economic development and social stability in 2015", a part of the initiatives was applied to the drug supply:

– support of the manufacturers releasing the drugs on the List of Vital and Essential Drugs with price less than 50 rubles;
– adoption of the Decree on restrictions of state purchases of foreign drug products ("Three is a crowd");
– provision of additional 16 billion rubles for drug supply to the benefit holders.

Except for the contingency plan, a range of initiatives and offers was discussed during 2015, which to this or that extent should allow stable drug supply:

– issue on the permit to allow parallel import of the drug products to Russia;
– a possibility to introduce mandatory licensing for certain drugs;
– issue on the permit to sell over-the-counter drug products outside the pharmacies;
– issue on the permit to sell drug products online.

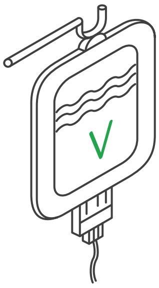
First results in the import substitution and increase of the share of the domestic manufactured drugs became evident in 2015. The share of domestic drug products increased by 4% and amounted to 27% by the end of the year. The most vivid examples were seen in the sphere of innovative and costly items that is why in the segment of drug supply to the benefit holders the share of Russian drugs increased from 13% in 2014 to 26% in 2015. It should be noted that as a program of import substitution Pharma-2020, 130 state projects on drug development in Russia, which in the future will allow to increase the part of Russian drugs. Still Russian pharmaceutical market depends from import. 73% of drug products expressed as money value consumed by the population are manufactured abroad. Thus, the top places in the manufacturer's ranking belong to the foreign companies:

SANOFI, BAYER, NOVARTIS. It should be noted that only two domestic manufacturers Otisipharm and Pharmstandard that had been one structure are included in TOP-20 ranking.

The main tendency of 2015 for distributor and pharmaceutical sphere was consolidation, with various reasons behind it.

There has been a change in main distributors. During the year 2015, two main players that were in the TOP-20 left the market: Oriola and Imperia-Pharma. The largest Russian distributors occupied the free spaces, thus the share of TOP-3 companies increased from 45% to 49%. In 2015, the leader on sales volume was Katren distributors, thus increasing the part to 20%. Protek distributor occupied the second place with share of 18%. Rosta distributor occupied the last place in TOP-3 in 2015.

In 2015, the process of mergers and acquisitions continued; in a way the year holds the record in terms of concluded and announced deals. Apothecary Chain 36.6 Company became the leader in the consolidation process. By the sales volume, Rigla chain continues to occupy the top position in the ranking, followed by Apothecary Chain 36.6, with Implosia in the third place. Their cumulative segment was 10%.



1. Pharmaceutical Market volume in Russia

In 2015, the development of the pharmaceutical market was influenced by the main economic situation in the country: continued devaluation of the national currency, negative growth of main market indicators - Gross Domestic Product (GDP), index of industrial production, index of investments, etc. - consumer's purchasing power. All this leads to the necessity of more thorough to the pharmaceutical market as socially significant segment of economy.

Within contingency measures legally stated in Decree of the Government of the Russian Federation N 98-p from January 27, 2015 "On approving plan of primary measures for providing sustainable economic development and social stability in 2015", a part of the initiatives was applied to the drug supply.

The first measures were connected to the drug prices. The Government suggested to change the main medication law "On Medicinal Products Circulation" to allow the one-time price indexation on the drug products that are under price regulation. This measure concerned to all drugs on the list of Vital and Essential Drugs (608 international non-proprietary names were included in the list of Vital and Essential Drugs in 2015), but only of low and middle price segment with price up to 50 rubles. The offered indexation was at the level of 30%. This initiative was not implemented. The problem with "washing-out" of the cheap drug products due to the inefficiency of its manufacture remained both in 2016 and in the new contingency plan. In 2016, a support program for domestic manufacturers of drug products of low price segment (up to 50 rubles) by the provision of subsidy for partial financing of costs connected with manufacture of Vital and Essential Drugs of this segment in limited list, as well as development of special order of price indexation for drug products of lower price segment manufactured in the Russian Federation. The due time for the development of the plan is June 2016. Thus, it is way optimistic to wait for its implementation this year.

The second point constituted the initiative of the Ministry of Industry and Trade for limitation of foreign companies' participation in the state purchases of the drug products, if the indicated drug product is released by two or more Russian manufacturers. It resulted in the adoption of the Decree on the Limitation of State Purchases of Import Drug Products ("Three is a Crowd") signed by Russian Prime Minister Dmitriy Medvedev in November 2015. The Decree implements the rule according to which the drug products manufactured by the foreign companies are not allowed to participate in state purchases in case when there are two or more application for the same contest from manufacturers from Russia and Eurasian Economic Union.

The third measure was to additionally allocate 16 billion rubles for drug supply of the benefit holders because of "the change of currency rate with purchase of drug products, medicinal products and expendable materials, including those bought as a part of state guarantees program for free healthcare of citizens". As a result of pharmaceutical benefits program, in 2015, the drugs were released in the amount of 101 billion rubles, which is 20% higher than in 2013-2014.

Except for contingency plan, during 2015, a range of initiatives and offers, which in one way or another should promote stable drug supply. Though, part of them may have negative consequences for the market. So, at the governmental level, a permit of parallel import of drug products to Russia and an introduction of mandatory licensing for certain drugs products.

An issue on the sales permit of over-the-counter drugs outside the pharmacies. But even the Ministry of Healthcare understands significant risks in this matter that is why this law draft will be discussed publically by the results of which the decision will be made. Discussions on the access to the over-the-counter drugs in the stores has been hold since 2012. Earlier, the Ministry of Industry and Trade insisted on selling all over-the-counter drug products at grocery stores.

At the end of 2015, the Ministry of Healthcare presented for public referendum the draft of Federal Law "On Amendments to separate legislative laws of the Russian Federation in terms of retail web-trade of the drugs products", allowing to sell the drugs products online. In case of adoption, the law will be implemented on the 1st of January 2017.

In the nearest years, a new segment of market may appear in Russia - drug reimbursement which applies to all categories of citizens, not only benefit holders. In Russia the idea of drug reimbursement program has been discussed for a few years already. In 2013, for example, the Ministry of Finance suggested to the Government of the Russian Federation to implement this mechanism for benefit holders.

Moreover, in Kirov and Omsk regions, pilot projects were started. In Kirov, some categories of patients with cardiovascular disease were supplied with the use of funds of regional budget. In Omsk, the patients who underwent aortic coronary bypass surgeries and stenting surgeries were provided with the medications. Until the end of March 2016, the Ministry of Healthcare of the Russian Federation intends to present for public referendum a draft of law on the drug insurance. According to the document, the expenses for the drug products prescribed to a patient as a part of outpatient care will be reimbursed according to the program of mandatory medical insurance.

The main issue of application of the regional experience to the entire country is with the choice of the target population. One of the suggestions included drug insurance of children. Also “Omsk” project has been widely discussed, i.e. the application of drug reimbursement to the patients who underwent stenting surgery. In 2015, stenting surgeries, surgeries on the restoration of vessel passage were made in 120 thousand of people; the cost of medications for their postsurgical treatment was almost 5 billion rubles. Half of such expenses the Ministry of Healthcare offers to compensate from the budget of Federal Fund of Mandatory Medical Insurance (FFOMS). For this in 2017, about 2.4 billion rubles will be reserved for these expenses in the budget of Federal Fund of Mandatory Medical Insurance (FFOMS)

” The launch of pilot project of drug reimbursement will require the establishment of reference price of the drug products, system informatization, and, the most importantly, the presence of money in the budget. Thus, there are more questions on the matter of drug reimbursement than there are answers. “

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At the moment, there are no changes in the structure of pharmaceutical market.

The "state" share (market volume secured with state money - reimbursable drug coverage and hospital purchases) amounts to about 3.4% of the drug market volume (if parapharmaceutical products are taken into consideration, the share is a little less - 25.5%). For the past four years this parameter has not changed. It should be noted that the maximal share of state expenses in the drug consumption seen in 2006 was 40.8%.

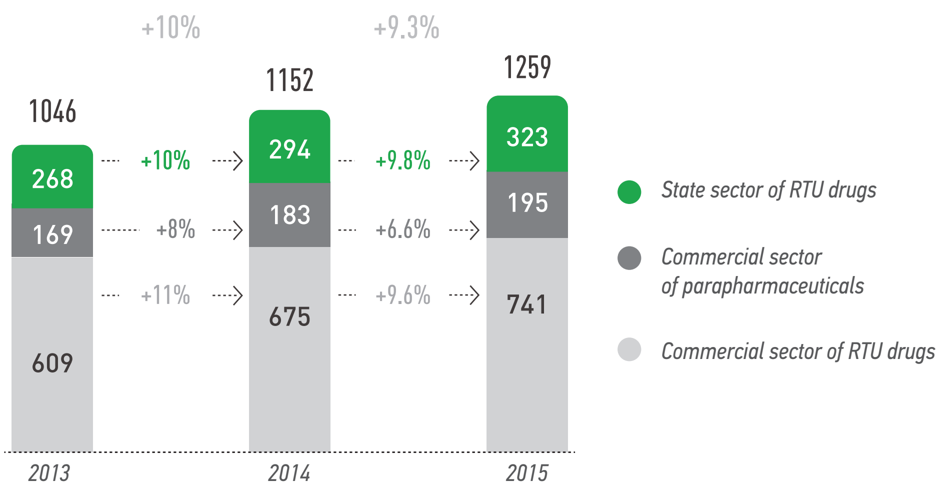


Figure 1

Pharmaceutical market capacity, billions rubles in end user prices

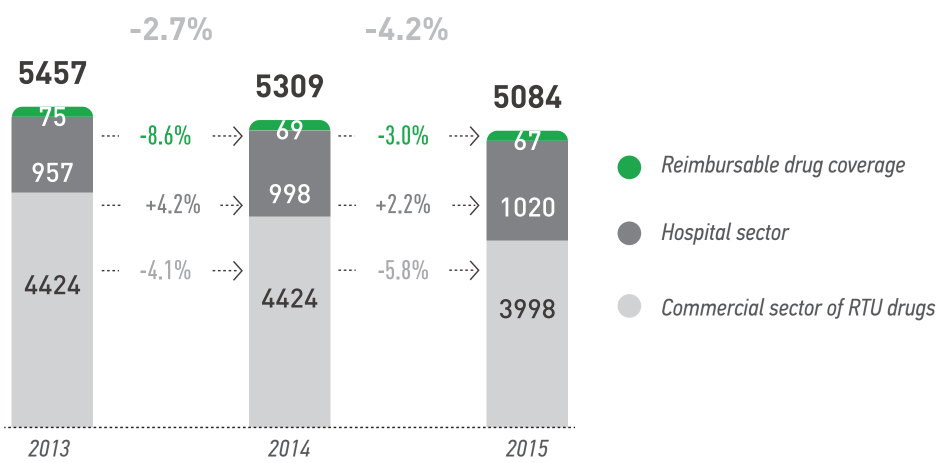


Figure 2

Pharmaceutical market capacity, million units

Figures 1 and 2 show retail sales volume of Russian pharmaceutical market in 2013 - 2015 in end user prices.

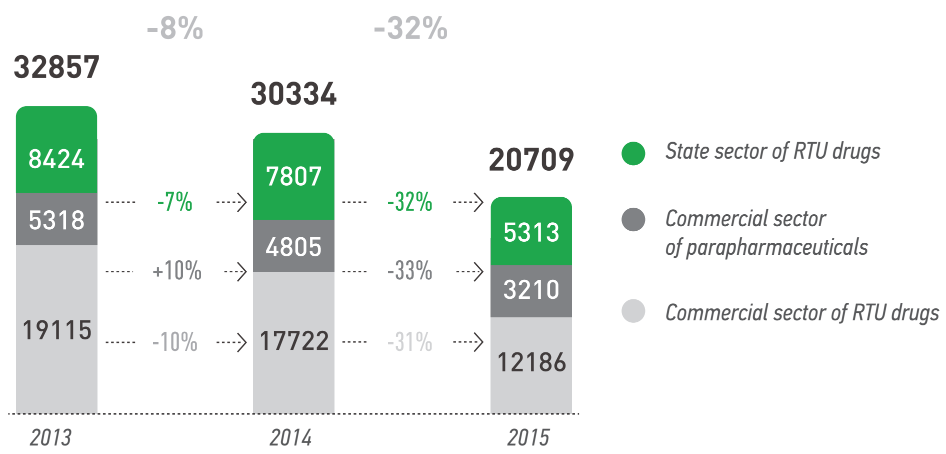
In 2015, the volume of the Russian pharmaceutical market achieved 1 259 billion rubles, which is 9.3% higher than that a year earlier. In 2015, the drug sales rates in units continued to drop and decreased by 4.2%, which amounted to 5.1 billion of units. Such drop of the parameter was last registered only in 2009.

Commercial sector of RTU drugs in 2015 showed one of the minimal growths for the past 5 years when the market growth rates were measured in two-digit values. Expressed in units, the drug consumption through pharmaceutical channel has been decreasing for a second year in row, and has achieved the parameters of 2004-2005. As during the crisis of 2008-2009, the parapharmaceutical sector on the market expectedly decreased its growth in pharmacies. A crisis first of all affects the sales of related products.

The government policy in the sphere of state drug supply of the population has been the same, the social spheres are not diminished. In 2015, the growth in sector of reimbursable drug coverage and

Figure 3

Pharmaceutical market capacity, billions dollars in end user prices



hospital purchases was 10%. Stability of such parameters has been seen for the past 3 years.

Despite of relatively stable positive growth in national currency on the market, the main pool of manufacturers on Russian market presents its sales volume in foreign currency. 2015 was a year of pharmaceutical market "crash" if expressed in dollars. In comparison with 2014, the volume of pharmaceutical market in prices decreased by 32% in dollars and by 14% in Euros because of ruble devaluation. Such fall led to the comparable parameters of pharmaceutical market capacity in 2015 with that of 2007-2008. Such parameter will not allow Russia to be included in TOP-10 leading world pharmaceutical markets.

Market Expressed in Numbers

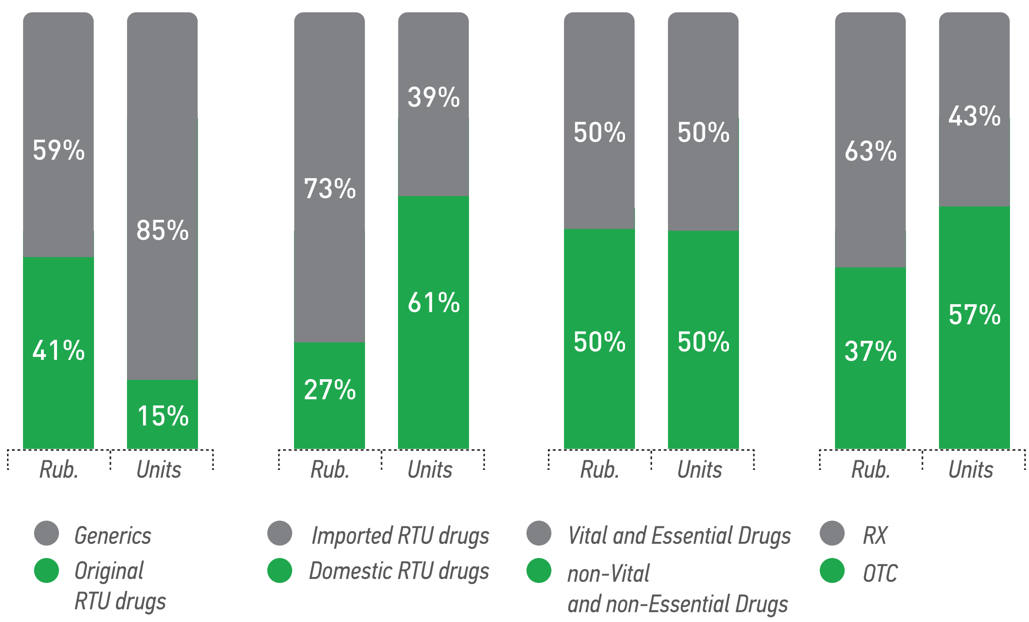


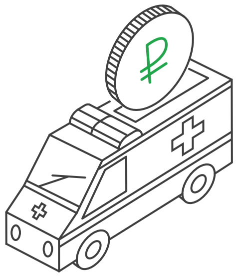
Figure 4

Market Structure in Various Sections, 2015

Table 1

Sales Structure of RTU drugs by ATC groups, 2015

First Level ATC-groups	Group share in sales value, %	Group share in real sale volume,%
A: Alimentary tract and metabolism	16.1%	15.2%
J: Antibacterials for systemic use	13.0%	11.1%
N: Nervous system drugs	10.3%	15.6%
L: Antineoplastic and immunomodulating agents	10.3%	1.3%
R: Respiratory system drugs	9.7%	12.3%
C: Cardiovascular system drugs	9.7%	10.2%
B: Agents affecting blood and blood forming organs	7.6%	9.1%
M: Musculoskeletal system drugs	6.1%	5.9%
G: Genitourinary system drugs and sex hormones	5.5%	1.7%
D: Dermatologicals	4.6%	9.8%
[~] Without allocation	2.4%	3.9%
S: Agents affecting sensory organs	2.1%	2.1%
V: Various	1.5%	0.7%
H: Systemic hormonal preparations (excluding sex hormones)	0.8%	0.7%
P: Antiparasitic products, insecticides and repellents	0.2%	0.4%



2. Commercial Segment of RTU drugs

In 2015, Pharmacy retail sales of the drug products were affected by general economic factors. Primarily, the financial crisis in the country. Because of this, during the year we observed an atypical for the pharmaceutical market month-to-month dynamics and to the same period of 2014. So the increase of sales in January-February, cause by a high seasonal level of morbidity, was not registered in following months. The sales were more influenced by the decrease of population consumption ability caused by the decrease of real money income. As a result, the commercial segment in the 4th quarter of 2015 showed the fall by 8% in rubles and by 17% in units. It should be noted that in December the fall compared with the same period of 2014 was 14% in price. Such dynamics was associated with several factors including "warm" autumn, which did not promote the sales growth of "seasonal" drug products for treatment of cold and flu, and also a feverish demand for the drug products in December 2014.

As a result, in 2015, the capacity of commercial segment of RTU drugs was 741 billion of rubles in end user prices or 563 billion of rubles in purchase prices of pharmacies (Figure 5), which was just 9.4% higher than in 2014. Although by the results of the first three quarters the market growth was at the level of 17%. In natural expression, almost 4.0 billion of units were sold, which is 5.0% less than that of 2014.

It should be noted that in 2015 commercial sector of RTU drugs showed one of the minimal growth for the past 5 years when the market growth rates were measured in two-digit values. Expressed in units, the drug consumption through pharmaceutical channel has been decreasing for a second year in row and has achieved the parameters of 2004-2005.

"So the increase of sales in January-February, cause by a high seasonal level of morbidity, was not registered in following months."

1. Proportion of Sales of Imported and Domestic RTU Drugs on Commercial Retail Market

The structure of commercial market of RTU drugs by the sales volume of imported and domestic drugs is presented on Figure 5.

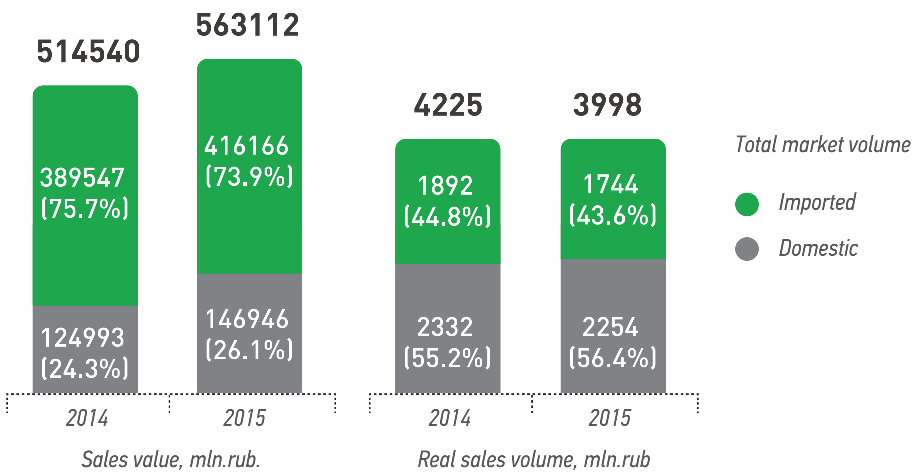
The domestic drugs traditionally cover about one fourth of the Russian commercial RTU drug market in value terms. In 2015, the domestic drug share amounted to 26,1%, exceeding 25% for the first time. At the same time, the domestic drugs prevail in pharmacy sales in real terms and amount to 56.4%. It should be noted that in 2015 the share in the domestic drugs increased both in rubles (by 1.8%) and in units (by 1.2%). It happened due to the increase of the sales of such popular and relatively expensive domestic brands such as CAGOCEL, ERGOFERON, AMIXIN, etc.

In 2015, the growth in sales of the domestic drugs was significantly higher than the sales growth of the imported drugs in sales value: +18% in terms of domestics RTU drugs, +7% in terms of imported RTU drugs. In real sales volume, the sales of the domestic drugs

Figure 5

Proportion of Sales of Imported and Domestic RTU Drugs on Commercial Retail Market

Note: the sales volume is shown in pharmacy purchase prices with VAT included.



decreased by 3.4%, but for the imported drugs this parameter decreased by approximately 7.9%.

In 2015, the average price of the domestic drug unit was 65 rubles, which is approximately 4-times lower than that for the imported drugs. In 2015, the average price of the imported drug unit was 239 rubles.

2. Proportion of Sales of RX and OTC-drugs on Commercial Retail Market

According to the results of 2013, sales of both Rx and OTC-drugs increased in retail commercial drug market in monetary terms. Usually, the sales of Rx drugs are rising more rapidly than that of OTC-drugs, in 2015, the sales growth of both groups of drugs was similar - the sales of Rx-drug products increased by 9.8% in rubles whereas the sales of OTC-drug products was 9.1%. Expressed in units, the consumption of both Rx- and OTC-drugs decreased: negative growth in sales volume of OTC-drug products: -6.5% and negative growth in Rx-drug products : -2.7%. The share of OTC-drug products in rubles was 50.6%; in units the most share also is with the OTC-drug product (69.3%).

It should be noted that in 2015, the average price of Rx drugs amount to 227 rubles, whereas the average price of

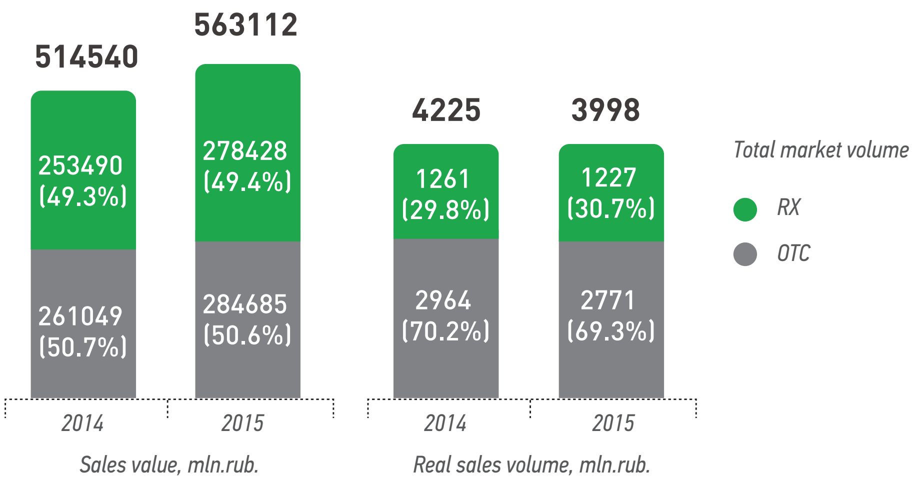


Figure 6

Proportion of Sales of Rx and OTC-drugs on Commercial Retail Market

Note. When calculating the share of Rx- and OTC-drug products an official division according to the List of Drug Products sold without a physician's prescription. The fact that often Rx drug products are sold in pharmacies freely, was not considered.

OTC-drug products was 2.5-fold lower and amounted to 74 rubles per unit.

3. Sales Structure of RTU Drugs on Retail Commercial Market by ATC Groups

The ratio of 1st level ATC groups by pharmacy sales in Russia is shown in Table 2.

ATC-group rating by sales value has changed a little in comparison with 2014 (changes relate mainly to improved position of ATC-group [C] - “Cardiovascular system drugs”. In 2015, as well as in the previous periods, the ATC-group [A] “Alimentary tract and metabolism” kept the leading position (19.4%). Compared to 2014, this group shows sales growth in money terms by 9%. By the number of sold units, this segment shows sales decrease, which amounts to 8.2%. Thus, we can conclude that the observed increase in sales in rubles in this group was due to higher drug prices.

About 17% of ATC-group [A] sales value concerns subgroup [A11] “Vitamins”. The first place by the sales volume in group [A07] is occupied with brand “Milgamma” with share in rubles, which amounts to 14%. MAGNE and VITRUM are on the 2nd and the 3rd places with shares 13.3% and 9.7%, respectively. By the number of sold units low-cost mainly domestic drug product ASCORBIC ACID is the leader (almost 20% of sales [A11]).

The first place in the real sales volume amount subgroups in group [A] is occupied with antidiarrheal drug products [A07] - 22% of all group sales.

In 2015, Group [C] “Cardiovascular system drugs” shifted from the 3rd place to the 2nd.

The largest share of sales volume in group [C] is covered by subgroup [C09] “Drugs influencing renin-angiotensin system” (31% from the sales volume in the group [C]). Losap is the leader in the subgroup, which takes about 13% of the sales volume for 2015.

Despite that ATC-group [B] Agents affecting blood and blood forming organs” in the past year has kept its position (9th place), it was registered as having the maximal among all ATC-group sales growth (+17% to the sales level of 2014).

In group [B], subgroup [B01] “Anticoagulants” takes the leading position: 58% of the sales value is covered by this subgroup. The main sales volume in the subgroup is taken by CARDIOMAGNYL and KSARELTO brands. Pharmacy sales of CARDIOMAGNYL have increased by 19.6% for the past year, KSARELTO has demonstrated even more significant dynamics (more than 2-fold

Table 2

Structure of RTU drugs on Retail Commercial Market by ATC-groups

First Level ATC-groups	Group share in sales value, rub.	Group share in real sale volume, %	First Level ATC-groups	Group share in sales value, %
A: Alimentary tract and metabolism	108 991	19.36%	678	16.96%
C: Cardiovascular system drugs	72 164	12.82%	451	11.29%
R: Respiratory system drugs	69 515	12.34%	589	14.73%
N: Nervous system drugs	65 428	11.62%	688	17.22%
M: Musculoskeletal system drugs	45 233	8.03%	279	6.97%
J: Antibacterials for systemic use	44 867	7.97%	278	6.94%
G: Genitourinary system drugs and sex hormones	42 567	7.56%	81	2.03%
D: Dermatologicals	34 939	6.20%	438	10.97%
B: Agents affecting blood and blood forming organs	22 686	4.03%	114	2.86%
L: Antineoplastic and immunomodulating agents	17 622	3.13%	53	1.34%
[~] Without allocation	16 258	2.89%	188	4.69%
S: Agents affecting sensory organs	15 145	2.69%	101	2.52%
V: Various	3 263	0.58%	23	0.57%
H: Systemic hormonal preparations (excluding sex hormones)	2 900	0.51%	19	0.48%
P: Antiparasitic products, insecticides and repellents	1 534	0.27%	18	0.44%

Note: the sales volume is shown in pharmacy purchase prices with VAT included.

increase of the sales value in comparison with 2014).

The structure of the commercial market by ATC groups remains rather stable from year to year. The increase in the capacity and the average cost of a unit in ATC-group is shown in Figure 7.

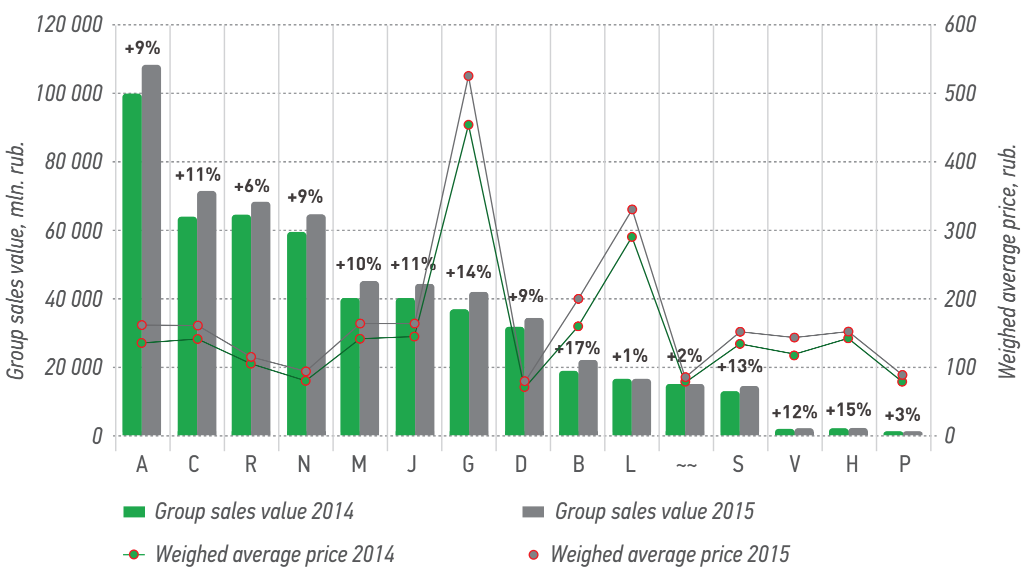
According to the results of 2015, all ATC-groups showed an increase in sales value. Except for abovementioned ATC-group [B], quite notable increased in money terms (14%) was registered for drugs in group [G] Genitourinary system drugs and sex hormones (due to the increase in sales value of DUFASTO, CIALIS, JES brands, etc.)

In real sales volume, the most part of ATC-groups was noted by the decrease of consumption, increase in pharmacy sales was registered only in the group of RTU drugs [H] "Systemic hormonal preparations (excluding sex hormones)", it amounted to +8%.

The highest average unit cost on the basis of 2015 amounted to 525 rubles for the drugs of group [G] "Genitourinary system drugs and sex hormones". Such a high

Figure 7

Structure of Commercial RTU drug market in 2014-2015



price is explained by the fact that the unit cost of some of RTU drugs in this group reaches 11 thousand rubles and more. Also high average unit price in noted in group [L] Antineoplastic and immunomodulating agents" - about 330 rubles, [B] "Agents affecting blood and blood forming organs" - about 200 rubles.

The contribution of various ATC-group to the overall growth of the commercial market was determined using weighed increase index: the value taking into account the share of each ATC-group multiplied by its growth rate (Figure 8).

In 2015, the drugs of the group [A] "Alimentary tract and metabolism", [R] "Respiratory system drugs", [N] "Nervous system drugs" made the largest contribution to the increase of the value capacity of the commercial RTU drugs market which totally amounted to 4.2% or about 50% of general market growth.

4. RTU drugs manufacturers on retail commercial market

Table 3 shows TOP-20 manufacturing companies leading by the sales volume on Russian commercial market in 2015.

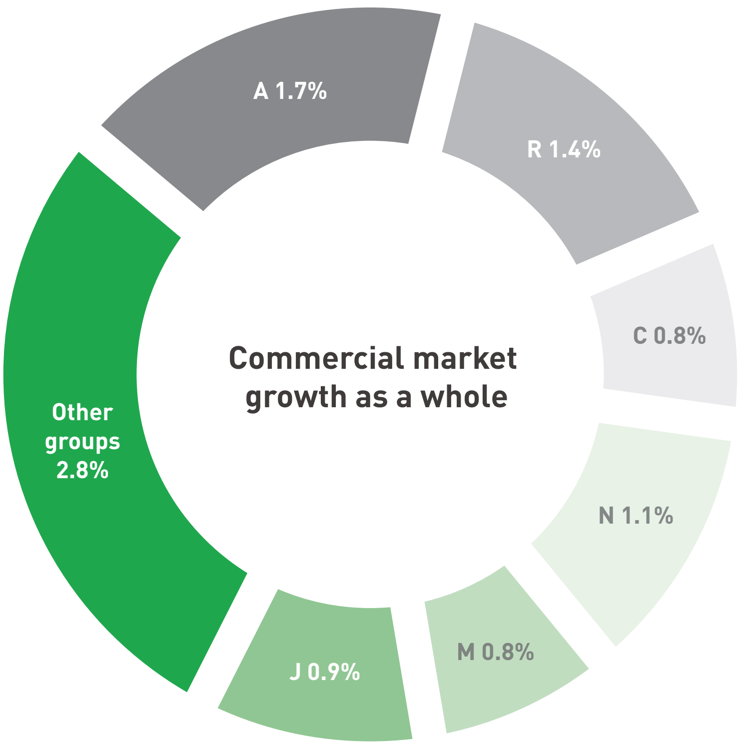


Figure 8

Weighed Increase of RTU Drugs on Retail Commercial Market by ATC groups

In 2015, over 1,000 players were presented on the Russian pharmaceutical market.

Totally, TOP-20 manufacturers cover 55.1% of RTU drug sales volume. The total share of TOP-20 has slightly decreased in comparison with 2014.

SANOFI retained the leading position in the ranking with a share in rubles amounting to 5.0%. SANOFI portfolio is quite large (more than 200 products sold in the commercial market). The maximal amount of the company's sales accounted for ESSENTIALE - its share in the company's sales by the end of 2015 was 16.9% in money terms with 11% decrease to the sales level of 2014. The largest increase in sales was registered for key products FESTAL (+31,2% to the sales level of 2014), ENTEROL (+70,5%), ULTRACAINE (+31,3%), etc. In real terms, leaders in the terms of sales are such brands as NO-SPA, LOZAP, ESSENTIALE. These three positions cover more than 30% of the sold units, which is almost equivalent to the total share of these drugs by sales value of the company.

BAYER, which occupied the second place, lost to the leader 1.3% by the share in rubles. Share differences in the key products are not significant in BAYER portfolio. Thus, by the results of 2015, leading "THERAFLEX" covers 9.1% from the total sales volume of BAYER, and specific weight of "JES" and "BEPANTEN" occupying the second and the third places was 7.5% and 7.1%.

NOVARTIS with share of 4.6% occupied the third place shifting one place. At year-end 2015, the company's sales growth rate was positive, +0.5%, but with more significant drug market growth in general (+9.4%), in manufacturer's ranking, NOVARTIS shifted down one place in comparison with 2014. For a row of company's key products a decrease in sales was noted - EXODERIL (-8.5% to the sales level of 2014), LINEX (-16.5%), ACC (0.5%). But it also should be noted that NOVARTIS portfolio also had growing group of drug products: Amoxiclav (+8.3%), KETONAL (+7.8%), GALVUS (+26.6%), etc.

According to the results of 2015, in TOP-20 of manufacturers of Russian commercial drug market, the following companies have improved their position: Gedeon Richter (pharmacy sales of the company's drugs have increased by 16.7% due to the stable demand of such RTU drugs as MYDOCALM, PANANGIN, DIROTON, etc.), STADA (which added slightly more than 19% to the sales level of 2014 due to the sales increase of some brands, particularly, SNUP, LEVOMECOL and VITAPROST), Actavis shifting up one position in the ranking. Moreover, domestic company Pharmstandard moved from 22nd place to 18th place due to the drug sales increase by more than 30% (with flagship drugs being

Table 3

TOP-20 manufacturing companies by pharmacy sales volume of Russian retail commercial market in 2015

2015 Rating	Changes	Manufacturer	Sales value, mln.rub.	Sales volume increase	Share
1	-	Sanofi	28 033	-0.1%	5.0%
2	1	Bayer	26 480	5.1%	4.7%
3	-1	Novartis	25 886	0.5%	4.6%
4	-	Servier	19 502	2.2%	3.5%
5	-	Glaxosmithkline	18 139	-0.3%	3.2%
6	-	Takeda	17 845	7.1%	3.2%
7	-	Teva	16 890	8.6%	3.0%
8	-	Berlin-Chemie	15 979	8.5%	2.8%
9	-	Otisipharm	15 580	8.2%	2.8%
10	2	Gedeon Richter	14 451	16.7%	2.6%
11	3	Stada	13 848	19.2%	2.5%
12	-2	Abbott	13 522	6.3%	2.4%
13	-2	Pfizer	12 086	-2.7%	2.1%
14	-1	Johnson & Johnson	12 008	1.9%	2.1%
15	-	KRKA	11 578	8.5%	2.1%
16	-	Astellas	10 457	10.4%	1.9%
17	1	Actavis	10 298	19.9%	1.8%
18	4	Pharmstandard	10 014	34.1%	1.8%
19	-	Valeant	9 096	11.7%	1.6%
20	-3	Boehringer Ingelheim	8 687	-4.9%	1.5%

IMUDON (+10.2%), KOMBILIPEN (+39.9%), etc.).

It should be noted that, in 2015, a half of the companies included in TOP-20 manufacturer's list has retained its positions. Thus, most part of the companies registered increase in sales. The pharmacy sales volume of TAKEDA, TEVA and BERLIN-CHEMIE drugs increased by 7.1%, 8.6% and 8.5%, respectively. in 2015, total demand for the RTU drugs of the leading Russian manufacturer OTISIPHARM increased by 8.2% due to the sales growth of such company's brands as PENTALGIN, AMIXIN, COMPLIVIT, etc.

Pharmacy sales of KRKA, ASTELLAS and VALEANT have increased by 8.5%, 10.4% and 11.7% for the past year, respectively, and French drug manufacturer Servier noted the sales growth by 2.2% in comparison with 2014.

In real sales, the leaders in pharmacy demand are Russian manufacturers. Pharmstandard company holds the maximal share (about 8%). STADA covers about 3.3% in pharmacy sold units. The third place is occupied by VEROPHARM (3.2%). Concentration by the parameter is lower than that expressed in sales value: TOP-20 manufacturers cover 47.5% of drugs sold in units.

5. Drugs of Retail Commercial Market

Table 4 shows TOP-20 drug brands leading by the sales volume on Russian commercial market in 2014-2015.

In total, TOP-20 leading brands cover 11.2% of sales value of the RTU commercial segment. The TOP-3 sales hits have slightly changed: ESSENTIALE has retained the leading position (the market share amounted to 0.8%), KAGOCEL has moved from 4th place to 2nd, NUROPHEN, which was at the 5th place in 2014, occupied 3rd position in 2015.

Segment of anti-flu drugs has been one of the most dynamic segments of commercial market for the past several years. In these terms, 2015 does not yield similar parameters in comparison with the previous years. In February 2015, Influenza and cold epidemics led to 1.5-fold of the sales growth of the "seasonal" drugs. However, crisis and demand decrease in money terms promoted either minimal growth of the total year growth of the acknowledged bestsellers of this segment or a total reduction in comparison with the level of 2014. Thus, for example, in 2015, the demand for Ingavirin increased by 1%, which with more significant growth of the market in general led to its downshift by

Table 4

TOP-20 drug brands by sales volume in value terms on Russian commercial market in 2014-2015

2015 Rating	Change	Manufacturer	Sales value, mln.rub. 2015 r.	Sales volume increase	Share
1	-	Essentiale	4 746	-10.6%	0.8%
2	2	Kagocel	4 279	11.5%	0.8%
3	2	Nurohen	4 192	17.4%	0.7%
4	-2	Concor	4 143	1.2%	0.7%
5	-2	Actovegin	4 028	2.2%	0.7%
6	-	Alflutop	3 299	1.5%	0.6%
7	11	Cardiomagnyl	3 197	19.6%	0.6%
8	-1	Ingavirin	3 064	1.0%	0.5%
9	2	Nice	2 980	4.3%	0.5%
10	4	Lozap	2 978	6.9%	0.5%
11	7	Detralex	2 809	7.4%	0.5%
12	-	Teraflu	2 801	-1.6%	0.5%
13	6	Mexidol	2 770	6.4%	0.5%
14	1	Pentalgin	2 765	2.6%	0.5%
15	-2	Exoderil	2 626	-8.5%	0.5%
16	7	Milgamma	2 614	14.5%	0.5%
17	8	Voltaren	2 552	13.4%	0.5%
18	27	Miramistin	2 532	43.7%	0.4%
19	-11	Linex	2 474	-16.5%	0.4%
20	8	Magne B6	2 454	14.7%	0.4%

1 place in the ranking. Sales of TERAFLU decreased by 1.6% in comparison with 2014. As far as ARBIDOL and LASOLVAN are concerned, the decrease of pharmacy sales volume of these brands (by 27.7% and 17.4%, respectively), cost their places in TOP-20 brands of commercial segment. The only exception among cold and flu medications was KAGOCEL, the pharmacy sales of which by the end of 2015 increased by 11.5% in comparison with 2014.

The most significant improvement of the positions in the ranking of 2015 was demonstrated by seven drug products: CARDIOMAGNYL (+11 places), DETRALEX (+7 places), MEXIDOL (+6 places), MILGAMMA (+7 places), VOLTAREN (+8 places), MIRAMISTIN (+27 places) and MAGNE, which moved from 28th position to the 20th position.

Low-cost drug products take the leading positions in the volume of sold units: CITRAMON, BACTERICIDE BAND-AID and ACETYLSALICYLIC ACID. Among RTU drugs in the TOP-20 in the sales value, only NUROPHEN made it in TOP-20 ranking by the real sales volume and took 14th place.

It should be noted that TOP-20 in money terms almost entirely consists of so-called “traditional” drug products, i.e. those sold only in Russia and former Soviet countries. In ruble ranking they are ranked under line 100. The weighted average price in the TOP-20 by units is about 20-25 rubles.

6. VITAL AND ESSENTIAL DRUGS

Vital and Essential Drugs is a list of the drug products approved by the Government of the Russian Federation in order to regulate the prices for drug products by the state. The aim of state regulation is an increased access to the drug products for the population and Healthcare Institutions.

In 2015, the list of Vital and Essential Drugs was composed by the new rules: it included only drug products with clinically proved efficiency based on two-level expert evaluation with participation of wide range of experts, including main part-time specialists of the Ministry of Healthcare of Russia in the main spheres of clinical medicine. It also should be noted that since 1st of March 2015, for the first time in three years an updated list of Vital and Essential Drugs has been implemented on the territory of Russia. It is the preparation and the approval of the new rules for its composition that caused the prolongation of the list’s edition of 212 for two following years.

The work on the update of the Vital and Essential Drugs List for 2016 started already in 2015, at the beginning of

2016, it was approved by the Council of Ministers of the Russian Federation.

According to the Ministry of Healthcare, in comparison with the previous year, the list has been expanded. Forty-three drug products were added to the list of Vital and Essential Drugs (six of which are manufactured by Russian companies), one drug product was excluded (manufactured by a Russian company). The number of international non-proprietary drug products of the indicated list has increased from 604 to 646 names.

Rather strict regulatory control of the composition of the list allows the drug manufactures whose drugs are included in the list determine its "rules of play" for the upcoming year and promotes the consumers understanding of how and at what level the limit release prices are set for certain drugs. But on the other hand, this measure makes the manufacture efficiency of certain types of drugs on the list of Vital and Essential Drugs equal to zero (it mostly concerns low-cost RTU drugs, the average unit price of which does not exceed 30-50 rubles/unit). As a result, in the second part of 2015-2016, a necessity of state support of the manufacturers of low-cost drugs on the list of Vital and Essential Drugs occurred. The Federal Antimonopoly Service offered to increase the price of the drug products on the list of Vital and Essential Drugs, which are a part of the cheapest segment for its manufacture not to be stopped because of lack of profitability. However, such measure was not approved by the administration of the Ministry of Healthcare. In February 2016, the mass media provided information that the Government of the Russian Federation as a part of support of the Russian economy allocated 4 billion of rubles to help pharmaceutical manufacturers who manufacture the drugs of the list of Vital and Essential Drugs. It mainly concerns the manufacturers of low-cost drugs on the list of Vital and Essential Drugs. Conclusions on the results of such support measure can be made only at the beginning of next year.

One more innovation for the list of Vital and Essential Drugs was a change of the calculation method of the limit prices for Vital and Essential Drugs. The new calculation method of the limit release prices for Vital and Essential Drugs expands the list of data to be provided by the holder or the owner of marketing authorisation when applying for the registration of a drug product. The applicant should provide not only the data of expenses (development, manufacture, drug distribution, raw materials, work payments, and also upfront expenses) but also data on the minimal release price of the manufacturer (without taking into consideration of the manufacturing sites, participating the drug manufacturing activity) of such drug product. One more requirement was implemented: the price of the replicated drug product should not exceed 80% of the reference drug product price; the price of biological analogue should not exceed 90%.

The list on countries towards which the information on the level of minimal release prices for drug products should be provided includes 21 positions.

According to the results of 2015, 583 INNs of the list of Vital and Essential Drugs were registered in the pharmacy sales (which accounts for 1987 brands). The sales volume of the drugs on the list of Vital and Essential Drugs was almost 200 billion rubles or 1605 million of units (Figure 9).

It should be noted that sales volume of Vital and Essential Drugs in value terms increased less significantly than the other drugs (5.6% - Vital and Essential Drugs, 11.7% - non-Vital Drugs). In real terms, the situation is slightly different: in unit terms, the share of Vital and Essential Drugs decreased by 1.3% whereas the sales volume of the drugs not on the list decreased by 7.9%.

”The new calculation method of the limit release prices for Vital and Essential Drugs expands the list of data to be provided by the holder or the owner of marketing authorisation when applying for the registration of a drug product.“

The share of domestic drugs in unit terms was 49.7%, in money terms their share was 27.2%.

At year-end 2015, the weighted average price for Vital and Essential Drugs amounted to 124.5 rubles; the price of one unit of a domestic drug was about 68 rubles, that of an imported drug was 3-times higher (180 rubles).

The average cost of Vital and Essential Drugs did not exceed the weighted average price for other drugs. It signifies that in the segment of Vital and Essential Drugs the shift of sales towards expensive drugs is less evident than generally on the market, which can be explained by strict regulation of prices for the drugs on the list of Vital and Essential Drugs.

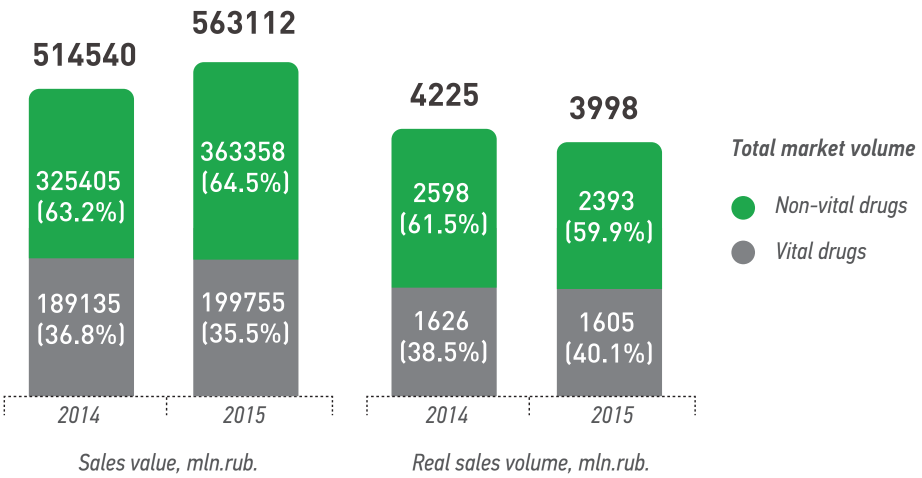


Figure 9

Sales Ratio of Vital and Non-Vital Drugs

Figure 10 shows a price index for the various groups of drugs.

Over 12 months of 2015 vital drugs prices increased by 2.8%. Drugs not included in the list of Vital and Essential Drugs increased in price by 14.2% compared to December 2014. The main price growth was in 1st half of 2015 - during this period the price index increased by 6.4%.

RTU drugs sales ranking by INN included in the list of Vital and Essential Drugs is presented in Table 5. At the top of the vital drugs ranking by INN is XYLOMETAZOLINE. We should note that XYLOMETAZOLINE also was a leader in 2014. Positions at the top of the ranking were not changed as a whole because the sales of the most INN drug had increased. In 2015, overall sales of all INN on the Vital and Essential Drugs ranking increased from the previous year with exception of AZITHROMYCIN, UMIFENOVIR, ENALAPRIL and DROTAVERINE - the drug sales of each of INN decreased by 3%, 21%, 3% and 1%, respectively.

The highest growth of the weighted average price is observed for INN IBUPROFEN (+15%) due to the price growth of a row of trade positions of NUROPHEN and IBUPROFEN. Moreover, in 2015, NUROPHEN Express in the form of gel for external use as well as NUROPHEN EXPRESS in capsules (#16 & #8) of the same brand were introduced to the pharmaceutical market and the price of all the above mentioned positions exceeds 100 rubles/unit whereas the average price of the drug products with same INN by the end of 2015 achieved in 132 rubles/unit having increased by 21% in comparison with 2014.

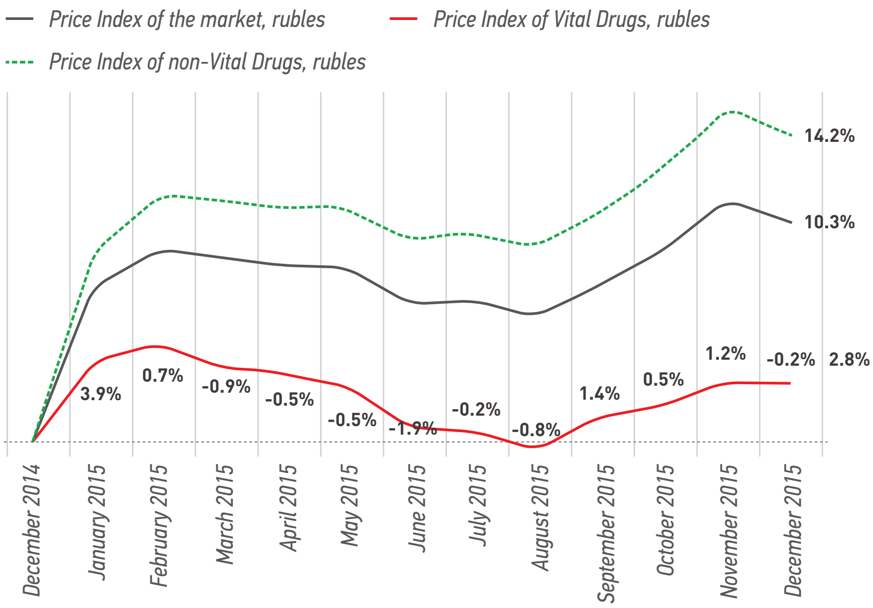


Figure 10

Price Index Dynamics On Commercial Market in 2015

Table 5

Sales Ranking of INN Included in the Vital Drugs List

2015 Rating	INN	% from vital drugs sales, %	Volume, millions of rubles	Leader among INN brands
1	Xylomethazoline	**4.8%**	**9 543**	Tyzin
2	Pancreatin	**2.9%**	**5 750**	Creon
3	Bisoprolol	**2.6%**	**5 284**	Concor
4	Ibuprofen	**2.6%**	**5 226**	Nurophen
5	Amoxicillin+Clavulanic Acid	**1.7%**	**3 416**	Amoxiclav
6	Ethylmethylhydroxipyridine succinate	**1.6%**	**3 251**	Mexidol
7	Azithromycin	**1.6%**	**3 135**	Sumamed
8	Atorvaststin	**1.6%**	**3 127**	Atoris
9	Imidasoliletinamid pentanedioic acid	**1.5%**	**3 064**	Ingavirin
10	Interferon Alfa-2b	**1.5%**	**3 019**	Viferon
11	Ambroxol	**1.5%**	**2 992**	Lazolvan
12	Losartan	**1.3%**	**2 690**	Lozap
13	Omeprazole	**1.3%**	**2 627**	Omez
14	Umifenovir	**1.2%**	**2 469**	Arbidol
15	Ademetionine	**1.2%**	**2 454**	Geptral
16	Enalapril	1.2%	2 409	Enalapril
17	Ursodesoxyholic acid	1.2%	2 408	Ursosan
18	Pregabalin	1.2%	2 402	Lyrica
19	Acetylcisteine	1.2%	2 365	Acc
20	Tamsulosin	1.2%	2 360	Omnic

7. Price Segmentation of Drugs on Retail Commercial Market

In 2015, the average unit price of RTU drugs on the commercial market increased by 16% and amounted to 104.9 rubles.

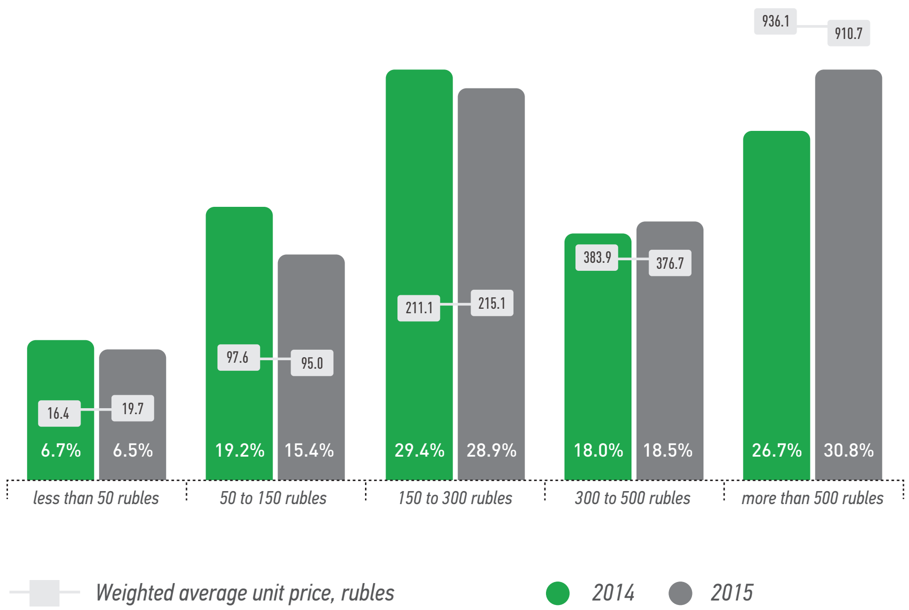
We now consider the components of this value.

The commercial market structure and the average price per unit in different price categories in 2014-2015 are presented in Figure 11.

As seen in Figure 11, the share of drugs with a price less than 50 rubles per unit decreased by 0.2% over the last year. It should be noted than a share of these drug products in the list of Vital and Essential Drugs increased by 0.2%. The tendency of demand shift towards more expensive and effective drug products has been seen on the national pharmaceutical market for the past several years. Thus, the sales volume

Figure 11

Value sales structure of commercial market RTU drugs by price categories



of such popular drugs as BACTERICIDAL PLASTER, ACTIVATED CARBON, CITRAMON and ACETYLSALICYLIC ACID decreased by 43 million of units.

If we “fix” the consumer basket at the level of 2014 (regardless of drug price in 2015, it falls into the same segment, which it is in according to the results of 2014), in 2015, the share of the drugs priced less than 50 rubles was 8.2%, i.e. by 1.5% higher than in 2014. It signifies that a rather significant group of low-cost products increased in price in 2015 automatically shifting to the next price segment. Increase of the average price per unit in the drug segment prices less than 50 rubles/unit by 20.1% confirms this fact. It should be noted that in other segments with “fixing” of the consumer basket at the level of 2014, decreases in shares will be noted: the share of drug segments priced 50-150 rubles/units will decrease 0.1%, the specific weight of the expensive drug segment (with price over 500 rubles/unit) and RTU drugs with price from 300 to 500 rubles will decrease by 0.5%; the share of drugs priced 150-300 rubles/unit will decrease by 0.4%. Thus, it can be concluded that in 2015, the market shares on price segments changed mainly due to the price growth and the transition of the drug products from one price range to another, to a lower extent due to the shift of consumer’s focus on more expensive RTU drugs.

The segment of the drug products with price up to 50 rubles has still the greatest capacity in the unit terms and amounts to almost 47%.

The fastest growing price group both in value (+26.3%) and in unit (+29.8%) terms is a group of drugs priced over 500 rubles, its share increased by 4.1% and amounted to 30.8% in rubles. In units, the share of this group is minimal - 4.8%.

The group of drugs price from 150 to 300 rubles, the group with the most capacity, covered 28.9% of volume in money terms. Sales growth in this group was +7.3% in 2015 in comparison with 2014.

8. Price Index of Drugs on Retail Commercial Market

To make an objective estimate of drug price change on the retail commercial market, price index based upon a fixed list of ready-to-use drugs was considered.

The main driver of market growth, as in previous years, was the growth of the drugs price index. In 2015, inflation for drugs (10.3%) was lower than the overall State Statistics Committee (SSC) consumer price index (12.9%). Thus, the price growth in terms of drug products was slightly behind the price growth in terms of food, non-grocery products and services but exceeded the price growth in terms of petrol at the same time.

Slightly less significant increase in prises of the most required drug products was noted: price index of TOP-100 trade names in circulation of 2015 was 7.4% (Figure 12).

The price index for imported and domestic drugs for 2015 is shown on Figure 13.

According to the data of the State Statistics Committee (SSC), in 2015, the drug products covered about 2.1% in the basic structure of population's consumer expenses in Russia, which is 0.1% higher than that of 2014. Thus, the State Statistics Committee (SSC) has slightly increased the significance of the drug products in the consumers' expenses.

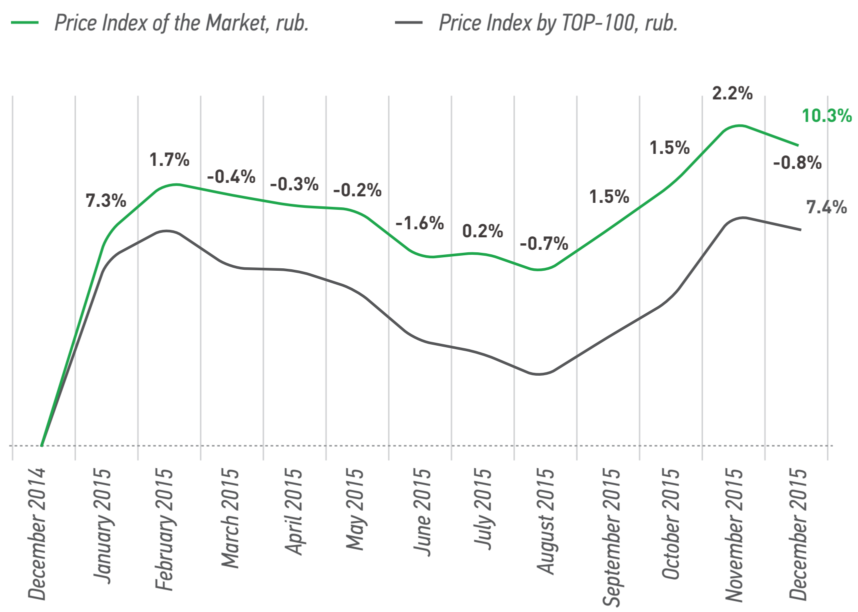


Figure 12

Change in prices of RTU drugs on the Russian commercial market in 2015

Figure 12 shows the overall consumer price index and price indices for various categories of goods and services.

In 2015, the overall consumer price index amounted to 12.9% with the highest price rise observed in food (14.0%). The lowest growth was observed in petrol (4.8%).

9. New Drugs of Retail Commercial Market

The sales analysis of the new drug products showed that 2015 was characterised with dynamic extension of the market. In 2015, more than 460 new brands of drug products appeared in pharmacies. In 2015,

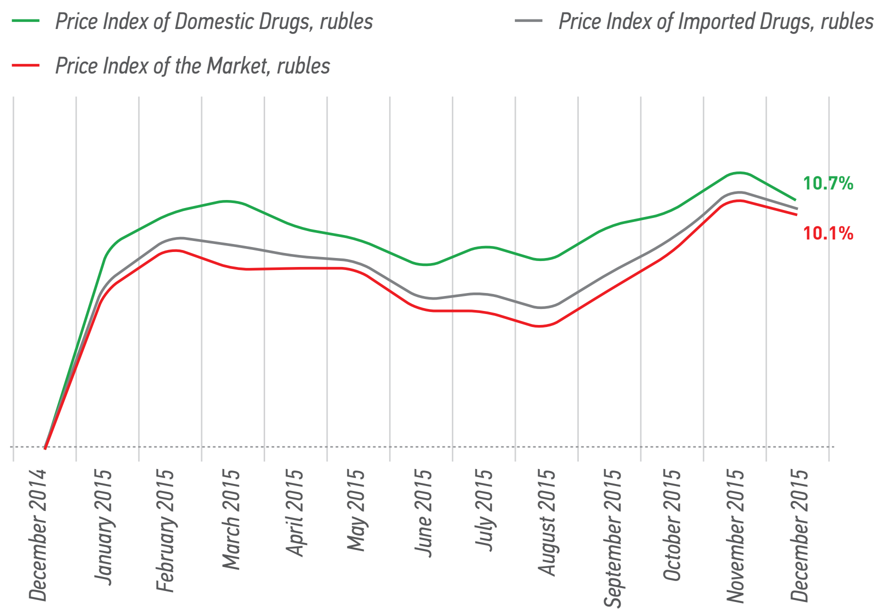


Figure 13

Price Index for Drugs of Domestic and Foreign Manufacturers on the Russian Commercial Market in 2015 the overall sales volume of the new drug products exceeded 960 million rubles and 3.0 million of units, which was equivalent to 0.17% of value and 0.08% of unit volume of pharmacy sales of all drug products on the retail commercial market.

The weighted average price of one unit of a new drug product was about 319 rubles.

The leader in sales of new products, which entered the market in 2015, was brand PHLEBOPHA (Atoll) possessing angio protective properties. Sales volume of the drug product was 101.4 million rubles. The second place in the ranking is occupied by MICODERIL (Otisipharm) designed for treatment of mycosis of skin and nails with sales volume of 96.3 million rubles. The third place with sales volume of 61.8 million rubles is taken by Atorvastatin-C3 (SEVERNAYA ZVEZDA) hypolipidemic drug.

According to the results of 2015, pharmacological group with the most capacity in value terms among new drug products on the commercial market of RTU drugs was "Venotonic and venoprotector agent" (DIOSMIN), followed by a pharmaceutical group of antimycotic drugs

Figure 14

Index of consumer prices in Russia (December 2015 compared to December 2015)

Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation" DSM Groupт

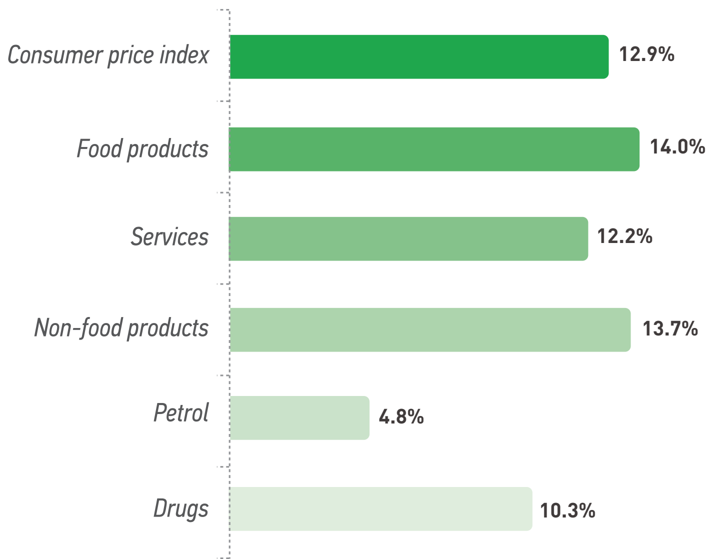


Table 6

TOP-20-new brands on the commercial market of the Russian Federation in 2015

№	Brand	Company	Volume, mln.rub.	Date of appearances in pharmacies, 2015
1	Phlebopha	Atoll	**101.4**	**March**
2	Micoderil	Otisipharm	**96.3**	**June**
3	Atorvastatin-C3	Severnaya Zvezda	**61.8**	**March**
4	Dinolak	Pharmadan	**50.2**	**January**
5	Forsiga	Bristol-Myers Squibb	**50.2**	**February**
6	Ophlomyl	Glenmark	**48.1**	**June**
7	Olmax Strong	Actavis	**38.9**	**January**
8	Ecophuryl	ABBA Rus	**32.9**	**May**
9	Eryspirus	Sandoz	**26.2**	**June**
10	Cabecyn	Pharm-Syntez (Moscow)	**23.5**	**June**
11	Oralsept	Gilesanto Holdings Ltd	**22.6**	**June**
12	Lortenza	KRKA	**22.6**	**June**
13	Moxarel	Vertek	**19.9**	**January**
14	Goldline	Izvarino Pharma	**19.9**	**January**
15	Dexilant	Takeda	**18.4**	**March**
16	Vizarsin Q-Tab	KRKA	**17.2**	**October**
17	Broxinac	Sentiss Pharma	**13.7**	**February**
18	Vipidia	Takeda	**12.4**	**May**
19	Panangin Forte	Gedeon Richter	**10.8**	**September**
20	Rengalin	Materia Medika	**10.6**	**June**

(NAPHTIPHIN), the third place in the ranking is taken by the group of hypolipidemic drugs (ATORVASTATIN).

Let's take a closer look at the brands, which constituted the TOP-20 ranking of the new trade names on the commercial market on the Russian Federation by the end of 2015. In March 2015, a new brand of domestic manufacturer, "Phlebopha", appeared on the Russian market. The drug product is released in the form of tablets. The agent has venotonic action, it increases the lymphatic drainage, improves microcirculation, decreases adhesion of WBC to the venous walls and its migration to the paravenous tissues, improves oxygen diffusion and perfusion in the skin tissue, has anti-inflammatory action. PHLEBOPHA is more accessible analogue in terms of money than PHLEBODIA (Laboratoire Innotech International) - the leader in the group of venotonic agents, including Diosmin.

MICODERIL drug product by Otisipharm company which took the second place in the ranking is an analogue of the popular antimycotic agent with active substance NAPHTIPHIN - EXODERIL (Sandoz). The sales volume growth is associated with lower price of the drug product than that of the original brand EXODERIL.

The third place is taken by generic drug product "Atorvastatin-C3", the hypolipidemic agent from the groups of statins, the main mechanism of action is the inhibition of the HMG-CoA reductase activity. Atorvastatin decreases the viscosity of blood plasma and activity of several factors of coagulation and aggregation of platelets. Due to this, it improves haemodynamics and regulates the condition of coagulation system.

Two new generics used for treatment of erectile dysfunction with Sildenophyl - VIZARSIN Q-TAB and OLMAX STRONG were included in TOP-20. VIZARSIN Q-TAB manufactured by KRKA is released in the form of tablets dispersed in the oral cavity. The pharmaceutical form accelerates the access of the active substance into the systemic blood flow and is an alternative for patients suffering from dysphagia.

The new drugs in the group of hypotensive drugs are brands "lortenza" manufactured by KRKA, which is a combined hypotensive drug product (calcium channel blocking agents + antagonist of angiotensin II receptors) and MOXAREL of Vertex manufacturer, which is a hypotensive agent of central action.

Among the drugs of pharm groups of agents decreasing secretion of gastric glands, inhibitors of protonic pump, a new drug with trade name DEXILANT (INN DEXLANSOPRAZOL) manufactured by

Takeda appeared in the ranking of the new drugs on the commercial drug market.

As a conclusion, it should be said that most of the new drug products were manufactured by foreign companies. Nevertheless, in 2015, Russian companies released on the market more than 117 new brands and 9 of them were included in TOP-20 of new trade names in the value terms for the indicated period of time.

3. Drug Reimbursement Program (DLO)

Drug reimbursement program to certain categories of citizens is one of the measures of social support of citizens eligible to receive government aid.

DLO program was created 11 years ago. During the time of its existence, the program has been changed multiple times: 7 high-priced nosologies were included in a separate group including diseases requiring expensive treatment ("high-priced nosologies (VZN)", "7 nosologies"). Since 2008, the subjects of the Russian Federation have received the rights to hold auctions for the state order for supply of necessary drug products for certain categories of citizens with provision of state social support and organization of drug supply (ONLS). The delegation of rights to the subjects of the Russian Federation has played a certain part in the stabilization of drug supply, a share of delayed supply has significantly decreased. More attention has been paid to the administration of the program in the subjects of the Russian Federation.

Since 2007, a beneficiary is entitled to choose a method of receiving benefits: a money refund or prescription drugs. Today, the number of people who may be covered by the benefits is about 19 million of people, but the number of beneficiaries who chose drug coverage is decreasing every year and now stands at about one fifth of the total. In 2015, the number of beneficiaries was about 3.7 million of people.

Today, the drug reimbursement to the citizens in the outpatient conditions as part of state social support and organization of drug supply is a measure of social support, which is the inpatient conditions also pertains to medical care. The source of financing of medical, including drug supply, care include: budgets of various levels (regional, municipal), means of Compulsory Medical Insurance), personal assets of the citizens.

The main directions of the developed drug policy in the Russian Federation include:

- in the outpatient conditions transition from the sector of state social support to the sector of medical care within the program of Compulsory Medical Insurance;
- the substitution of the procedure of state purchase of RTU drugs for reimbursement of the price of RTU drugs sold in the pharmacies by the prescription from physicians.

Free or beneficiary drug supply with patients at the early stages of diseases is profitable for the country, as seen by an international and Russian experience. It allows to cut expenses on hospital treatment, decreases the mortality rate. Strategy of drug supply until 2025, approved by the Ministry of Healthcare in 2013, anticipates that, in 2015-2016, various schemes must be tried in several Russian regions, with the transition to the drug reimbursement system in 2017. The Ministry of Healthcare offers the model of drug supply with outpatient treatment (i.e. in the outpatient facilities), which would include partial reimbursement of the cost of drugs. At the moment, despite the formation of a united model of the drug reimbursement, some positive experience has been seen in this sphere in certain regions.

Thus, last year the results of pilot project of drug supply in Kirov Region were discussed. The pilot project was started in 2013. The program included cardiovascular disease and had the following mechanism of financing: 90% is paid by the region, the rest 10% is paid by the patient. According to the region's governor Nikita Belyukh, the amount of 911 calls and cases of hospitalization with cardiovascular diseases has decreased by 25% in the region for the past two years. Moreover, the amount of primary cases of disability has decrease by 22% (i.e. the citizens who were confirmed as disabled in the current year), the mortality from the cardiovascular diseases decreased by 21%. According to the data of the government of Kirov Region, the region has saved 90.5 million of rubles, which is 3-times higher than the expenses of the regional budget for realization of the project - 31.4 million rubles (initial investments in the project were 20 million rubles). Thus, the Government of the Russian Federation has officially admitted this pilot project to be successful and has decided to extend it to some other regions in 2016.

One more type of drug reimbursement program is a system of reference prices: the state sets the limit of drug price, until which it can reimburse the patient's expenses. If the person would like to buy a more expensive drug, he/she pays for the difference between the reference price and the market cost of the drug product. Such policy of financing has been successfully implemented in some foreign countries with various principles of determination of reference prices. The most simple is limitation of reimbursement size for interchangeable drug products with the price of the cheapest generic from this pharmacological group. In Sweden, 10% of its cost are added to the sum, in Denmark this number amount to 100%. In Germany the limit price is determined based on the average price of several analogous drugs with recalculation of active substance content and the package size.

In Russia this type of financing has been experienced in Krasnoyarsk Kray as a part of National Oncologic Program on a regional level. Due to this, in 2015, even with the growth of the foreign currency, the region managed to save 7% of expenses on drug products. On a regional level a list of reference wholesale and retail prices for the drug products on the list of Vital and Essential Drugs was made, which was implemented in the state chain of pharmacies in the region which would not have allowed the wholesalers working with it increase internal prices even on the drug products not on the list of Vital and Essential Drugs and not having fixed additional cost. In the end, despite the growth of the specific weight of high-priced drug product, its accessibility in the region increased. If in 2005, the share of such drug products was 30% from all beneficiary drugs and it was used by 2 thousand of people, in 2015, 60% of the drug products are high-priced taken by 15 thousand of benefit holders.

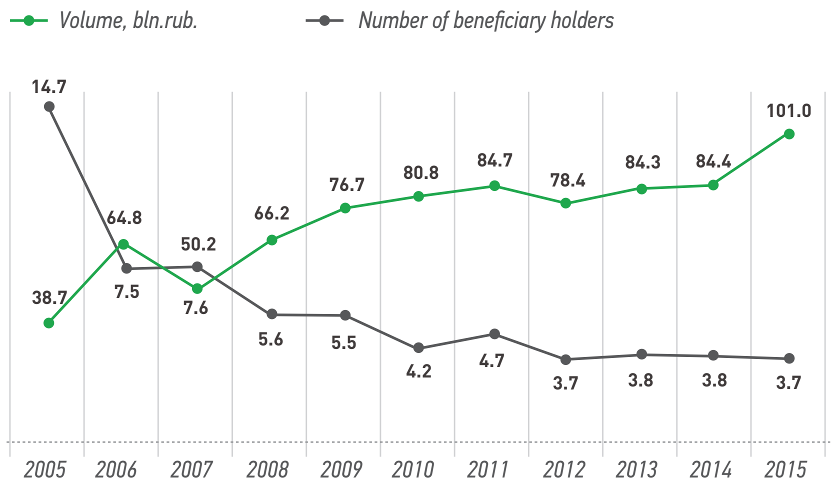
Despite these positive examples, many issues are still at large: it is not yet clear which regions have been chosen for realization of the pilot projects, which budgets will finance the projects: whether it will be federal, partially federal or regional means. All of this can delay the realization of the pilot projects for a year.

As can be seen from Figure 15, according to the results of 2015, 101 billion rubles was spent in order to purchase drugs for the beneficiary categories of citizens. Compared to 2014, the growth was about 19% - one of the highest since 2009. In real terms, a trend to the decrease of sales volume is seen: in 2015, RTU drugs were purchased 3% less than in 2014 that amounted to 66.5 million of units.

The norm of financial costs per month per citizen receiving state social assistance in

Figure 15

Dynamics of DLO Program Money Spent



the form of social service on supplying the drugs, medical devices, as well as specialized medical nutrition products for children with disabilities in the past several years has steadily increased by 5%. 2015 made no exception: the expenses increased from 671 to 707 rubles.

If we talk separately about the two parts of the program, the share of the expensive drugs procurement program decreased in 2015, the volume increased by 17% in comparison with 2014 (Figure 16). The program "Seven high-priced nosologies" (7 VZN) is characterized with low number of benefit holders: about 130 thousand of people.

Since March 2015, the list of drugs purchased by the program of 7 VZN, was completed with five more drugs: ANTI-INHIBITORY COAGULANT COMPLEX, MOROCTOCOG ALPHA, BLOOD COAGULATION FACTOR VIII + WILLEBRAND'S FACTOR, VELAGLUCERASA ALPHA, LENALIDOMIDE. In March 2016, one more drug product will be purchased within VZN program: NATALIZUMAB.

In real terms, there is a tend to increase of consumption of the drug products by the program of VZN: the volume was about 3.5 million of units, which is 13% higher than in 2015.

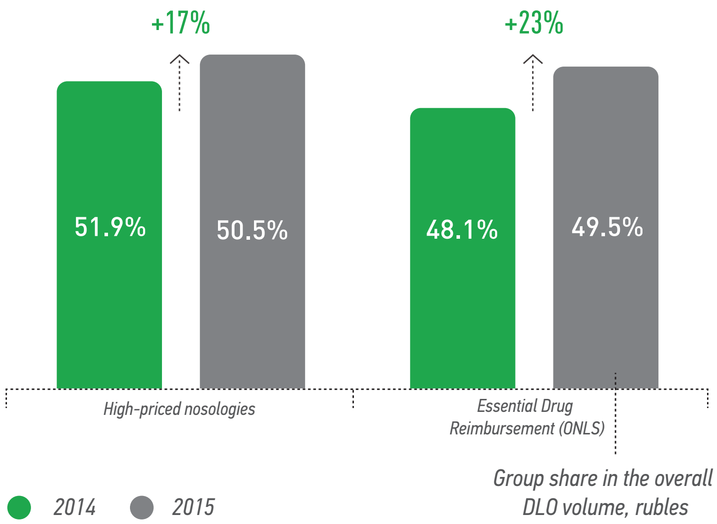


Figure 16

Ratio of cost under "7 nosologies" and ONLS programs in total funds spent on DLO program, in rubles

As usual, at the end of 2014, the Ministry of Healthcare of Russia performed all necessary work on supply in 2015 of regions of year requirement in the drug products for treatment of diseases, included in the list of high-priced nosologies. Open auctions were performed; state deals were made with consideration of approved requirements for 2015, based on the ability of supplier's products. By the most state contracts the drug products were supplied to the subjects of the Russian Federation at the end of 2015.

2014 was the last year, when the drug products by the program of high-priced nosologies were purchased in centralized manner. According to Federal Law # 317-FZ as of 25th of November 2013, amendments anticipating the delegation to the organs of state government of the subjects of the Russian Federation of the rights on the organization of drug products supply to patients included in "7 nosologies" program. But the president of the Russian Federation have signed the law on the delay of responsibility delegation on the drug supply within "Seven high-priced nosologies" program until 1st of January 2018. The explanatory note to the Law says that "decentralisation of the drug products purchases in the terms determined earlier would have had negative influence on the responsibilities of the Russian Federation on the drug supply to the patients and would have led to inefficient use of budgetary means: in order for each region to purchase the drug products separately the amount of trades would have to be increased minimum 83 times, which would have led to the complication of the drug purchase procedure and the increase of its cost".

Approximately since 2013, there has been a wide discussion of the extension of "7 nosologies" program which may include 27 more rare disease from which about 13 thousand of people suffer in Russia. But at the moment there is no data on program extension.

One of the innovations that has been actively discussed is an implementation of electronic marking of the drug packages. Each batch of the drug product will receive a chip, which will contain digital information on all main parameters of manufactured drug product due to which each package can be accurately identified. It will allow to prevent the access of falsified and low-quality drugs to pharmacies and hospitals. The program will be started with the drug products included in program "7 nosologies".

In 2015, 50 billion rubles was spent on ONLS program, which is 23% higher than in 2014. The share of subprogram of ONLS in the total volume of drug reimbursement program tend to increase, the trend started in 2014 for the first time in several years: from 48% in 2014 to 50% in 2015 (Figure 16).

However, in real sales there is a tendency to the decrease of sales volume: about 62.9 million of packages were sold, which is 4% lower than in 2014. Thus, the weighted average price of one prescription grew by 22% and amounted to 810 rubles.

For 2016, the list of drugs for essential drug reimbursement of certain categories of citizens was completed with 15 drug products, six of which have drug products on this list increased 320 to 335 names.

In 2016, the government did not plan to cut the budget on the financing of beneficiary categories of citizens. Thus, the norm on one benefit holder will be 758 rubles, which is 7% higher than in 2015. About 33.7 billion rubles will be spent on the program of Essential Drug Reimbursement.

The volume of financing of "7 nosologies" program is estimated as 43.6 billion rubles. Because of bad financial and economic situation, an contingency plan has been developed which anticipates additional volume of money in order to support the programs of drug supply:

– 16 billion rubles are planned for drug supply of citizens eligible for state social support as a set of social services, and also for compensation of expenses connected with change of foreign currency when purchasing imported drug products,
– 8.5 billion rubles are allocated for drug supply of patients with diseases from the list of seven nosologies: haemophilia, cystic fibrosis, hypophyseal nanism, Gaucher's disease, malignant neoplasms of lymphoid, haematopoietic and related tissues, multiple sclerosis as well as after organ and/or tissue transplantation.

As a result, in 2016, the volume of the segment of drug reimbursement may amount to 102 billion rubles, which is similar to the parameter of 2015.

1. Proportion of Imported and Domestic Drugs within DLO Program

The DLO program includes mainly "imported drugs" while the domestic production takes only modest place in the volume of the reimbursed drugs. The main task of the government according to PHARMA-2020 program is to dramatically change the situation: according to the results of work in this sphere, the share of domestic products should amount to about 50%.

Therefore, there is no accident that a trend outlined on the market and, particularly, in the beneficiary drug supply program, of appearance of a growing number of domestic drugs that can replace imported analogues.

According to the results of 2015, the share of domestic drugs in value terms increased 2 times (Figure 17). Increase in money cost for procurement of domestic drugs increased by 138%, while the consumption of the imported drugs increased only by 2%.

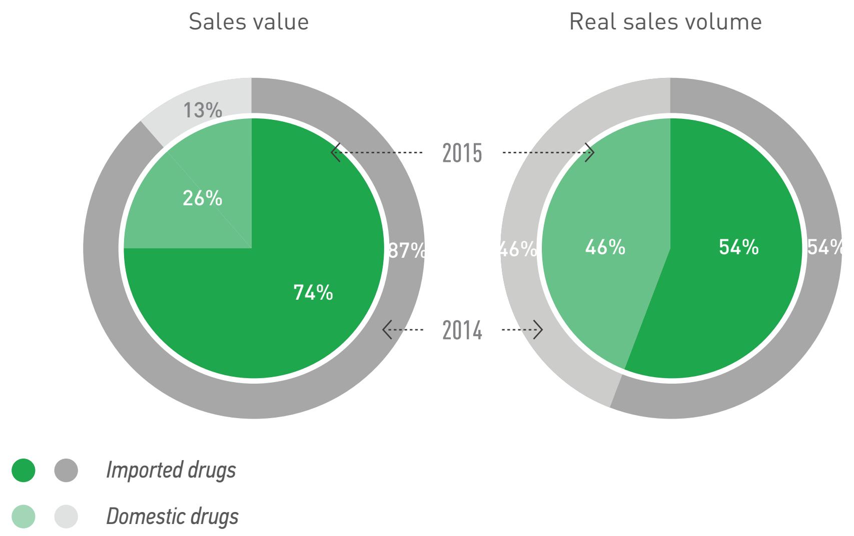
The main contribution in the sales volume increase of the domestic drugs was made by antineoplastic drug products ACELLBIA (INN RITUXIMAB) by Biocad CJSC, the sales of which started in 2014, and also by a newcomer of 2015, brand BORAMILAN FS (INN BORTEZOMIB) by F-Sintez CJSC.

Thus, in spite of the stable proportion of imported and domestic drug sales in favour of imported drugs, for the first time the share of domestic drugs has significantly increased. In 2015, 74% of the sales value amounted to the imported drugs, 26% amounted to the domestic drug products.

In real terms, the share of the domestic drug products remained at the level of 2014. A trend to the decrease of sales volume in units of both domestic and imported drug products: in 2015, the sales volume of domestic drugs decreased by 3%, of imported drugs - by 4%.

Figure 17

Proportion of Imported and Domestic Drug Sales



Proportion of imported and domestic RTU drug sales by "7 nosologies" and ONLS programs is shown in Figure 18.

Significant changes took place in DLO of "7 nosologies": in 2015, the share of domestic manufacturers was 35% in comparison with 10% of 2014, in real terms, 17% (by 6% more than in 2014).

Under the ONLS program the shares of Russian and foreign drugs remained the same: about 17% in money terms and about 48% in units.

2. Proportion of Rx and OTC-drugs Within the DLO Program

The Rx drugs prevail in DLO program both by sales value and by real sales volume - as all these drugs are prescribed by physicians strictly according to the indications for use.

In 2015, the share of Rx drugs in the DLO program sales value in Russia did not change: in sales value it amounted to 99%, in real terms it amounted to 88%.

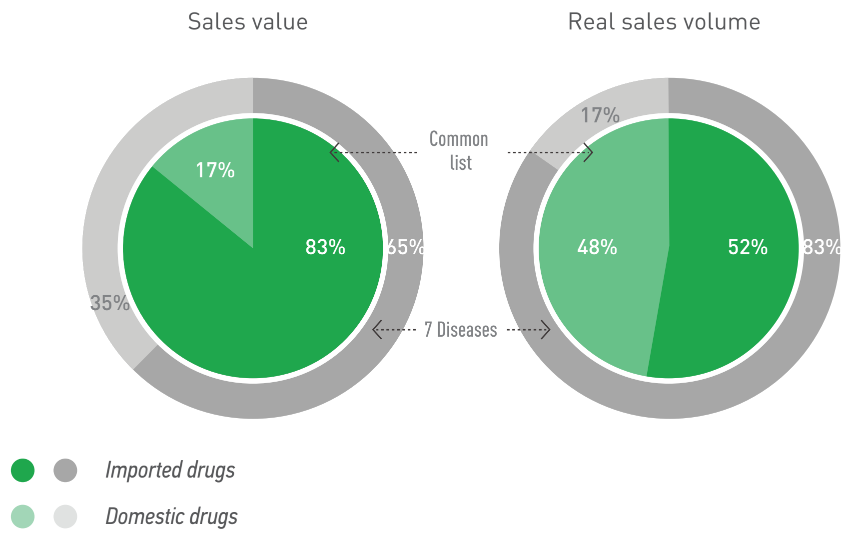


Figure 18

Proportion of Imported and Domestic Drug Sales Under "7 nosologies" and ONLS programs

3. Drug Sales Structure by ATC groups within the DLO program

Proportion of 1st level ATC groups by pharmacy sales within the Russian DLO program in 2015 is shown in Table 7.

The ATC ranking by sales volume in accordance with DLO program is quite stable.

Group [L] “Antineoplastic and immunomodulating agents” remain the most expense item of the DLP program - about 48% of all allocated state funds were spent on its purchase in 2015. In 2015, the cost for their purchase increased both in rubles and in units: by 24% and 15%, respectively, in comparison with 2014. Antineoplastic drugs ([L01] and [L02]) of last generations have proven efficacy in the treatment of patients with oncological diseases, improve the quality and duration of life. For the first time during the existence of the program, the leadership in the group was taken by the domestic drugs: earlier mentioned brands ACELLBIA (INN RITUXIMAB) by Biocad CJSC, the sales of which started in 2014, and also by a “newcomer” of 2015, brand BORAMILAN FS (INN BORTEZOMIB) by F-Sintez CJSC.

Brand COPAXON-TEVA occupies the third place in the leadership. All three drug products cover approximately 10% from the sales value of group [L] “Antineoplastic and immunomodulating agents”.

Group [B] “Agents affecting blood and blood forming organs” (15.1%) occupies the second place in the ranking. In 2015, this group increased the sales volume which allowed it to surpass the drug group [A] “Alimentary tract and metabolism”. Sales volume of drugs from the group “Agents affecting blood and blood forming organs” increased by 25% in rubles and by 3% in units.

Loosing less than one per cent to the second place, group [A] “Alimentary tract and metabolism” occupies the third place. In comparison with 2014, by 10% more were sold the drug products in rubles, the sales in units did not change. The subgroup with the most capacity in the ATC [B02] “Haemostatics” cover 80% of the circulation. About 76% of all sales in this group concern the drug products for treatment of diabetes mellitus ([A10]). The leaders of this group by sales value as in the previous years are the imported drug products LANTUS, CERESIM and KHUMULIN.

In 2015, the structure of the DLO of the fifth leaders by ATC-groups did not change in comparison with the previous year: the share in sales value amounted about 88%.

Table 7

Drug sales structure by ATC drugs on the DLO market

Note: the sales volume is shown in end user prices with VAT included

First level ATC-groups	Sales value, mln.rub.	Group share in sales value, %	Real sales volume, millions of units	Group share in real sales volume, %
L: Antineoplastic and immunomodulating agents	50 786.4	50.3%	3.6	5.5%
B: Agents affecting blood and blood forming organs	15 276.5	15.1%	5.2	7.9%
A: Alimentary tract and metabolism	14 331.9	14.2%	17.7	26.6%
R: Respiratory system drugs	5 521.1	5.5%	4.9	7.3%
N: Nervous system drugs	3 754.6	3.7%	10.1	15.3%
J: Antibacterials for systemic use	3 261.9	3.2%	0.8	1.2%
H: Systemic hormonal preparations (excluding sex hormones)	2 436.5	2.4%	0.8	1.1%
C: Cardiovascular system drugs	2 214.4	2.2%	18.9	28.4%
M: Musculoskeletal system drugs	1 432.4	1.4%	1.9	2.9%
V: Other drugs	1 179.8	1.2%	0.4	0.5%
G: Genitourinary drugs and sex hormones	470.2	0.5%	1.0	1.6%
[~] No allocation	205.0	0.2%	0.0	0.1%
S: Agents affecting sensory organs	154.4	0.2%	1.0	1.5%
D: Dermatologicals	20.4	0.0%	0.1	0.2%
P: Antiparasitic products, insecticides and repellents	2.9	0.0%	0.0	0.0%

Changes in the ranking are minimal: the groups [A] and [B] changed places (Figure 19).

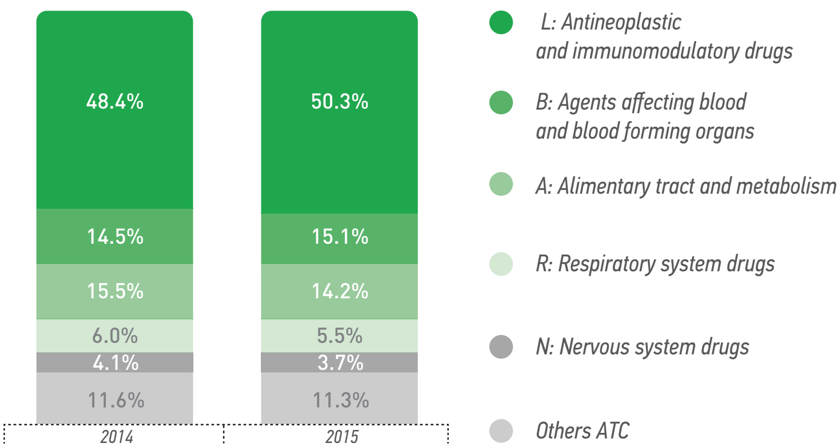
Group [L] “Antineoplastic and immunomodulatory agents” still covers 2/5 of DLO sales. This is the most expensive group of drugs in DLO - weighted average price per unit is about 13900 rubles (in 2014 about 13300 rubles). According to the results of 2015, all leading ATC-groups register an increase in sales of rubles. In terms of units, sales of group [R] “Respiratory system drugs” (-1%) and [N] “Nervous system drugs” (-3%) in units decreased in TOP-5 ATC-groups.

It is interesting to look at how much money is spent under the DLO program for treatment of main disease groups. With this purpose, we correlated the drugs with the corresponding indications for use. As a result, we received the following cost ranking in DLO by diseases (Table 8).

The first line in the ranking is occupied by the drugs for the treatment of cancer, which account for 30% of the whole DLO segment value (about 30 billion rubles). The largest volume of purchases accounts for the following drugs: INN RITUXIMAB and INN BORTEZUMIB, included in the program “7 nosologies” as a treatment for patients with malignant neoplasms of lymphoid, haematopoietic and related tissues. According to the Ministry of Healthcare and Social Development of Russia, cancer is the second cause of death in Russia after cardiovascular diseases and accounts for about 15% of total number of deaths. In 2009, the National Cancer Program was launched, which led

Figure 19

Sales Proportion by ATC groups in the Drug Reimbursement Program



to increase of the number of patients with early diagnosed neoplastic diseases, and mortality from this disease started to decrease in Russia for the first time in several decades. However, according to the State Statistics Committee (SSC), from January to November 2014, 267.6 thousand of people died from oncologic diseases, and during the same period of 2015 - 271.7 thousand of people.

According to the results of 2015, preparations for the treatment of immune system diseases remained at the second place

Table 8

Cost ranking in DLO by diseases, 2015

Deseases	Volume, millions of rubles	Share
Oncologic diseases	**30 163.5**	**29.9%**
Immune system disorders	**20 623.0**	**20.4%**
Disorders of blood and hemopoietic organs	**15 273.3**	**15.1%**
Diabetes mellitus	**11 135.4**	**11.0%**
Respiratory disorders	**5 497.4**	**5.4%**
Nervous system disorders	**3 746.4**	**3.7%**
Infectious agents diseases	**3 286.7**	**3.3%**
Alimentary disorders	**3 238.1**	**3.2%**
Hormonal disorders	**2 435.1**	**2.4%**
Cardiovascular disorders	**1 987.6**	**2.0%**
Others	**1 951.1**	**1.9%**
Musculoskeletal disorders	**1 432.4**	**1.4%**
Ocular disorders	**155.0**	**0.2%**
Male and female reproductive disorders	**92.4**	**0.1%**
Skin diseases	**31.2**	**0.0%**

surpassing agents for blood disorders in the sales ranking. The greatest increase in costs in this group is noted for drugs that have immunomodulatory and immunosuppressive action. One change happened in the third leading positions: brand REVLIMID occupied the second position substituting brand REMICADE. The first and the third positions are still occupied by brands COPAXONE-TEVA and GENFAXON.

”The first line in the ranking is occupied by the drugs for the treatment of cancer, which account for 30% of the whole DLO segment value (about 30 billion rubles). According to the Ministry of Healthcare and Social Development of Russia, cancer is the second cause of death in Russia after cardiovascular diseases and accounts for about 15% of total number of deaths.“

Among the drugs for treatment of blood and blood organs diseases of the highest sales volume still accounts for INN BLOOD COAGULATION FACTOR VIII (36%), INN EPTACOG ALPHA [activated] (18%) and INN OCTOCOG ALPHA (12%). All three INN are included in the program 7 nosologies and by the results of 2015, the sales volume of realization: INN BLOOD COAGULATION FACTOR VIII - by 14%, INN EPTACOG ALPHA [activated - 25%], INN OCTOCOG ALPHA - 24%.

Thus, leading positions in the DLO ranking are still occupied by the diseases mainly used in high-priced nosologies. The total share of expenses for purchase of drugs for these groups of diseases is about 50% of all segment of DLO or about 50 billion rubles.

4. Manufacturers in the DLO Segments

Significant changes occurred in the ranking. Except for leaders of the previous years F.Hoffmann-La Roche, which despite significant decreased of sales value of realisation, remained at the leading position. In 2015, total volume of state money means spent on the purchase of the drugs of this company was about 10 billion rubles, which is 32% less than 2014. The most costly as in the previous years was the drug based on monoclonal antibodies MABTHERA (about 28% of all company sales in sales value in comparison with 56% in 2014), the purchase of which decreased by 66%.

The second and the third line of the ranking was occupied by two domestic manufacturers F-Syntez CSJC and Biocad CSJC moving JOHNSON & JOHNSON and TEVA companies due to the sales of two antineoplastic drugs Boramilan FS and Acellbia.

Thus, according to the results of 2015, four Russian manufacturers were included in TOP-20 by sales value (two in 2014).

Table 10 shows the ranking of manufacturers participating in the “7 nosologies” and ONLS program.

The leader of “7 nosologies” program for the first time became F-Syntez Russian company, and the leader of the previous years F.Hoffmann-La Roche moved to the fifth line.

5. Drugs in the DLO Segments

Table 11 shows TOP-20 brands leading by sales volume in the DLO program in 2015..

In 2015, TOP-20 brands covered 51% of sales value, which is by 2% less than in 2014.

As noted several times before, for the first time two second positions of the ranking of sales value were occupied by two domestic brands: BORAMILAN FS and ACELLBIA. The third position is still taken by the brand COPAXONE-TEVA, which has increased its sales volume by 5%.

Table 9

TOP-20 drugs manufacturers by the consumption volume in the DLO program in 2015

Rating 2015	Change	Manufacturer	Sales value in 2015, millions of rubles	Sales value increase	Share
1	0	F.Hoffmann-La Roche	**10 156**	**-31.5%**	**10.1%**
2	13	F-Syntez	**8 521**	**+537.5%**	**8.4%**
3	17	Biocad	**6 252**	**+670.7%**	**6.2%**
4	-1	Teva	**5 916**	**-2.2%**	**5.9%**
5	-1	Sanofi	**5 747**	**+5.6%**	**5.7%**
6	-1	Baxter	**5 106**	**+25.3%**	**5.1%**
7	-5	Johnson & Johnson	**4 762**	**-42.6%**	**4.7%**
8	-2	Merck & Co. Inc	**3 794**	**-1.5%**	**3.8%**
9	1	Generium	**3 720**	**+36.8%**	**3.7%**
10	-3	Novo Nordisk	**3 598**	**+12.2%**	**3.6%**
11	-3	Astrazeneca	**3 516**	**+20.3%**	**3.5%**
12	25	Celgene	**3 412**	**+2568.7%**	**3.4%**
13	-4	Novartis	**3 396**	**+22.6%**	**3.4%**
14	-3	Laboratory Tuteur	**3 071**	**+14.5%**	**3.0%**
15	-3	Octapharma	**2 238**	**+17.0%**	**2.2%**
16	-3	Eli Lilly	**1 757**	**+0.8%**	**1.7%**
17	-3	Boehringer Ingelheim	**1 613**	**+5.2%**	**1.6%**
18	-1	Pharmstandart	**1 247**	**+21.6%**	**1.2%**
19	-3	Glaxosmithkline	**1 137**	**-5.7%**	**1.1%**
20	5	CSL Behring GMBH	**1 108**	**+70.6%**	**1.1%**

Table 10

TOP-20 drug manufacturing companies by sales volume in DLO segment in accordance with "7 nosologies" and ONLS program

	7 nosologies		ONLS	
Рейтинг 2015 г.	Manufacturer	Sales volume, rubles	Manufacturer	Sales volume, rubles
1	F-Syntez	**7 533.7**	F.Hoffmann-La Roche	**5 956.6**
2	Biocad	**5 944.6**	Sanofi	**4 584.2**
3	Teva	**5 321.0**	Astrazeneca	**3 516.5**
4	Baxter	**5 049.4**	Novo Nordisk	**3 485.0**
5	F.Hoffmann-La Roche	**4 199.7**	Merck & Co	**2 894.8**
6	Generium	**3 720.2**	Johnson & Johnson	**2 385.5**
7	Celgene	**3 412.3**	Eli Lilly	**1 757.5**
8	Laboratory Tuteur	**2 692.1**	Novartis	**1 753.4**
9	Johnson & Johnson	**2 376.3**	Boehringer Ingelheim	**1 612.6**
10	Octapharma	**2 070.4**	Glaxosmithkline	**1 136.9**
11	Novartis	**1 642.7**	Pharmstandart	**1 036.2**
12	Sanofi	**1 163.2**	Fresenius	**1 017.4**
13	CSL Behring	**1 044.2**	F-Syntez	**987.7**
14	Merck & Co.	**899.3**	Sotex	**939.6**
15	Sinnagen	**752.3**	Pharm-Syntez (Moscow)	**916.0**
16	Astellas Pharma	**410.9**	Servier	**911.5**
17	Biotest Pharma	**303.9**	Beaufour Ipsen	**729.5**
18	Instituto Grifols	**247.7**	KRKA	**729.3**
19	Pharmstandart	**210.7**	Vetter Pharma-Fertigung	**702.8**
20	Talecris Biotherapeutics	**206.0**	Abbott	**642.7**
Total:		**98.4%**		**73.9%**

The newcomers in the ranking include immunomodulating agent REVLIMID manufactured by Celgene (+61 position in the ranking), antineoplastic drug FILAHROMIN FS produced by F-Syntez CJSC (+19 positions in the ranking), coagulant IMMUNATE by Baxter Healthcare (+7 position in the ranking), drug PREPARATION OF INTERFERON BETA-1B INFIBETA by Generium CJSC (+4 positions in the ranking).

The weighted average price for the drugs of TOP-20 is very high and amounts to approximately 52000 rubles per unit. In 2015, the most expensive drugs in TOP-20 was the drug for treatment of multiple myeloma REVLIMID, the weighted average price of which is close to 500 thousand rubles, inhalation drug for treatment of obstructive diseases of the respiratory tract SYMBICORT is the "cheapest" (about 2000 rubles).

> In 2015, the most expensive drugs in TOP-20 was the drug for treatment of multiple myeloma REVLIMID, the weighted average price of which is close to 500 thousand rubles.

The most drugs on TOP-20 and the fourth leaders, in particular, belong to the group [L] "Antineoplastic and immunomodulating agents" (8 brands). The second place by this parameter is taken by ATC group [B] "Agents affecting blood and blood forming organs" (4 brands).

The most drugs on the rating are the drugs included in the "7 nosologies" program (15 brands).

Table 11

TOP-20 brands by sales value in the DLO program in 2015

2015 Ranking	Change	Brand	Manufacturer	Sales value in 2015, millions of rubles	Sales value increase	Share
1		Boramilan FS	F-Syntez	**5 562.8**		**5.5%**
2	68	Acellbia	Biocad	**5 527.6**		**5.5%**
3	0	Copaxone-Teva	Teva	**5 248.2**	**4.7%**	**5.2%**
4	61	Revlimid	Celgene	**3 412.3**	**2568.7%**	**3.4%**
5	-1	Lantus	Sanofi	**3 074.1**	**11.0%**	**3.0%**
6	-5	Mabthera	F.Hoffmann-La Roche	**2 829.3**	**-66.1%**	**2.8%**
7	-2	Herceptin	F.Hoffmann-La Roche	**2 611.0**	**21.6%**	**2.6%**
8	-2	Coagil	Generium	**2 587.7**	**24.2%**	**2.6%**
9	-1	Genfaxon	Laboratory Tuteur	**2 494.8**	**52.1%**	**2.5%**
10	-8	Velcade	Johnson & Johnson	**2 376.3**	**-65.0%**	**2.4%**
11	-4	Remicade	Schering-Plough	**2 330.2**	**19.7%**	**2.3%**
12	19	Filahromin FS	F-Syntez	**1 970.9**	**246.1%**	**2.0%**
13	0	Octanat	Octapharma	**1 654.5**	**31.8%**	**1.6%**
14	-4	Recombinate	Baxter	**1 627.3**	**17.6%**	**1.6%**
15	-4	Avastin	F.Hoffmann-La Roche	**1 481.5**	**11.9%**	**1.5%**
16	7	Immunate	Baxter Healthcare	**1 388.4**	**106.6%**	**1.4%**
17	-2	Pulmosim	F.Hoffmann-La Roche	**1 360.6**	**15.8%**	**1.3%**
18	-2	Symbicort	Astrazeneca	**1 247.0**	**16.1%**	**1.2%**
19	-5	Ceresim	Genzyme Corporation	**1 163.2**	**-2.6%**	**1.2%**
20	4	Infibeta	Generium	**1 102.8**	**73.4%**	**1.1%**

6. Segments by Price in the DLO Program

In 2015, the average price per unit in the DLO program increased by 35% and amounted to about 1,519 rubles.

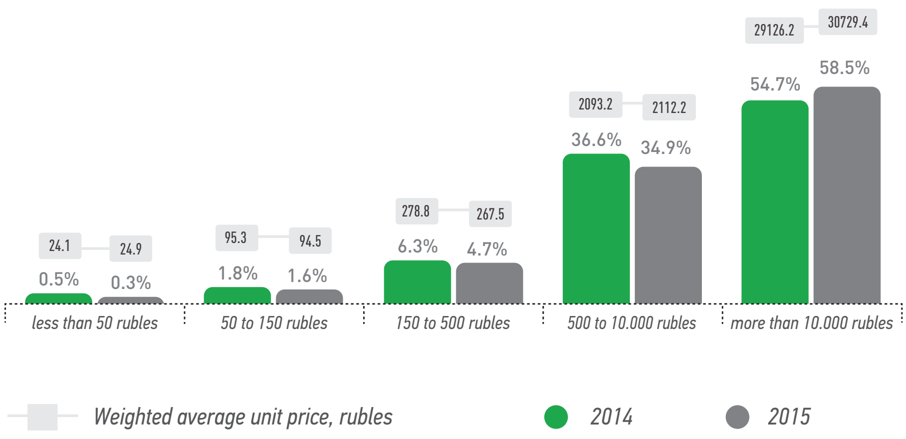
Since the time when the DLO program was introduced, the price structure of this market segment was being transformed with the share of more expensive drugs increasing. According to the results of 2015, segment of drugs priced over 500 rubles and more, covered 93% of the sales value, in the previous year this parameter was 91%.

The drug consumption structure within the DLO program is presented in Figure 20.

Changes in the price of a drug unit purchase by the DLO program have concerned the most "expensive" and "cheapest" drugs. The figure shows that the average price of a unit in segments "50 to 150 rubles" and "150 to 500 rubles" has decreased, and in segment "less than 50 rubles" and "more than 10,000 rubles" has increased. With this, the maximal growth of the cost is observed in

Figure 20

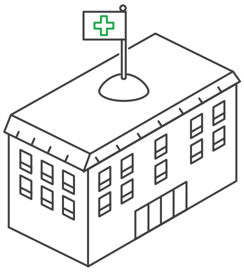
Sales Volume Under DLO Program in Accordance with Price Segments



the most expensive segment “more than 10,000 rubles”, the average price of a unit in this segment has increased by 6%.

In 2015, the drugs in the program of “High-priced Nosologies” are presented only in the segments from 500 rubles per unit. As in the previous periods, the most part of the sales volume (79%) covers the drugs with price more than 10,000 rubles.

The drugs of subprogram ONLS in the most part are presented in the segment with price 500 rubles to 10,000 rubles, which is about 48%. The most sales volume of 39% is in the segment of more than 10,000 rubles. In the segment of “500 rubles to 10,000 rubles”, the leader in sales volume is hypoglycaemic agent “Lantus” with weighed average price of a unit of more than 3,200 rubles. Whereas in the most expensive segment the sales leader, antineoplastic agent HERCEPTIN costs more than 48,000 rubles per unit.



4. Sales Value in the Segment of Healthcare Institutions (HCI)

In 2014, 7,003 medical facilities functioned in the state and municipal healthcare system, including: 4,231 (60.4%) hospitals, 739 (10.6%) dispensaries, 1,336 (19.1%) self-sustained outpatient facilities and 697 (9.9%) dentistry rooms. In 2014, the optimization measures included 359 medical facilities, of which 26 were closed and 330 were reorganized. By the end of 2018, 15 more facilities are to closed and 581 is to be reorganized. It is mainly hospitals and outpatient facilities. As a result, by the end of 2018, in comparison with January 2014, the number of hospitals will decrease by 11.2%, the number of outpatient facilities will decrease by 7.2%.

Such dynamics does not promote the implementation of one of the main objective of the healthcare reform - to increase the duration and quality of life, the accessibility of medical care. Because of this, it is offered to make amendments in the law “On Fundamental Healthcare principles in the Russian Federation” and set the conditions on the decisions of reorganization and closures of medical facilities - forbid to close the only medical facility in rural areas without the consent of the locals.

Drug supply of HCI is one of the main spheres of work. Recently, the regulatory base, controlling drug purchases by HCI, has been constantly updated and completed.

For HCI, since 1 of January 2014, the law which regulates the purchase order of the drug products has been changed: Federal Law N 44-FZ “On Contract system in the sphere of procurement of goods, work and services for provisioning governmental and municipal needs” has been implemented. One of the ideas of this law was to create prerequisites for centralized purchases. According to the results of 2015, only 9 subjects of the Russian Federation have not transferred to the centralised principle of purchases. It means the joint trades which the regional centre performs with certain medical organization. Such centralization due to its volume allows to save significant amount of money - up to 30% of the cost. Further, in order to prevent the price rise a mechanism of formation of long-term contracts - for 3, 7 years - with fixed price at the present day is to be implemented. In the unstable conditions of financial and economic position of Russia, for the state this measure will allow to keep prices and not allow high inflation in the state purchases.

One of the main events of 2015 was the signing of Decree N 1289 “On the restrictions and conditions of access of imported drug products included in the list of Vital and Essential Drugs, to be purchased for state and municipal requests” by the Government of the Russian Federation on the 30th of November. The new rules are applied to the list of Vital Drugs confirmed by the government. The customer must decline all applications with offers on the supply of the drug products from foreign countries (except for the states-members of Eurasian Economic Union), if no less than two applications are submitted for participation in the supplier contest, which comply with the documentation requirements on the purchases and contain offers on the purchase of the drug product produced in Eurasian Economic Union. The confirmation of the country of manufacture of the drug product is a certificate on the origin of the product issued by a competent authority. Until 31st of December 2016, including, the Decree is not applied to the foreign drug products the production of which is partly located on the territory of the Russian Federation (primary package and secondary (consumer's) package).

The attitude towards the Decree differs in experts and market players. Opinions on the decrease of competition between the manufacturer, and on the price rise, on the quality of generic drugs are made etc.

For the past several years, the budgets on some procedures within reformation in the system of healthcare have been increased. But in 2016, the budget volume by these directions have insignificantly increased:

1. Total volume of budget income of the Fund of Compulsory Medical Insurance (CMI) for 2016 was 1.7 billion rubles, it is by 6% more in 2015.

2. Subventions are planned at the level of 1.5 billion rubles, which is by 3% more than in 2015.

3. A norm by person of financing of the basic program of CMI was 8,438.9 rubles, which is 2% higher than the parameter of the previous year.

4. The standard for urgent medical care: the cost of one call is now 1747.7 rubles, which is 37.6 rubles more (+2%) than in 2015. Whereas in 2015, the increase of an urgent medical care call was more significant in comparison with the previous year: by 202.7 rubles or +14%.

5. Ninety billion rubles of additional funds (to the funds of CMI) for high-technological medical care are planned to be allocated for federal state institutions and six billion rubles for co-financing of the subjects, which will make the growth 18% in comparison with 2014.

6. In the budget of the Fund 3.2 billion rubles are allocated for 2016 in order to continue the program of development of healthcare in rural areas: one-time compensation payments to medical workers aged less than

50 years old who will move to work at a village, working settlement or city-type settlement.

According to the results of 2015, the volume of hospital sales increased by 6% in rubles (in comparison with 2014) and amounted to 221.9 billion rubles. In real terms, the sales volume was 1019.6 billion of units in 2015, which by 2% higher than in 2014. It should be noted that the segment of hospital purchases is the only segment on the pharmaceutical market, which shows positive dynamics in the real terms.

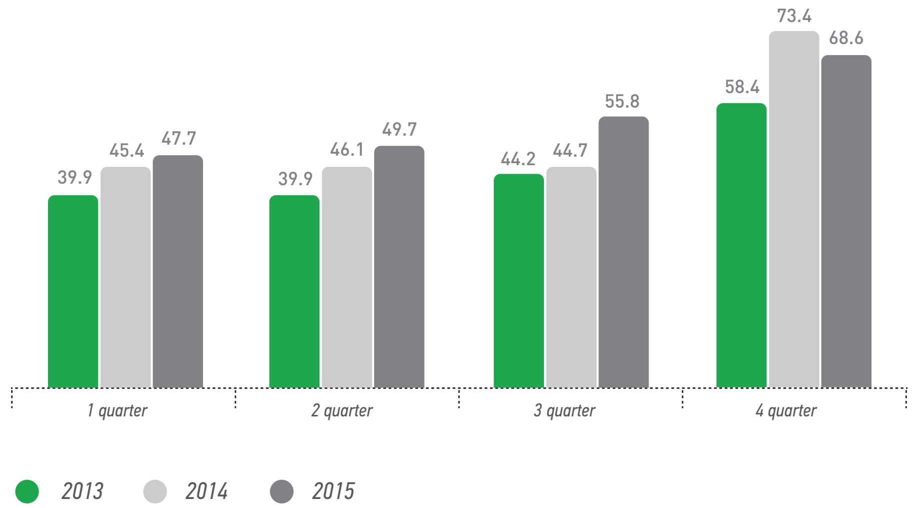
For the past several years, the segment growth happens in the last quarter of the year - hospitals make stock supply for the 1st quarter of the next year. However, in 2015, in comparison with 2014, the increase of the sales volume happened in the third quarter already.

Let's discuss the main pharmaeconomic parameters of hospital sales segment.

The average price of one unit of an RTU drug purchased by HCI was 217 rubles. The increase of growth of a unit by HCI

Figure 21

Dynamics of Hospital Sales Volume by Quarters, billion rubles



segment in comparison with 2014 was 3%, whereas, in 2014, in comparison with 2013, the growth was at the level of 10%.

As in the previous year, the largest share in the sales value in HCI segment is covered by imported drugs, whereas by the real sales volume domestic drugs take the leading positions. Thus, in real terms, the domestic drugs as the cheaper one are purchased 3 times more than the imported ones. The domestic drugs cover about 30% of the volume in money terms and about 75% in unit terms. In 2015, the growth of the domestic drugs share increased both in money terms and in real terms.

In 2015, the purchase volume of the imported drugs decreased both in rubles and in units: -2% and -9%, respectively. Whereas the volumes of purchases of the domestic drugs continue to grow: the increase in rubles was by 28% and in units was by 7% in comparison with 2014.

The cost of one unit of an imported drug product is almost 7 times higher than the

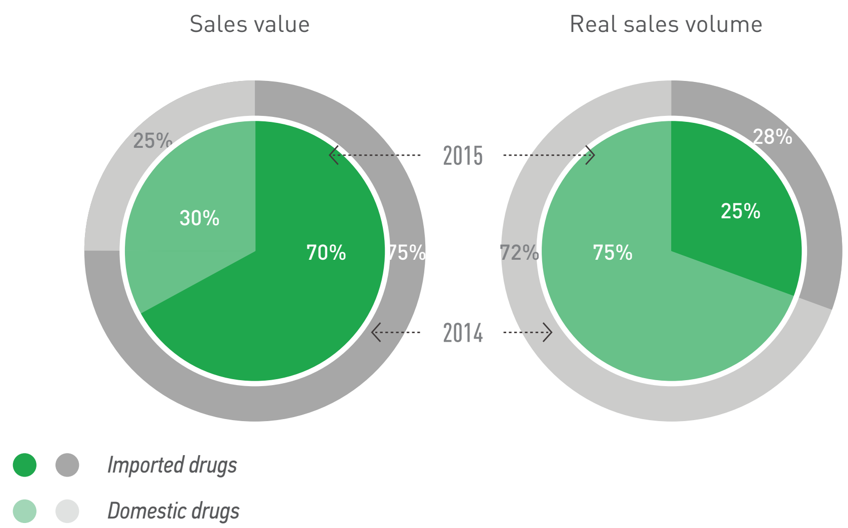


Figure 22

Proportion of Domestic and Imported Drug Sales cost of one unit of a domestic drug product purchase by a HCI, although the difference in the weighted average price of a unit continues to decrease, mainly due to the increase of purchases of the domestic drugs of more expensive segment. In 2015, one imported unit of a RTU drug cost 620 rubles on the average, one domestic unit was 87 rubles. In comparison with 2014, the cost of one purchased imported unit increased by 8%, the cost of one domestic unit in 2015 cost by 20% more.

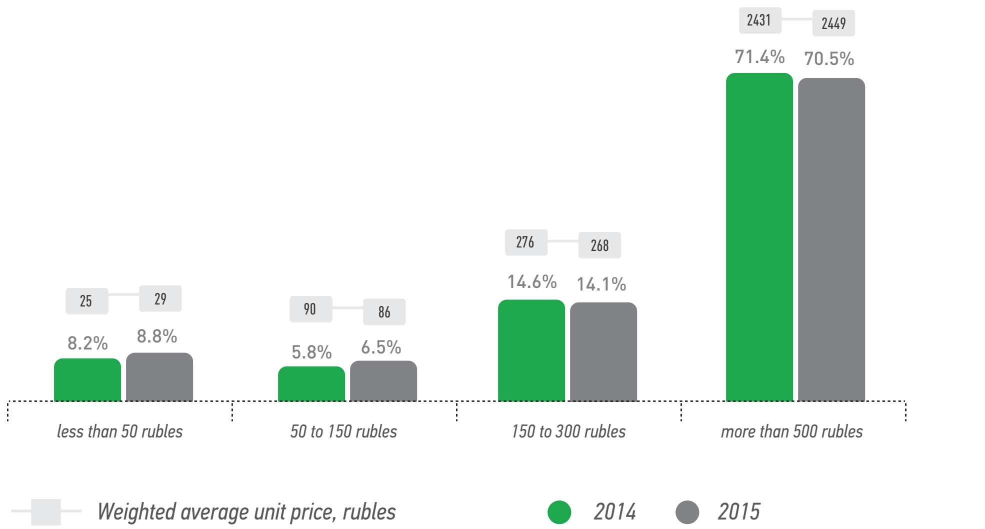
The structure of HCI segments by price categories in shown in Figure 23.

In 2015, the changes of 2014 continued: the lowest growth and the share decrease in the sales structure by price segments are observed in segment priced more than 150 rubles. On the contrary, in segments of "cheap" drugs, the maximal growth and share increase are observed. Thus, in segment "150 rubles to 500 rubles" the growth amounted to 2% in rubles, whereas in segment "50 to 150 rubles" the growth was 10 times more.

In real terms, the segment of drugs priced up to 50 rubles is the one with the most capacity, its share covers 67%. However, for the past several years, the segment decreases the sales volume: in 2015, in comparison with 2014, the decrease was 2%. Such decrease happens due to the transition of the part of drugs into more

Figure 23

Structure of HCI Segment By Price Categories in 2014 and 2015



expensive segment. As in the previous years, the most purchased drug is "Sodium Chloride" (33% of the real sales volume in the segment "less than 50 rubles").

As in the previous years, the most share among the imported drugs is covered with segment of drugs priced more than 500 rubles (83%) (Figure 24). Domestic drugs almost in equal parts are presented in the segments of "less than 50 rubles" (25%) and "150 to 500 rubles" (19%), 14% are left in the segment of "50 to 150 rubles", and the most sales volume which was 42% is seen in the segment of "more than 500 rubles".

If in the segments with unit price up to 500 rubles, the difference between the weighted average price of imported and domestic drugs is not significant, in the segment with the most capacity "more than 500 rubles", the difference between domestic and imported drugs is still significant: it makes approximately 2 times.

The ratio of hospital purchases of the drugs by first level ATC-groups in Russia according to the results of 2015 is presented in Table 12.

The ranking of the drugs in HCI segment by ATC-groups differs significantly from that of commercial market. Ranking of

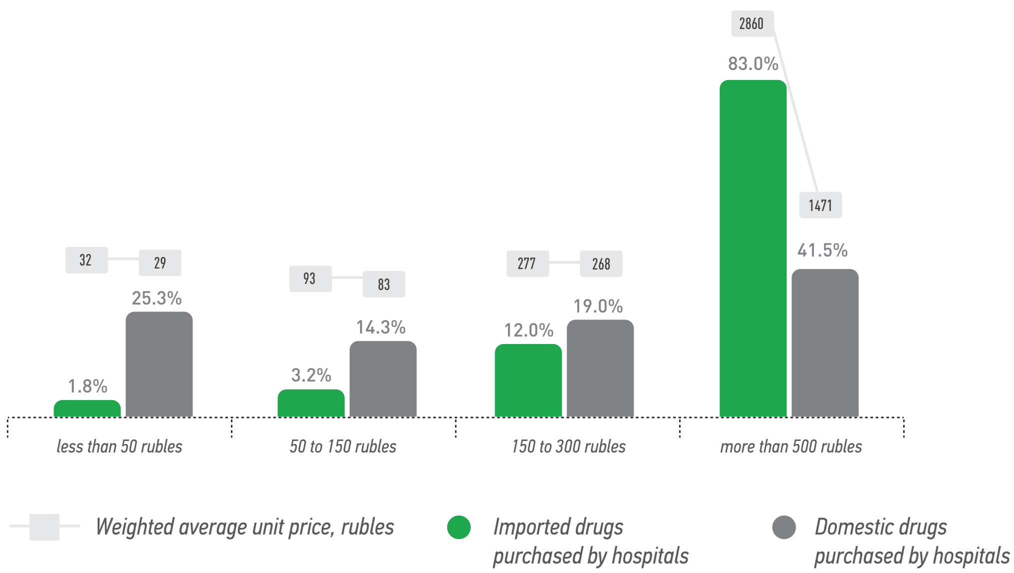


Figure 24

Structure of HCI Segment by Price Categories for Imported and Domestic Drugs in 2015

ATC-groups compared to 2014 has not changed. In hospital purchases group [J] “Antibacterials for systemic use” remains the leader. Positive dynamic in the growth of this group has been observed since 2012 (+6% in rubles in 2015).

Unlike the previous years, in 2015, the group growth in rubles happened mainly due to the increase of vaccines sales volume [J07] (+13%). The increase of purchases in subgroup [J07] concerned such drugs as POLYSACCHARIDE MENINGOCOCCAL VACCINE A+C, KLESHCH-E-VAC, and others.

Subgroups “Antiviral drugs for systemic use” [J05] and “Antibacterial drugs was systemic use” [J01], the constant leaders of group [J], as in the previous year, increased its sales value insignificantly: +5% and +4% compared to 2014. The trend of the previous periods is still seen: the sales volume of the drugs “Antibacterial drugs for systemic use” [J01] in units decreased by 6%. “Antiviral drugs for systemic use” [J05] preserved its growth rates increasing consumption volume by 12%.

The decrease of sales volume in subgroup [J01] happened because of the decrease of real sales volumes of ten leaders: BENSILPENICILLIN (-41%), AMPICILLIN (-29%), CEPHASOLINE (-17%) and CEPHOGRAM (-15%). In 2015, the maximal growth rates are observed for the drugs CEPHOPERASONE, SULBACTAM (+87% in rubles) and CIPROFLOXACINE (+10% in units).

In subgroup “Antiviral drugs for systemic use” [J05] the group growth was made by brands KALETRA (+19% in rubles), REYATAZ (+57% in rubles), being the brands with the most capacity. It is notable that the ten leaders on sales value in the subgroup include two drugs not having been purchased before - agents for HIV-treatment OLITIDE and KEMERUVIR of the domestic manufacturer Pharmasyntez.

The subgroups of ATC-group [J] with the least capacity, unlike in the previous periods, decreased its sales volumes: “Immune sera and immunoglobulins” [J06] (-1% in rubles) and “Antimycotic drugs for systemic use” [J02] (-5% in rubles).

In subgroup “Immune sera and immunoglobulins” [J06], the decrease of sales volume happened because of the purchase decrease of brands OCTAGAM (-20% in rubles) and GAMUNEX (-37% in rubles), which make the ten most purchase brands in rubles.

In the first ten brands of subgroup “Antimycotic drugs with systemic use” [J02] FLUCONASOL (-44% in rubles), MICOSIST (-24%), and CANDIDAS (-22%) contributed to the decrease of sales volume of all subgroup.

Table 12

Structure of the Hospital Purchase of RTU Drugs by ATC-Groups in 2015

First Level ATC Groups	Sales value, million of rubles	Group share in sales value, %	Real sales volume, millions of units	Group share in real sales volume, %
J:Antibacterials drugs for systemic use	**78 035.9**	**35.2%**	**294.2**	**28.9%**
B:Agents affecting blood and blood forming organs	**34 748.5**	**15.7%**	**340.9**	**33.4%**
L:Antineoplastic and immunomodulating agents	**34 259.8**	**15.4%**	**11.5**	**1.1%**
N:Nervous system drugs	**20 088.0**	**9.1%**	**93.0**	**9.1%**
A:Alimentary drugs and metabolism	**15 122.3**	**6.8%**	**79.0**	**7.7%**
V:Other drugs	**9 677.5**	**4.4%**	**11.8**	**1.2%**
C: Cardiovascular system drugs	**7 715.8**	**3.5%**	**49.3**	**4.8%**
R:Respiratory system drugs	**5 961.6**	**2.7%**	**31.8**	**3.1%**
M:Musculoskeletal system drugs	**4 645.7**	**2.1%**	**21.7**	**2.1%**
G:Genitourinary system drugs and sex hormones	**3 178.5**	**1.4%**	**4.3**	**0.4%**
H:Systemic hormonal preparations (excluding sex hormones)	**2 703.4**	**1.2%**	**14.0**	**1.4%**
D:Dermatologicals	**2 317.8**	**1.0%**	**59.0**	**5.8%**
S:Agents affecting sensory organs	**2 135.5**	**1.0%**	**6.6**	**0.6%**
[~] No allocation	**1 255.7**	**0.6%**	**2.3**	**0.2%**
P:Antiparasitic products, insecticides and repellents	**47.5**	**0.0%**	**0.4**	**0.0%**

As in the previous years, the second place in ATC-group ranking in hospital segments by the results of 2015 was taken by group [B] “Agents affecting blood and blood forming organs”. Since 2013 positive trends have been observed in the subgroup: the number of purchased drug units in this group is increasing: by 4% in 2015, whereas in 2012-2013 the unit volumes decreased. The HCI expenses rate for purchase of the drugs in group “Agents affecting blood and blood forming organs” decreased in comparison with 2014 and amounted to 1%.

The increased in the sales volume of group [B] mainly happened due to the increase of purchase volume in the subgroup B05 “Solutions for plasma substitution and perfusion”, which has the most capacity (+5% in rubles). The most “purchased” drug is SODIUM CHLORIDE that increased its sales volume in comparison with 2014 (+26%) in rubles and (+10%) in units.

Group [L] “Antineoplastic and immunomodulating agents” takes the third place in the ranking by the sales value and 11th place by the real sales volume. Compared to last year, the purchases of the drugs in this group increased by 14% in money terms and by 10% in units. The group with the most capacity is [L01] “Antineoplastic agents”, which the share of 67% of all volumes in the subgroup. If in money terms, the purchase leader is the drugs with INN TRASTUZUMAB, in unit terms, both in 2015 and in the previous years, the first place in group [L] is taken by antineoplastic drugs with INN CYCLOPHOSPHAMIDE with share of about 20%.

Table 13 shows TOP-20 manufacturers in HCI segment according to the results of 2015.

Foreign manufacturer Pfizer remained the leader of 2015. Increase of sales volume of the leading brands PREVENAR (+13%) and ZIVOX (+27%) allowed the company to keep its leading position.

Abbott occupies the second place. The company has been steadily increasing its sales volume since 2011. It managed to move from the 9th position to the TOP-3. Leader in hospital purchases in the product portfolio of the company is the agent for HIV-treatment KALETRA, with share more than 60%, the purchase volume of which increased by 18% in rubles in comparison with the previous year.

Having lost one line in the ranking or -6% of the sales value, SANOFI holds the third position. Anticoagulant drug Clexan (-26%) contributed to the decrease of sales volume of the company, which, by the results of 2015, was the most sold drug in the HCI portfolio of the company.

Table 13

TOP-20 Manufacturers in HCI Segment According to the Results of 2015

2015 Ranking	Changes	Manufacturer	Sales value, millions of rubles	Sales value increase	Share
1	0	Pfizer	11 449.4	12.4%	5.2%
2	3	Abbott	10 043.5	14.1%	4.5%
3	-1	Sanofi	9 022.0	-5.9%	4.1%
4	0	F.Hoffmann-La Roche	8 674.3	-1.6%	3.9%
5	1	Merck & Co.	8 398.4	-4.1%	3.8%
6	1	Johnson & Johnson	7 423.8	-2.9%	3.3%
7	-4	Glaxosmithkline	5 977.7	-34.6%	2.7%
8	1	Novartis	5 759.1	-7.8%	2.6%
9	-1	Takeda	5 634.3	-10.3%	2.5%
10	2	Valeant	4 870.7	10.8%	2.2%
11	0	Astrazeneca	4 722.7	-0.2%	2.1%
12	-2	Bayer	4 349.5	-11.8%	2.0%
13	0	PH “Pharm-Center”	4 241.8	23.6%	1.9%
14	29	Pharmasyntez (Irkutsk)	3 726.5	295.7%	1.7%
15	1	Veropharm	3 660.5	34.9%	1.6%
16	1	Microgen NPO	3 523.6	42.0%	1.6%
17	-3	Boehringer Ingelheim	3 288.9	-0.9%	1.5%
18	2	Kraspharma	2 777.1	24.6%	1.3%
19	11	Hematec	2 596.8	71.3%	1.2%
20	-5	Baxter Healthcare	2 518.2	-13.2%	1.1%

The list domestic manufacturers, included in TOP-20, was completed with two more companies: Pharmasyntez and Hematec. Manufacturer Pharmasyntez occupies the 14th position in the ranking, moving up 26 points. Such growth of the company was provided by the sales of new products for treatment of HIV Olitide and Kemeruvir, which occupied leading positions in the company's portfolio in 2015 in this segment.

By increasing its sales volume by 71%, Hematec company got in the ranking of the best companies occupying the 19th place. The company's growth was ensured by "Sodium Chloride", the sales volume of which increased by 93% in comparison with 2014.

The maximal fall of the sales volume in comparison with 2014 was noted for Glaxosmithkline company (-35%) which lost four lines in the ranking, moving to the seventh place. Among first five drugs in sales volume in the hospital portfolio of the company, only one brand "Poliorix" showed significant growth, the rest decreased its sales volume.

Table 14 shows TOP-20 brands in HCI segment according to the results of 2015.

In 2015, the three leaders were not changed. As well as in the previous year, pneumococcal polysaccharide conjugated adsorbed vaccine PREVENAR increased its sales volume (+13%). Brands SODIUM CHLORIDE and KALETRA by Abbott also increased its sales volume (25% and 19% in rubles, respectively) and kept its positions.

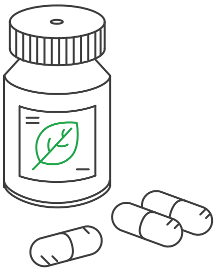
The share of TOP-20 brands in hospital purchases is 25% - which is 2% more than in the previous years. The ranking includes both expensive imported drug products and cheap domestic drug products (SODIUM CHLORIDE, GLUCOSE, CEFTRIAXONE).

Compared to 2014, there are no new brands in the ranking of 2015. The most successful of the brands is an agent for treatment of HIV OLITIDE, it occupied 26th place in the ranking of the sales value.

Table 14

TOP-20 Brands in HCI Segment According to the Results of 2015

2015 Ranking	Change	Brand	Sales value, million of rubles	Sales Value Increase	Share
1	0	Prevenar	**7 709**	**13.4%**	**3.5%**
2	0	Sodium Chloride	**7 232**	**25.3%**	**3.3%**
3	0	Kaletra	**6 144**	**18.8%**	**2.8%**
4	+3	Herceptin	**3 053**	**33.0%**	**1.4%**
5	+3	Reyataz	**2 498**	**14.4%**	**1.1%**
6	-2	Prexista	**2 324**	**-21.4%**	**1.0%**
7	-2	Vaccine	**2 268**	**-11.3%**	**1.0%**
8	+5	Allergen	**2 224**	**28.0%**	**1.0%**
9	0	Isentress	**2 179**	**12.7%**	**1.0%**
10	+4	Ceftriaxone	**2 135**	**26.4%**	**1.0%**
11	+1	Kurosurf	**1 996**	**9.3%**	**0.9%**
12	+3	Meropenem	**1 971**	**21.5%**	**0.9%**
13	+3	Avastin	**1 841**	**16.6%**	**0.8%**
14	-4	Ultravist	**1 804**	**-2.2%**	**0.8%**
15	-9	Clexan	**1 782**	**-25.4%**	**0.8%**
16	+1	Glucose	**1 606**	**3.0%**	**0.7%**
17	+6	Sevoran	**1 464**	**16.9%**	**0.7%**
18	-7	Kivexa	**1 448**	**-21.0%**	**0.7%**
19	+5	Actilise	**1 387**	**11.7%**	**0.6%**
20	0	Heparin	**1 360**	**2.3%**	**0.6%**



5. Nutritional Supplements (NS)

In 2015, Nutritional supplements (NS) were in spotlight of state and regulatory organs.

Since January 2015 Federal Law N532-FZ from December 31, 2014 “On Amendments in certain legislative acts of Russian Federation in terms of counteraction to the circulation of falsified, forged, low-quality and non-registered drug products, medical devices and falsified nutritional supplements” has been implemented. The Law toughened criminal and civil liability for circulation of falsified nutritional supplements (NS).

One of the guarantor of its realisation was Self-administrated Organisation Non-profitable Partnership “Union of the Manufacturers of NS to the Food”, created in 2014. The first group of NS taken under control became the NS for potency increase. In April 2015, control purchases of NS increasing the potency in men were made. The study showed that 80% of the drugs for male potency increase sold in pharmacies as NS contain prohibited substances. Self-administered organisation of NS manufacturers along with other non-profitable organisations of pharmaceutical manufacturers pressured for the initiation of criminal prosecution of manufacturers of falsified nutritional supplements for potency increase. Until this time the quality of products in this group of nutritional supplements is doubtful, despite various studies presented by manufacturers.

NS for potency increase by the results of 2015 occupied the second place in the ranking of NS for indications, losing to vitamins. The group share of “NS increasing libido in men and eliminating erectile dysfunction” was about 13.6% in the sales value. It should be noted that in 2014 this group was the leader in circulation. As a result of close “attention” to the products of this group, in 2015, the sales volume in rubles decreased by 4%, in units fell by 16%. The main downshift happen because of the sales decrease of the third in sales value drug product TONGCAT ALI PLATINUM (Polens) by 40% in comparison with 2014. The Federal Service on Surveillance for Consumer Rights Protection and Human Well-Being cancelled state registration of this NS in August 2015, determining the NS as falsified with content of “pharmaceutical substances not indicated during state registration”.

This fact became the main reason for the preparation of a law draft, which will transfer the rights on NS market regulation from the Federal Service on Surveillance for Consumer Rights Protection and Human Well-Being to the Federal Service on Surveillance in Healthcare. The tests of the products will be performed directly in the laboratories of the Federal Service on Surveillance in Healthcare.

Presently, the Russian Federation does not require clinical trials for NS that are compulsory for drug products. Only mandatory “Declaration of Compliance” - the confirmation of NS quality immediately by manufacturer - is required. Such situation allows many unconscientious manufacturers to violate technologies and receipts, releasing on the market the drug products not studied in correct way.

In 2015, the Federal Service on Surveillance for Consumer Rights Protection and Human Well-Being revealed violations in 84% of the sites producing nutritional supplements to food. Last year 739 batches of these goods weighing more than 36 kg were taken off the manufacture.

In pharmacy sales, the share of nutritional supplements makes 4.6%, it is the segment of non-drug products with the most capacity. Recently, the NS market has been growing with high rates, on the average by 12-14% per year. In 2015, positive dynamics of growth is till preserved, but the growth rate decreased because of the crisis. According to the results of 2015, the sales volume of NS in pharmacies increased by 6%, but the dynamics is lower than for the drug products (9%). The main slowing down of the sales both in money terms and in real terms happened in 4th quarter of 2015 when dynamics was even negative to the similar period of 2014. In total, for the 3 last months of the year, NS sales decreased by 11% in rubles and by 17% in units.

Presently, about 2,200 various brands of NS manufactured by 900 manufacturers are sold on the market.

During 2015, about 273 million of units of NS were sold through pharmacies with total cost of 31 billion rubles in wholesale prices and 43 billion rubles in retail prices. In units, the NS market for the second year in a row demonstrates negative dynamics. The price for one unit of NS was 157 rubles (in retail prices) or about 113 rubles (in purchase prices from distributors) in 2015, which is 13% higher than in 2014.

NS price dynamics was analysed using the Laspeyres price index.

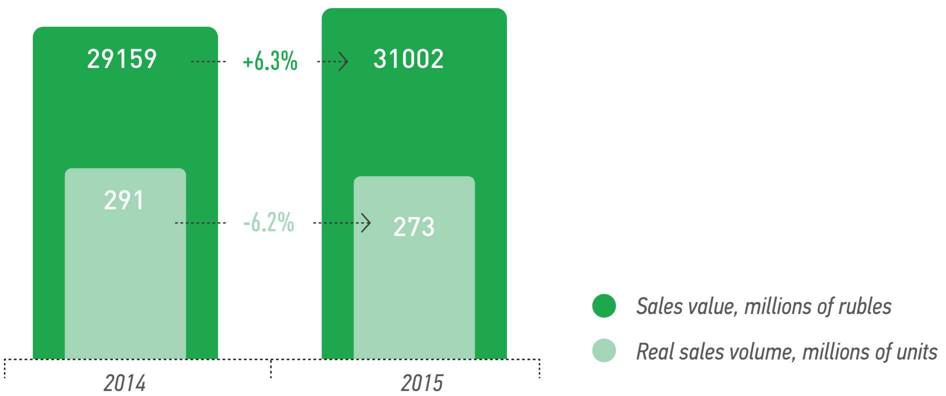
According to Laspeyers index, in 2015, in comparison with 2014, NS prices in rubles increased by 14.5%, which exceeds the inflation parameter of 2014. The main price growth for NS was noted in January 2015 when the market players corrected their prices because of foreign currency growth to ruble. Further, the price change was insignificant, even with tendencies of deflation in summer associated with market’s desire to support the sales of this group and to avoid decrease of sales in units. But in the autumn, with continuation of ruble weakening, the NS prices started to rise again. As a result, the parameter of 2014 was surpassed almost by 3.5%. It should be noted that inflation in terms of NS was also higher than the price growth for drugs in total (10.3%).

Unlike the market of drug products with prevalence of foreign manufacturer's products, NS market shows the reversed picture: NS produced in Russia cover 56% of sales value and 81% of real sales volume. It should be noted that the share of domestic manufacturers decreased by 2% in money terms and remained practically the same in real terms. It was connected with various price increase for imported and domestic drugs.

Among foreign manufacturers NS manufactured in Germany (24%), USA (21%) and Poland (8%) take the leading positions. Queisser Pharma GMBH & CO.KG tops the list of German manufacturers (NS Doppelhertz) with considerably growth of Merk Selbstmedikation sales (PHEMIBION brand). As a result, the share of German BS in the total sales volume increased by 1%.

Figure 25

Nutritional Supplements Sales Volume in Russia in 2015



Among American NS, products by company Solgar Vitamin and Herb (NS SOLGAR) is the most popular one. Genexo (NS MAXILAC) is the leader among Polish manufacturers.

The imported NS as in the drug market are more expensive than the domestic ones: the price of one unit of imported NS was 280 rubles; of the domestic one was about 80 rubles. In 2015, domestic NS increased in price to a lesser extent (+9%) than the imported ones (+18%).

The most demanded price segment on the market is the segment of NS priced under 50 rubles. The share of this segment is about 61% of sold NS in real terms. It should be noted, however, that because of the low price the share of this segment in real terms is about 10%. The most profit is made by NS prices over 500 rubles, the share of such segment is 32.5% (although in units its share is only 4%).

Let's discuss TOP-20 of NS manufacturers (Table 15). TOP-20 companies occupy about 66% in money terms.

As usual domestic manufacturer Evalar tops the ranking of NS manufacturers, its

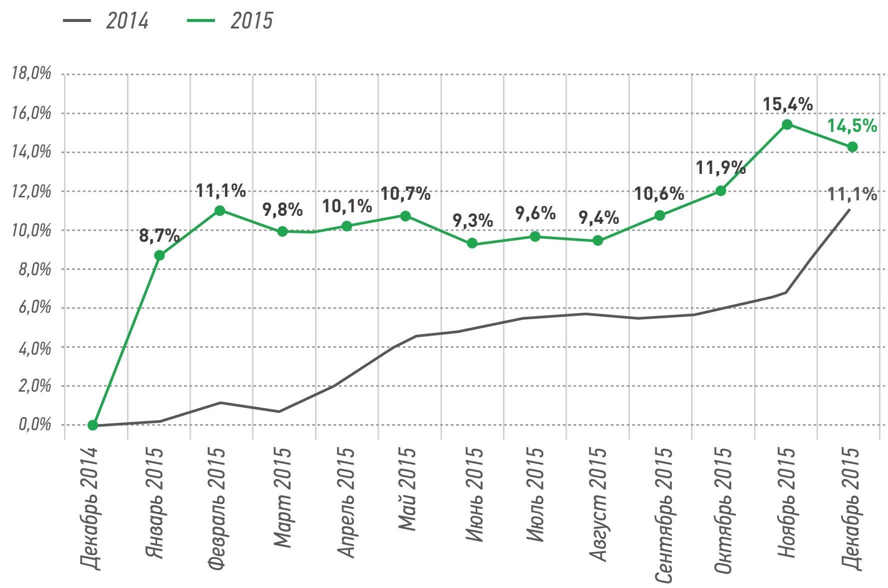


Figure 26

Change in NS Prices on Russian Commercial Pharmacy Market in 2015 products cover about 15% of all NS pharmacy sales in money terms. In the past 3 years the company shows negative dynamics of sales value leading to decrease of manufacturer's share on the market. Such dynamics can be explained by the decrease of sales of nutritional supplements TURBOSLIM, the sales of which only for 2015 fell by 30%. By the results of the year, the leading brand in NS portfolio of the company was supplement FITOLAX which promotes the intestinal function.

The growth of such position is about 15% in money terms. Two leading brands (FITOLAX and TURBOSLIM) cover 40% of company's sales. Such NS as GLYCIN, MOTHERWORT, HONDA also increased their sales, but since its share in the manufacturer's portfolio is not large, they couldn't give the positive dynamics of company's sales in general. The manufacturer Evalar is one of the few domestic companies among NS manufacturers (and among drug manufacturers) that releases its

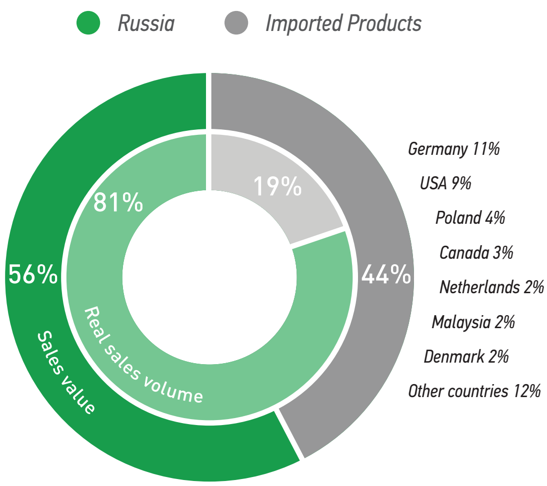
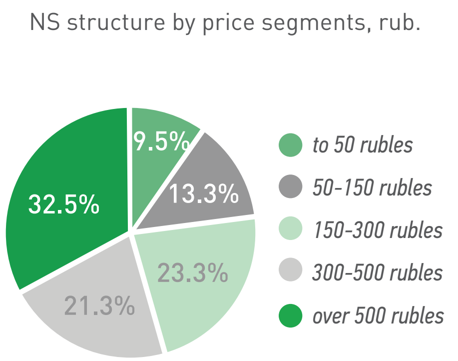


Figure 27

Proportion of Imported and Domestic NS Sales by Countries products on foreign markets as well. The export share achieved 15% in Evalar's circulation. The company products are sold in 22 countries with the largest share of sales in CIS countries. In 2015, Evalar opened its branch in the USA and started to release the line of 12 products. In order to sell its products the manufacturer opens phytomarkets, which range of products include more than a thousand of names of Russian and foreign productions.

RIA PANDA steadily occupies the second places, annually increasing its breakaway from the closest rivals. In 2015, the company's sales increase was 8%, despite the difficulties in sales of the main products (SEALEX FORTE & ALI CAPS) designed for correction of specific disorders in men and covering 83% of the company's sales (we mentioned it before). Manufacturer RIA PANDA has been actively expanding. In 2015, a construction of academician



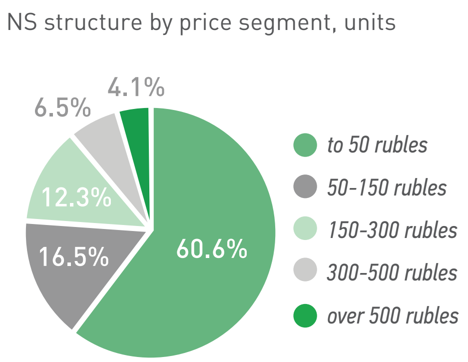


Figure 28

Proportion of NS Sales by Price Segments

Table 15

TOP-20 NS Manufacturers in Russia in 2015

Note: the sales volume is shown in pharmacy purchase prices with VAT included.

2015 Ranking	Change	Manufacturer	Sales Value in 2015, millions of rubles	Sales Value Increase	Share
1	0	Evalar	4 604.6	-4.7%	14.9%
2	0	RIA "Panda"	3 452.6	8.4%	11.1%
3	0	PharmaMed	1 913.0	42.3%	6.2%
4	2	Solgar Vitamin And Herb	1 143.4	29.2%	3.7%
5	-1	Valeant	1 015.4	0.7%	3.3%
6	2	Rusfic Group	920.8	11.0%	3.0%
7	0	Queisser Pharma	904.1	5.7%	2.9%
8	7	Merk Selbstmedikation	757.4	62.5%	2.4%
9	-4	Polens (M) Sdn Bhd	657.8	-28.5%	2.1%
10	1	Diod	591.2	-8.6%	1.9%
11	-2	Pfizer	587.4	-17.5%	1.9%
12	4	Otisipharm	576.3	34.4%	1.9%
13	4	Polpharma	535.1	27.7%	1.7%
14	-2	Bayer	496.1	-22.5%	1.6%
15	3	Genexo Sp. Z.O.O	489.9	81.5%	1.6%
16	-3	Pharm-Pro LTD	480.5	-0.3%	1.5%
17	-3	Ilmixgroup	475.9	0.5%	1.5%
18	-8	Polyaris	324.7	-50.8%	1.0%
19	0	Biocor	312.1	22.2%	1.0%
20	0	Novartis	305.5	20.9%	1.0%

Filatov plant in Gatchina district of Leningrad Region was completed. The plant's capacity includes 1 billion of tablets and capsules per year (more than 20 names) with possibility to increase its production volume up to 3 billion of units. On Gatchina plant the foreign partners' contractual manufacture is planned as well as the extension of NS production. The plant has been built in accordance with GMP requirements, at the beginning of 2016 it passed the audit on the compliance of manufactured solid pharmaceutical forms to the quality standards.

As we mentioned before, foreign manufacturers have higher rates of expansion that domestic companies. PharmaMed company covers the share of 6.2% and is one of the three TOP manufacturers because of high rate of VITAMISHKI brand growth (64%).

Merk Selbstmedikation also demonstrates high rate of growth (+7 positions up the ranking) due to the double growth of their brand PHEMIBION, combined vitamins and minerals for pregnant women.

Two companies, Otisipharm and Polpharma moved up 4 positions. Manufacturer Otisipharm sells vitamins Complivit on the market. Its sales increased 1.7 times in comparison with 2014. Polpharma presents NS NORMOBACT (for regulation of intestinal microflora) on the Russian market. The sales of this NS increased by 26%.

Genexo sells NS MAXILAC on the Russian market (for regulation and restoration of intestinal microflora), its sales increased by 80% that allowed for the manufacturer to move to 15th place.

Except for companies, showing positive dynamics in the ranking's position, we should note the manufacturers that moved down. Polyaris fell by 8 lines because of the 2-time sales decrease of NS REDUXIN, NS for weight loss and body cleansing. Polens (M) SDN BHD moved down 4 places, in comparison with 2014, its main brand is TONGCAT ALI PLATINUM (the sales of this NS has been practically equal to zero since September 2015).

TOP-20 brands cover 42% on the market. The ranking's leaders by the results of 2015 are "SEALEX FORTE" and "ALI CAPS" (RIA "PANDA"). VITAMINS SOLGAR (SOLGAR VITAMIN and HERB) took the third place moving up 1 position.

The maximal sales increase among TOP-20 was observed for brands VITAMISHKI, PHEMIBION and MAXILAC (mentioned above).

It should be noted that almost all NS for weight loss show negative dynamics.

Table 16

TOP-20 NS Brands by Sales in Russia in 2015

2015 Ranking	Change	Brand	Company	Sales Value, million of rubles	Sales Value Increase	Share
1	0	Sealex Forte	RIA "Panda"	1 694.9	4.5%	5.5%
2	1	Ali Caps	RIA "Panda"	1 15.4	7.9%	3.7%
3	1	Solgar	Solgar Vitamin And Herb	1 133.8	29.0%	3.7%
4	6	Vitamishki	PharmaMed	905.2	64.1%	2.9%
5	0	Doppelhertz	Queisser Pharma	904.1	5.7%	2.9%
6	0	Fitolax	Evalar	864.3	15.2%	2.8%
7	-5	Turboslim	Evalar	840.1	-29.1%	2.7%
8	4	Phemibion	Merk Selbstmedika-tion	757.4	62.5%	2.4%
9	2	Alphavit	Rusfic Group	528.3	12.8%	1.7%
10	10	Maxilac	Genexo Sp. Z.O.O	489.9	81.5%	1.6%
11	3	Normobact	Polpharma	488.0	26.4%	1.6%
12	1	Hematogen	Various	485.9	20.6%	1.6%
13	-4	Supradin	Bayer	472.3	-23.5%	1.5%
14	-7	Tongcat	Polens (M) Sdn Bhd	381.2	-41.3%	1.2%
15	4	Men's Formula	PharmaMed	377.2	30.3%	1.2%
16	-1	Indinol	Ilmixgroup	352.5	2.1%	1.1%
17	-9	Reduxin Light	Polyaris	314.2	-51.3%	1.0%
18	-1	Motherwort	Various	301.0	1.8%	1.0%
19	4	LINEX for Children	Novartis	294.9	20.9%	1.0%
20	20	Glycin Forte	Evalar	274.1	73.3%	0.9%

The consumer's trust to this group weakened. The sales of all leaders in this group decreased by the results of 2014: TURBOSLIM (Evalar), REDUXIN LIGHT (Polyaris), TROPICANA SLIM (Evalar), XL S (Richard Bittner).

Only TUBROSLIM remained in TOP-20 ranking, moving down 5 positions, and REDUXIN LIGH that occupied 17th position (-9 positions). In general, NS for weight loss and body cleansing sales decreased by 34% in rubles and by 27% in units during 2015.

TOP-20 brands included LINEX for children (NOVARTIS) and GLYCIN FORTE (Evalar), the growth rate of which increased the growth of NS sales volume in general.

PHYTOMUCYL may be named a possible newcomer in TOP-20 ranking by the results of 2016 (manufactured by Pharmamed). The product is presented as an agent for body cleansing and weight loss). The product appeared on the Russian market only in August 2014, but at the moment it occupies 27th place in the sales volume ranking. The high sales rates are also observed for COMPLIVIT (1.7 times), BACTISTATIN (BIOS NPF, the product for regulation and restoration of intestinal microflora, 2 times growth and 29th place by the end of 2015).

Manufacturers market the nutritional supplements as the means for the prevention of various diseases. It is not very convenient to use the existing official classifier to assess the NS market as many nutritional supplements used for prevention of the same diseases are in different sections of the classifier (for example, products improving vision). Therefore, DSM specialists developed their own NS classifier, which reflects the realities of today's NS market more accurately. The NS Classifier consists of 17 sections, most of which include the 2nd, and some of which have the 3rd subsection.

The NS sales ranking by classifier is presented in Table 17.

According to statistics, each fourth Russian citizen plans to start taking various vitamins and nutritional supplements in order to improve his/her health (from the study of Romir holding) and about 45% of surveyed citizens of the Russia Federation take NS.

The share of such Russians who were taking various supplements and vitamins increased in comparison with 2012 (then the survey results showed the number of 32%). The main reason for consumption of such products is the desire to restore the balance of vitamins and various microelements in the body, thus improving

Table 17

Sales Ranking by NS Classifier According to the Results of 2015

Position No.	NS Registry Section	Sales Value, millions of rubles	Increase to 2014	Group Share, %	Leader of Each Section
1	V: NS affecting whole body	7 843.6	16.1%	25.3%	Phemibion
2	G: NS affecting reproductive system	6 850.8	3.2%	22.1%	Sealex Forte
3	A: NS affecting digestive system	5 601.5	17.8%	18.1%	Fitolax
4	N: NS affecting function of central nervous system	2 173.9	11.7%	7.0%	Mortherwort
5	W: Slimming and cleansing NS	1 812.3	-34.3%	5.8%	Turboslim
6	C: NS supporting cardiovascular system function	1 431.1	-2.6%	4.6%	Doppelhertz
7	S: NS affecting sensory organs	1 026.7	-1.5%	3.3%	Ocuwhite
8	D: NS for skin and hair problems	847.4	5.3%	2.7%	Complivit
9	M: NS for bone system diseases	766.9	16.0%	2.5%	Honda
10	I: NS supporting immune system function	707.8	45.1%	2.3%	Vitamishki
11	B: NS affectinghaematopoietic system	628.7	14.1%	2.0%	Hematogen
12	R: Respiratory system NS	506.7	2.6%	1.6%	Doctor Theiss Drops
13	U: NS affecting urinary system	291.3	13.1%	0.9%	Prolyt
14	H: NS function of endocrine glands	253.0	10.8%	0.8%	Endocrinol
15	T: NS used in poisoning and intoxication	161.9	-23.0%	0.5%	White carbon
16	O: NS used for treatment and prevention of oncology diseases (other than reproductive system tumours)	62.5	5.6%	0.2%	Promisan
17	J : NS used in virus, bacterial, fungous disease	13.9	-26.7%	0.04%	Camomile

the health and the workability, release stress and eliminate tiredness with certain groups of vitamins.

There is no surprise that by the results of several years already NS ranking by the first level of DSM Group classifier is topped by group [V] “NS affecting whole body” - the share of which is 25%. This group included vitamins and general toning products. The second place belongs to group [G] “NS affecting reproductive system” (22%). The third leader is group [A] “NS affecting alimentary tract” (18%).

High growth rates were shown by group [I] “NS supporting immune system function” (+45%). The leadership in this group belongs to NS “Vitamishki”.

Significant negative dynamics is shown by only 2 groups: [W] “Slimming and cleansing NS” (-34%) and [T] “NS used in poisoning and intoxication” (-27%).

In conclusion, we would like to remark that even in 2014 the crisis starting in the country affected the market of pharmacy NS. in 2015, its influence only strengthened. The negative effect is also provided by constant information on the low-quality NS and NS containing prohibited substances. NS as a category of product for “health improvement” in times of crisis is one of the most vulnerable one. In 2016, decrease in consumption ability of population in terms of this group of products is expected.

6. Beauty Products

For the past several years sales increase of non-medication range of products have been noticed in Russian pharmacies. In general, sales volumes of parapharmaceutical products (excluding NS) increased in 2012-213 by 14% in money terms and by 7% in units. In 2014, slight retardation of the growth in this segment due to economic difficulties was noted because of economic difficulties - the sales demand increase in rubles was 8%, in units it decreased by 3%. 2015 promoted crisis tendencies - in one way or another, consumer whose real profit is not only not increasing but also decreasing, starts to save money on the products of non-drug range.

Pharmacy beauty products “suffered” the most. For the past 4-5 years a growth of activity of cosmetic companies in the pharmacies increased. The manufacturers found loyal customers in the pharmacies, and not only traditional pharmacy brands started to appear on the shelves (VICHY, LA ROCHE-POSAY, AVENE) but also new brands that just presented itself. In 2015, no less than 50 new cosmetic brands appeared in the range of pharmacy products in 2015. The absence of price regulation and wide range made the cosmetic products quite a promising unit for pharmacies. The large chains opened beauty parlours and department of treatment beauty products, held various promotional events and open houses for consumers of beauty products. It promoted the formation of a special segment of pharmacy visitors - the consumers deliberately visiting the pharmacies to buy beauty products.

Crisis events in Russian economy started in the second part of 2014, by 2015 made more influence of the sales of pharmacy beauty products. Slowing down of consumers’ activity, caused by the decrease of population’s profits, and also price rise on almost all products led to the decrease in terms of rubles in this segment for the first time in the past five years.

According to the results of 2015, pharmacy cosmetic takes the third place (after drug products and NS) in the structure of pharmacy sales and the second place in the structure of parapharmaceutical groups of goods. The share of this segment was 4% from the total volume of the pharmacy sales and 31% from the total volume of the sales of parapharmaceutical products.

In 2015, the sales volume of the pharmacy cosmetic was a little less than 25 billion rubles or 147 million of units.

Compared to 2014, the market of pharmacy beauty products decreased by 0.9% in rubles and by 20.2% in units. For comparison, in 2014, the demand increase by 7.5% compared to that of 2013 was registered. It is notable, that the decreased demand of pharmacy beauty products was quite similar during the entire years, which shows stable trend that has all chances to continue in the nearest future. For comparison, a year earlier, when the economic crisis just started, the significant decrease of demand was observed only in the second half of the year.

Sales dynamics of the pharmacy beauty products by the results of the previous year was significantly lower than the sales dynamics of the drugs and the NS which also shows some slowing down of the development of the market's segment.

There is no official classification of beauty products in Russia, however, depending on the purpose, effect and price, all beauty products can be divided into three groups: active (medicinal) beauty products, mass market beauty products and selective beauty products (Premium and Deluxe class). We have to note than the division into these groups is conventional and subjective.

Active (medicinal) beauty products are used for treatment and prevention of certain diseases, contain various biologically active substances. Medicinal beauty products include such brands as SOFIA (creams and balms), BORO PLUS creams, etc.

Mass market beauty products are cosmetics available to most consumers,

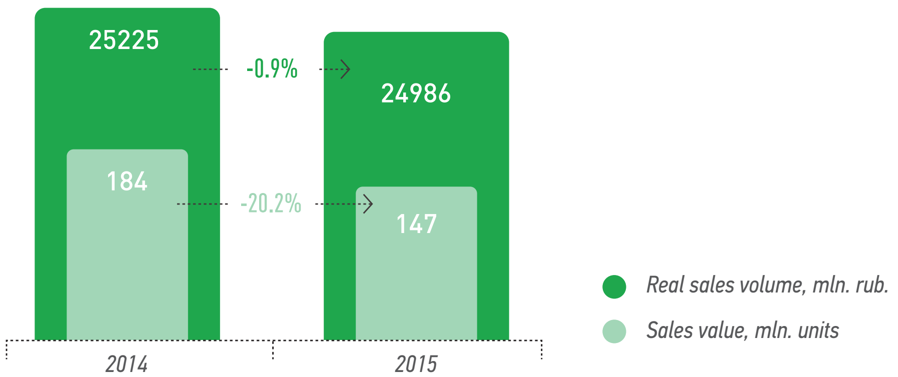


Figure 29

Beauty Products Sales Volume in Russia in 2014-2015

Note: the sales volume is shown in pharmacy purchase prices with VAT included.

designed for skin, hair and nails care. They are available both in pharmacies and other retail outlets (supermarkets, specialized stores, etc).

Such beauty products usually do not include any selective preparations eliminating specific problems such as acne. Mass-market beauty products include the goods of such manufacturers as, for example, GARNIER, NIVEA.

Selective beauty products (Premium and Deluxe class) - beauty products with cosmetic lines designed to certain skin or hair condition. These products are sold mostly in pharmacies. For example, a manufacturer of selective beauty products is Vichy, Avene, Uriage, etc.

Among the three types of goods, the segment of selective beauty products shows the most significant growth in money terms (+13.9%). In unit terms, this segment increased even more significantly - by 20%. The reason for such rapid increase of segment was the appearance of new successful brands, primarily the domestic brand LIBREDERM.

The sales of pharmacy medicinal beauty products decreased in units: -1.4% in rubles and -16.4% in units. This segment of the pharmacy beauty products had been steadily growing for the past several years (thus, by the results of 2014, the sales value of the consumption of active beauty products in the pharmacies increased by 9%), but in 2015, a new trend brought. In the past year the reduction of consumer's demand for the active beauty products concerned not only units but also ruble equivalent. The decreasing profits of the population lead to economy on the position of beauty products with active components. For example, in 2015, the sales of antimycotic agents in the segment of active beauty products decreased, though it is its sales that had been steadily increasing for the past several years.

The demand for the pharmacy mass-market beauty products by the results of 2015 decreased by 20.8% in rubles and 32.5% in units. This trend cannot be called an absolutely new one since the decrease in beauty products sales of the lower price segment started several years ago. Nevertheless, in 2015, this reduction achieved significant size. The sales of this type of beauty products is performed mostly through specialized stores and chain retail, the pharmacy serves as the additional channel of sales. However, the rivalry with the main channels of sales is very complicated in terms of price and the range of goods. In other words, the consumer significantly reduced the purchase of the beauty products that can be bought in other places on more profitable conditions than in a pharmacy.

Beauty products sold through pharmacies have wide price range: from the cheap ones, priced about 20-25 rubles (soap, wet tissues, inexpensive domestic hand creams etc.) to very expensive, the price of which may exceed 12,000 rubles per one unit. By the results of the year, the weighted average price of one unit was about 170 rubles (increase to the level of 2014 +24%). The segment of the medicinal beauty product showed the most significant increase of the weighted average price of a unit (123 to 145 rubles). In the segment of selective beauty products a decrease of the parameter by 5% (the weighted average price by the results of 2015 was 607 rubles), and mass-market beauty products increased in price by 17% on the average (the weighted average price of a unit was 88 rubles).

Proportion of pharmacy beauty products sales by type presented on Figure 31.

The ratio of three types of beauty products have slightly changed - the segment of selective beauty products increased its share in the sales value and by the results of 2015 amounted to 33% (29% - in 2014). The share of mass-market beauty products decreased

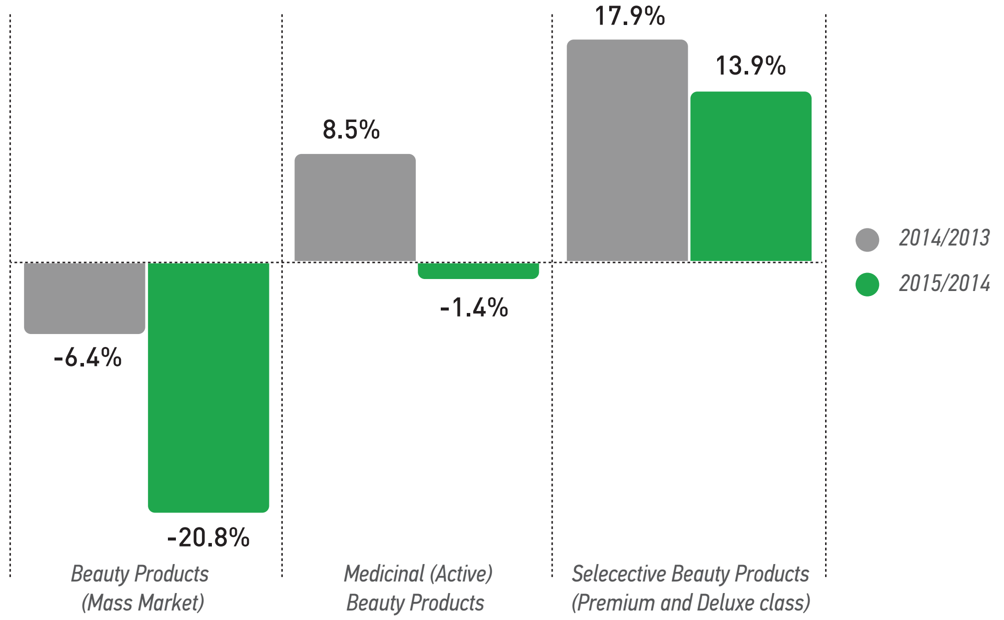


Figure 30

Sales Increase of Pharmacy Beauty Products Sales by Type by 4% for a year and amounted to 16%, and the medicinal beauty products slightly weakened its positions (the specific weight of the segment is 50%). In units, due to a higher price the beauty products of Premium and Deluxe class occupy just 9%. The share of mass market and medicinal beauty products in units distributed in the following way: 32% and 59%, respectively.

As shown on Figure 32, the products of Russian manufacturers are in more demand than that of the foreign ones, taking over 67% of the real sales volume. However, by the sales value the imported beauty products significantly take over (more than 60% of sales).

Within the segments, the proportion of domestic and imported beauty products is unequal.

In 2015, eighty-nine per cent of the selective beauty products consist of imported beauty products. Only one brand LIBREDERM is manufacture partially in our country.

The mass market, as in the previous year, the domestic beauty products surpassed the imported beauty products by the amount of sold units (66%). By the sales value, the foreign brands have the predominant share (57%).

In the segment of medicinal beauty products domestic brands have the leadership both in the sales value (55%) and in the real sales volume (72%) parameters.

In pharmacies "universal" beauty products are mainly sold that are designed for any type of consumer, it takes 77% in the sales volume in money terms and 80% in units. Beauty products for children occupy the second place, with 8% of sales value and 13% of real sales volume. The third place is taken with beauty products for "middle age (after 25 years)". This category has significant prevalence in terms of expensive beauty products (if the segment's share in money terms is 7%, in units terms it is only 3%) - almost 80% of the volume of this category accounts for the selective beauty products. The fourth place belongs to the beauty products for people over 45 years old (4% in the sales value and 1% in the real sales value). The share of beauty products for young and teenage age by the results of 2015 was 2% in rubles and 1% in units. We should note that, in comparison with the previous year, the share of the beauty products for mature age decreased, and for the young age it significantly increased compared to the previous year.

Vichy brand traditionally tops the ranking of selective beauty products (Figure 33). Compared with 2014, the sales of

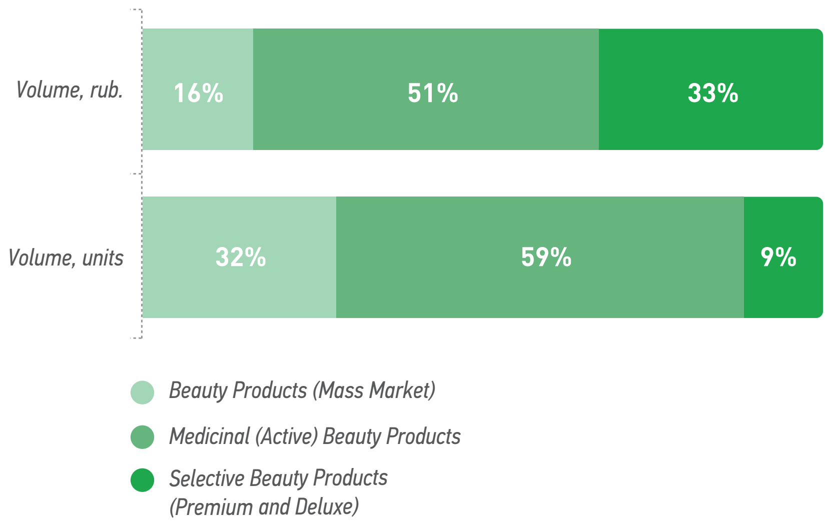


Figure 31

Proportion of Pharmacy Beauty Products Sales by Type, 2015

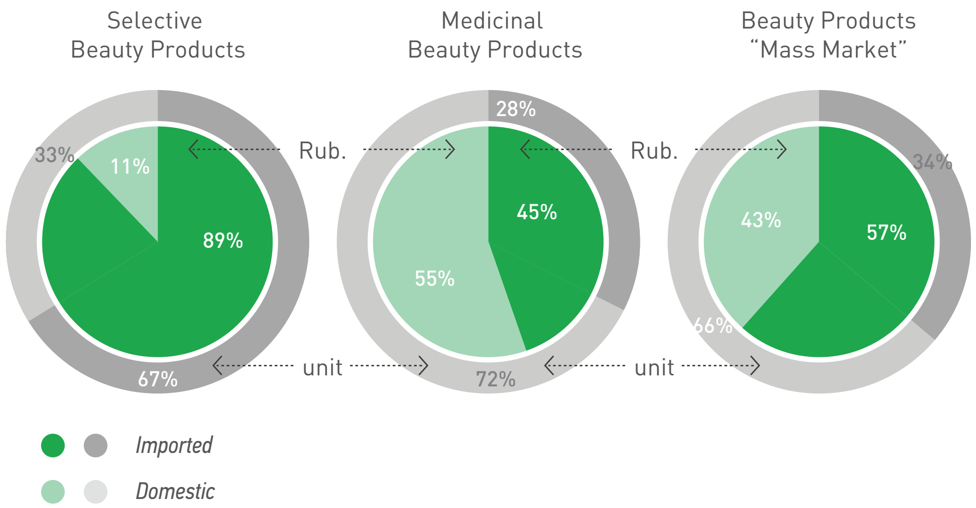


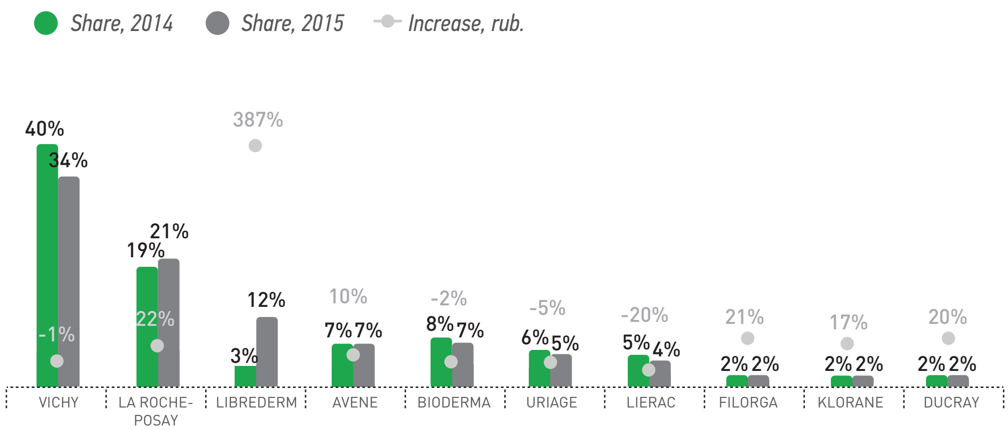
Figure 32

Proportion of Pharmacy Beauty Product Sales By Type, 2015 this brand decreased by 1%, their share decreased by 6%. Negative dynamics from TOP-10 was also observed by brand LIERAC (-20% to the sales value 2014), BIODERMA (-2%) and URIAGE (-5%). All other brands increased both in sales volume and in share. The sales volume and the share of LA ROCHE-POSAY should be noted as well, the brand belongs to L'OREAL manufacturer (as well as VICHY). Thus, two of these brands combined occupy about 55% of the sales value on the market, which is 4% less than that of 2014. LA ROCHE-POSAY takes the second place in the ranking for several years in a row, and by the results of 2015 the market share covered by the beauty products of this French brand increased by 2% (in 2014, the growth of LA ROCHE-POSAY's brand share was also 2%).

Out of the brands occupying from 3 to 10 places, AVENE, KLORANE and DUCRAY should be noted as well - compared to 2014, the sales volume of these brands increased by 10%, 17% and 20%, respectively. All three brands are manufactured by beauty product manufacturer PIERRE FABRE. In

Figure 33

TOP-10 Selective Beauty Products Brands (Premium and Deluxe class)



2015, the combined share of the brands did not change compared to 2014.

One more developing brand Filorga had significant grow of selective beauty products sales among the key players - +21% to the sales level of 2014.

It should be noted that, in 2015, the most part of selective brands of the pharmacy beauty products included in TOP-10 had decrease in sales in unit terms. The price rise promoted more positive picture in the ruble terms. The average price of LA ROCHE-POSAY unit increased by 17%, of AVENE unit - by 19% and of BIODERMA unit - by 26%. The rise of average cost of one VICHY unit was 12%, whereas LIERAC increased by 20%, and FILORGA by 25%.

The maximal growth of weighed average price (+44%) was seen in LIBREDERM brand which practically took TOP-10 brands of selective pharmacy beauty products by storm. Such increase was connected with widening of the products range of the brand and inclusion of large amount of expensive products (this was the reason for inclusion of this brand in selective beauty products). This brand being the most successful pharmacy beauty products brands of Russian origin for the past several years is mainly manufactured in our country, though some of the products are manufactured abroad. The sales of this brand in the pharmacies started several years ago, but the peak of the consumers' demand was in 2015. In ruble terms, the sales of LIBREDERM brand increased almost 5 times, in unit terms, the increase was 3 times.

The ranking 2015 by the composition does not differ from the one of 2014. But the order of some brands was changed. Thus, due to the decrease of the sales LIERAC moved from 6th to 7th place, Bioderma lost its place in the top three leading positions because of the sales decrease.

LIBREDERM due to the increase in sales was on the 3rd place, FILORGA and KLORANE switched places - the first brand moved up to 8th place, and the second place moved down to the 9th.

In 2015, in the ranking of mass-market beauty products, the first place was reserved by JOHNSON'S BABY brand (Figure 34). Even 9% decrease of sales volume did not prevent the leading brand to increase its market share by 2%. It should be noted that combined consumption of the pharmacy mass-market brands plunged by the results of 2015 by almost 21%. Because of this, even negative increases in sales (but not as significant as the decrease of the whole segment) promoted stabilization of market positions of certain brands.

The fifth leaders in the ranking of mass-market beauty products were not changed compared to 2014. The consumer's demand for NIVEA, NATURA SIBERICA and UMNAYA EMAL in pharmacies decreased more than 30% in a year, the sales of NORVEGSKAYA FORMULA by Neutrogena decreased by 24%. in 2015, all brands of mass market ranking experienced decrease of sales. The most "modest" decreases of sales volume were registered for the following brands: domestic brand KORA (-7%), CHILDREN'S CREAM (-3%) and MOYO SOLNYSHKO (-4%). All listed brands improved its positions in the ranking, the brand MOYO SOLNYSHKO moved from 12th place to the 10th of place.

By the results of 2015, the ranking of pharmacy mass market beauty products there are five Russian brands, which shows that democratic price policy allows the Russian brands to equally compete with the foreign beauty products giants mainly in this segment of the pharmacy beauty products.

In the ranking of active beauty products, the leader remained the same - LOSHADINAYA SILA despite the decrease

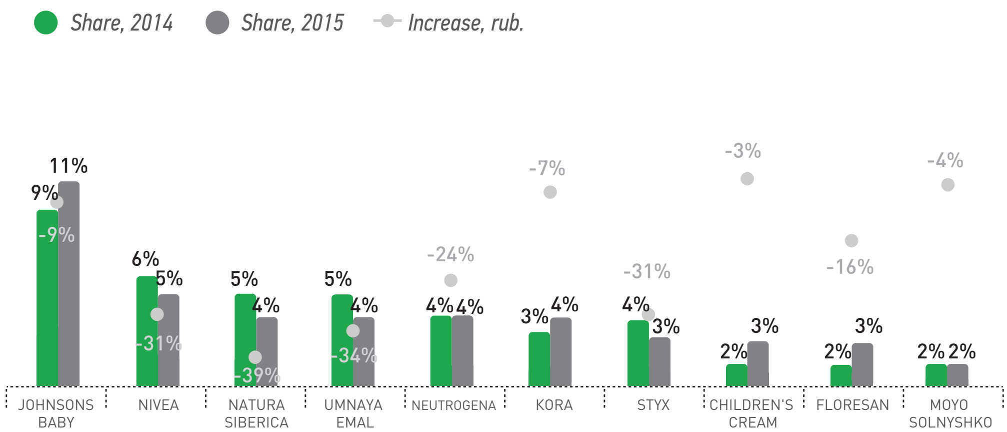


Figure 34

TOP-10 Mass Market Beauty Products Brands in sales is still unreachable for the closest rivals (Figure 35). By the results of 2015, the sales of the leading brand decreased by 10%. The second place in the segment of active beauty products is occupied by MICOSAN (a set of products for treatment of nail fungus), the sales volume of which decreased by almost one fourth in a year. As a result, the share of the brand decreased by 1%. The similar reduction of the specific weight in general sales volume of the active beauty products was noted for DRY DRY brand, which presents the products against excessive sweating. The decrease of the brand's sales was at the level of -13%.

Significant increase in sales in ruble terms among TOP-10 brands of "active" beauty products was demonstrated by brands ALERANA and LACTACYD (+15% and +17% compared to 2014). Such significant dynamics allowed these beauty products took its places on the 5th and the 6th of the ranking, respectively. The brand ALERANA in terms of beauty products is presented in Russian pharmacies as products of hair care, and LACTACYD - as means for private hygiene.

We should also note the brand EMOLIUM specialized mainly on the body products with steadily increasing sales for the past two years (in 2015, the brand's sales increased by 7%. The demand for the brand BELWEDER in Russian pharmacies has been also increasing for the past several years, however, if in 2014 the sales increase was 20% in rubles, in 2015, this parameter was more modest and amounted to +10%.

Negative market dynamics of the segment of pharmacy beauty products confirms the conclusions that this range of products has become one of the most vulnerable segments of the pharmaceutical market during the period of economic crisis - for the first time in the last five years the demand has decreased not only in units but in rubles as well. The deepest plunge has been noted for the combined demand for mass-market brands and an evident trend for the consumers to buy beauty products in other retail stores other than pharmacies has appeared. Even such popular brands as NIVEA and NATURA SIBERICA registered more than 30% decrease in sales volume in 2015.

In the segment of selective beauty products in units, the measurements were compensated with price rise in rubles. Although, it can be said that only the price factor "saved" selective beauty products from the sales decrease in terms of rubles. This segment of the pharmacy beauty product market is distinguished with high loyalty of the consumer (most part of the key brands can be bought only in pharmacy), moreover, dermatological application of the brands relates them to the drug products, and the reliability and the trust to the "medicinal" brands increases the demand stability even in the period of decrease of the real profits of the population. For example, the sales of LA ROCHE-POSAY, AVENE, FILORGA etc. brands significantly increased in rubles by the results of 2015.

> "Dermatological application of the brands relates them to the drug products, and the reliability and the trust to the "medicinal" brands increases the demand stability even in the period of decrease of the real profits of the population."

In the segment of medicinal beauty products, the sales decrease in rubles was minimal. The pharmacy sales volume of the brands decreased but some of them experienced the growth of the consumer's demand (ALERANA, LACTACYD, EMOLIUM, etc). This segment of the pharmaceutical market is traditionally the most stable.

In 2016, the tendencies described above allow to make a more confident prognosis for the decrease of the pharmacy sales. However, it should be mentioned that the decrease in the consumer's activity and total decrease of the pharmacy beauty products sales did not prevent certain brands from achieving high parameters of the sales and the growth of the market share. It mainly concerns Librederm brand, the sales of which have increased significantly for the past year, which allowed this widely advertised domestic brand to become one of the leaders on the Russian market of pharmacy beauty products.

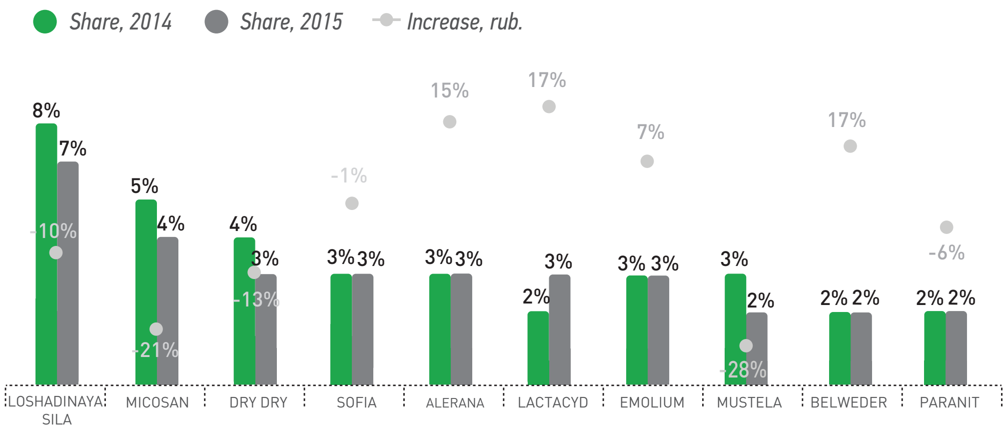


Figure 35

TOP-10 Medicinal (Active) Beauty Product Brands

7. Drug import

From January 01, 2016, Eurasian Economic Union member states established a single market of pharmaceuticals and medical devices. Currently, EEU includes 5 countries: Russia, Belarus, Kazakhstan, Kyrgyzstan and Armenia. This event not only can affect the structure and dynamics of drug import to Russia, but can also create additional competence for Russian manufacturers. In particular repackaging of imported drugs and smooth realization will be possible on the territory of EEU countries. Uniform rules for the registration and review of drug products, uniform requirements to drug labeling and instructions for medical use of drug products as well as other documents will be approved. These documents will provide uniformity of obligatory requirements to safety and quality of drug products on the territory of the Union.

A transitional period is planned till December 31, 2025, during which the drug products registered before January 1, 2016 on the territory of the EEU member states, should be brought into compliance with EEU rules and requirements. Until the termination of their marketing authorization these drugs can be sold on the territory of EEU member states that issued the corresponding marketing authorization. Therefore it is planned that when the EEU single drug market will start functioning, the national drug markets of the EEU member states will continue functioning till the end of the transitional period.

At the moment there are certain difficulties with the registration of foreign drug products: obligatory certificate of the Russian inspectorate on compliance with Russian GMP standards is required. This decision was made in December 2014, when the Federal Law N61 "On Medicinal Products Circulation" was amended. But all the necessary documents were developed and approved only in February-March 2016. Inspection term is 210 working days, i.e. several months. Therefore most probably import drugs will not be registered in 2016. Hence EEU pharmaceutical market may become a way out of this situation.

But for the single market to start actually working it is required to approve 23 regulatory documents, which were to be approved before 2016, of them only 4 have been approved so far (March 2016). The most anticipated act concerns drug registration, which leaves open the question on interchangeability: Russia insists on this provision to be included into the registration documents, the rest of the countries are against.

However the preferences for the member states of Eurasian Economic Union have already started working. A bill on restricting foreign drug products in the public procurements of Russia passed in the end of 2015. Suppliers of imported drugs will not be able to participate in the auction if at least two applications have been submitted by Russian manufacturers. The draft document applies to all the drugs purchased for state needs including the list of vital and essential drugs (LVED). However the restrictions do not apply to the drugs manufactured in Armenia, Belarus and Kazakhstan.

In the beginning of 2015, the government resumed extensive discussion of the parallel drug import as a measure to reduce the cost of drugs from LVED list and one of the anti-crisis measures. Parallel import is import of original goods from abroad without direct consent of the trademark owner. In other words after approval of the parallel drug import on the territory of the country the drug can be supplied not only but its direct manufacturer, but also by numerous distributors. Public officers expect uninterrupted supply of necessary pharmaceutical products in domestic market and reduction of the drug price through the development of competition and free movement of goods. However drug manufacturers distinguish several important negative consequences of parallel import for the market. First of all it will increase the volume of poor-quality and counterfeit goods. Secondly, domestic equivalents of foreign drugs will be put at risk. Thirdly, there will be significant drop of interest among foreign companies in the localization of manufacture. Fourth, parallel import itself is not a guarantee of price reduction for the consumer since the pricing mechanism involves at least one organization in the country. According to some reports introduction of parallel import is postponed in Russia for several years, however neither foreign, nor domestic manufacturers should minimize the possibility of legislative approval of this process.

In 2015, dynamics of volumes of imported pharmaceutical products was mainly affected by economic factors: weakening of the ruble, reduced purchasing power. As a result the volume of import fell by a third compared to 2014.

Figure 36 shows the volume of drug import to Russia in 2015.

In 2015, volume of drug import to Russia was 8.7 billion of dollars (in prices of the customs value), which is 33% lower than in 2014. In physical terms the fall of the volume of imported drugs doesn't look so dramatically: the amount of imported drugs was approximately 2.7 billion packages, in relation to 2014 the value fell by 14%. This figure is closer to the consumer dynamics in physical terms.

Reduction in the supplies of the pharmaceutical products was mostly due to the currency fluctuations: importers were afraid to import large drug consignments and used the formed stock.

Volume of substance import doesn't repeat the dynamics of drug import. This is due to the fact that the majority of domestic drugs are manufactured from the foreign substance. As a result, in 2015, the price of imported substances was 776.6 million dollars, which is 5% lower than in 2014. Approximately 11.9 thousand tons of pharmaceutical substances were imported to Russia, which is 6% higher than in 2014. In value terms the substances manufactured in Europe prevail (63%). In physical terms significant part is represented by the substances manufactured in China (58%), followed by substances

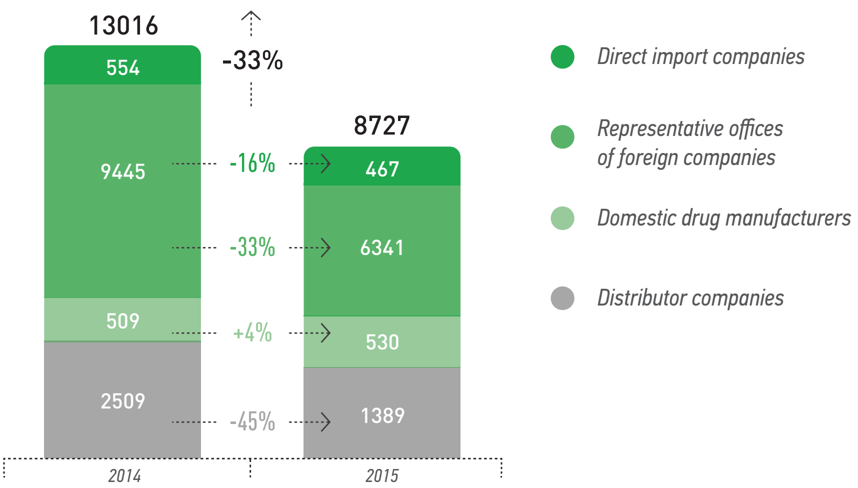


Figure 36

Volume of import, millions of dollars

manufactured in India (11%). Top three substances in value terms are: INSULIN (16%), PERINDOPRIL (8%), DIOSMIN (4%). Top three in weight are: ACETYLSALICYLIC ACID (11%), PARACETAMOL (11%), METFORMIN (6%).

Table 18 shows the portion of different groups of drug importers in Russia (by value of import of the group in 2014 and 2015).

As Table 21 shows, in 2015, approximately 90% of the total drug import volume is represented by two groups of importers: distributor companies and representative offices of foreign manufacturers. Import structure continues to change in favor of

Table 18

Shares of different groups of drug importers in Russia by drug import volume in 2014 and 2015

Rating	Importers	Share of the import volume, %	
		2014 г.	2015 г.
1	Distributor companies	**19,3**	**15,9**
2	Representative offices of foreign companies	**72,6**	**72,7**
3	Direct import companies	**4,3**	**5,3**
4	Domestic drug manufacturers	**3,9**	**6,1**
	Total	**100**	**100**
	Import volume, $ millions	**13 016**	**8 727**

> Among the companies that showed high growth it is worth mentioning the representative offices of Basins Healthcare (+30%), Amgen (+77%).

"Representatives of foreign manufacturers". Share of import by distribution companies continues to decline as well as the volume of goods imported by this group.

The maximal import share is covered by the representatives of foreign manufacturers (73%).

Segment "Direct import companies" showed positive growth in 2015, and its share exceeded 5% (in the import structure). A major player in this segment is the company Pharmaceutical import, export, its share is 67%. It is followed by Orfe with its share of 11%.

The main importer among domestic drug manufacturers is Pharmstandart-Leksredstva, its share according to the results of 2015 was 27%. Almost all the companies in this segment show negative dynamics. The second is Nizhfarm with a share of 22%. The third is Ufa vitamin plant with a share of 19%.

Let's look at the leaders in the importer groups heading the ranking – distributor companies and representatives of foreign manufacturers.

Table 19 shows TOP-10 among the representatives of foreign manufacturers by import volume in 2015.

In 2015, "Representatives of foreign companies" group decreased by 33% in dollars. In 2014, concentration in the importer group "Representatives of foreign companies" decreased to 51% vs 56%.

Import volumes decreased almost in all the manufacturers. As in the previous years, NOVARTIS and SANOFI are the leaders of importer group "Representatives of foreign companies". The last in

Table 19

TOP-10 representative offices of foreign manufacturers by import volume in 2015

Ranking	Representative offices of foreign manufacturers	Share by import volume of the "Representative offices...", %		Increase to 2014, dollars
		2014 г.	2015 г.	
1	Novartis	9.9%	9.6%	-35.7%
2	Sanofi	8.4%	6.2%	-51.7%
3	Abbott	4.5%	5.2%	-23.9%
4	Teva	5.8%	5.2%	-41.3%
5	Pfizer	4.9%	4.7%	-36.8%
6	Bayer	3.9%	4.4%	-25.8%
7	Johnson & Johnson	4.1%	4.1%	-35.1%
8	Boehringer Ingelheim	3.8%	3.9%	-34.3%
9	MSD Pharmaceuticals	4.6%	3.7%	-47.3%
10	Berlin Chemie	3.8%	3.7%	-36.5%
	Total:	53.5%	50.6%	

TOP-3 leaders is the representative office of Abbot.

Among the companies that showed high growth it is worth mentioning the representative offices of Basins Healthcare (+30%), Amgen (+77%). The “new member” in this group is the representative office of Merk, which covered approximately 2% of the volume of imported drugs in the studied period.

In general other representative offices of foreign companies showed negative dynamics of import in dollars. Such companies as SANOFI, TAKEDA, RUSFIC, GLENMARK, SERVIER, and others showed decline over 50%.

Table 20 shows TOP-10 distributors by drug import volume in Russia.

In 2015, the share of 10 largest distributor-importers in the total import volume of the Distributor companies group increased up to 90%. As shown in Table 22, three companies: Protek, R-Pharm, Katren are the largest distributors by import volume in the group Distributor companies. Protek is a leader according to results of the previous year. In 2015, R-Pharm remains second, but its share increased by over 3%. Both distributors show negative dynamics both in physical terms and in dollars.

> ” Three companies: Protek, R-Pharm, Katren are the largest distributors by import volume in the group Distributor companies. “

Table 20

TOP-10 distributors by drug import volume in Russia in 2014 and 2015

Ranking	Distributor	Share in the import volume in the group "Distributor companies", %		Increase 2014 г.
		2014 г.	2015 г.	
1	Protek	21.0%	22.7%	-41.8%
2	R-Pharm	17.9%	21.3%	-36.0%
3	Katren	9.4%	15.7%	-10.3%
4	Puls pharmaceutical company	5.1%	8.2%	-14.0%
5	SIA	9.1%	5.5%	-67.5%
6	ROSTA	7.6%	5.1%	-63.9%
7	Euroservice	4.0%	4.0%	-46.0%
8	Alliance Healthcare Russia	3.5%	2.7%	-57.9%
9	National distribution company	2.4%	2.4%	-46.9%
10	BSS	0.5%	1.9%	89.5%
	Total:	80.6%	89.5%	

Table 21

TOP-20 drug manufacturers by drug import volume in Russia with regard to all groups of importers in 2014 and 2015

Ranking 2014 г.	Ranking 2015 г.	Manufacturer	Shares by import value, $, % 2014 г.	Shares by import value, $, % 2015 г.	Increase to 2014
1	1	Novartis	6.2%	5.5%	-40.2%
3	2	Bayer	4.7%	4.7%	-32.7%
2	3	Sanofi	5.9%	4.3%	-51.0%
5	4	Abbott	3.8%	4.1%	-28.3%
8	5	Glaxosmithkline	3.2%	3.5%	-26.0%
4	6	Teva	3.9%	3.4%	-40.5%
14	7	Servier	2.5%	3.1%	-19.0%
9	8	KRKA	3.0%	3.0%	-32.1%
6	9	Pfizer	3.4%	2.9%	-42.8%
12	10	Johnson & Johnson	2.7%	2.9%	-29.5%
13	11	Gedeon Richter	2.7%	2.7%	-34.2%
7	12	Takeda	3.3%	2.6%	-47.2%
10	13	F.Hoffmann-La Roche	2.8%	2.5%	-40.1%
60	14	Celgene	0.3%	2.5%	505.9%
11	15	Berlin-Chemie	2.8%	2.4%	-41.8%
17	16	Merck & Co.	2.4%	2.4%	-32.1%
15	17	Boehringer Ingelheim	2.5%	2.4%	-34.6%
16	18	Astellas Pharma	2.5%	2.3%	-38.3%
18	19	Astrazeneca	2.0%	2.2%	-26.6%
19	20	Valeant	2.0%	1.7%	-41.5%
		Total:		61%	

It is worth noting that the leader of the distributor group in the pharmaceutical market Katren is only third by import and the share of the company is several points below the pharmaceutical market in general. Note that in 2015, Katren share increased by almost 70% and equals to 16%. Among the three leaders only Katren shows positive dynamics in drug import in physical terms (+30%). Although in dollars the import is also decreasing, this decrease is not so fast (only -10%).

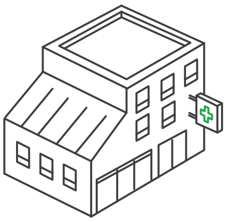
Total share of the three leading drug suppliers is 60%.

Reflecting the general trends of drug import in Russia, dynamics of national and interregional distributors shows negative values. Only two companies in the list of distributors-importers showed positive dynamics in dollars: DOMINANTA-SERVICE (exclusive distributors of the largest pharmaceutical plants in Bulgaria) and BSS (which actively gains traction in the pharmaceutical market of Russia).

Let's note that such distributors as ORIOLA, IMPERIA-PHARMA, MEDINTORG left the list of importers. The first two companies ceased activities in the pharmaceutical market. Distributor MEDINTORG specializes in drug supply for treatment of orphan diseases, drug products used in psychiatry and neurology, cardiosurgery and transplantology, gynecology, etc. In 2015, import of this company was minimal. Drug supplies were reallocated via other distributors and representative offices of the companies.

Table 21 shows TOP-20 manufacturers by drug import volume in Russia with regard to all groups of importers.

The share of TOP-20 drug manufacturers by import volume in Russia in 2015 was 61%. NOVARTIS, BAYER, SANOFI are the largest manufacturers by drug import volume in Russia in 2015. Only one foreign company of the TOP-20 manufacturers by sales volume in the pharmaceutical market (see section 10 Manufacture) doesn't enter the ranking of importers that is STADA localized in Russia (the corporation includes the Nizhparm plant).



8. Pharmacy Networks

Stable trend in pharmacy segment in the recent years includes consolidation and multi-format development of large retailers. The year 2015 was no exception, and in some way became a record in the number of settled and announced deals.

The leader in consolidation process is the Pharmacy network 36.6. Recall that in December 2014 this Russian network acquired Finnish Oriola-KD, which includes pharmacies Stary lekar and 03 Apteka. The first half of 2015, the company devoted to rebranding of acquired pharmacies into Gorzdrav and 36.6. In summer 2015, Pharmacy network 36.6, OJSC, announced the end of consolidation of the group of companies 36.6 and pharmacy network A.v.e. In December 2015, the network merged with another large company, pharmacy network A5, which occupied the 5th line of the ranking. This deal enabled 36.6 to become the leader in the number of outlets in a single network. By the end of the year 36.6 consolidated over 1910 stores. In June 2016, final closing of transaction is expected, however now according to preliminary estimates the consolidated network should occupy approximately 5.5% of the entire market of pharmacy sales.

Attention of the pharmacy networks is often focused in the regions is often focused in the regions. In December 2015, pharmaceutical group Rosta acquired Nizhny Novgorod discounter Ladushka. This transaction increased the number of network stores to 1,146 pharmacies. Hence Raduga became the 5th network and exceeded 1,000 stores. After merging with network Ladushka pharmacy network Raduga will cover approximately 2.6% of the market and compete with Samara Implosia for the third line of the ranking.

Melodiya zdorovya acquired Samara pharmacy network Bliznetsy. Bliznetsy is a pharmacy network of Samara consisting of 30 discounter pharmacies.

In July 2015, pharmacy network Pharmakopeika – Tvoy doktor became a consolidated structure that includes approximately 530 pharmacies in four federal districts. Pharmacy network Tvoy doktor for a long time had strong position in Tula region. Pharmakopeika is a rapidly growing network in Siberian Federal District, it rapidly increases the presence of its discount pharmacies.

In November 2015, KALINKA, one of the largest pharmacy networks of Tyumen, has become a part of PHARMALAND network (head office in Ufa).

More and more retailers are coming to a conclusion that development of several networks with different brands and formats helps adapt to the changing market. Pharmacy retail is no exception: the chains are now developing in several formats – self-service pharmacies and so called discounters (pharmacies with low wholesale prices). Almost every TOP-20 chain has at least two brands with different format: RIGLA – BUD ZDOROV, DOCTOR STOLETOV – OZERKI, 36.6 – GORZDRAV –A.V.E, RADUGA – LADUSHKA, etc. Discounter format is in demand, especially during crisis, it helps attract consumers with low income.

In addition to already existing formats pharmacy networks have been actively looking for new forms of interaction with other retailers. Retailer Dixie has concluded an unlimited partnership agreement with pharmacy operator Pharmacy chain 36.6 for priority placement on rented areas. Pharmacy chain 36.6 will be able to open its representations in Dixie corner stores and in Victoria supermarkets.

In June 2015, X5 Retail Group announced new terms for cooperation with the tenants of Pyaterochka stores. Pharmacy chain Planeta zdorovya (Planet of Health) will open 150 pharmacies in Pyaterochka supermarkets under the new terms of cooperation. Planeta zdorovya pharmacies will be situated both outside the cash area of Pyaterochka stores and in the trading area of the supermarkets in shop-in-shop format. In addition to Planeta zdorovia, the pharmacy chain Aloe will also be located in Pyaterochka stores. It is planned to open at least 330 drugstores in Pyaterochka stores until the end of 2017.

Pharmacy chain 36.6 has become the first one that opened a pharmacy with a total area of 1,000 m2. Hypermarket 36.6 is oriented towards professional consultations in all the categories of goods. In addition to traditional range of products the pharmacy offers photo studio, shaving services as well as consulting in the field of sports nutrition. Within 2 years there will be up to 30 drugstores of expanded format.

In 2015, TOP-10 networks showed total growth of 25% compared to the same period in 2014. Share of TOP-10 was 23%, which is 3% higher than in 2014. Therefore we can see that merger and acquisition processes in the last 2 years mostly affected the TOP-10, leading to 6% increase of concentration. Until then the total share of 10 leading pharmacy networks remained around 16-17% for the last 7 years.

Figure 38 shows growth of TOP-10 pharmacy networks by sales turnover and number of outlets in 2011-2015. In the last three years there has been significant growth in terms of number of outlets, since the networks started to grow rapidly due to the opening of new outlets and merging of networks. Growth of TOP-10 networks in number of outlets is 72% when compared to 2011-2012. In the ranking of 2015, 5 networks already have over 1,000 outlets.

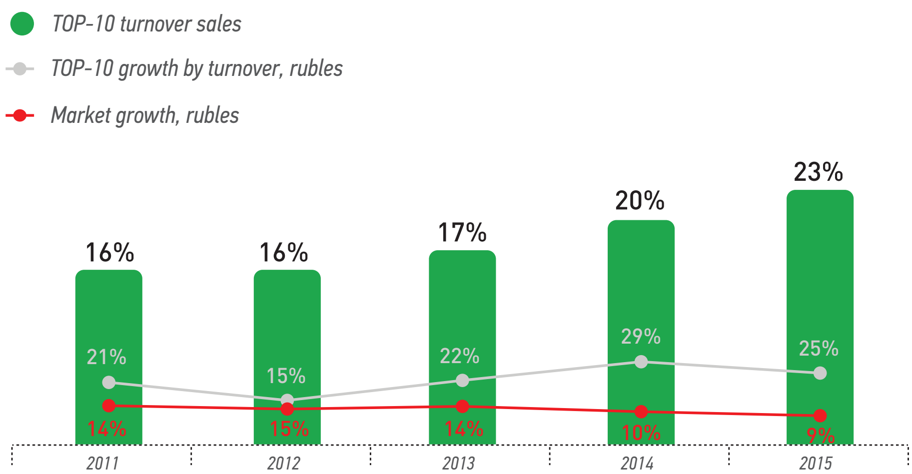
During 2015, Rigla opened 192 new pharmacies. During the last years this network is the leader in organic growth. Over one hindered pharmacies were opened by the networks Apteka-Timer, Aprel, Pharmland.

The last year was full of transactions that significantly changed the ranking in the pharmacy market. Throughout the year we observed the "battle" for leadership between two retail players: pharmacy network Rigla and pharmacy network 36.6.

Pharmacy network Rigla is leading in the actual volume of sales. Gap between it and the pharmacy network 36.6 is minimal and associated with more successful sales of parapharmaceutical goods in the network. Rigla share in the ranking grew from 3.2% to 3.6% in a year.

Figure 37

Concentration of TOP-10 pharmacy networks



According to the results of January-November 2015, A5 pharmacy network has sales turnover around 20 billion rubles, which allows the network to occupy the 5th line. As a result of consolidation of 36.6 and A5 pharmacy networks, the share of consolidated network will exceed 5.5% and will in the nearest future be unachievable for the rest of participants by organic growth.

Table 22 shows the ranking of pharmacy networks in commercial sector with quantitative and value growth parameters in 2015.

Only distributors that actively developed both pharmacy networks and production sites could boast of business diversification.

In the beginning of 2016, 36.6 Pharmacy network announced that it plans active development of wholesale business segment. Distributor LLC Good Distribution Partners is functioning in the structure of 36.6 group, it currently works with retail segment. Due to significant increase in the pool of direct contracts with the manufacturers of pharmaceutical products it was

Dynamics of TOP-10 pharmacy networks

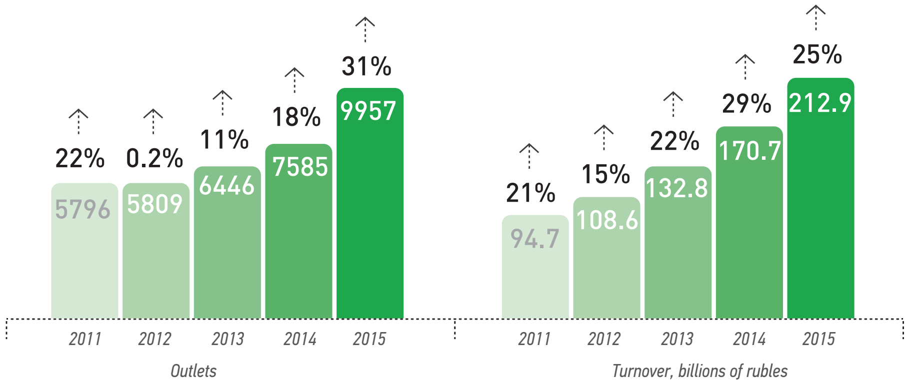


Figure 38

Dynamics of TOP-10 pharmacy networks growth of sales turnover and number of outlets

Table 22

Network ranking by sales turnover in 2015 on the commercial pharmacy market

[1]Pharmacy network 36.6 includes brands Gorzdrav, AVE-Luxury, 36.6; A5 turnover is only included for December 2015
[2]Data on pharmacy network A5 are provided until November 2015
[3]Raduga includes sales turnover of the pharmacies Raduga, Pervaya Pomosch, turnover of pharmacy network Ladushka is only included for December 2015
[4]Pharmland includes turnover of pharmacy network Kalinka since December 2015
[5]Pharmakopeika includes networks Pharmakopeika, Tvoy doctor, Apteka ot sklada, Zdes apteka. Volume of the network Tvoy doctor (Tula) is included since July 2015
[6] Data on pharmacy network Ladushka are provided until November 2015

Рейтинг	Pharmacy network	Volume, billions of rubles	Share in commercial market	Turnover increase compared to	Outlets number
1	Rigla	**34.1**	**3.6%**	**25%**	1 461
2	36.6 Pharmacy network[1]	**33.5**	**3.6%**	**31%**	1 912
3	Implosia	**25.1**	**2.7%**	**11%**	1 400
4	Doctor Stoletov	**21.0**	**2.2%**	**12%**	311
-	A5[2]	**20.0**	**2.1%**	**2%**	1 072
5	Raduga[3]	**17.6**	**1.9%**	**13%**	1 146
6	Planeta zdorovya	**14.5**	**1.6%**	**41%**	905
7	Pharmland[4]	**12.9**	**1.4%**	**25%**	585
8	Pharmaimpex	**12.4**	**1.3%**	**2%**	579
9	Pharmakopeika[5]	**11.4**	**1.2%**	**38%**	530
10	Samson-pharma	**10.3**	**1.1%**	**33%**	56
11	Vita	**10.1**	**1.1%**	**36%**	533
12	Classica	**9.4**	**1.0%**	**15%**	191
13	Apteka-Timer	**8.8**	**0.9%**	**43%**	515
14	Neo-pharm	**8.7**	**0.9%**	**90%**	217
15	Melodiya zdorovya	**8.5**	**0.9%**	**36%**	618
16	April	**7.6**	**0.8%**	**43%**	400
17	Pharmacor	**7.2**	**0.8%**	**1%**	320
-	Ladushka[6]	**7.1**	**0.8%**	**8%**	270
18	Gubernskiye apteki	**5.8**	**0.6%**	**49%**	240
19	Nevis	**5.8**	**0.6%**	**7%**	305
20	Novaya Apteka (Khabarovsk)	**5.7**	**0.6%**	**25%**	122

decided to develop wholesale supplies to the third parties in the Russian market.

Russian pharmaceutical company Evalar which owns a pharmacy network of the same name consisting of 66 pharmacies, decided to carve out a niche in the non-drug retail and brought a new retailer, Phytomarket chain stores, to the market. New retail chain Phytomarket is a chain of stores with “natural products for health” with non-drug product selection: vitamin mineral complexes, phytocosmetics, sport, dietic and other nutrition. In 2016, Evalar plans opening 3-5 more Phytomarket stores.

Financial instability and rise in currency rate induced inflation which also affected the drugs. It attracted more attention to the problem of rising prices. In spring 2015, Russian President Vladimir Putin instructed the Government of the Russian Federation and regional Ministries of Healthcare to consider the feasibility of establishing state and municipal pharmacy organizations to ensure the availability of low price drugs as well as potent and analgesic drugs. Most likely activization of local government in opening state pharmacies took place in the framework

In 2015, 100 pharmacies were opened in Moscow region. By the end of 2016, state pharmacy network of Moscow region Mosoblmedservice should number approximately 280 pharmacies. Recall that the pharmacy network Mosoblpharmacia already existed in Moscow region, and, in 2011, it entered the A5 group of companies. State network united approximately 500 stores and entered the TOP-15 largest pharmacy networks in Russia. In Novosibirsk, a municipal pharmacies will open in the metro. In Ulyanovsk region, the state discounter pharmacies are being opened.

Note that even now the state pharmacy networks remain in many regions. According to DSM Group estimates, the share of state pharmacies reaches 10%.

Also recently, the ban on internet drug sales have been actively discussed. Activity of internet pharmacies in Russia is regulated by the law “On Medicinal Products Circulation” amended on July 1, 2015. In particular, the document states that as a part of internet anti-piracy campaign in pharmaceutics the online pharmacies offering drugs will be blocked in pretrial order. In the end of October, Federal Service for Supervision of Communications, Information Technologies and Mass Media (Roskomnadzor) included 17 online pharmacies into the register of sites with prohibited information.

Moscow and Moscow region represent the most capacious region in Russia. Total share of these two subjects is about 29% of the total pharmacy market capacity. The more interesting it is to see the ranking of pharmacy networks in this area. There are about 9,000 pharmacy institutions. The concentration in the Moscow region is higher than in Russia: TOP-20 networks represent 38% of the market vs 31% for the same TOP-20 in Russia.

Ranking leader is pharmacy network 36.6 as in the Russia ranking. This is due to the specifics of the network, it is mainly focused on development in this particular region.

In December 2015, pharmacy network A5 is in the second place, acquired by pharmacy network 36.6. Therefore in the Moscow region, the entire share of 36.6 is approximately 15% and the number of stores will exceed 1,650. Today this is the largest network both by the turnover and by the number in Moscow and Moscow region.

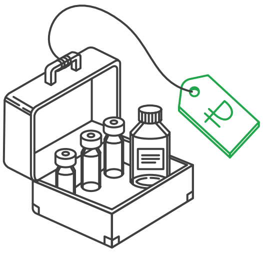
In the Moscow region, ranking of pharmacy networks consists of networks that mainly work in this region, but still there are national pharmacy networks that work throughout the country (DOCTOR STOLETOV, RADUGA, PLANETA ZDOROVYA). Two networks in this ranking are state networks: APTEKI STOLITSY and STOLICHNYE APTEKI.

In 2016, consolidation processes will continue, which in its turn can lead to new changes in the ranking of pharmacy networks. But most probably the rate of this process will slow down due to the economic crisis, as it happened in 2009-2010.

Table 23

Network ranking in the Moscow region in 2015

Рейтинг	Pharmacy networks	Volume, billions of rubles	Share in commercial segment,	Outlets number
1	36,6	**25.0**	**9.3%**	930
2	A5 (sales turnover till November 2015)	**15.3**	**5.7%**	722
3	Samson-pharma	**10.3**	**3.8%**	56
4	Rigla	**10.1**	**3.8%**	349
5	Neo-pharm	**8.0**	**3.0%**	201
6	Dialog	**4.6**	**1.7%**	37
7	Apteki stolitsy	**2.9**	**1.1%**	85
8	Doctor Stoletov	**2.9**	**1.1%**	70
9	Stolichnye apteki	**2.8**	**1.0%**	133
10	Solnyshko	**2.8**	**1.0%**	53
11	Trika	**2.6**	**1.0%**	52
12	Pharmpreparaty	**2.5**	**0.9%**	33
13	Floria	**2.1**	**0.8%**	55
14	Planeta zdorovya	**1.9**	**0.7%**	125
15	Econom	**1.9**	**0.7%**	51
16	Raduga	**1.7**	**0.6%**	50
17	Dezhurnaya apteka	**1.7**	**0.6%**	47
18	Skazhite A	**1.5**	**0.6%**	35
19	Serdechko	**1.4**	**0.5%**	40
20	Lecrus	**0.9**	**0.3%**	24
	TOP-20	**103.0**	**38%**	3 148



9. Distribution segment of the pharmaceutical market

Specifics of Russian pharmaceutical market are that the pharmaceutical distributors play an important role in providing the population with the drugs. First of all our country is characterized by its sizes. Therefore, a major wholesaler should have not only a big pharmaceutical warehouse, but also an extensive network of logistic centers. Secondly it includes large centers of financial flows that connect the retailers and manufacturers.

The past year made noticeable adjustments into the work of the wholesale segment. First of all note the change in the list of leading pharmaceutical distributors. In 2015, two major players of TOP-20 left the market.

In December 2014, former Russian division of Finnish ORIOLA-KD (distributor ORIOLA and pharmacy network STARY LEKAR) came under control of the pharmacy network 36.6. Main goal of the pharmacy network 36.6 is to develop the retail segment, therefore in connection with the non-core wholesale assets all the regional warehouses were closed. The only one that keeps working is the single logistic center in Domodedovo, Moscow region, used for the needs of the 36.6 pharmacy chains. However it is worth mentioning that in the beginning of 2016, 36.6 announced its return to the wholesale market. Distributor LLC Good Distribution Partners is functioning in the structure of 36.6 group. It currently works with retail segment. Development of wholesale segment in the Moscow region and hospital sales will be based on this distributor.

In the beginning of June 2015, IMPERIA-PHARMA, distributor from St. Petersburg declared bankruptcy. Note that the company was present both in the state procurement market and in the retail segment: 45% of turnover was represented by state procurements and 55% by pharmacy supply.

These two distributors represented a total of 5.2% of the market. The vacant niche was occupied by the leading pharmaceutical distributors (Katren, PROTEK) and the so called secondary players that recently have been showing aggressive development politics (PULSE, BSS). Note that these companies show the highest growth in TOP-10.

Despite the crisis events, distributors should actively develop warehousing and logistic infrastructure. In 2015, this process was most pronounced.

Thus the leader of the last years Katren became the resident of biotechnopark in the science city Koltsovo in Novosibirsk region. The company plans to build a high-technology automated centralized logistic center for operational support of pharmacies and hospitals. Total area of investment project NPK Katren is 17,512 m2, the volume of capital investments is over 1 billion rubles. In the second quarter of 2016 logistic center in

Saratov region will start working. Project investments amounted for 654 million rubles.

In the end of 2015, PULSE became the tenant of logistic complex in the Leningrad terminal (Moscow region). Recently this distributor has been showing high growth rate. Only in 2015, its sales increased 1.5 times. As a result the distributor occupied the 4th line of the ranking, while in 2011, it was only on the 10th line. The share of the company increased by 2.7% and exceeded 10%.

In 2015, CV PROTEK also developed its infrastructure: it upgraded the warehouse in St. Petersburg increasing the performance two times; it started building a new warehouse complex for the manufacturers with 42,000 pallets in Pushkino.

At year-end distributor BSS grew by 64%, which made it possible to increase its market share 1.5 times to 3.3% and occupy the 9th line in the ranking. The objective of the company is to enter TOP-5 of distributors in terms of shipment volume. At present the company is represented in Russia by 10 subsidiaries. But BSS plans to open full-fledged centers in Nizhny Novgorod, Voronezh and a city in Siberia. In the nearest three years, the company plans to invest 1 billion rubles in development. Apart from the wholesale segment half of investments are to be invested in the expansion of retail segment of the pharmaceutical distributor. BSS is developing a pharmacy network ALOE which currently includes 127 pharmacies. It is planned to increase the number to 500 outlets. In addition to organic growth the company will use the tools already popular in the market: distributor signed an agreement on opening its outlets in 300 grocery stores of X5 retailer.

It is popular for a distributor to have its own pharmacy chain. Almost all national distributors have pharmacy business. The only exception is represented by the wholesale companies specialized in state procurement.

The volume of the pharmaceutical market in Russia, in terms of distributor prices, was 1,018 billion rubles, which is 9% higher than in 2014. In 2015, market consolidation increased. TOP-10 distributors occupied approximately 93%, while in the previous year their share was about 89%. However concentration grows only through TOP-3 distributors. Their share increased by 4% from 45% to 49%. Increase of total share of TOP-3 is provided by higher growth rate of Katren and Protek compared to general market growth in 2015.

During the last three years distributor Katren has been the leader in wholesale segment. In the recent years, the company growth was significantly higher compared to its business rivals. 2015 was no exception: growth by 16% to the turnover of 2014 allowed the company to increase its share significantly

(+2.7% is a high result for the first place) and increase the gap between the first and the second lines. Katren is the only distributor that has business not only in Russia but also in the CIS countries (at present the company is represented in Ukraine, Kazakhstan and Belarus). Besides let's note a successful project of the company website apteka.ru. Over 11.4 pharmacy institutions purchased pharmaceutical assortment through this system in 2015 for a total sum of 2.7 billion rubles.

Second place went to distributor Protek (gap with Katren is 17 billion rubles). Share for the year exceeded 18%. Public companies in the market are limited. Their distribution segment is represented by Protek. According to expert data of international ranking agency RIA Rating Protek group of companies entered TOP-100 most expensive public companies of Russia in 2015 occupying the 72nd line. The capitalization of the company in 2015 was 435.4 billion of dollars. Compared to 2014 OJSC PROTEK climbed in the ranking by 5 points having increased the capitalization by 15.9% in a year.

The last in TOP-3 in 2015 is ROSTA. The company returned into TOP-3. But let's note that its growth rate is the lowest in TOP-3 and even lower than the market growth in general. Therefore the share of this distributor in the market decreased by 0.4%.

In 2016, it will be hard for the distributors to maintain high growth rate. The crisis affects the population purchasing power, inflation exceeds the wage growth. Therefore only effective companies can show high results. That makes this year so interesting.

Concentration in the distribution segment

Figure 39

Concentration in the distribution segment

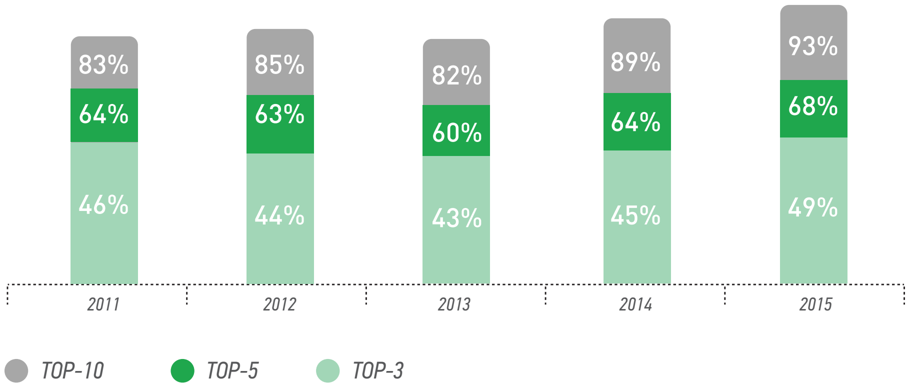
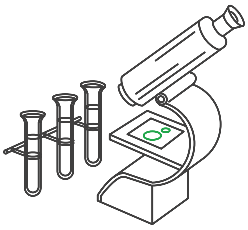


Table 24

TOP-10 distributors in the pharmaceutical market

Ranking of 2015	Disributor	Volume, billions of rubles	Sales value increase	Share
1	Katren	**202.9**	**26%**	19.9%
2	Protek	**185.9**	**25%**	18.3%
3	Rosta	**109.6**	**5%**	10.8%
4	Puls	**105.0**	**50%**	10.3%
5	SIA	**91.5**	**-15%**	9.0%
6	Alliance Healthcare	**79.7**	**9%**	7.8%
7	R-Pharm	**74.0**	**7%**	7.3%
8	Pharmcomplect	**43.6**	**21%**	4.3%
9	BSS	**33.7**	**64%**	3.3%
10	Euroservice	**21.4**	**29%**	2.1%



10. Manufacturing

2015 for drug manufacturers in the domestic pharmaceutical market was marked by idea of import substitution. The overall aim of import substitution is to satisfy the needs of the population for accessible, good-quality, effective drugs. In the opinion of Russian legislators, it was impossible without increasing the market share of domestic products. The idea is not innovative in general, but it came to the fore in difficult economic situation.

Every domestic manufacturer was supposed to obtain a GMP compliance certificate until January 1, 2016, which is also aimed at increasing the quality of the pharmaceutical products.

In 2015, the Ministry of industry and trade of the Russian Federation inspected several dozens of drug manufacturers that carry out production on the territory of Russia and issued 98 conclusions on compliance with the rules of drug production and quality control. It is worth mentioning that the active phase of transition to the standards of Good manufacturing practice in our country started only in 2014 when the government regulated procedures and established the bodies responsible for the issue of certificates of compliance with the standards for the manufacturing sites. However in the beginning of 2016 67% of Russian drugs were produced in accordance with the international requirements.

It is planned to complete the transition to GMP standards in our country by 2017. Since 2016 compliance with Russian GMP standards is required not only for domestic, but also for foreign manufacturers that supply products to the Russian Federation. In 2016, it will apply to those who haven't been working in Russia previously, and since 2017, it will apply to all the companies. Although the Russian GMP rules are equivalent to GMP rules of the European Union, domestic regulatory acts do not accept the certificates even from major manufacturers and request a document that proves the compliance of foreign manufacturing sites with the Russian standards. Furthermore Russian and foreign drug manufacturers follow different procedure of obtaining certificate, with different cost and by different bodies. This situation complicates the procedure and raises questions among the foreign companies that operate in the Russian market. Ministry of industry and trade considers that for the majority of the foreign companies it's too early to worry about, they don't require the certificate until 2017, if they do not bring new pharmaceutical forms to the market. And the rest will have time for inspection during the year. According to the calculation of the Association of International Pharmaceutical Manufacturers (AIPM) about 3,000 sites will be inspected by 2017.

In 2015, the status of the local drug manufacturer remained uncertain. At the moment the local manufacturer is a

Table 25

Key projects on organization of new manufactures in pharmaceutical market in 2015

Initiator company	Region	Description of manufacture	Capacity
Novo Nordisk	Kaluga	Insulin cartridges and pens	20 million cartridges and 10 million pens per year
RIA Panda	Leningrad region	The plant will specialize in production of import substitution products	960 million solid pharmaceutical forms (tablets, capsules) per year
GK Niarmedik	Kaluga region	Entire cycle from synthesis of raw substances to production of final products is performed under one production. The company produces the following drug forms: tablets, capsules, syringes, products in vials and sachets.	100 million packages of drug products in different dosage forms per year
Novartis	Leningrad region	Over 40 original and generic products of NOVARTIS group of companies	1.5 billion of units of solid pharmaceutical forms per year
Vertex	Leningrad region	The plant will specialize in production of import substitution products	70 billion packages of finished drug products (up to 1 billion items of drug products) per year
AstraZeneca	Kaluga region	About 30 innovative drugs for cardiology, oncology and treatment of respiratory diseases.	40 million packages (850 million tablets) per year

company, whose drug packaging stage is located in the country. However for several years the press discusses the legislative approval of the definition of local manufacturer, for which the packaging stage in Russia is not sufficient. Manufacturing site in Russia provides certain preferences to the companies in the state procurement programmes and facilitates issue of GMP compliance certificate. Therefore, in 2015, several foreign pharmaceutical companies established manufacturing sites in our country.

In addition to the manufacturing sites launched during the past year we should mention the plans on organization of drug manufacture in Russia in the medium term.

In 2016, Bionorica and Aenova GmbH will start building a pharmaceutical plant in Voronezh region.

In 2015, construction of plant for manufacture of drug products from human blood plasma began. It is planned to put it into operation in 2018, the project is carried out by GC Generium. The project of plasmatic production of Generium group of companies is developed within the state program of import substation Pharma 2020 strategy.

Alpharm company plans to launch manufacture in Zelenograd district of Moscow region in 2017. The new facility is supposed to manufacture products for prevention and treatment of respiratory, urogenital, skin, intestinal infections, and several chronic inflammatory gastrointestinal diseases.

Consolidation of companies into National immunobiological company (Natsimbio), which in its turn forms part of GC Rostech terminated last year. The last to enter the state corporation were FGUP NPO Microgen and OJSC Sintez. In the middle of 2015, JSC Natsimbio was announced the single supplier of domestic immunobiological drug products purchased by the Ministry of Healthcare of Russia for preventive vaccination included into the national calendar of preventive vaccinations (NCPV) for the period of 2015–2017. Besides Natsimbio will become the single supplier of drug products for treatment of tuberculosis, HIV and viral hepatitis purchased with federal budget.

As for direct or indirect state support of Russian drug manufacturers it is worth mentioning that the Russian drug manufacturer Nanolek was included into the program of support of investment projects carried out in the Russian Federation. Within this program Nanolek will receive 6.1 billion rubles for manufacture development in Kirov region. Also in 2015, it was announced that Merck and Nanolek had entered into agreement on establishing manufacture of drugs for treatment of diabetes mellitus type 2, blood hypertension and cardiac failure at Nanolek plant. Within the signed agreement Merck passes Nanolek the entire cycle of drug manufacturing technology, technology of package protection, which will reduce the possibility of falsification, and will conduct professional training of specialists in the Russian company to reproduce all the technological steps.

In addition to the target funding 2015 brought legislative initiatives to increased the competitiveness of domestic drug manufacturers.

It was announced in the beginning of the year that the Ministry of industry and trade was developing a mechanism for providing subsidies to domestic pharmaceutical manufacturers. The subsidies will be provided for development and manufacture of the pharmaceutical substances. Also the subsidies will be provided to the manufacturers of medical devices. First of all the ones included in the list of implanted devices. Besides the Ministry of industry and trade plans subsidies for creation of engineering centers, industrial parks and other strategic institutions.

In the end of the year the Prime Minister signed a decree on the limitation of state procurement of foreign drugs included in the list of vital and essential drugs (LVED). According to this decree the state acquirer should reject all the proposals of drug supply from abroad if he received at least two applications for drug supply from Eurasian Economic Union (Russia, Belarus, Armenia, Kazakhstan and Kyrgyzstan). Domestic applications should be submitted by the companies that do not form one group to be considered separate.

We cannot say that the last year was marked by a record number of M&A transactions in the pharmaceutical manufacture worldwide. However the importance of some of mergers and acquisitions in terms of their influence on future development of the global market is relatively high.

Throughout 2014, some companies were fighting for the botox manufacturer Allergan. Canadian pharmaceutical company Valeant Pharmaceuticals made several attempts of hostile takeover but another pharmaceutical giant Actavis managed to succeed. Transaction was completed in the beginning of 2015 (cost: 70.5 billion of dollars). After merger Actavis changed its name to Allergan (in some markets Actavis retained its old name). But activity of consolidated company didn’t stop with that. In July, it was announced that the Israel manufacturer Teva Pharmaceutical acquires the generic manufacture business of the pharmaceutical company Allergan for 40.5 billion of dollars. This transaction that many experts consider another step in consolidation of the global pharmaceutical industry was aimed at strengthening Teva position in the generic market and make it one of the world largest pharmaceutical companies. But even this didn't become the most notable news with respect to Allergan.

In the end of November US pharmaceutical company Pfizer and Irish Allergan announced the merger agreement. The acquisition price is about 160 billion of dollars, closing period is the second half of 2016. As a result of transaction with Allergan (which would be later renamed Pfizer) and further company integration it is expected that Pfizer will make a decision to divide the consolidated company into two businesses: innovative and generic by the end of 2018. It is planned that Pfizer shareholders will own about 56% and Allergan shareholders about 44% of shares in consolidated company.

In addition to the acquisition of generic manufacture business from Allergan, Teva settled another transaction: acquisition of Auspex Pharmaceuticals US company for 3.2 billion of dollars. Acquisition of Auspex Pharmaceuticals will allow Teva to expand the range of drugs for treatment of locomotor system. Besides after transaction with Allergan Teva announced cancellation of proposed takeover of Mylan (expected transaction price: 43 billion of dollars).

In 2015, two other major transactions started in 2014 were closed. Indian pharmaceutical company Sun Pharmaceutical Industries closed transaction on acquisition of another Indian company Ranbaxy, and US Abbott Laboratories brought the share in the Russian pharmaceutical manufacturer OJSC Veropharm to 100%.

German pharmaceutical concern MERCK announced termination of acquisition of Sigma-Aldrich US company. The price of transaction which was the largest in MERCK history was 17 billion of dollars. Transaction was approved by the European Commission on June 15, 2015.

In general share of imported drugs in the market is 72.8% in money and 39% in packages. As mentioned above the growth of drug segment in general was 8.5%, however in packages the market reduced by 4%. Such a low growth in physical terms is provided by negative sales growth of imported drug packages (reduction is -9%), while the sales of domestic drugs in packages reduced only by 0.6%. In ruble terms imported drugs increased only by 4%, while domestic drugs increased by 28%. Import substitution mainly started working in the segment of state procurement. The share of domestic drugs increased by 8% and amounts for 30%. The purchase of domestic drugs increased by 50% in volume, and by 7.5% in physical terms. In commercial segments program results are less visible and are more related to customer switching to generic drugs (the share of domestic drugs increased by 2% and amounts for 26%).

Foreign manufacturers represent 90% of the ranking of drug manufacturers in Russia.

TOP-20 manufacturers ranking is relatively stable, the changes mainly range within 1 to 2 lines. Although there were more serious “ups and downs” in 2015.

Total share of TOP-20 manufacturers in 2015 was 50.3%.

In 2015 TOP-3 didn’t change as compared to 2014. The top position is occupied by corporation SANOFI, despite the fact that the sales dropped by 1%. Retail segment continues to prevail for the company (over 70% of turnover is represented by pharmacy sales). Manufacturer BAYER raised to the second line. Only 12% of his sales are represented by state procurement. Main sales volume is represented by commercial segment. This segment drives the growth of this company. In general the sales volume of this manufacturer increased by 3%, while in commercial segment the sales increased by 6%. Corporation NOVARTIS went down one line. This is due to sales stagnation in the pharmacy market.

Note that most of the companies in the ranking are growing slower than the market in general, and some even show negative dynamics. Sales decrease by 19% resulted in the drop of F.HOFFMANN-LA ROCHE by 4 lines. This is due to decreased drug purchase from this manufacture within the program of subsidized provision of medicines by almost 30%.

Significant increase (+3 lines up the ranking) is shown by Abbott (due to high growth of volumes in state procurement) and Pharmstandard (the manufacturer showed stable high dynamics over 20% in all the segments).

Let’s note that there are two domestic manufacturers, OTC Pharm and Pharmstandard, in TOP-20 ranking that previously represented a single structure.

Table 26

TOP-20 manufacturing companies by sales volume in the Russian pharmaceutical market in 2015

Ranking 2015	Change	Manufacturing company	Sales value, millions of rubles	Sales value increase	Share
1	-	Sanofi	**49,7**	**-1%**	4,8%
2	1	Bayer	**41,7**	**3%**	4,0%
3	-1	Novartis	**41,6**	**0%**	4,0%
4	-	Glaxosmithkline	**30,3**	**-10%**	2,9%
5	1	Teva	**29,1**	**3%**	2,8%
6	1	Takeda	**28,2**	**3%**	2,7%
7	-2	Johnson & Johnson	**27,5**	**-11%**	2,7%
8	3	Abbott	**27,1**	**9%**	2,6%
9	1	Pfizer	**27,1**	**4%**	2,6%
10	-1	Servier	**26,7**	**1%**	2,6%
11	2	Berlin-Chemie	**21,8**	**2%**	2,1%
12	-4	F.Hoffmann-La Roche	**21,7**	**-19%**	2,1%
13	-1	Merck & Co. Inc	**21,6**	**-1%**	2,1%
14	-	OTC-pharm	**20,5**	**9%**	2,0%
15	-	Gedeon Richter	**19,9**	**13%**	1,9%
16	-	Stada	**19,5**	**19%**	1,9%
17	2	Valeant	**17,2**	**13%**	1,7%
18	-	KRKA	**17,1**	**8%**	1,6%
19	3	Pharmstandard	**16,5**	**33%**	1,6%
20	-	Astrazeneca	**16,5**	**10%**	1,6%