



# **RUSSIAN PHARMACEUTICAL MARKET**

**2012**



# TABLE OF CONTENTS

Summary

1. Pharmaceutical market value in Russia	3
2. Commercial segment of RTU drugs	5
3. Drug reimbursement program	11
4. Sales value in the segment of health care institutions	33
5. Nutritional supplements	50
6. Beauty products	61
7. Drug Import	71
8. Pharmacy networks	86
9. Distribution segment of the pharmaceutical market	91
10. Manufacturing	95

---

JSC DSM Group

**General Manager**  
Sergei Shulyak

Director of  
Strategic Research  
Yulia Nechayeva

Senior Analyst  
Yulia Prozherina

Analyst  
Anastasia Kazova

**Analytical Report**  
**Pharmaceutical**  
**market in RUSSIA**  
**Results of 2012**

Address:  
125040, Moscow,  
5-ya ul. Yamskogo  
Polya, d. 7, str. 2

Phone:  
(495) 780-72-63,  
780-72-64  
Fax: (495) 780-

## Summary

In 2012, the audit of government programs that affect the pharmaceutical market took place. In the previous year, a number of laws were approved. It will affect the development of the market in the short and long term (for example, increasing the availability of high-quality, effective and safe medicines to meet needs of the population is the main goal of "The Strategy of providing the population of the Russian Federation with drugs till 2025").

The Russian pharmaceutical market is among the ten largest pharmaceutical markets in the world. At the end of 2012 Russia took the 7th place. In Russia in 2012, the value of the pharmaceutical market amounted to 921 billion rubles (VAT) in consumer prices, which is 12% more compared to 2011. Russia was ranked third for growth rate.

The Russian pharmaceutical market is import oriented. 76% of drugs in terms of money consumed by the population are produced abroad. Therefore, on the first place in the ranking of foreign producers is: SANOFI, NOVARTIS. On the third line is PHARMSTANDARD - the only domestic manufacture of the top 20 leading players in the Russian pharmaceutical market. The development of the pharmaceutical distribution sector of the market is on a given vector in recent years - business diversification: all national distributors are within the control structure of a subordinate pharmacy chains, the second direction, which is actively developing - is domestic manufacture. In 2012, there was a redistribution of the market. "Protek" took the leading position with a share of 16.5%. "Sensation" of the year - the distributor "Katren" got the second place. Rounding up the Top-3 was the distributor "SIA" (Leader of previous years). Their combined share of the total market is 44%.

For the pharmacy chain, the year was marked by the development of new formats within the chain. Many market players have discount stores under different brand names now. On the other hand pharmacy chains offer premium pharmacies, shops and cosmetic studios, etc. Also redistribution of the market take place in the retail segment - the leader of the pharmacy chain is "Rigla", "A5" takes the second

place, the leader of previous years, "36.6" get only the third place. Their combined share reaches 7.3%.

Commercial segment of the Russian market in 2012 shows strong growth (+15%). Volume of sales in 2012 in the commercial segment amounted to about 537 billion rubles. (17.3 billion dollars). It was sold 4.46 billion units, which was almost coincided with the index in 2011.

The "parapharmaceutical" segment didn't reach pre-crisis level in terms of growth in 2012. In 2012, the capacity of this segment amounted to 149 billion rubles, which is 14% higher than the volume in 2011. Despite this, the pharmacy is actively developing this tendency in their sales – firstly non-drug products under its own brand name are manufactured.

The state sector shows a growth of 4% in 2012. This is one of the most stable segments of the pharmaceutical market, because its development depends on budget funds. At the end of 2012 it was spent 78.4 billion rubles in order to purchase medicines for the privileged categories of citizens (Drug reimbursement program). The increase amounted to -7.4% and was negative compared to 2011. At the end of 2012 segment capacity of hospital purchases amounted to 157 billion rubles, which is 11.7% higher than in 2011. In natural terms, the volume of purchased drugs is approximately 1.1 billion units, which is also higher by 8.3% than in 2011.

The value of drug import in Russia in 2012 amounted to 14.4 billion dollars, which is 9% higher than in 2011.

According to the forecast DSM Group, the Russian pharmaceutical market will grow in 2013 by 12% in rubles and will exceed 1,035 billion rubles.

# 1. Pharmaceutical market value in Russia

Russia, in the times of the Soviet Union, preferred to live by five year periods. Today's Russia is developing larger scale and longer term plans. Since 2013, Russia has launched a number of new federal programs related to a variety of areas - from health care to aviation industry. Over the period of 2013 - 2015, the expected funding of the 50 federal target programs will be at 1,021 billion Rubles in 2013, 926.2 billion Rubles in 2014 and 935 billion Rubles in 2015.

One of the first long-term projects related to the pharmaceutical market was the **Concept of Long-Term Socio-Economic Development of the Russian Federation until 2020** adopted in 2008.

In 2012, the **Strategy for the Development of Medical Science in Russia until 2025** was approved. The strategy includes measures to develop innovative products and critical technologies. The main purpose of the document is to create high-tech innovative products and use them in public health practices. The expected share of innovative products on the market will be up to 10% of the amount of newly registered products. Today, Russia is in the fourth place after China, the U.S. and Japan in the total number of scientists. As regards research funding, Russia ranks ninth in the world. As regards the number of scientific publications, it is in the 15th - 18th place.

On December 24, 2012, the State Program **Development of Health Care of the Russian Federation until 2020** was approved. Over 33 trillion Rubles will be allocated from budgets of all levels to support its implementation. The State Program measures are expected to be implemented in two phases: the first phase - from 2013 through 2015, the second phase - from 2016 through 2020. The State Program includes 11 subprograms: "Prevention of Diseases and Promotion of Healthy Lifestyles. Development of Primary Health Care"; "Enhanced Provision of Specialized, including High-Tech, Health Care, Emergency Care, including Emergency Specialized Care, Medical Evacuation", etc.

The **State Program of Development of Pharmaceutical and Medical Industries** was adopted. It involves the allocation of more than 100 billion rubles out of the federal budget by 2020. The State Program is to ensure the application of international standards in the industry, and the inflow of foreign investments.

The State Program Development of the Pharmaceutical and Medical Industries consists of three subprograms:

- Development of Drug Production; the main goal is to organize production of generic and innovative drugs to treat socially significant diseases.
- Development of Medical Device Production aims to organize production of high-tech medical devices.
- Improved State Regulation in the Field of Pharmaceuticals and Medical Devices aims to create a legal and regulatory framework, improve the quality and safety of products, and ensure the priority development of the national pharmaceutical and medical industries, etc.

Also, the State Program has its targets: nationally produced pharmaceuticals must take up 50% of the market by 2020, and nationally produced medical devices - 40%.

The **Strategy of Pharmacological Support for the Population of the Russian Federation until 2025** was adopted. The aim of the Strategy is to increase availability of high-quality, effective and safe pharmaceuticals to meet the needs of the population and the health care system through development of a rational system, aligned with the available resources, and of the pharmacological support of the population of the Russian Federation.

Also 2012 saw the approval of the **Strategy of the Long-Term Development of the Pension System** and the adoption of the State Program "Social Support of Citizens", both of which will also indirectly affect the pharmaceutical market.

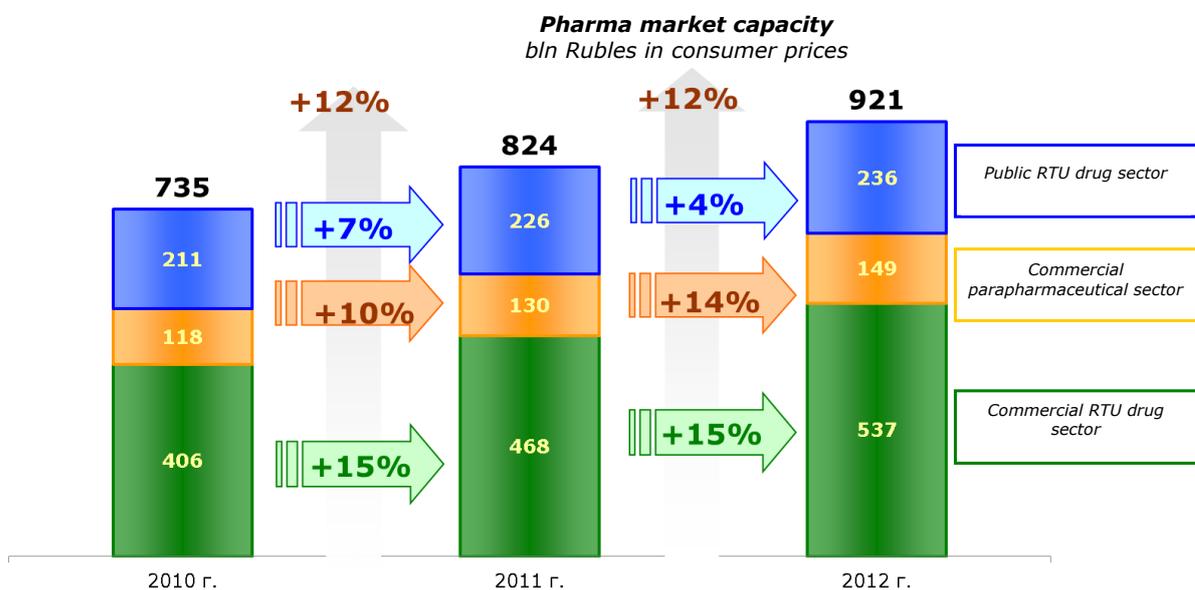
The pharmaceutical market in Russia is going through a time of change and state innovations. The reform of the pharmaceutical market is not over yet, and in the future, the industry awaits new changes. From January 1, 2014, GMP (Good Manufacturing Practice - GMP) standards will be mandatory. The question whether the industry is prepared to adopt these standards in 2014 is still debated.

So far, the impact of the developed strategies and programs on the numerical indicators of the pharmaceutical market has been minimal. And the market is growing quite steadily at an average rate.

Figure 1-2 shows the dynamics of the pharmaceutical market in Russia over 2010-2012 in retail prices.

Figure 1

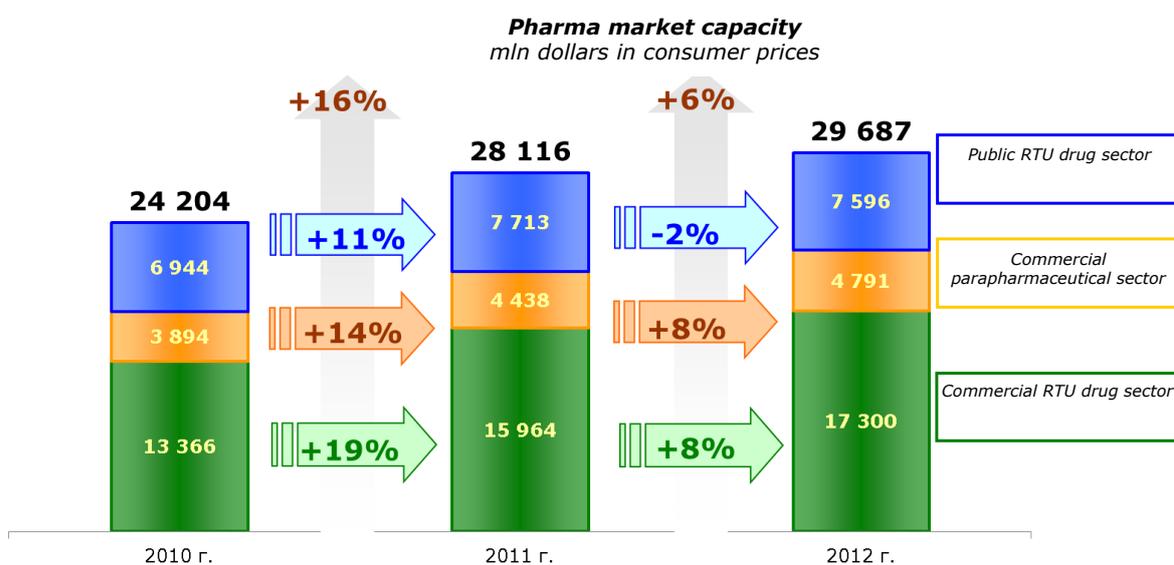
### Pharmaceutical market capacity



Source: DSM Group. ISO 9001:2008

Figure 2

### Pharmaceutical market capacity



Source: DSM Group. ISO 9001:2008

Over the past year, the market capacity reached 921 billion Rubles (or 29.7 billion Dollars), which is 12% more than in 2011. The market growth has accelerated and remains stable, though without recovering the pre-crisis 20-25%.

The market growth in packages, compared with the Ruble-expressed growth, looks very modest at a 1.3% gain. If we consider the market by segment, pharmacy sales of pharmaceuticals showed the greatest growth at 15% - 537 billion Rubles, pharmacy sales of parapharmaceuticals grew by 14% (149 billion Rubles), the government procurement market showed the smallest growth at +4% - 236 billion Rubles.

The government continues to adhere a clear policy in the sphere of pharmacological support of the population. In 2012, the public funds had a market share of 25.6%. Furthermore, procurement of drugs by medical institutions is growing faster at +11%, whereas in the drug reimbursement program, the state "saves up" through the tender system and import substitution program (the drug supplies showed a negative growth of -7.5%). Also, the drug supplies to the pharmacies to meet the subsidized provision system requirements have been affected by a decline in the numbers of beneficiaries.

The market growth continues to be driven through an increase in the drug price index. It is comparable with the consumer price index of the State Statistics Committee and is 6.0%. The index grew due to a drop in profitability for the entire supply chain, as a result of changes in taxation and price regulation for drugs from the list of vital and essential drugs (VED). If the index of VED prices was only 1.5%, and this was due to peculiar registration of imported pharmaceuticals and increased currency costs, the index of pharmaceuticals beyond the VED list was 7.8% for 2012. That was the only way the market was able to somewhat compensate for the lost income from the controlled drugs.

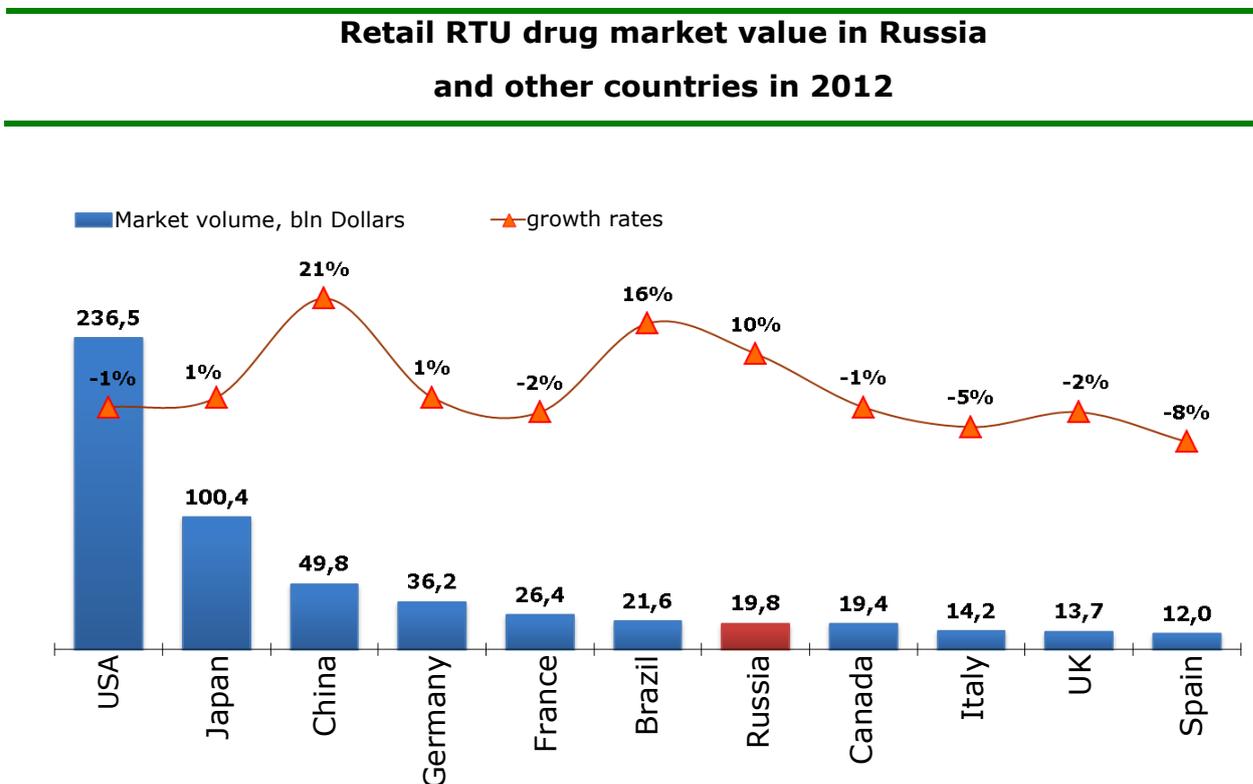
### **Russia's pharma market value compared to the rest of the world**

According to IMS HEALTH, the total sales of drugs in 14 major pharmaceutical markets across the world over 12 months - from January to December 2012 - amounted to 573.4 billion US Dollars (a gain of less than 1%). Traditionally, the most rapidly growing markets include countries in Latin America and China.

At the end of 2012, Russia is the world's 7th leading pharmaceutical market and the third-fastest one percentage-wise.

The biggest market is the U.S., where only the retail sales of drugs are worth 236.5 billion dollars, though in 2012, the drug sales in the U.S. market shrank. Sales also declined in almost all European countries. Generally, the pharmaceutical markets of the top 5 European countries fell by 2%.

Figure3



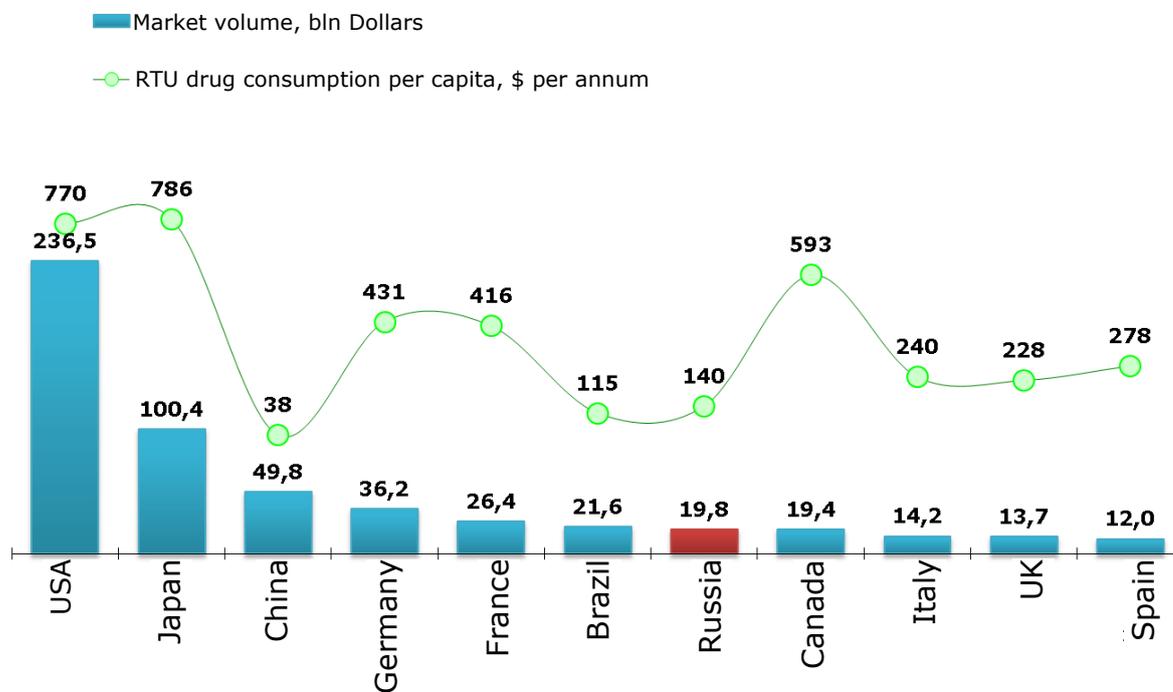
**Source:** IMS Health, DSM Group. **ISO 9001:2008**

**Note:** The RTU drug pharmacy market = the commercial segment of RTU drugs + DLO

Russia is still 3 and 5 times behind, respectively, the average European and US drug consumption. Only Brazil and China have smaller per-capita drug consumption than Russia (140 Dollars) at 115 and 38 Dollars, respectively.

Figure 4

### RTU drug consumption in Russia and other countries in 2012



**Source:** IMS Health, DSM Group. ISO 9001:2008

**Note:** The RTU drug pharmacy market = the commercial segment of RTU drugs + DLO

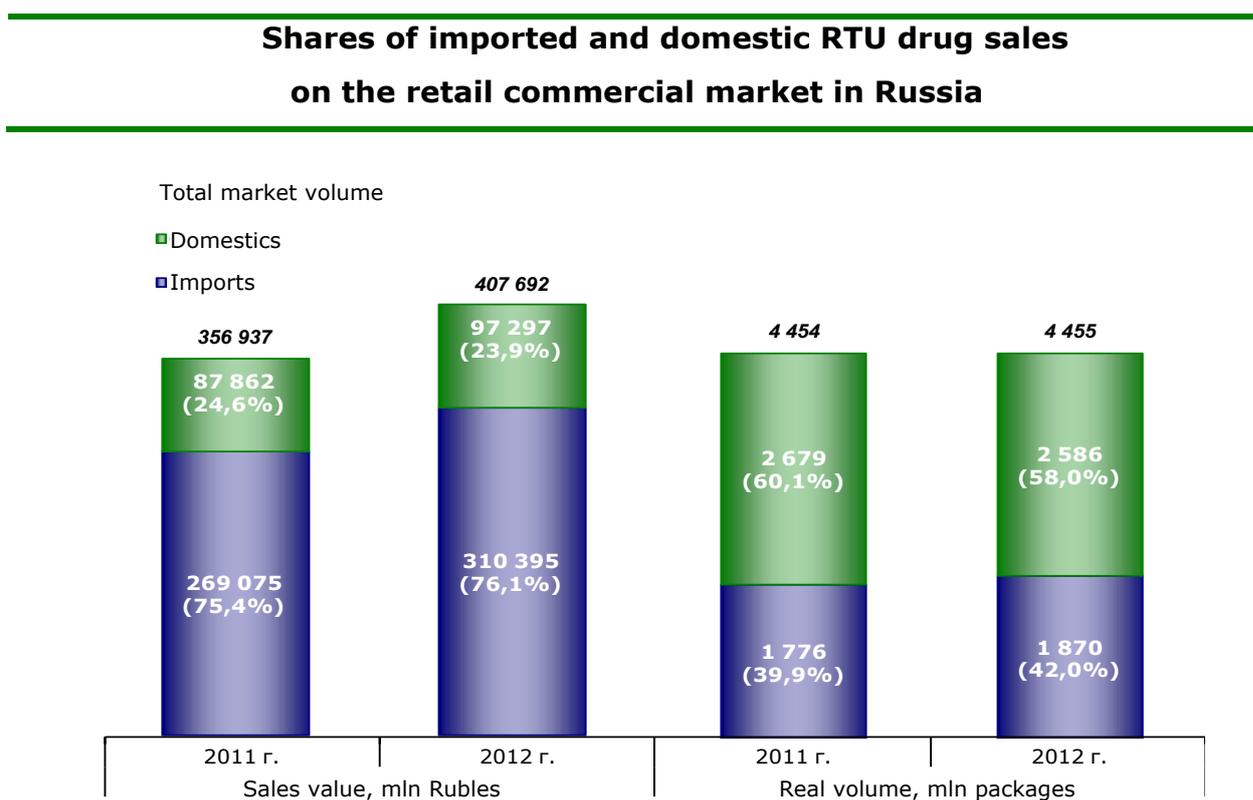
## 2. Commercial segment of RTU drugs

The RTU drug commercial market in 2012 amounted to 537 billion Rubles in consumer prices, or 408 billion Rubles in pharmacy purchase prices<sup>1</sup> (Figure 5) which is 14% more than in 2011. 4.5 billion packages were sold, which substantially coincides with the 2011 figure.

### 1. Imported to domestic RTU drug retail commercial market sales ratio

The breakdown of the RTU drug commercial market by sales of domestic and imported pharmaceuticals is shown in Figure 5.

Figure 5



**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

**Note:** Sales value are given in pharmacy purchase prices, VAT included.

<sup>1</sup> All volumes and prices further on in the RTU drug commercial segment section are given in pharmacy purchase prices, VAT included.

In value terms, the share of domestic drugs traditionally accounts for about one-fourth of the Russian RTU drug commercial market. In 2012, the share of domestic drugs accounted for 24%. At the same time, domestic pharmaceuticals prevail in pharmacy sales in volume terms - 58.0%. It is worth noting that in 2012 the share of the domestic drug packages decreased by 2.3%. This was due to cheap pharmaceuticals, such as ACTIVATED CARBON, BACTERICIDAL PATCH, CORVALOL, VALIDOL, etc., priced within 15-20 Rubles.

In 2012, sales of domestic drugs were less pronounced than those of the imports: 11% vs 15% in value terms. In volume terms, sales of Russian drugs decreased by 3%, while imported pharmaceuticals gained 5%.

The average price of a domestic drug package in 2012 was 38 Rubles, which is more than 4 times less than the price of an imported drug package. In 2012, the price of an imported package averaged toward 166 Rubles.

## **2. The ratio of sales of Rx drugs to OTC drugs in the retail commercial market**

At the end of 2012, the pharmaceutical market was stirred up by a new wave of information about the decision allowing sales of OTC drugs at retail stores.

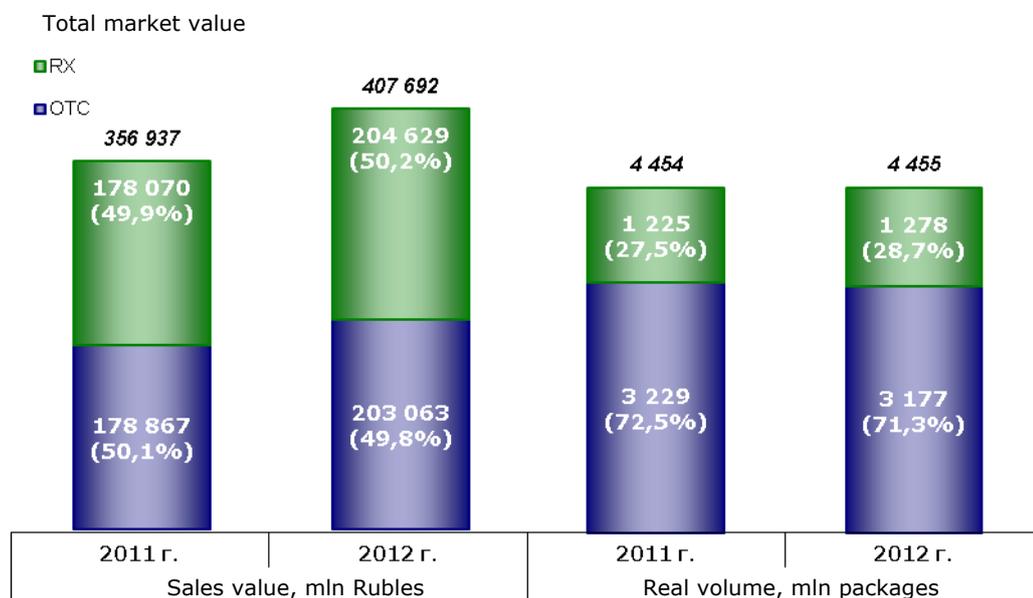
This information appeared on the market in late October, and already in early December, the Industry and Trade Ministry prepared and sent to the Ministry of Health for approval a list of OTC drugs that can be sold in grocery stores - it consists of 34 drug groups without specific names.

Representatives of the pharma community stated that this decision might put many retail pharmacies out of business, with the consumer being hit the hardest.

Though the Ministry of Health periodically asserts its support for this initiative, the decision to allow retail sales of OTC drugs is premature in Russia.

The ratio of Rx vs OTC drugs is shown in Figure 6.

### Shares of OTC and Rx drugs on the retail commercial market in Russia



**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

**Note:** Sales value are given in pharmacy purchase prices, VAT included.

**Note:** When calculating shares of Rx and OTC, drugs were distributed officially according to the OTC list. The fact that pharmacies freely dispense Rx drugs was ignored.

Sales of prescription and non-prescription drugs grew in monetary terms in the RTU drug retail commercial segment, as based on the 2012 results. Typically, sales of prescription drugs rise faster than sales of OTC drugs, as was the case in 2012. Compared with 2011, the value volumes of OTC drugs gained 14%, while that of Rx drugs gained about 15%. In volume terms, equivalent dynamics was observed: negative growth in sales of OTC drugs (-2%) and an increase in sales of Rx drugs (+4%). The share of Rx drugs in Rubles amounted to 49.8%; in volume terms, non-prescription drugs dominate (71.3%).

The thing to notice is that the average cost of Rx drugs in 2012 was 160 Rubles, while the price of OTC drugs was on average 2.5 times lower - 64 Rubles per packaging.

### 3. RTU drug sales on the retail commercial market broken down by ATC group

RTU drug pharmacy sales by Level I ATC group in Russia are shown in Figure 1.

Table 1

#### RTU drug sales on the Russian retail commercial market broken down by ATC group

Level I ATC groups	Sales value, mln Rubles	The group's share in sales value, %	Actual volume, million packs	The group's share in the actual volume, %
A: Alimentary tract and metabolism	80,549	19.8%	815.1	18.3%
R: Respiratory system	51,471	12.6%	621.9	14.0%
C: Cardiovascular system	50,901	12.5%	429.0	9.6%
N: Nervous system	48,345	11.9%	850.8	19.1%
M: Musculo-skeletal system	31,307	7.7%	281.2	6.3%
J: Antiinfectives for systemic use	29,644	7.3%	264.2	5.9%
G: Genito-urinary system and sex hormones	29,502	7.2%	77.7	1.7%
D: Dermatologicals	23,606	5.8%	478.0	10.7%
L: Antineoplastic and immunomodulating agents	17,569	4.3%	77.2	1.7%
[~] Pharmaceuticals without an ATC group	13,840	3.4%	255.8	5.7%
B: Blood and blood forming organs	13,204	3.2%	125.2	2.8%
S: Sensory organs	11,399	2.8%	112.9	2.5%
H: Systemic hormonal preparations, excluding sex hormones	2,654	0.7%	19.6	0.4%
V: Various	2,171	0.5%	22.9	0.5%
P: Antiparasitic products, insecticides and repellents	1,460	0.4%	23.9	0.5%

**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

**Note:** Sales value are given in pharmacy purchase prices, VAT included.

**Note:**[~] Pharmaceuticals without an ATC group (homeopathic drugs, drugs of plant and animal origin, substances etc.)

In value terms, the rating of ATC groups slightly changed as compared to 2011 (with changes mostly coming from the improved position of the ATC group [R] Respiratory system). In 2011, drugs from the ATC group [A] Alimentary tract and metabolism retained the leading positions (19.8%) as in previous periods. Compared with 2011, this group shows 16% sales growth in monetary terms. As based on the quantity of packages sold, this segment shows a minor positive gain of 1.6%. Thus, we can conclude that the observed increase in sales in Rubles for this group is due to higher prices for drugs.

About 16% of the sales value of the ATC group [A] falls under the subgroup [A11] Vitamins. This group includes vitamins, multivitamins and vitamin-mineral complexes. The MILGAMMA brand was No. 1 in sales value in the group [A11], with a Ruble share of 16%. In the value rating of the vitamin products, the national product line KOMPLIVIT is No. 3 (7.6%). In terms of packages sold, the inexpensive domestic product ASCORBIC ACID leads (18.2% of [A11] sales).

In volume terms, antidiarrheals ([A07]) at 26,1% of the group sales are No. 1 of the Group [A] subgroups, as in the previous year. LINEX, a product well known to consumers through active promotion, is at the value rating top in [A07] - 23,3% of all sales of antidiarrheals. However, in terms of packages sold, LINEX is only rated second, significantly behind ACTIVATED CARBON having a 60.3% share of the [A07] sales.

The Group [R] Respiratory system moved from the fourth place to the second in 2012.

The largest share of the sales value in the group [R] falls under the subgroup [R05] Cough and cold preparations (30% of sales for the group [R]). Inside the group, LASOLVAN is at the top, with a 4% share of the total value of the group [R], sales for this brand gained 12.5% as compared to 2011.

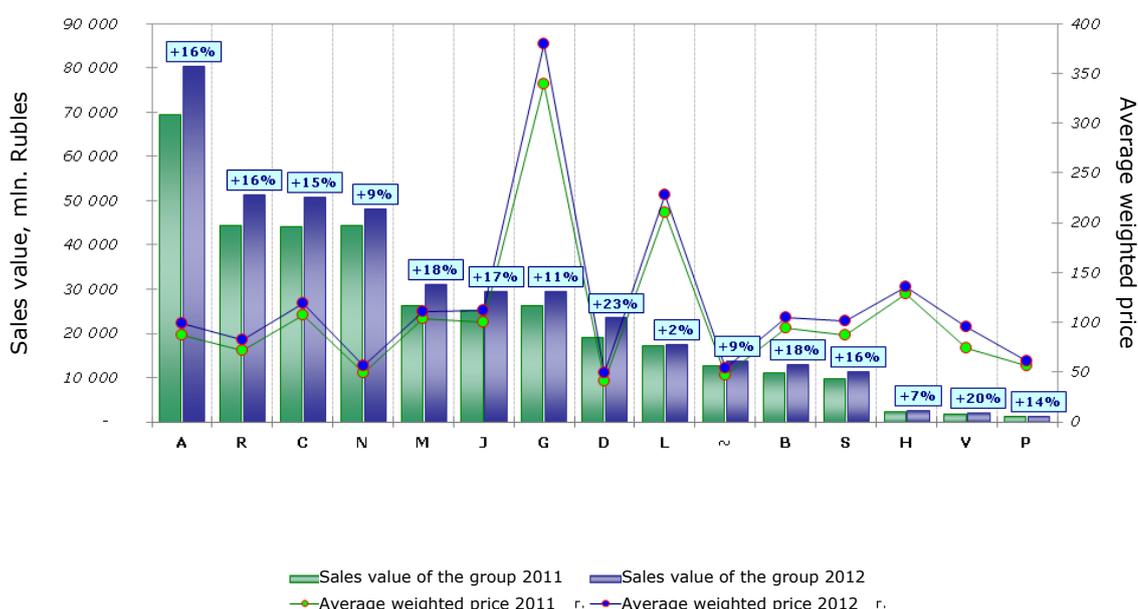
The group [R] has another key subgroup - 25% came from nasal preparations [R01]. Furthermore, the bulk of sales in the subgroup comes from the brands TYZINE, AQUA MARIS and OTRIVIN. TYZINE pharmacy sales doubled over the year, OTRIVIN also showed impressive dynamics (+50% compared to the value of sales in 2011).

The structure of the commercial market by ATC groups is quite stable from year to year. Capacity gains and average package cost gains in the ATC groups are shown in Figure 7.

At the end of 2012, almost all ATC groups show gains in the value of the sales, with the exception of the ATC group [L] Antineoplastic and immunomodulating agents (sales of the group drugs shrank by 2.3%). In monetary terms, maximum gains of 23% were noted for the group [D] Dermatologicals (due to increased sales of the brands EXODERIL, MIRAMISTIN, BEPANTEN, etc.). In volume terms, the largest pharmacy sales gain was registered for the RTU drugs in the group [M] Musculo-skeletal system drugs - it amounted to +10%.

Figure 7

### Structure of the RTU drug commercial market in 2011-2012



**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**  
**Note:** Sales value are given in pharmacy purchase prices, VAT included.

The largest price for a weighted average package, as based on the 2012 results, was for the group [G] Genito-urinary system and sex hormones. Such a high price is due to the fact that the package price for some RTU drugs in this group is about and over 5 thous. Rubles. Also a high price for a weighted average package was noted in the groups [L] Antineoplastic and immunomodulating agents - about 210 Rubles, and [H] Systemic hormonal preparations, excluding sex hormones - about 130 Rubles.

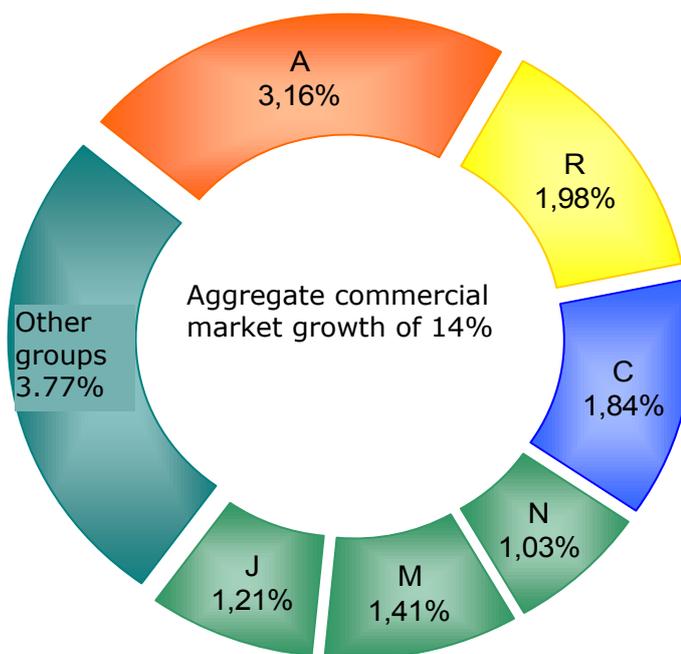
Contribution of different ATC groups to the overall growth of the commercial market was estimated using the weighted growth - an index that takes into account the share of an ATC group multiplied by the rate of its growth (Figure 8).

Figure 8

---

**Weighted growth of the RTU drugs in the retail commercial market by ATC group**

---



**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

The value capacity of the RTU drug commercial market in 2012 increased mostly due to [A] Alimentary tract and metabolism, [R] Respiratory system and [C] Cardiovascular system, which in aggregate totaled 7.0% or about 45% of the market growth as a whole.

#### **4. Manufacturers of the RTU drugs in the retail commercial market**

Table 2 lists the TOP 20 manufacturers that are sales leaders in the commercial market in Russia in 2012.

**TOP-20 RTU drug manufacturers by pharmacy sales volume in the retail commercial market in Russia in 2012**

Rating of 2012	Change	Manufacturer	Sales value, mln Rubles	Sales value increase	Share
			2012		
1	-	NOVARTIS	24,759	16.66%	6.07%
2	-	SANOFI	21,838	10.92%	5.36%
3	-	PHARMSTANDARD	17,718	-0.39%	4.35%
4	-	BERLIN-CHEMIE	13,992	6.91%	3.43%
5	-	TAKEDA	13,534	13.39%	3.32%
6	-	BAYER	13,252	17.65%	3.25%
7	1	TEVA	12,532	22.57%	3.07%
8	-1	GEDEON RICHTER	11,409	4.15%	2.80%
9	2	PFIZER	11,081	25.78%	2.72%
10	1	ABBOTT	10,867	13.26%	2.67%
11	-1	SERVIER	10,613	18.05%	2.60%
12	1	KRKA	8,542	20.30%	2.10%
13	-1	STADA	8,399	13.87%	2.06%
14	-	MERCK	7,930	16.09%	1.95%
15	-	BOEHRINGER INGELHEIM	7,539	15.24%	1.85%
16	2	ASTELLAS PHARMA	7,012	29.51%	1.72%
17	-	DR.REDDY 'S LABORATORIES	6,431	18.38%	1.58%
18	-2	ACTAVIS GROUP	5,780	6.41%	1.42%
19	-	GLAXOSMITHKLINE	5,758	10.64%	1.41%
20	1	JANSSEN PHARMACEUTICA	4,545	12.95%	1.11%

**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

**Note:** Sales value are given in pharmacy purchase prices, VAT included.

In 2012, the Russian pharmaceutical market had about 1,000 players (550 domestic manufacturers and 501 foreign manufacturers).

The TOP 20 manufacturers account for 54.8% of all RTU drug sales value. Compared to 2011, the total share of the Top Twenty remains virtually unchanged.

NOVARTIS has kept its leading position in the rating, with a 6.1% share in Rubles. NOVARTIS has quite a significant portfolio (more than 100 drugs sold on the commercial market). The largest volume of the company's sales was generated

by LINEX - as based on the results of 2012, its share in the company's sales was 11.7% in monetary terms, with a gain of 11% compared to sales in 2011. The highest increase in sales was noted for OTRIVIN (+51%), SINECOD (+61%), GALVUS (+109%), etc. In volume terms, such well-known brands as TERAFLU, LINEX, KETONAL lead the sales. These three items account for 29% of packages sold, which is equivalent to the total share of these products in the company's sales value.

SANOFI-AVENTIS, the runner-up, lost 0.71% of the Ruble share to the leader. The "irreplaceable" sales hits - ESSENTIALE, NO-SPA, MAGNE - give the company strong market positions, and ESSENTIALE and NO-SPA are TOP-20 brands.

As in 2011, PHARMSTANDARD is in the third place, with a share of 4.35%. The company's sales in 2012 demonstrated a decline at -0.4%, it is noteworthy that the largest domestic drug manufacturer is the only one of all rated companies to demonstrate reduced pharmacy sales. This is due to a drop in sales of the leading pharmaceutical brands - ARBIDOL (-22% compared to sales in 2011), KODELAK (-29%).

As based on 2012, the following companies improved their standing as Top-20 manufactures on the Russian commercial drug market: TEVA (pharmacy drug sales grew by 22.6% driven by strong growth in demand for such RTU drugs as SUMAMED, AMBROBENE and HYLAK), PFIZER (which gained almost 26% compared the sales level in 2011 due to increased sales of several brands, in particular TYZINE, LYRICA and DIFLUCAN), ABBOTT moved one place up in the rating. Furthermore, KRKA moved from the 13th place to the 12th, helped by more than 20% growth in sales of the company's drugs (the growth flagships were drugs such as ENAP (+5%), LORISTA (+77%), GERBION ( 24%) and ATORIS (41%)).

ASTELLAS PHARMA moved from the 18th place in 2011 up to the 16th in 2012, having demonstrated the highest pharmacy sales gains of 29.5% among the top twenty companies. Russian pharmacies sell 19 pharmaceutical brands of the company, with DE-NOL, OMNIC, FLEMOXIN and others showing marked demand gains. In 2012, sales grew almost for all drugs of ASTELLAS PHARMA.

We should also mention JANSSEN PHARMACEUTICA which is the pharmaceutical business unit of Johnson & Johnson. In 2012, the company ranked 20th, having increased its domestic pharmacy sales by nearly 13%. This was also caused by rising demand for drugs, such as the antidiarrheal IMODIUM (+35% compared to sales in 2011), the antiulcer agent PARIET (+13%) and MOTILIUM, a drug that relieves symptoms of dyspepsia (+28%).

## 5. Retail commercial market drugs

Table 3 lists the TOP 20 brands that are sales leaders in the commercial market in Russia in 2012.

Table 3

### TOP 20 brands by sales value terms, in the commercial market in Russia in 2011-2012

Rating of 2012	Change	Brand name	Sales value, mln Rubles 2012	Sales value increase	Share
1	1	ESSENTIALE	3,812	5.5%	0.93%
2	-1	ARBIDOL	3,744	-22.1%	0.92%
3	3	CONCOR	3,291	16.5%	0.81%
4	1	ACTOVEGIN	3,214	10.7%	0.79%
5	-2	VIAGRA	3,037	-4.7%	0.75%
6	1	LINEX	2,892	11.2%	0.71%
7	-3	NUROFEN	2,844	-7.7%	0.70%
8	1	ALFLUTOP	2,683	26.0%	0.66%
9	-1	TERAFLU	2,443	11.3%	0.60%
10	3	DETRALEX	2,336	17.7%	0.57%
11	6	NISE	2,218	22.0%	0.54%
12	3	NO-SPA	2,095	12.1%	0.51%
13	3	LASOLVAN	2,091	13.2%	0.51%
14	46	REDUXIN	2,079	108.1%	0.51%
15	-3	ANAFERON	2,077	3.2%	0.51%
16	2	MEXIDOL	2,054	13.7%	0.50%
17	4	MILGAMMA	2,053	22.5%	0.50%
18	51	KAGOCEL	2,049	124.7%	0.50%
19	-5	MOVALIS	2,021	6.7%	0.50%
20	-10	OSCILLOCOCCINUM	2,013	-4.0%	0.49%

**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

**Note:** Sales value are given in pharmacy purchase prices, VAT included.

In aggregate, the top 20 leading brands account for 12.5% of the value of the RTU drug commercial segment. The three sales hits have changed: ESSENTIALE became the leader (displacing ARBIDOL to the 2nd place), CONCOR settled the third position, surpassing VIAGRA and ACTOVEGIN.

It should be noted that 2012 did not bring about any "large-scale" epidemics of influenza and other respiratory infections, drugs in this category grew at an uneven pace: sales of ARBIDOL and OSCILLOCOCCINUM shrank by 22% and 4%, respectively, at the same time, demand for TERAFLU, ANAFERON and KAGOCEL increased. KAGOCEL showed a particularly noticeable growth, its sales more than doubled over 2012.

Two drugs - the above mentioned KAGOCEL (+51 line) and REDUXIN that moved from the 60th line to the 14th - improved their positions in the 2012 rating most noticeably. A massive advertising campaign that stimulated a growing demand for the eponymous nutritional supplement also "boosted" sales of the drug. As a result, over 2012, pharmacy sales of REDUXIN increased by 108%, as compared to 2011.

In terms of sold packages, inexpensive preparations, such as ACTIVATED CARBON, CITRAMONUM and ACETYLSALICYLIC ACID, have the leading positions. Of the RTU DRUG's that made it to the TOP-20 by value, only NUROFEN is rated as a TOP-20 drug in volume terms, with its 16th place. It should be noted that the TOP-20 RTU DRUG's in volume terms are almost 100% the so-called "traditional" pharmaceuticals, that is those sold only in Russia and the former Soviet Union. In the Ruble rating, they stand below the 100th position. The weighted average price of the TOP 20 in packages is about 10 Rubles.

## 6. Vital Drugs

Currently, the the VED list has about 500 INN's. These are essential drugs that contribute to reduced mortality and morbidity in the population. The number of drugs in the list of vital and essential drugs (VED) doubled over three years, from about 5,000 items in 2009 to 10,000 in 2012. In 2011, the list of such drugs was expanded to include 37 international non-proprietary names, in 2012, it was expanded to include 29.

Drugs in this list are subject to state regulation in force from April 2010. Regulation is based on determining the manufacturer's maximum price and maximum trade markups, that is the wholesale and retail prices. Markups vary by region. According to the pricing methodology, Russian pharmaceutical manufacturers can annually re-register the prices adjusted for inflation, or subject to changes in the prices for raw-stuff and materials or overheads. Foreign manufacturers register the prices based on the data of the minimum prices in the

manufacturing countries and states where the drugs are registered. However, in reality, neither domestic, nor foreign manufacturers have been able to raise the ex-works prices for the VED drugs in two years since this system was put in place. This gave rise to tensions in the pharma community.

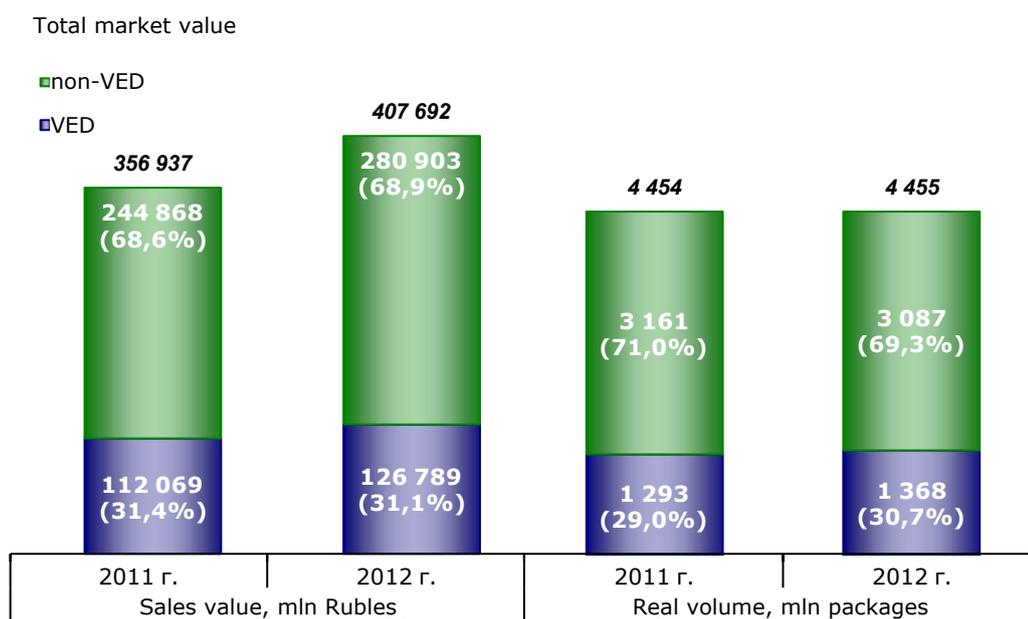
In October 2012, a new pricing method was approved for the VED drugs. This method assumes annual indexation of the prices for the domestic drugs that are in the VED list, depending on the inflation rate. The inflation rate had earlier been a criteria to raise the price, however, domestic manufacturers had not been able to raise the prices based on this indicator. As for foreign companies, the methodology for determining the maximum ex-works price for them has not changed.

The VED list for 2013 will be the same as in 2012. As a result, the current full VED list contains 567 pharmaceuticals, of which 93 titles (16.4%) are manufactured only by domestic companies, 207 titles (36.5%) - only by foreign companies, and 267 titles (47.1%) are manufactured by both Russian and foreign pharmaceutical companies.

The renewal of the VED list for 2013 is explained by the current preparations to migrate to the new insurance-based drug provision system which, according to the Russian Ministry of Health plans, may take effect in the near years.

Based on the 2012 results, 479 INN's listed as VED's (corresponding to 1604 brands) were on sale at pharmacies. VED sales totaled 100.6 billion Rubles, or 1,262 million packages (Figure 9).

### VED to non-VED sales ratio



**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

**Note:** Sales value are given in pharmacy purchase prices, VAT included.

The thing to mention is that in value terms, VED sales increased slower than sales for the other drugs (13% vs. 15%). In volume terms, quite the opposite is true: VED sales in packages grew by 6%, while the sales of the drugs outside of the list decreased by 2%.

The share of domestic drugs, as well as across the market as a whole, dominates in volume terms (53.4%), while in money terms, its share is only 25.1%.

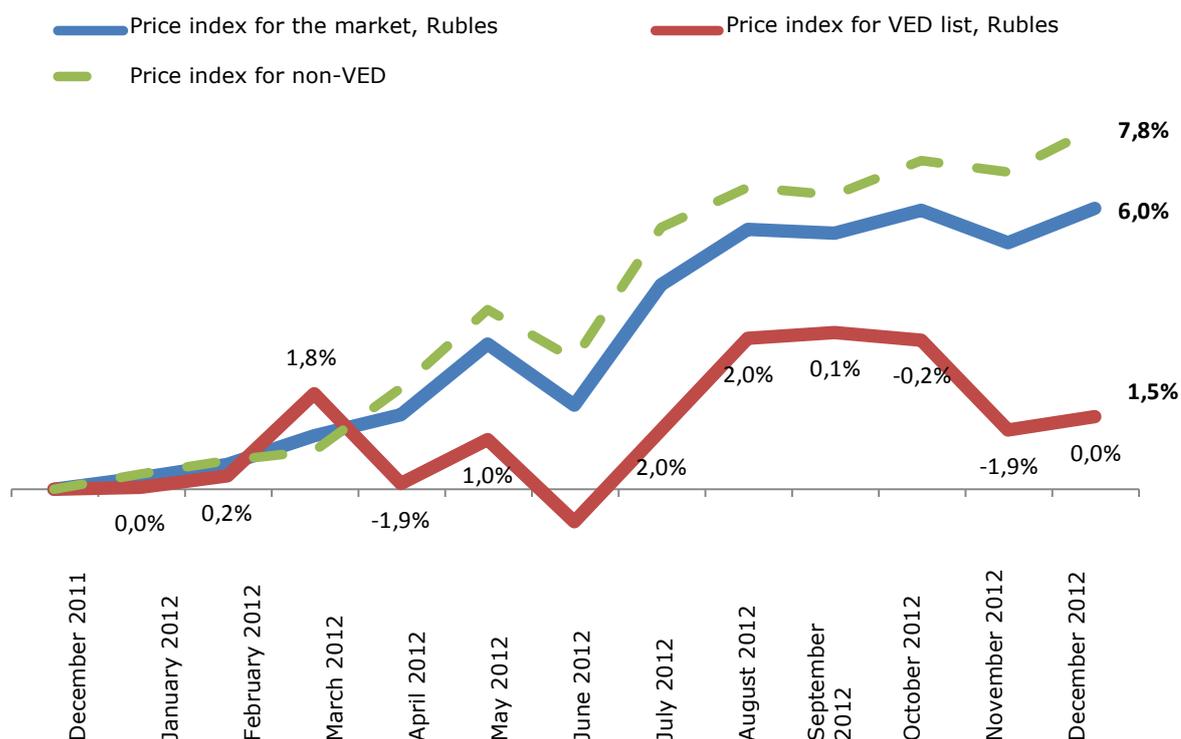
The weighted average price of VED's was 92.7 Rubles as based on the 2012 results, whereas the price of one package of a domestic pharmaceutical was 43 Rubles, and that of an imported one was 4 times as high (149 Rubles).

Another interesting fact is that the price of VED's exceeded the weighted average price of the other drugs, whereas earlier the drugs not listed as VED's averaged a 7% higher price. Thus, we can conclude that the VED segment sales are shifting more markedly toward more expensive drugs than across the market as a whole.

Figure 10 shows the index of prices for different groups of drugs.

Figure 10

### Dynamics of the price index on the commercial market in 2012



**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

Over 12 months of 2012, the VED prices increased by 1.5 times. Drugs not listed as VED's gained 7.8% in their price, compared with December 2011. The main increase in the prices was in the 2nd half of 2012 - during this period, the price index rose by 4%. That was the only way the market was able to somewhat compensate for the reduced income due to the fixed VED prices.

RTU drug sales by INN added to the VED list are rated in Table 4. At the top of the VED rating by INN is XYLOMETAZOLINE. Note that in 2011, UMIFENOVIR (ARBIDOL) led the rating, however, the 22.1% fall of the pharmacy sales of this INN in 2012, at a time when the demand for TYZINE (INN XYLOMETAZOLINE) tripled, displaced the leading INN. PANCREATIN preparations are in the second place in the VED rating, with MEZIM-FORTE leading the sales. INN BISOPROLOL is in the third place (CONCOR is the INN leader).

Table 4

### Sales rating for INN's listed as VED's

Rating of 2012	INN	% of VED sales, Rubles	Value, mln Rubles	Leading brand among INN's
1	XYLOMETAZOLINE	4.17%	5,287	TYZINE
2	PANCREATIN	3.57%	4,531	MEZIM-FORTE
3	BISOPROLOL	3.08%	3,906	CONCOR
4	UMIFENOVIR	2.95%	3,744	ARBIDOL
5	AZITHROMYCIN	2.40%	3,039	SUMAMED
6	AMOXICILLIN + CLAVULANIC ACID	2.25%	2,848	AMOXICLAV
7	ENALAPRIL	2.03%	2,576	ENALAPRIL
8	ETHYLMETHYLHYDROXYPYRIDINE SUCCINATE	1.81%	2,298	MEXIDOL
9	FLUCONAZOLE	1.80%	2,278	FLUCOSTAT
10	DROTAVERINE	1.78%	2,255	NO-SPA
11	INTERFERON ALFA-2B	1.69%	2,137	VIFERON
12	OMEPRAZOLE	1.68%	2,125	OMEZ
13	ADEMETHIONINE	1.61%	2,039	HEPTRAL
14	IBUPROFEN	1.58%	2,009	NUROFEN
15	ATORVASTATIN	1.55%	1,971	TORVACARD
16	DIDROGESTERON	1.49%	1,891	DUPHASTON
17	CETIRIZINE	1.47%	1,858	ZYRTEC
18	AMBROXOL	1.32%	1,680	LASOLVAN
19	TAMSULOSIN	1.27%	1,606	OMNIC
20	CLOPIDOGREL	1.22%	1,549	PLAVIX

**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

ENALAPRIL shows the largest weighted average price growth (+17%) due to the release of "large" ENAP packages (in 2012, sales of ENAP 10 mg, 500/1000 pills/package, grew)

## 7. Price segmentation of retail commercial market drugs

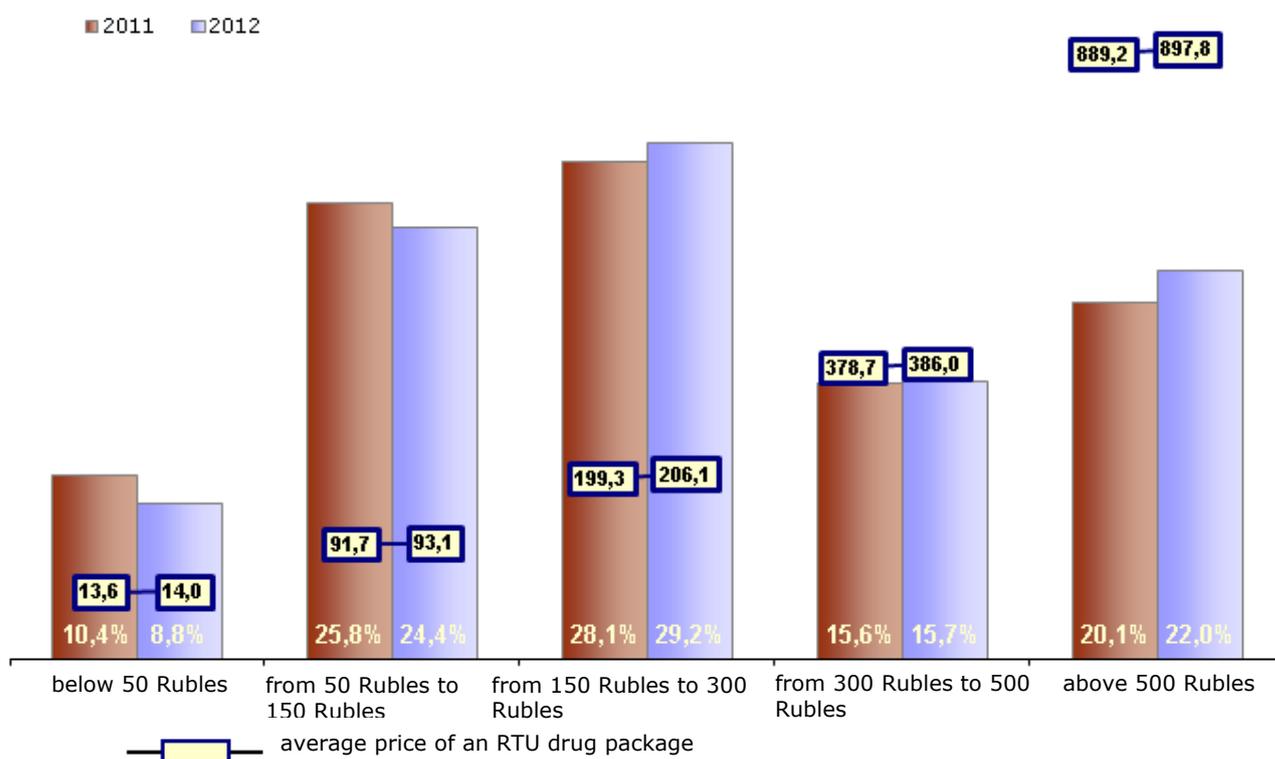
The average cost of an RTU drug package in the commercial market in 2012 increased by 14.2% to 91.5 Rubles.

Let's consider what this value consists of.

Figure 11 shows the structure of the commercial market and the average price per package in the price segments in 2011-2012.

Figure 11

**RTU drug value sales on the retail commercial market broken down by price segment**



**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**  
**Note:** Sales value are given in pharmacy purchase prices, VAT included.

The greatest fear in 2012 was the possibility that cheap drugs would be eliminated from the distributors' and pharmacies' offerings due to the regulated prices for VED's. The fears proved groundless, the offering is largely determined by the needs of consumers, and pharmacies always try to close positions for items out of stock. If there is a disconnect between the pharmacy's offering and the buyers' need, the buyer is inevitably lost.

As seen in Figure 9, the share of drugs priced below 50 Rubles fell by 1.6% over the last year, the share of these drugs in the VED list dropped by 1.1%. And this has been characteristic of our market in recent years, and not related directly to the regulation of prices. This tendency can be seen as the shifting of consumer preferences toward more expensive and more effective drugs. Thus, sales of such

popular pharmaceuticals as NAFTIZIN, ACTIVATED CARBON, CITRAMCITRAMONUM AND ANALGIN dropped by 32.6 million packages.

And if we "fix" the consumer basket at the 2011 level (i.e. irrespective of the drug price in 2012, it will end up in the same segment as it is based on the 2011 results), the share of pharmaceuticals priced below 50 Rubles in 2012 will amount to 10.2%, that is only 0.2% less than in 2011. Changes will also be minimal for the remaining segments. Thus, we can conclude that market shares by price segment change mainly due to price increases and transition of a pharmaceutical from one price group to another higher one.

The segment of pharmaceuticals priced below 50 Rubles remains the most capacious in volume terms, amounting to 57%.

The fastest growing price group both in value terms (+25%) and in volume terms (+24%) is a group of pharmaceuticals priced above 500 Rubles, its share increased by 1.9% to 22.0% in Rubles. In packages, the share of this group is minimal at 2.2%.

The group that is most capacious as based on the results of 2012 is a group of pharmaceuticals priced between 150 and 300 Rubles. It took up 29.2% of the volume in money terms. Sales growth for this group was +18% in 2012 as compared to 2011.

## **8. The price index for retail commercial market drugs**

To make an objective estimate of drug price change on the retail commercial market segment, a price index based upon a fixed list of ready-to-use drugs was considered.<sup>2</sup>

As in previous years, the market growth continues to be driven through an increase in the drug price index. In 2012, the drug inflation rate (6.0%) was lower than the overall consumer price index of the SSC (6.6%). Drug prices rose unevenly, the main growth came in the second half. The index grew due to a drop in profitability for the entire supply chain, as a result of changes in taxation and price regulation for VED drugs.

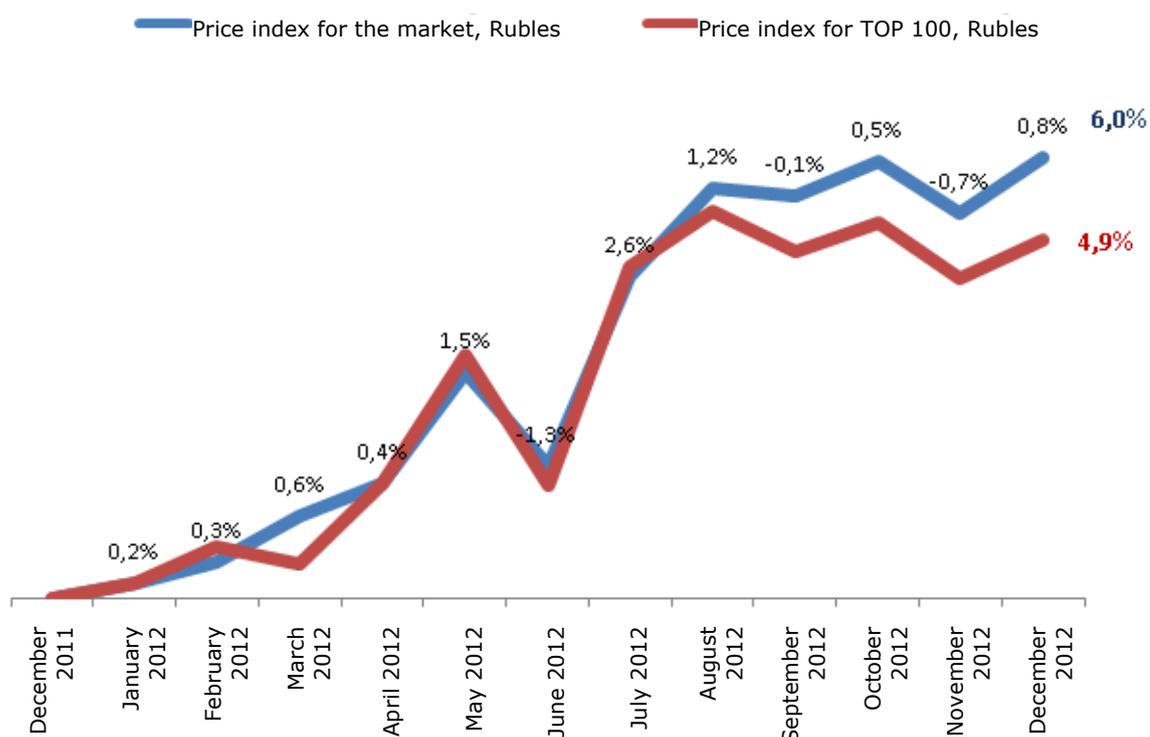
---

<sup>2</sup> Price index for the current year was calculated on the basis of an intersected list of all full names of drugs present on the market in the previous year.

The price rise of the most popular drugs on the market was slightly lower: in 2012 the price index of the TOP-100 brands (in turnover) amounted to 4.9% (Figure 12).

Figure 12

**Change in prices of RTU drugs on the Russian commercial market in 2012**

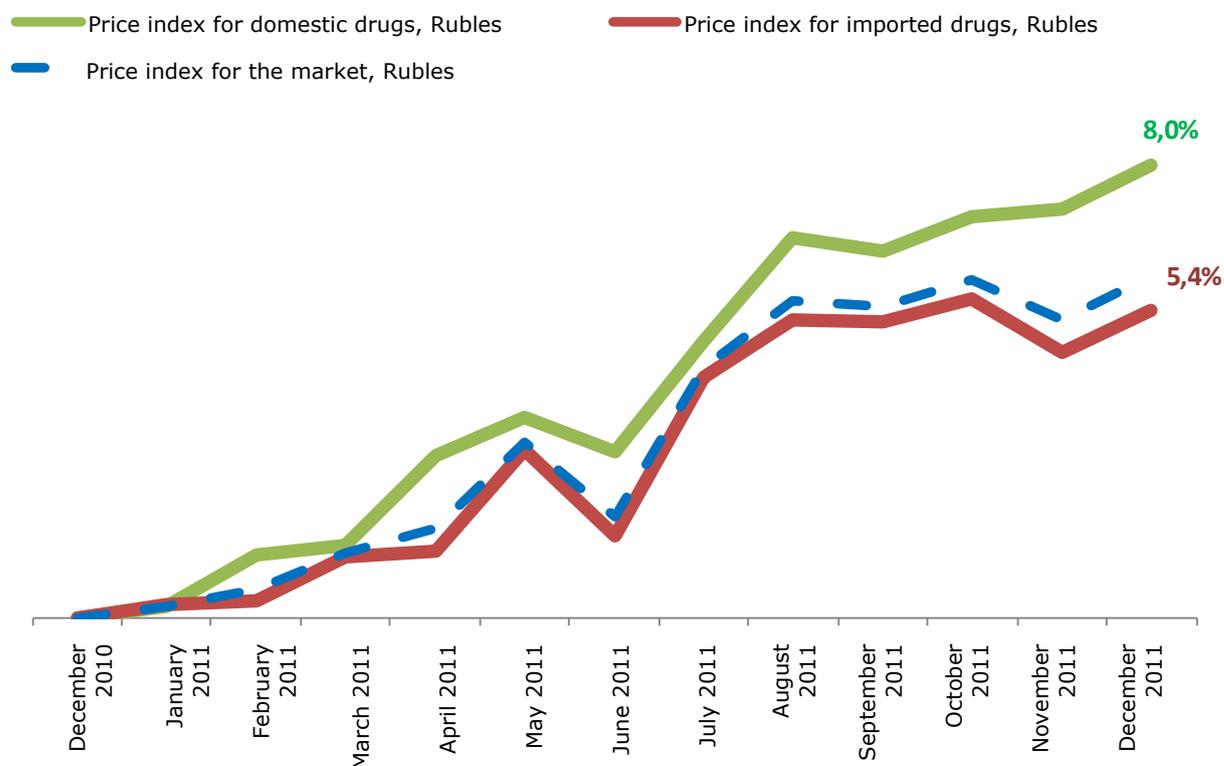


**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

The price index for imported and domestic drugs in 2012 is shown in Figure 13.

In 2012, the changes in prices for domestic and imported drugs were different. The indicators were 8.0% and 5.4%, respectively. Prices for drugs produced in Russia grew at a substantially faster rate than those for imported pharmaceuticals.

### Price index for drugs of domestic and foreign manufacturers on the Russian commercial market in 2012



**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

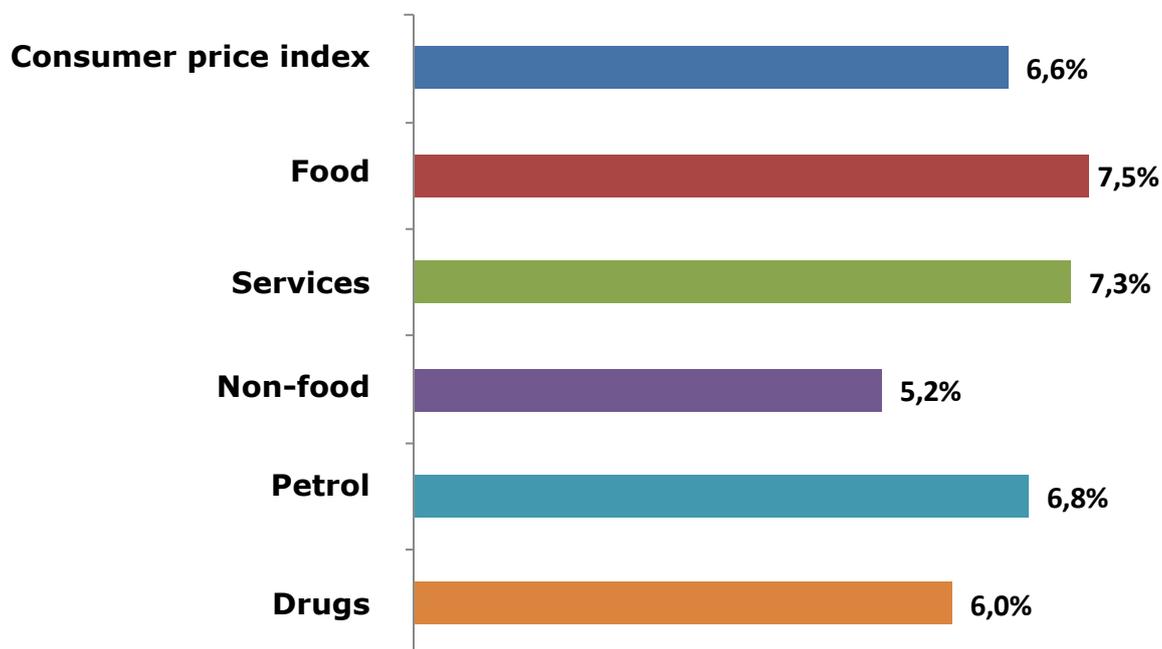
According to the State Statistics Committee, drugs cover about 1.8% of the base structure of consumer spending in Russia, which is 0.08% lower, compared to 2009. Thus, the SSC somewhat lowered the importance of drugs in consumer spending.

Figure 14 shows the overall consumer price index and price indices for various categories of goods and services.

---

**The index of consumer prices in Russia  
(December 2012 compared to December 2011)**

---



**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**, SSC

The overall index of consumer prices in 2012 was 6.6%. The highest price rise was observed in the food segment (7.5%). The price rise for non-food products was the lowest (5.2%). The index of drug prices was lower than overall inflation rate.

### 9. New drugs on the retail commercial market

New drugs are brought to market each year. In 2012, more than 620 new drug brands appeared in the Russian pharmacies. Compared to 2011, this figure increased almost 1.8-fold (in 2011, around 180 brands appeared in pharmacies).

Total sales volume of new products amounted to 862 million Rubles in 2012 and about 4.6 million packages, which amounted to 0.21% of the sales value and 0.10% of real pharmacy sales of all drugs on the retail commercial market. The weighted average cost per standard package of a new drug was about 187 Rubles.

Most of the new drugs are produced by foreign manufacturers, the Russian manufacturers brought to market 228 brands in 2012.

**Top 20 new brands in 2012  
on the commercial market of the Russian Federation**

Rating of 2012	Brand name	Company	Value, mln Rubles	Date of appearance in pharmacies
1	WICKS	PROCTER & GAMBLE	189.5	May 2012
2	ANVIMAKS	ANVILAB	67.2	October 2012
3	HONDROGARD	FARMFIRMA SOTEX	58.9	February 2012
4	ALERANA	VERTEX	56.5	March 2012
5	ORTANOL	LEK D.D.	45.0	June 2012
6	NASIVIN SENSITIVE	NYCOMED	42.3	April 2012
7	ORSOTEN SLIM	KRKA	39.9	January 2012
8	NEXT	PHARMSTANDARD	31.6	April 2012
9	ROSUKARD	ZENTIVA	15.6	August 2012
10	ROXERA	KRKA	13.4	May 2012
11	ANTISTEN MV	OZON	13.2	March 2012
12	LISINOPRIL-TEVA	TEVA PHARMACEUTICAL	12.0	April 2012
13	EFFEZEL	GALDERMA	10.7	May 2012
14	SUMATROLID SOLUTAB	OZON	7.9	July 2012
15	DIAFLEX ROMPHARM	S.C.ROMPHARM COMPANY	7.5	June 2012
16	BRILINTA		7.5	May 2012
17	NOVALGIN	CONCERN STIROL	6.8	June 2012
18	ROSULIP	EGIS	6.2	June 2012
19	ONBREZ BREEZHALER	NOVARTIS	5.6	March 2012
20	TUTABIN	LABORATORY TUTEUR	5.0	April 2012

**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

The WICKS brand is the sales leader among the new drugs brought to market in 2012. This brand includes a whole range of different pharmaceuticals, nutritional supplements and parapharmaceuticals. In recent years, the following drugs were registered under the WICKS brand: WICKS ACTIVE SYMPTOMAX, WICKS ACTIVE BALSAM WITH MENTHOL AND EUCALYPTUS, WICKS ACTIVE SINEX AND WICKS ACTIVE EXPECTOMED. All of these drugs became available in mid-2012 and relieve cough symptoms of various diseases. The total sales of the drugs sold under the brand name WICKS was almost 190 million Rubles, as based on the 2012 results.

Another line of anti-cold drugs produced under the brand name ANVIMAKS (ANVILAB LTD.) is rated second. Though this drug was brought to market in October 2012, the volume of its sales is rather high, amounting to about 67 million

Rubles in pharmacy purchase prices. The reason is this pharmaceutical is not a new product but rather a new brand that emerged as a result of the rebranding of ANTIGRIPPIN-MAXIMUM. Importantly, the composition, the release form and packaging design of this product are the same, which contributed to its successful market promotion under a new name.

HONDROGARD based on chondroitin sulfate, from ZAO FARMFIRMA SOTEX, ranked third in the sales of new products (59 million Rubles). The drug is available as a solution for intramuscular injection and is used for degenerative diseases of the joints and spine.

The spray ALERANA (JSC VERTEX) made it to the rating of new drugs in 2012. The brand ALERANA currently covers a number of anti-hair loss agents: shampoos, nutritional supplements, and different product kits. In 2011, the manufacturer created a new product to deal with alopecia - the spray ALERANA based on minoxidil - and registered it as a drug. Its sales in 2012 amounted to about 57 million Rubles.

Analysis of new drug sales, as based on the 2012 results, with regard for the pharmacological groups identified that the pharma group ARD AND COLD RELIEVERS was the most capacious in money terms, which is due to the launch of the brands WICKS and ANVIMAKS.

The pharma group TISSUE REPAIR STIMULATOR is in the second place, due to the launch of HONDROGARD and another five new products (ADGELON, ARTRADOL etc.)

The pharma group ALOPECIA CURE is on the third place, due to the brand ALERANA brought to market.

It must be emphasized that, based on the results of 2012, the TOP-20 new brands rating includes quite a lot of new nationally produced brands - seven items. Furthermore, the three of them (ANVIMAKS, HONDROGARD And ALERANA) are among the top 5 in terms of new product sales.

Thus, the drug market has been developing actively from year to year. Recently, there has been a marked trend towards an increasing number of new titles. An increased share of new nationally produced items is an important indicator.

### 3. Drug reimbursement program

As one of social support measures, drug reimbursement program covering certain categories of citizens supports citizens eligible to state aid.

DRP was established as part of the health care reform and has changed the approach to providing people with drugs. Previously, the state provided free drugs to patients with certain diseases, and since 2005, all representatives of the privileged citizen categories are on DRP.

In 2007-2008, it became necessary to revise the existing system under which privileged categories of citizens are provided with pharmaceuticals, and the two components of the drug reimbursement program were singled out:

1. Pharmaceuticals centrally procured with the federal funds that are intended to treat patients with malignant neoplasms of the lymphoid, haematopoietic and related tissues, hemophilia, cystic fibrosis, pituitary dwarfism, Gaucher's disease, multiple sclerosis, and after transplantation of organs and/or tissues (Decree of the Government of the Russian Federation, dated February 14, 2009, No. 115, in Moscow). This program was called "7 high-cost nosologies" (7 nosologies", "high-cost nosologies (HCN)").
2. Essential drug reimbursement program (EDRP) performed regionally.

Today beneficiary drug coverage, funded by the state, has become an established segment of the pharmaceutical market.

Since 2007, beneficiaries have had the right to choose how to receive the benefit: compensation or prescription drugs. Around 12 million people are now eligible to beneficiary coverage.

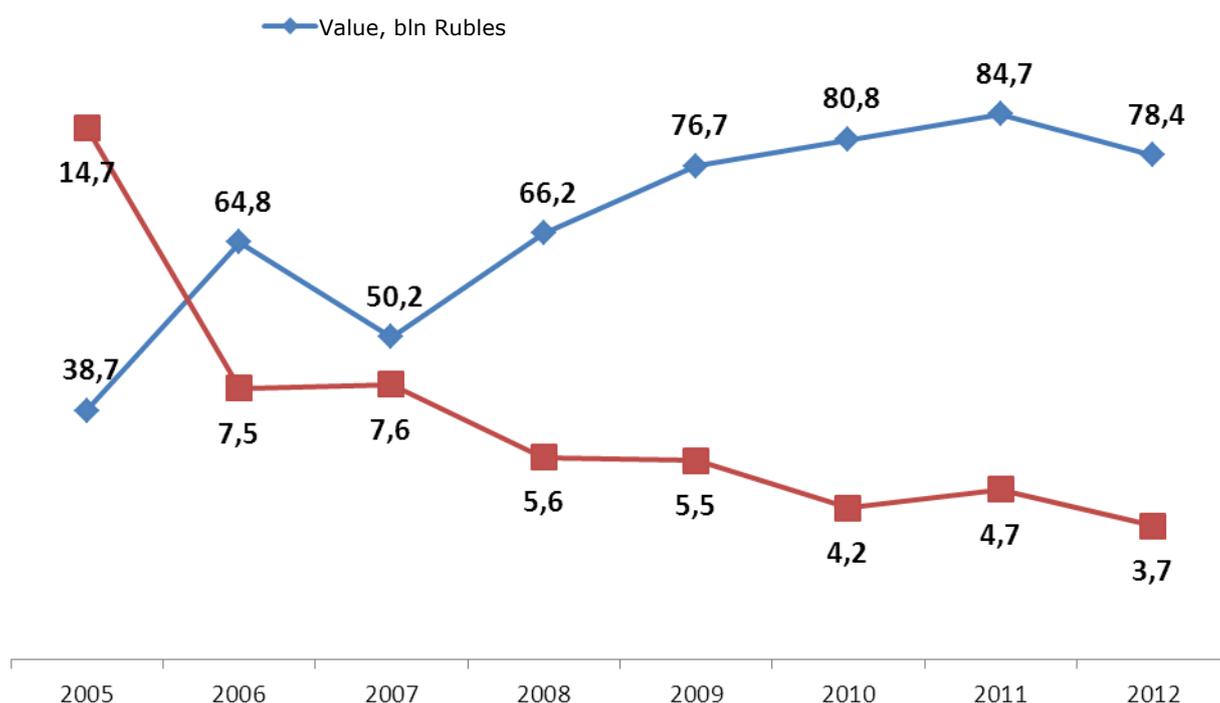
In 2012, there were 3.7 million beneficiaries who have chosen drug coverage. (Figure 15). The Russian authorities allocated nearly 27 billion rubles on drugs for the privileged categories of citizens in 2012. The standard amount is the basis for calculating the subsidy which is then transferred to the regions to finance drug coverage. For an individual citizen entitled to subsidized drugs, this standard amount cannot limit the price of a prescription.

As can be seen from Figure 15, based on the results of 2012, 78.4 billion Rubles was spent on drug purchases for the privileged categories of citizens. As compared to 2011, the gain is -7.4%. In real terms, about 83.9 million drug

packages were sold under this program. This is 13.6% less than in 2011. Thus, if in 2011 this indicator showed positive dynamics, and before that the number of packaged sold had been on continuous decline, from 2012 the situation got back to the initial state.

Figure 15

**Federal beneficiaries number dynamics (mln people) and the value of money spend under DRP**



Source: DSM Group. ISO 9001:2008

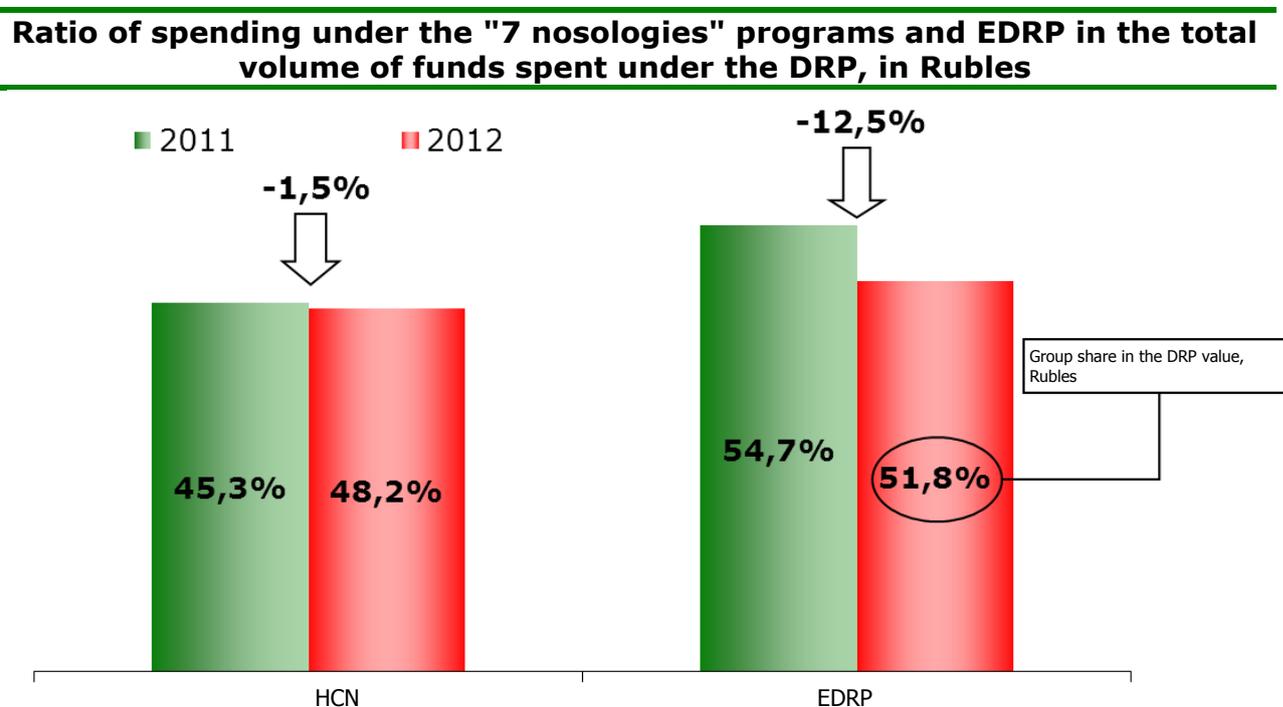
Despite the declining number of federal beneficiaries, the amount of funding allocated to the program is growing every year. In 2013, the allocated funds will continue to grow at the 2012 level, amounting to 52 bln Rubles. The largest budget allocations will go to Moscow (more than 4.5 billion Rubles), St. Petersburg (about 1.3 billion) and Moscow region (1.23 billion).

The standard amount of monthly financial costs per citizen receiving state social assistance in the form of drugs, medical accessories, and nutritional care for children with disabilities will be 604 Rubles in 2013, as in 2012.

It should be noted that during the period of the DRP program, the level of availability of quality drugs to beneficiaries increased significantly. This is reflected in the growth of the average price of a sold package. In 2012, the average price of prescriptions for subsidized drugs increased by 7,1% and amounted to 935 Rubles.

If the two parts of the program are considered separately, the share of sub-program on expensive drugs procurement is increasing. While the funding is declining: in 2012, it was at 37.8 billion Rubles, which is 1.5% less than in 2011 (Figure 16). The "7 nosologies" (high-cost nosologies) program is peculiar in that it covers a small number of beneficiaries - different data puts their number at about 100 thousand people. Thus, the HCN program allocates about 378 thous. Rubles per one beneficiary. In volume terms, consumption under the HCN program amounted to about 2.8 million packages, which is 1.6% lower than in 2011. Thus, based on the results of 2012, a tendency towards a reduced number of packages sold was observed (in the past 2 years, this indicator showed growth).

Figure 16



**Source:** DSM Group. **ISO 9001:2008**

Currently, the possibility of expanding the "7 nosologies" program is widely discussed: in 2014 it may include another 27 rare diseases affecting about 13 thous. people in Russia now. According to preliminary estimates of the Ministry of Health and Social Development, an additional 4.5 billion Rubles need to be allocated from the national budget to treat these diseases.

Another fundamental change which may affect the "7 nosologies" program is a bill that would allow the regional authorities, from 2014, to purchase drugs for people with rare diseases with the funds allocated from the federal budget (a

program similar to the EDRP). These measures will allow for prompt provision of required drugs to citizens. Today the Ministry purchases drugs once a year.

The EDRP program had 40.6 bln Rubles spent on it in 2012, which is 12.5% less than in 2011. Furthermore, the share of the EDRP sub-program in the total beneficiary drug coverage dropped from 55% to 52% (Figure 16). In volume terms, about 81.1 million packages were purchased, which is 14% less than in 2011. Thus, the average price per prescription was 500 Rubles, up from 2011 (492 Rubles).

## **1. Ratio of imported and domestic drugs the DRP program**

The DRP program includes mainly "imported drugs", while the domestic production takes only a modest place in the volume of the reimbursed drugs. According to the program Pharma-2020, the main task of the government is to dramatically change this situation: the ultimately targeted share of domestic products should be about 50%.

It is therefore no mere chance that the market, in particular, the subsidized drug coverage program, now exhibits a tendency toward a growing number of domestic products that can replace its imported counterparts.

Based on the results of 2012, the share of domestic products in value terms increased by 2% (Figure 17). The increase in cash costs for the purchase of domestic drugs was 12%, while the consumption of imported drugs decreased by 10%.

"Victory" of domestic drugs can be exemplified with INN ZOLEDRONIC ACID: in 2010, the share of imported drugs for this INN was 73%, in 2011, it was already 28%, and in 2012 it shrank to 14%. Imported drugs were driven out by domestic counterparts: RESORBA (ZAO PHARM-SINTEZ), ZOLERIKX (BIOCAD) RESOKLASTIN FS (SINTEZ AKO) and VEROKLAST (OOO LENS-PHARM)

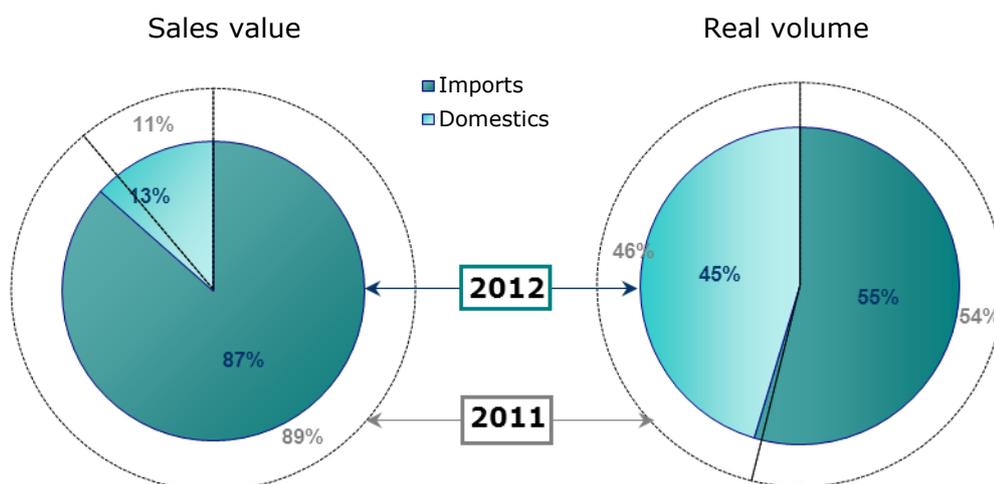
With respect to the HCN program, for subsidized pharmaceuticals, we can give an example of NOVOSEVEN (NOVO NORDISK) having been replaced with the domestic pharmaceutical COAGIL (LEKKO) with the same INN EPTACOG ALFA [ACTIVATED].

For the INN IMATINIB, most of the drugs are the imported drugs GLEEVEC (NOVARTIS) and GENFATINIB (LABORATORY TUTEUR S.A.C.I.F.I.A.), but this year, with the market launch of the new drug FILACHROMIN FS (ZAO F-SINTEZ), transition to the domestic pharmaceutical can be expected in the coming years.

As regards the INN INTERFERON BETA-1B, there has been an ever more marked shift from the imported pharmaceuticals BETA FERON (BAYER AG) and EXTAVIA (NOVARTIS) toward the domestic pharmaceuticals RONBETAL (ZAO BIOCAD) and INFIBETA (ZAO GENERIUM).

Figure 17

**Ratio of imported and domestic RTU drug sales**



**Source:** DSM Group. **ISO 9001:2008**

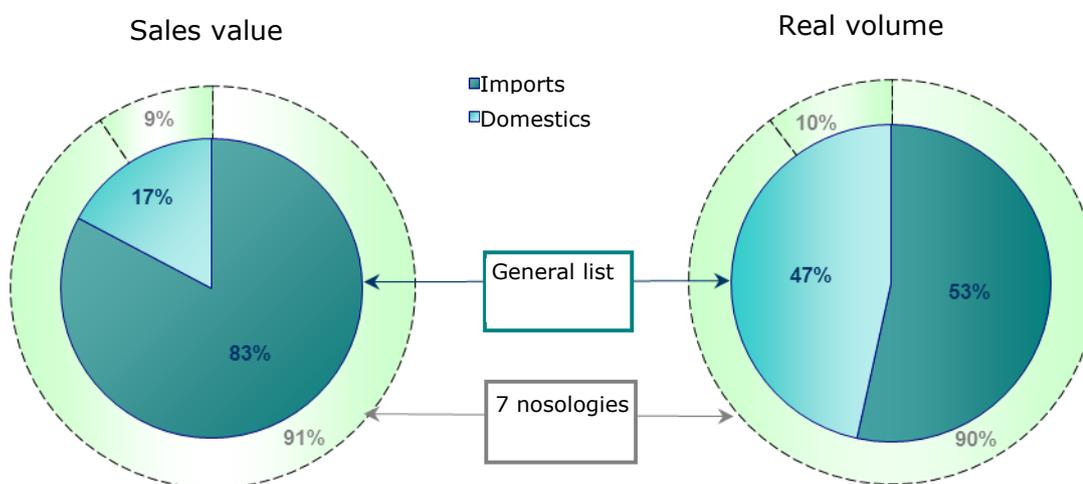
**Note:** the sales value shown is in final consumer prices with VAT included.

Thus, despite the positive trends, the ratio continues to favor imported drugs: the value share of imported drugs is 87%, and the value share of domestic drugs is 13%.

In volume terms, the share of domestic drugs reduced by 1% (a growth of -15%). If in 2011, it amounted to 46%, in 2012 it amounted to 45%. The share of imported drugs in packages increased by 1%.

The ratio of imported and domestic RTU drug sales under the "7 nosologies" program and the EDRP is shown in Figure 18. In the part of the DRP program corresponding to 7 high-cost nosologies, domestic drugs covered about 9% of the sales value in 2012. In volume terms, their share was about 10%. Furthermore, the share of domestic drugs increased by 2.5% compared to 2011. Bringing new drugs to market is not a quick process, so the share of Russian producers in subsidized programs will increase "in leaps and bounds."

### Ratio of imported and domestic RTU drug sales under the "7 nosologies" programs and EDRP



**Source:** DSM Group. **ISO 9001:2008**

**Note:** the sales value shown is in final consumer prices with VAT included.

Under the EDRP program, the share of Russian drugs amounts to about 17% in terms of money (+3.7% to 2011), and about 41% in terms of packages (-15% to 2011).

## 2. Proportion of Rx and OTC drugs within the DRP program

It is not a great surprise that the Rx drugs prevail in the DRP program both by sales value and by sales volume, as all these drugs are prescribed by physicians strictly according to the therapeutic indications.

In 2012, the share of Rx drugs in the DRP program sales value in Russia amounted to 98%, as in the previous year. Rx drug share by sales volume did not change, as compared to 2011, amounting to 88%.

## 3. Drug sales by ATC groups within the DRP program

The ratio of the Level-I ATC groups in pharmacy sales within the DRP program in 2012 in Russia is shown in Table 6.

### Drug sales by ATC groups on the DRP market

Level I ATC groups	Sales value, mln Rubles.	The group's share in sales value, %	Actual volume, million packs	The group's share in the actual volume, %
L: Antineoplastic and immunomodulating agents	37,837.1	48.3%	3.2	3.9%
A: Alimentary tract and metabolism	11,661.0	14.9%	18.3	21.9%
B: Blood and blood forming organs	10,766.3	13.7%	5.2	6.2%
R: Respiratory system	4,478.8	5.7%	5.4	6.4%
C: Cardiovascular system	3,504.4	4.5%	29.6	35.2%
N: Nervous system	3,476.5	4.4%	12.8	15.3%
H: Systemic hormonal preparations, excluding sex hormones	1,740.3	2.2%	1.2	1.4%
M: Musculo-skeletal system	1,368.2	1.7%	3.6	4.3%
J: Antiinfectives for systemic use	1,288.3	1.6%	0.9	1.1%
V: Various	873.2	1.1%	0.3	0.4%
[~] Pharmaceuticals without an ATC group	623.0	0.8%	0.2	0.2%
G: Genito-urinary system and sex hormones	451.7	0.6%	0.9	1.1%
S: Sensory organs	283.0	0.4%	2.0	2.4%
D: Dermatologicals	31.4	0.04%	0.3	0.3%
P: Antiparasitic products, insecticides and repellents	3.7	0.005%	0.01	0.01%

**Source:** DSM Group. **ISO 9001:2008**

**Note:** the sales value shown is in final consumer prices with VAT included.

The ATC rating by sales volume in accordance with the DRP program is quite stable.

Group [L] Antineoplastic and immunomodulating agents remain the most expensive item of the DRP program - in 2012 more than 48% of all allocated state funds were spent for their purchase. However, the purchase costs did not change significantly compared to the previous year in Rubles (-0.4%), but rose in packages

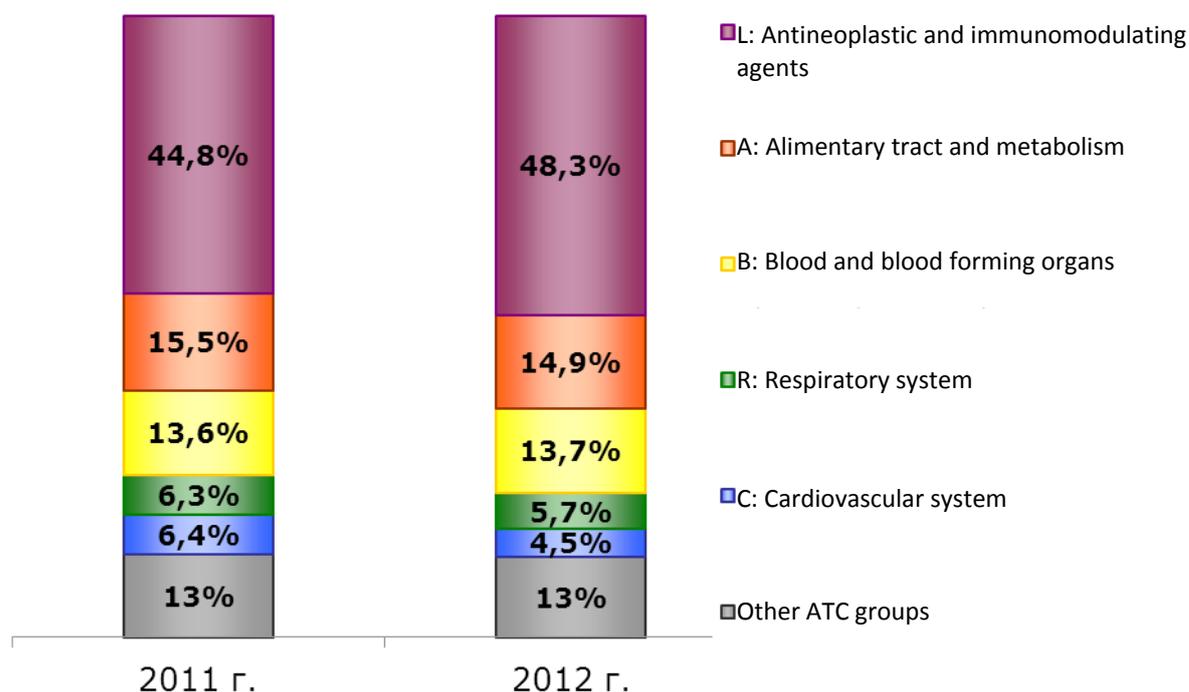
(+5.7%). Antineoplastic agents ([L01] and [L02]) of the latest generations have proven efficacy in the treatment of patients with oncological diseases, and improve the quality and length of life. The leaders in this ATC group are GLEEVEC, MABTHERA, VELCADE, averaging a price per package of 50 thousand rubles. Based on the results of 2012, only GLEEVEC sales increased, while those of MABTHERA and VELCADE fell.

Group [A] Alimentary tract and metabolism are in the second place in ATC group rating. In 2012, sales in this group fell by 11.4% in money terms, and by 6.4% in packages. Almost 72% of all sales in this group accounts for diabetes mellitus drugs ([A10]). The foreign-made drugs LANTUS and CEREZYME lead the sales in this group. The average price per pack for LANTUS is about 3,300 Rubles, and that for CEREZYME is about 70 thousand Rubles.

At the bottom of the rating is group [B] Blood and blood forming organs (13.7%). The tendency for this group was as follows: in terms of value, sales fall, while in real terms, they grow - 2012 was no exception (-6.3% in Rubles and 2.4% in packages). The most capacious subgroup in this ATC is [B02] HEMOSTATICS, accounting for 74% turnover. The prices went down due the replacement of the Danish hemostatic NOVOSEVEN with its Russian counterpart COAGIL-VII.

In 2012, the DRP structure by ATC groups did not change significantly compared to the previous year: the groups [C] and [R] traded places, but the five ATC leaders are the same, accounting for 87% of the ruble volume at the end of 2012 (Figure 19).

### Ratio of sales by ATC groups in the DRP program



**Source:** DSM Group. ISO 9001:2008

Group [L] Antineoplastic and immunomodulating agents still takes two fifths of the DRP sales, there is a significant increase in its share in value terms (+3.5%). This is the most expensive drug group in the DRP - the weighted average price per package is about 12,500 Rubles. At the end of 2012, sales value in Rubles declined in all 5 leading ATC groups. The groups [L] (-0,4%) and [B] (-6,3%) were affected to a lesser extent. The largest decline in sales was for group [C] (-35,7%). Positive growth in packages was observed only for the groups [L] and [B] of these TOP-5 ATC groups.

It is interesting to look at how much money is spent for treatment of specific disease under the DRP. To this end, we aligned the drugs to the therapeutic indications. The result is the following rating of costs in the DRP by disease (Table 7).

### Cost rating in the DRP by diseases, 2012

Diseases	Value, mln Rubles	Share
ONCOLOGY	28,160.9	35.9%
DISORDERS OF BLOOD AND HEMOPOIETIC ORGANS	10,771.9	13.7%
IMMUNE SYSTEM DISORDERS	10,270.5	13.1%
DIABETES MELLITUS	8,491.0	10.8%
RESPIRATORY DISORDERS	4,489.9	5.7%
CARDIOVASCULAR DISORDERS	3,504.5	4.5%
NERVOUS SYSTEM DISORDERS	3,246.6	4.1%
ALIMENTARY DISORDERS	3,002.2	3.8%
HORMONAL DISORDERS	1,742.6	2.2%
OTHER	1,549.3	2.0%
INFECTIOUS AGENTS DISEASES	1,549.3	1.5%
MUSCULOSKELETAL DISORDERS	1,085.6	1.4%
MALE AND FEMALE REPRODUCTIVE DISORDERS	451.7	0.6%
OCULAR DISORDERS	282.8	0.4%
AIDS/HIV	142.0	0.2%
SKIN DISEASES	36.0	0.05%

**Source:** DSM Group. **ISO 9001:2008**

**Note:** the sales volume shown is in final consumer prices with VAT included.

Oncology drugs rank first, accounting for 36% of the sales value of the entire DRP segment (about 28 billion Rubles). The largest value of purchases are for the drugs INN Imatinib (GLEEVEC), INN Rituximab (MABTHERA) and INN Bortezomib (VELCADE) added to the "high-cost 7 nosologies" as agents for treating patients with malignant neoplasms of the lymphoid, haematopoietic and related tissues. According to the Russian Ministry of Health and Social Development, cancer is the second cause of death in Russia after cardiovascular diseases. In 2009, the National Cancer Program started, which improved early diagnosis of neoplastic diseases and reversed the mortality from this pathology in Russia for the first time in several

decades. For example, in 2010 compared with 2009, mortality decreased by 0.9%, while in 2011 compared to 2010 it shrank a further 1.1%, which is the best result over the past 15 years. According to the Health Minister B. Skvortsova, in 2012 Russia had a decrease of mortality from all of the most significant diseases, with a steady decline in mortality from cancer.

At the end of 2012, in the sales rating, drugs for blood disorders overtook the agents for immune system disorders.

Of the agents for the disorders of blood and hemopoietic organs, the biggest sales were generated by the INN BLOOD COAGULATION FACTOR VIII (41,5%), INN EPTACOG ALPHA [ACTIVATED] (13.3%) and INN EPOETIN ALFA (10.3%). However, compared to 2011, their sales dropped significantly. Of the INN leaders, the INN BLOOD COAGULATION FACTOR IX retains positive growth (+99,4%) due to increased sales of the drugs IMMUNIN and OCTANINE added to the program "7 nosologies."

Drugs used to treat disorders of the immune system rank third, which translates to 13.1% of the purchase volume under the DRP (about 10.3 billion Rubles). In this group, the largest increase of costs was noted for drugs with immunomodulatory and immunosuppressive action.

As in the previous year, of the immunomodulating agents, the drug COPAXONE-TEVA (INN GLATIRAMER ACETATE) accounted for most spending, also at the end of 2012, GENFAXON and RONBETAL had leading positions. It should be noted that COPAXONE-TEVA (INN GLATIRAMER ACETATE) is listed as a drug used for the treatment of multiple sclerosis under the "7 nosologies" program. At the same time, the INN GLATIRAMER ACETATE is on the list of strategic drugs, manufacturing of which must start in this country in the near future. In 2012, the share of COPAXONE-TEVA declined as compared to 2011 (-25% in Rubles), while the sales of another drug for the treatment of multiple sclerosis GENFAXON increased (+77%).

Several immunosuppressants are used also to treat autoimmune diseases such as rheumatoid arthritis, Crohn's disease and so on. Their purchase costs also increased. So, one of the group leaders, the selective immunosuppressant REMICADE, which has already been mentioned above, is intended to treat these pathologies.

Thus, diseases that can be referred to high-cost nosologies are at the top of the DRP rating. At the end of 2012, the total share of the spending on the drugs for

these three groups amounted to over 60% of the entire DRP segment, or 50 bln Rubles.

#### 4. Manufacturers in the DRP segment

Table 8 lists the TOP 20 manufacturers that lead by consumption value in the DRP in 2012.

In 2012, over 421 manufacturers took part in the DRP program, which is more than in 2011. Of the manufacturers that took part in the DRP for the first time, SINNAGEN CO. leads by sales value. (205 mln.). Under the DRP program, this company supplies CINNOVEX, an ATC [L] drug for the treatment of multiple sclerosis. TEKHNOLOGIA LEKARSTV OOO, a company which produces antineoplastic agents (BICALUTAMIDE, ANASTROZOLE-TL and LETROZOLE), antimicrobial agents (VALACYCLOVIR in tablets) and drugs for the treatment of nervous system disorders (QUETIAPINE), is the second place of the "newcomers" in sales volume.

Table 8

#### TOP-20 RTU drug manufacturers by the consumption volume in the DRP program in 2012

Rating of 2012	Change	Manufacturer	Sales value, mln Rubles 2012	Sales value increase	Share
1	0	F.HOFFMANN-LA ROCHE	14,850.3	25.1%	18.9%
2	+1	JANSSEN PHARMACEUTICA	6,236.0	-11.4%	8.0%
3	-1	NOVARTIS	5,419.4	-42.4%	6.9%
4	0	TEVA PHARMACEUTICAL	3,901.8	-25.0%	5.0%
5	0	SANOFI	3,628.2	-8.3%	4.6%
6	+9	LABORATORY TUTEUR	3,563.0	154.9%	4.5%
7	0	BAXTER HEALTHCARE	2,905.2	-8.2%	3.7%
8	0	NOVO NORDISK	2,837.0	-8.6%	3.6%
9	0	MERCK	2,581.0	-11.2%	3.3%
10	-4	ASTRAZENECA	2,511.7	-24.0%	3.2%
11	-1	PHARMSTANDARD	2,418.9	-6.0%	3.1%
12	+33	F-SINTEZ	1,762.1	604.8%	2.2%
13	-1	ELI LILLY	1,419.3	-16.2%	1.8%
14	+3	BOEHRINGER INGELHEIM	1,333.6	1.3%	1.7%
15	-1	GENZYME CORPORATION	1,217.7	-15.3%	1.6%
16	+43	TALECRIS BIOTHERAPEUTICS	1,150.9	1006.9%	1.5%
17	+1	OCTAPHARMA AG	1,138.8	-1.2%	1.5%
18	-7	BAYER	1,061.0	-46.1%	1.4%

19	+1	ASTELLAS PHARMA INC	949.7	-0.3%	1.2%
20	-4	SERVIER	924.0	-30.0%	1.2%

**Source:** DSM Group. **ISO 9001:2008**

**Note:** *the sales value shown is in final consumer prices with VAT included.*

As in the past year, F.HOFFMANN-LA ROCHE led the manufacturers ranking. In 2012, the total amount of state funds spent for procurement of drugs produced by this company amounted to nearly 15 billion Rubles that is by 25,1% more than in 2011. The most costly drug, as in the past year, was MABTHERA, a drug based on monoclonal antibodies, (about 58% of all drugs in value terms), with its purchases gaining 51.4%.

In 2012, despite the negative sales growth, JANSSEN PHARMACEUTICA overtook NOVARTIS, taking the second place and moving NOVARTIS down to the third place. This was possible due to a substantial drop in NOVARTIS sales (-42,4% compared to 2011), largely because of shrinking sales of the antineoplastic drug GLEEVEC (-47% compared to 2011). Furthermore, the DRP expanded to include JANSSEN PHARMACEUTICA pharmaceuticals, such as the transdermal therapeutic system for the treatment of pain syndrome DUROGESIC MATRIX, the neuroleptic XEPLION, the drug for treatment for psoriasis STELARA, etc.

Table 9 shows the top manufacturers participating in the "7 nosologies" program and EDRP.

**TOP-20 drug manufacturers by sales in the DRP segment in accordance with the "7 nosologies" and EDRP programs**

7 nosologies			EDRP		
Rating of 2012	Manufacturer	Sales value, mln Rubles 2012	Ranking 2012	Manufacturer	Sales value, mln Rubles 2012
1	F.HOFFMANN-LA ROCHE	9,895.3	1	F.HOFFMANN-LA ROCHE	4,954.9
2	JANSSEN PHARMACEUTICA	5,110.0	2	SANOFI	3,628.2
3	NOVARTIS	4,241.6	3	NOVO NORDISK	2,812.3
4	LABORATORY TUTEUR	3,123.7	4	MERCK	2,567.0
5	TEVA PHARMACEUTICAL	3,010.7	5	ASTRAZENECA	2,511.7
6	BAXTER HEALTHCARE	2,873.7	6	ELI LILLY	1,410.9
7	PHARMSTANDARD	1,731.4	7	BOEHRINGER INGELHEIM	1,333.6
8	F-SINTEZ	1,132.7	8	NOVARTIS	1,177.8
9	GENZYME CORPORATION	1,122.4	9	JANSSEN PHARMACEUTICA	1,126.0
10	TALECRIS BIOTHERAPEUTICS	1,101.6	10	SERVIER	924.0
11	OCTAPHARMA	925.0	11	TEVA PHARMACEUTICAL	891.1
12	BAYER	808.7	12	FRESENIUS	840.8
13	ASTELLAS PHARMA	614.9	13	KRKA	726.3
14	BIOTEST PHARMA	588.9	14	PHARMSTANDARD	687.5
15	BIOCAD	529.6	15	GLAXOSMITHKLINE	647.6
16	CSL BEHRING	454.7	16	F-SINTEZ	629.4
17	SINNAGEN	204.9	17	FARMFIRMA SOTEX	594.3
18	GENERIUM	120.8	18	ABBOTT	537.4
19	PANACEA BIOTEC	78.3	19	FARM-SINTEZ (MOSCOW)	535.9
20	VEROPHARM	39.6	20	VEROPHARM	524.6
Total		99.8%	Total		71.6%

Source: DSM Group. ISO 9001:2008

6 companies from TOP 20 were included in this ranking of manufacturers participating in the "7 nosologies" program under the common list: F.HOFFMANN-LA ROCHE LTD, JANSSEN PHARMACEUTICA NV, NOVARTIS, TEVA PHARMACEUTICAL INDUSTRIES LTD, PHARMSTANDARD OAO and F-SINTEZ ZAO. F.HOFFMANN-LA ROCHE LTD ranked first both in the "7 nosologies" program and in the EDRP. It is worth noting that the TOP 20 companies in the HCN rating include 5 domestic producers: PHARMSTANDARD OAO, F-SINTEZ ZAO, BIOCAD ZAO, GENERIUM ZAO and VEROPHARM OAO, more than in 2011. It also evidence of the trend to substitute imports and increase the volume of domestic production.

## 5. DRP segment drugs

Table 10 shows TOP 20 brands leading by sales value in the DRP in 2012.

**Top 20 brands by sales value  
in the DRP in 2012**

Rating of 2012	Change	Brand name	Manufacturer	Sales value, mln Rubles 2012	Sales value increase	Share
1	+1	MABTHERA	F.HOFFMANN-LA ROCHE	8,581.2	51.4%	10.9%
2	+1	VELCADE	JANSSEN PHARMACEUTICA	5,110.0	-7.7%	6.5%
3	-2	GLEEVEC	NOVARTIS	3,315.9	-46.8%	4.2%
4	0	COPAXONE-TEVA	TEVA PHARMACEUTICAL	2,878.5	-24.6%	3.7%
5	0	LANTUS	SANOFI	2,403.9	1.6%	3.1%
6	+4	GENFAXON	LABORATORY TUTEUR.	2,306.7	77.3%	2.9%
7	0	HERCEPTIN	F.HOFFMANN-LA ROCHE	1,954.7	16.3%	2.5%
8	+1	REMICADE	CENTOCOR	1,672.4	21.4%	2.1%
9	-1	COAGIL	LEKKO FF	1,435.6	-13.6%	1.8%
10	+4	PULMOZYME	F.HOFFMANN-LA ROCHE	1,184.7	8.2%	1.5%
11	new	FILACHROMIN FS	F-SINTEZ	1,132.7	new	1.4%
12	-1	CEREZYME	GENZYME CORPORATION	1,122.4	-12.6%	1.4%
13	+126	KOATE-DVI	TALECRIS BIOTHERAPEUTICS	1,101.6	1,242.8%	1.4%
14	+1	AVASTIN	F.HOFFMANN-LA ROCHE	0.1	6.0%	1.2%
15	-2	HUMULIN	ELI LILLY	966.8	-14.8%	1.2%
16	+53	IMMUNATE	BAYER	913.7	302.1%	1.2%
17	+2	KETOSTERIL	EVALAR	838.2	6.6%	1.1%
18	new	GENFATINIB	LABORATORY TUTEUR	806.9	new!	1.0%
19	-2	SYMBICORT	ASTRAZENECA UK	774.7	-6.4%	1.0%
20	-4	OCTANATE	OCTAPHARMA	757.4	-9.8%	1.0%

**Source:** DSM Group. **ISO 9001:2008**

**Note:** the sales volume shown is in final consumer prices with VAT included.

The value of sales for the top 20 brands in 2012 amounted to 51.3% of the sales value, which is 3.7% less than in 2011.

In 2012, MABTHERA became the new leader in brands, with a share of 10.9%. VELCADE moved up to the second place with a share of 6.5%. But the leader of the previous year, Gleevec, went down 2 positions to the third place with a share of 4.2%.

Two new players in the rating should be noted - hemostatic agents for the treatment of hemophilia and other diseases associated with blood-clotting disorder

- KOATE-DVI (TALECRIS BIOTHERAPEUTICS INC and BAYER AG) and IMMUNATE (BAXTER HEALTHCARE CORP).

New drugs made it to the DRP rating - drugs for the treatment of leukemia FILACHROMIN FS (F-SINTEZ ZAO) and GENFATINIB (LABORATORY TUTEUR S.A.C.I.F.I.A).

The weighted average price for the TOP 20 brands is very high - more than 8,592 Rubles per package. The most expensive drug was the drug for the treatment of such an orphan disease as Gaucher disease, CEREZYME (about 72,000 Rubles), the "cheapest" drug was HUMULIN (about 722 rubles.), a genetically engineered human insulin.

Most TOP 20 drugs and the three leaders belong to group [L] Antineoplastic and immunomodulating agents (10 brands). ATC [B] Disorders of blood and hemopoietic organs have the second place by this measure.

Most drugs in this rating are drugs provided under the "7 nosologies" program. The hypoglycemic LANTUS, which ranks 5th in the TOP-20 list, is the leader of the general list of subsidized drugs.

## **6. Segments by price in the DRP**

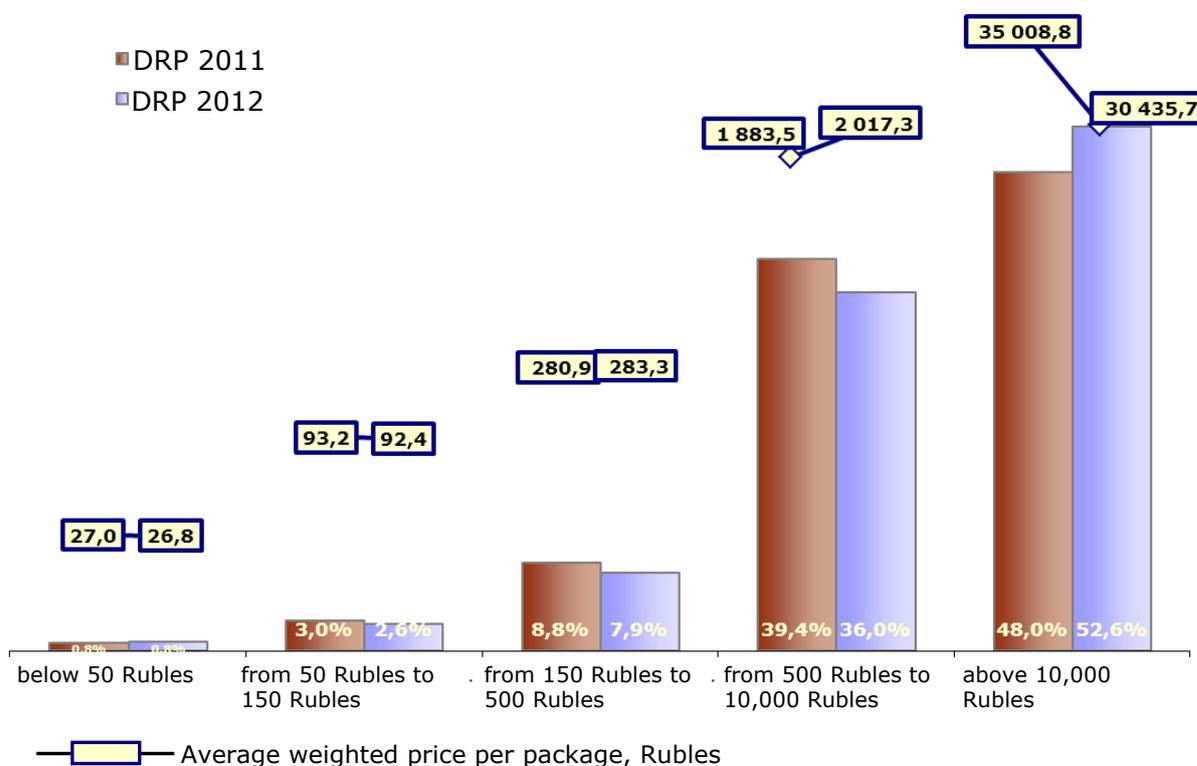
As was mentioned above, in 2012, the average cost per package in the DRP continued to grow and amounted to about 935 rubles. It should be noted that such impressive result is observed neither in the commercial segment of the market, nor in hospital procurement.

Since the DRP was introduced, the price structure in this market segment has been continuously changing to feature expensive drugs more prominently. At the end of 2012, the segment of expensive drugs priced from 500 Rubles took up 89% of the sales value.

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

As is clear from the Figure, the average cost per package in the segments has remained virtually the same, except for the expensive drug segment priced above 10,000 Rubles. In the latter segment, the average price fell compared with the previous year and amounted to about 30 thousand Rubles.

### Value of sales under the DRP according to price segments



**Source:** DSM Group. ISO 9001:2008

**Note:** the sales value shown is in final consumer prices with VAT included.

It should be noted that the drugs included to the HCN are presented mainly in the segments from 500 rubles per package - they cover 99.9% of the sales value. 77% of sales are covered by drugs priced over 10,000 rubles.

EDRP sub-program drugs are mostly concentrated in the segment priced from 500 rubles to 10,000 rubles - more than 48%. The segment priced over 10,000 rubles also covers a large sales value of 30%. This segment includes such sales leaders as the hypoglycemic agent LANTUS (the weighted average price per package is more than 3,346 rubles) and the antineoplastic drug HERCEPTIN (the weighted average price package is around 67 thous. Rubles), and the immunosuppressant REMICADE (39 thous. Rubles).

## **4. Sales value in the segment of health care institutions (HCI)**

Since 2011, Russia has pursued an active health system modernization program. The main task of the modernization program is to raise medicine to a new level. To make it affordable and high quality, and not only in the regional capital, but also in the province. At the same time, doctors should provide treatment and prevention. Morbidity is expected to decline and life expectancy - to increase.

The implementation of the modernization program seeks to achieve the following objectives:

1. Reinforce the physical infrastructure of medical institutions.
2. Introduce modern information systems in health care.
3. Implement standards of health care delivery.

460 billion Rubles was allocated to implement the program. In 2011, the federation units used only about 20% of the allocated amount. Active spending came in the second half of 2012. Still, the program is not fully implemented. By the end of the year, 70% of the budgeted money had been used. 8% of health care providers did not complete overhaul. Only 12.7% of the HCI's in the plan finished the full scope of medical equipment deliveries. There are only 3 units of the Russian Federation not connected to the Unified Doctor Appointment Registration System.

The plan is to continue with the health care system modernization in 2013.

As part of and in connection with the program implementation, we have observed steady growth of the HCI segment in recent years, as well as a qualitative change in the structure of purchased drugs. At the end of 2012, the market for this segment grew by 11.7% in Ruble terms (compared to 2011) and amounted to 157 billion Rubles. In volume terms, the volume of drugs purchased in 2012 amounted to about 1.1 billion packages, which is also 8.3% higher than in the previous year.

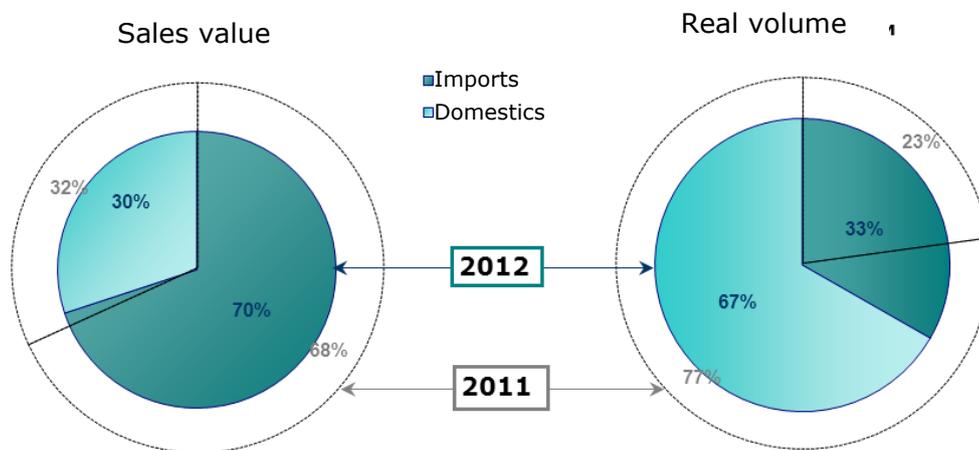
Let us consider the basic pharmacoeconomic indicators of the hospital procurement segment.

The cost of one RTU drug package purchased by an HCI amounted to an average of 143 rubles. Compared to 2011, the increase of average price of package in the HCI segment was about 3.1%.

As in the previous year, in the HCI segment, imported products accounted for the largest share by sales value, while domestic drugs lead by volume in packages. Thus, in volume terms, two times as much domestic drugs, as the cheaper ones, are procured compared to imported drugs. Domestic drugs take up about 30% of the money volume and 67% in volume terms. Nonetheless, compared to 2011, their share in sales value, and especially in physical volume decreased (Figure 21), while the share of imported drug procurement in 2012 increased.

Figure 21

**Ratio of imported and domestic RTU drug sales**



**Source:** DSM Group. **ISO 9001:2008**

**Note:** the sales value shown is in final consumer prices with VAT included.

The imported drugs procurement in 2012 grew in rubles by 15%, and that of domestic drugs - by 6%. In volume terms, the volume of imported drug procurement was up 58%, while the volume domestic drug procurement fell by 6%.

A package of an imported drug costs almost 5 times as much as a package of a domestic drug purchased by HCI's: in 2012, one imported RTU drug package on average cost 299 Rubles, a domestic package cost 64 Rubles. Compared with the previous year, the gap between the cost of an imported package and a domestic package narrowed: in 2011 imported drugs were 7 times as expensive as domestics. Compared to 2011, the cost of a purchased imported drug package fell by 27.5%, and one domestic package in 2012 cost the hospitals 12.8% more. Thus, in 2012, HCI's purchased more imported drugs though of the cheaper variety (than

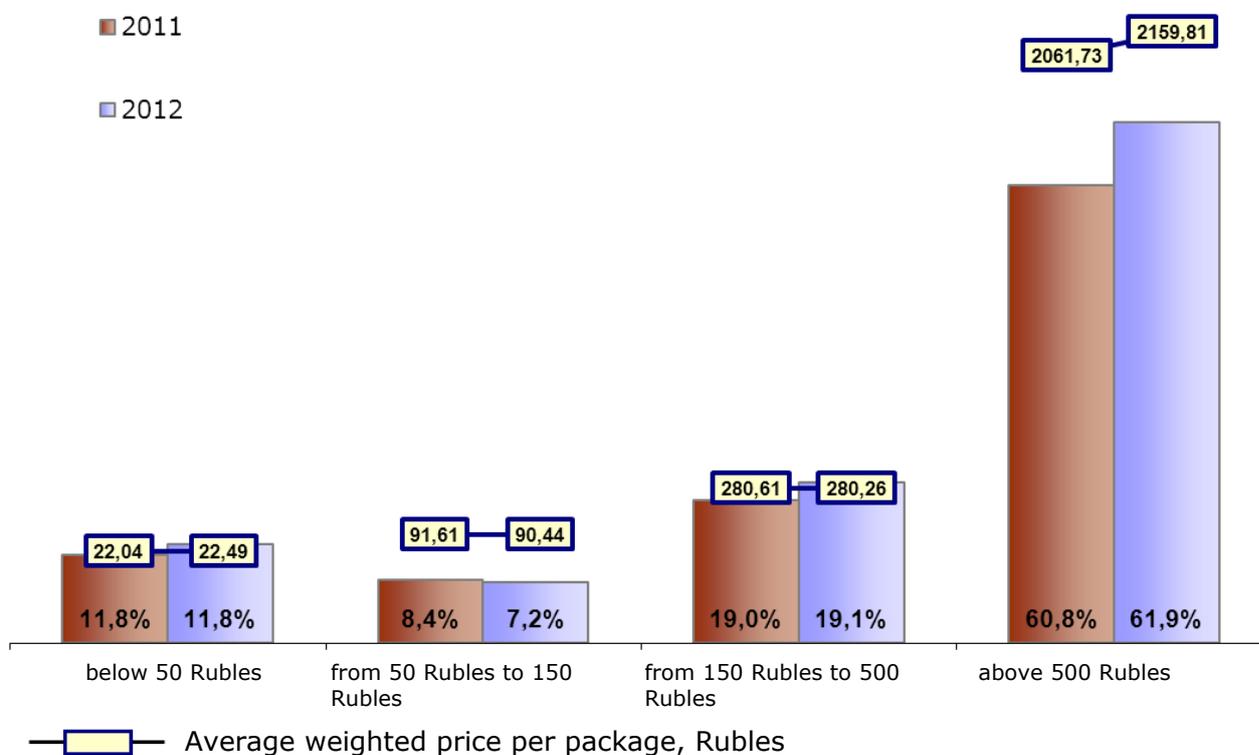
in the previous year) and fewer domestic drugs though of the more expensive variety (as compared to 2011).

The structure of HCI segment by price category is shown in Figure 22.

Sorting the drugs into price categories revealed that in 2012 all segments showed an increase in sales value, with the exception of the 50 to 150 Ruble segment, where the procurement volume shrank by 4%.

Figure 22

### Structure of HCI segment by price category in 2011 and 2012



Source: DSM Group. ISO 9001:2008

Note: the sales value shown is in final consumer prices with VAT included.

The most capacious segment is the segment of drugs priced above 500 Rubles, and its share increased by almost 1% due to reduced procurement volumes in the 50 to 150 Ruble segment. In 2012, it took about 61.9% of the sales value of the HCI sector sales value, and only 4.1% in volume terms. Note that the average cost of one package in the segment priced above 500 rubles is about 2160 Rubles,

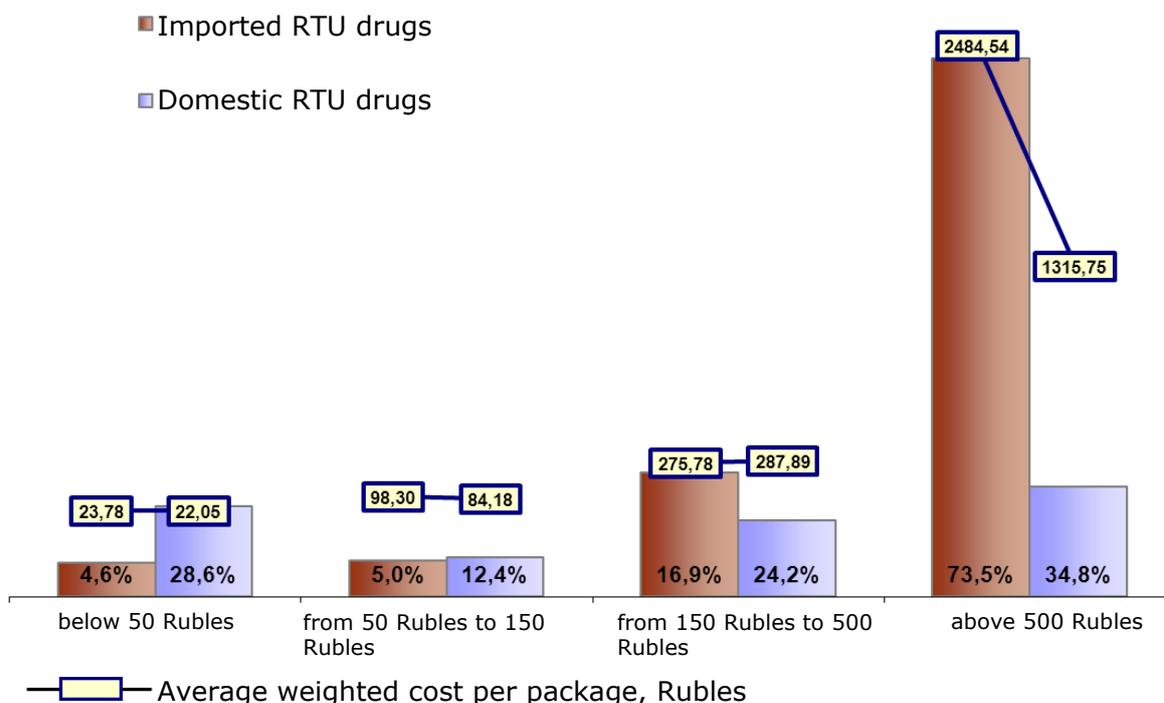
which is almost 15 times higher than the average price of all RTU drugs in hospital purchases.

In natural volume terms, the segment of pharmaceuticals priced below 50 Rubles is the most capacious - its share amounts to 74,8%. This is because hospitals purchase large quantities of domestic solutions such as SODIUM CHLORIDE, GLUCOSE, CEFAZOLIN, etc. These 3 brand account for about 33% of the total hospital procurement in volume terms.

As seen in Figure 23, of the imported drugs, the drug segment priced above 500 Rubles has the largest share. (73.5%). Domestic products are equally concentrated in the price categories "below 50 Rubles" (28.6%) and "from 150 to 500 Rubles" (24.2%), 12.4% falls within the segment "from 50 to 150 Rubles", and the largest sales volume amounting to 34.8% falls within the segment "above 500 Rubles".

Figure 23

**Structure of HCI segment by price category for imported and domestic drugs in 2012**



Source: DSM Group. ISO 9001:2008

Note: the sales value shown is in final consumer prices with VAT included.

If in the segments with the cost of a package below 500 Rubles the difference between the weighted average price of imported and domestic drugs is not as noticeable, in the most capacious segment "above 500 rubles", imported drugs are almost 2 times as expensive as domestics.

The ratio of RTU drug hospital procurement by Level I ATC group in Russia for 2012 is shown in Table 11.

The HCI segment drug rating by ATC group considerably differs from the commercial market. The three leading ATC groups did not change compared to 2011. The undisputed leader in hospital purchases is group [J] Anti-infectives for systemic use. If in 2011 this group showed a decrease in sales value compared to the previous similar period, by the end of 2012, this group showed the greatest increase in sales of all ACT Level I groups, both in rubles (+45%) and in packages (21%).

Sales growth in group [J] was mainly due to increased hospital procurement of antivirals for systemic use [J05] (+73% in Rubles) and drugs for treatment of tuberculosis [J04] (+77% in Rubles). Positive growth was observed for the most capacious sub-segment of group [J] - [J01] antibacterials for systemic use (+34%). The total share in rubles for these 3 subgroups was approximately 83.6%.

An increase in purchases in subgroup [J05] mostly affected drugs for the treatment of the HIV infection, such as KALETRA, PREZISTA, REYATAZ, ISENTRESS, etc.

### Structure of RTU drug hospital procurement by ATC group in 2012

Level I ATC groups	Sales value, mIn Rubles	The group's share in sales value, %	Actual volume, million packs	The group's share in the actual volume, %
J: Antiinfectives for systemic use	58,831.0	37.4%	360.1	32.6%
B: Blood and blood forming organs	30,629.6	19.5%	387.8	35.2%
L: Antineoplastic and immunomodulating agents	17,965.8	11.4%	11.5	1.0%
N: Nervous system	14,889.9	9.5%	101.2	9.2%
A: Alimentary tract and metabolism	11,379.3	7.2%	77.0	7.0%
C: Cardiovascular system	6,457.9	4.1%	52.3	4.7%
V: Various	3,836.6	2.4%	9.2	0.8%
M: Musculo-skeletal system	3,683.1	2.3%	21.0	1.9%
R: Respiratory system	3,406.0	2.2%	29.3	2.7%
H: Systemic hormonal preparations, excluding sex hormones	2,208.6	1.4%	14.5	1.3%
G: Genito-urinary system and sex hormones	1,710.6	1.1%	3.0	0.3%
D: Dermatologicals	1,006.7	0.6%	29.1	2.6%
S: Sensory organs	898.9	0.6%	5.6	0.5%
[~] Pharmaceuticals without an ATC group	327.8	0.2%	1.2	0.1%
P: Antiparasitic products, insecticides and repellents	36.5	0.02%	0.3	0.03%

**Source:** DSM Group. **ISO 9001:2008**

**Note:** the sales value shown is in final consumer prices with VAT included.

In subgroup [J04], the largest share of purchases fell to antibiotics [J04AB] and aminosalicic acid and derivatives [J04AA]. These subgroups account for more than 80% in Rubles and also showed the greatest gains compared to 2011: for [J04AB] +104%, and for [J04AA] +89%. High growth in subgroup [J04] is mainly due to increased procurement of AMINOSALICYLIC ACID, drugs for treatment of tuberculosis TERIZIDONE and CAPREOSTAT, etc.

Sales of the most capacious subsegment in group [J] - Antibacterial drugs for systemic use [J01], which accounted in 2012 for 45% of the value of procurement

in the entire subgroup [J01], compared to 2011, consolidated their positions and rose in Rubles (+34%) and packages (+14%). Of the procurement leaders in this subsegment, most sales growth was identified for the brands CEFTRIABOL, AVELOX, LEVOFLOXACIN, CEFOGRAM, etc., and the best-selling brand in [J01] - the carbapenem antibiotic MEROPENEM - showed a 31% decline in purchases.

If in 2011, the sub-segment of vaccines [J07] was noted for one of the most significant drops in purchases, in 2012 it showed an increase in sales compared to the previous period. Thus, purchases of myelitis vaccines increased, particularly for POLIORIX, which led to a high gain in the subsegment. In addition to the myelitis vaccines (17.2% share in [J07], gain of +211%), the leaders in the subgroup in procurement volume are hepatitis vaccines (18.9% share in [J07], gain of +26%) and rabies vaccines (12.7% share in [J07], gain of +11%)

Based on the results of 2012, group [B] Blood and blood forming organs took the second place in the ATC group rating in the hospital segment. Compared to 2011, the number of purchased drug packages of this group increased by 21%, and HCI spending for procurement - by 14%. The largest volume of funds falls to the drugs in subgroup [B05] Plasma substitutes and perfusion solutions (a share of 55% in Rubles in group [B]). The most "procured" drug, as in 2011, continues to be SODIUM CHLORIDE which is widely used as a solvent for many drugs administered by injection and infusion.

Group [L] Antineoplastic and immunomodulating agents ranks third. Compared with the previous year, procurement of drugs in this group decreased by 13% in money terms and by 6% in packages. The most capacious subgroup continues to be [L01] Antineoplastic agents which account for 70% of the total costs across the subgroup. While drugs based on the INN Docetaxel led INN purchases in money terms and the situation here changes every year, in volume terms in 2012, as well as for the previous years, at the top of group [L] is the antineoplastic drugs INN CYCLOPHOSPHAMIDE with a share of 23% which have a low price (about 48 Rubles per package).

Table 12 ranks the TOP 20 manufacturers in the HCI segment based on the results of 2012.

**TOP 20 manufacturers in the HCI segment based on the results of  
2012**

Rating of 2012	Change	Manufacturer	Sales value, mln Rubles 2012	Sales value increase	Share
1	+1	GLAXOSMITHKLINE	8,758.5	24.9%	5.7%
2	-1	SANOFI	7,890.0	-2.7%	5.1%
3	+6	ABBOTT	7,036.1	138.7%	4.6%
4	-1	F.HOFFMANN-LA ROCHE	5,314.5	-13.5%	3.4%
5	-1	MERCK	5,242.3	3.8%	3.4%
6	-1	NOVARTIS	4,371.5	-10.8%	2.8%
7	+1	TAKEDA	4,309.5	36.1%	2.8%
8	-2	ASTRAZENECA	3,731.7	-11.7%	2.4%
9	+11	JANSSEN PHARMACEUTICA	3,156.1	70.9%	2.0%
10	+5	ABOLMED	3,069.4	35.0%	2.0%
11	+19	KRASFARMA	2,962.1	116.9%	1.9%
12	+7	MICROGEN	2,938.9	47.8%	1.9%
13	-1	PFIZER	2,658.0	-4.2%	1.7%
14	-4	BIOTEC MFDPK	2,552.8	-11.1%	1.7%
15	-4	TEVA PHARMACEUTICAL	2,486.7	-12.3%	1.6%
16	0	SINTEZ AKO	2,381.3	9.8%	1.5%
17	-10	VEROPHARM	2,327.7	-29.5%	1.5%
18	-5	GEDEON RICHTER	2,311.5	-6.7%	1.5%
19	+2	BAYER	2,207.2	28.0%	1.4%
20	-3	BRISTOL-MYERS SQUIBB	2,169.2	1.5%	1.4%

**Source:** DSM Group. **ISO 9001:2008**

**Note:** the sales value shown is in final consumer prices with VAT included.

If in the previous two years, the three leaders in the manufacturer's rating had been the same, 2012 brought about serious changes. GLAXOSMITHKLINE took the first place in 2012, with a share of 5.7%, ahead of its nearest rival in the past year - SANOFI-AVENTIS (5.1% share). GLAXOSMITHKLINE was in the first place thanks to substantially increased (3000-fold) procurement of the myelitis vaccine POLIORIX and of the brands for the treatment of the HIV infection - ZIAGEN, EPIVIR 3TC, TELZIR, the anticoagulant FRAXIPARINE and other brands.

ABBOTT ranked third with a share of 4.6%, having moved 6 lines up and demonstrated the strongest sales growth of the TOP-10 manufacturers (138.7%). ABBOTT made it to the top three companies by acquiring SOLVAY PHARMA back in 2011. ABBOTT significantly reinforced its positions, including the hospital procurement segment, thanks to the merger and revision of the portfolios of the

two companies. In addition, some of the company's drugs generated substantially increased sales. The leading hospital purchase is KALETRA, a drug for the treatment of the HIV infection. It experienced a 8.5-fold increase in procurement, compared to the previous year. PROPOFOL, a drug for general anesthesia, generated 20x more sales, and the antiviral drug SINAGIS generated 4x more sales.

Compared to the previous year, the TOP-20 rating now includes JANSSEN PHARMACEUTICA (+11 positions and 9th place) and KRASFARMA (+19 positions and 11th place). These companies showed the strongest growth in hospital purchases: +70.9% and +116.9%, respectively.

KRASFARMA's high gain was due to increased purchases of drugs such as LEVOFLOXACIN (23x increase), VANCOMYCIN (75x increase), and CEFUROXIME (125x increase).

JANSSEN PHARMACEUTICA showed +70.9% growth in Rubles mainly due to increased purchases of drugs for the treatment of the HIV infection - PREZISTA (3.8x increase) and INTELENCE (3.5x increase).

The maximum decline in purchases, as compared to 2011, was noted for VEROPHARM (-29.5%) which "rolled back" in the ranking from the 7th to the 17th place. This significant decline was because hospitals reduced purchases of some of the core drugs produced by the company. These are mostly the antineoplastic drugs, such as PACLITAXEL, TAUTAX, DOXORUBICIN-LENS, VERO VANCOMYCIN, etc.

Thus, compared to 2011, the reason for the changed positions of the manufacturers was largely the increased purchases of drugs for the treatment of the HIV infection, as well as anti-TB drugs, and reduced purchases of antineoplastics. Importantly, as regards the HIV drugs, instead of growing purchases we should rather talk of recovering the necessary level of coverage provided by these drugs that was lowered in the previous year.

Table 13 ranks the TOP 20 brands in the HCI segment based on the results of 2012.

---

**TOP 20 brands in the HCI segment based on the results of 2012**


---

Rating of 2012	Change	Brand name	Sales value, mln Rubles 2012	Sales value increase	Share
1	0	SODIUM CHLORIDE	7,463.7	45.0%	4.7%
2	+46	KALETRA	3,860.3	749.8%	2.5%
3	-1	COMBIVIR	2,100.2	-1.0%	1.3%
4	+1	CLEXANE	1,947.7	21.5%	1.2%
5	+1	VACCINE	1,852.9	19.4%	1.2%
6	+24	CAPREOMYCIN	1,798.6	214.3%	1.1%
7	+50	PREZISTA	1,546.0	284.7%	1.0%
8	+6	ALBUMIN	1,494.7	70.7%	1.0%
9	-2	GLUCOSE	1,473.6	-2.4%	0.9%
10	-7	HEPARIN	1,353.8	-28.3%	0.9%
11	-1	ACTOVEGIN	1,304.0	14.9%	0.8%
12	-8	MERONEM	1,160.2	-31.4%	0.7%
13	-2	KIVEXA	1,154.4	9.3%	0.7%
14	+76	CEFTRIABOL	1,129.3	283.6%	0.7%
15	+29	ISENTRESS	1,122.2	138.3%	0.7%
16	-3	CEFTRIAXONE	1,104.8	23.9%	0.7%
17	-2	FRAXIPARINE	1,019.4	23.1%	0.6%
18	+56	AVELOX	979.5	194.0%	0.6%
19	-10	IMMUNOGLOBULIN	934.7	-23.3%	0.6%
20	+16	REYATAZ	907.2	71.5%	0.6%

**Source:** DSM Group. **ISO 9001:2008**

**Note:** the sales value shown is in final consumer prices with VAT included.

SODIUM CHLORIDE - a solvent for a number of injection and infusion formulations - was in the first place in the hospital brand ranking, as in the previous periods. The share of the brand is the highest in the HCI segment, amounting to 4.7%. KALETRA with a share of 2.5% is in second place in the ranking of most purchased brands. The strongest procurement growth was noted for this drug. As noted above, it is largely thanks to this brand that ABBOTT was able to become one of the top three companies in the hospital segment, based on the results of 2012. The drug COMBIVIR manufactured by GLAXOSMITHKLINE is in the third place.

The share of the TOP 20 brands in the hospital purchases is about 23%. Importantly, the rating includes both expensive imported drugs, and cheap domestic products (SODIUM CHLORIDE, GLUCOSE).

Compared to 2011, the 2012 rating has six new brands, including three antiviral drugs for the treatment of the HIV infection - PREZISTA, ISENTRESS, REYATAZ, and three antimicrobial agents: for the treatment of tuberculosis

(CAPREOMYCIN), diseases of the respiratory system (AVELOX) and the broad spectrum cephalosporin antibiotic CEFTRIABOL.

## 5. Nutritional supplements

Nutritional supplements (NS) in pharmacies and on the Russian market have long been a recurring issue in debates. Periodically, proposals are tabled to tighten control over the circulation of nutritional supplements. Still another wave came at the end of 2012.

To prevent the convergence of nutritional supplements and drugs under the same brand name, the Federal Antimonopoly Service proposed that the Ministry of Health register nutritional supplements in the same way as drugs. In that case, manufacturers of supplements would have to spend millions of dollars on clinical trials, and the time of the registration procedure would increase to 1.5 to 2 years. The FAS has argued for several years on the advisability of regulating nutritional supplements with the law On Circulation of Drugs. Today, however, the market offers products that are positioned as both drugs and supplements, which misleads consumers.

The All-Russian Public Opinion Research Center (VTsIOM) presented data<sup>3</sup> on the level of awareness the Russians have with respect to nutritional supplements, and on how widespread the use of nutritional supplements among our fellow citizens is. For most Russians, a nutritional supplement is an addition to food. 60% of the respondents think so. 16% of the respondents say that nutritional supplements are vitamins. Only 5% of respondents believe that nutritional supplements are drugs.

Every fourth Russian takes nutritional supplements with varying degree of frequency. Every tenth respondent occasionally consumes supplements (only subject to deterioration of health), one in five respondents takes nutritional supplements seasonally, and 6% follow a regimen. Only 2% do so on a regular basis.

Where to sell nutritional supplements is another topic for debate. Many legislators believe that nutritional supplements should be removed from pharmacies and sold in special sectors of stores. And the Russian State Duma will soon consider appropriate amendments to the laws.

---

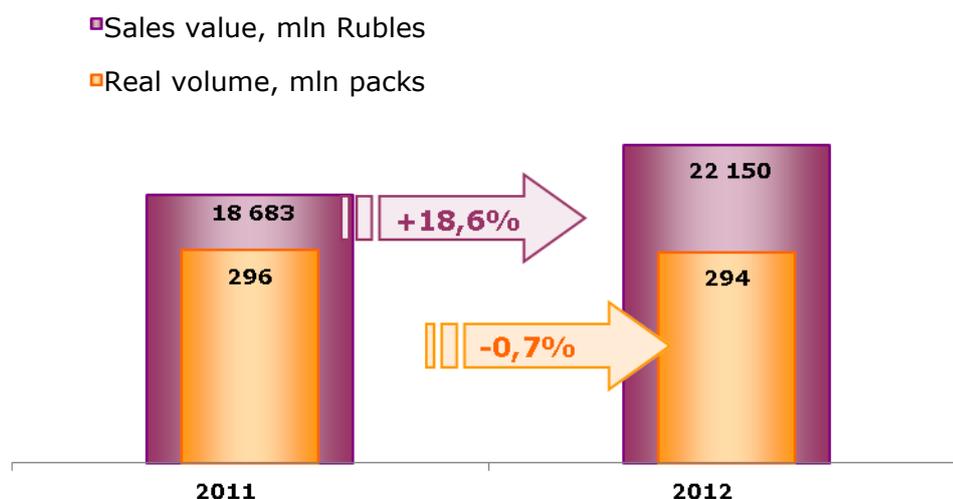
<sup>3</sup> The All-Russian opinion poll was conducted December 1-2, 2012 among 1,600 people in 138 villages in 46 regions and republics of Russia.

As of now, most of the Russians who take nutritional supplements buy them at pharmacies (70%). And we hope that this situation will not change.

As can be seen from Figure 24, in 2012 pharmacies sold about 294 million packages of nutritional supplements for a total of about 22.2 billion Rubles in wholesale prices and 29.8 billion Rubles in retail prices. The growth in value terms (in pharmacy purchase prices) amounted to 18.6%, sales in packages slightly declined, compared to 2011 (-0.7%). Thus, we can conclude that the observed increase in sales in Rubles is exclusively due to growing prices for nutritional supplements. So, if in 2011, the cost per one conditional package of a nutritional supplement was 63.1 Rubles, in 2012, it was 75.7 Rubles, which is 19.9% higher.

Figure 24

### Sales of nutritional supplements in Russia in 2011-2012

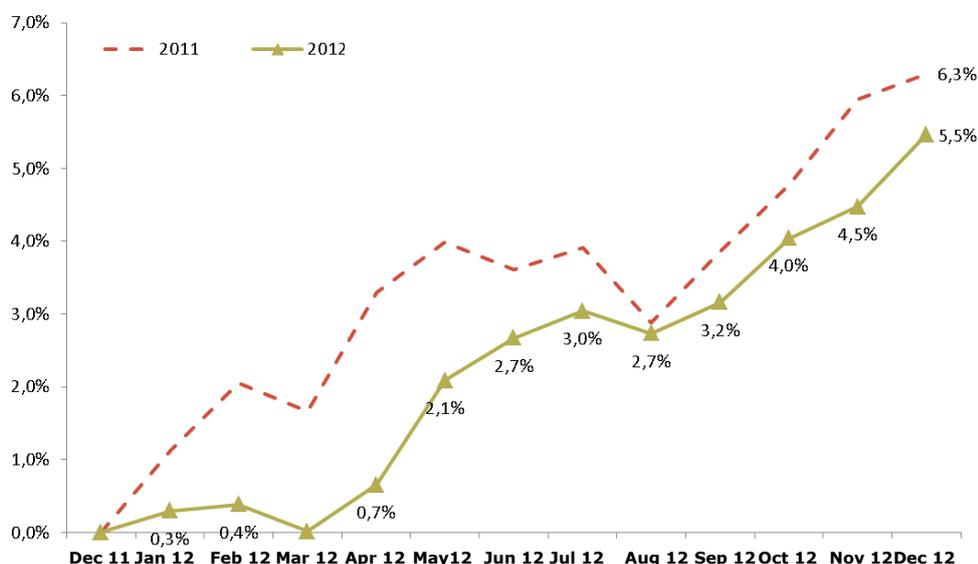


**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

**Note:** Sales value are given in pharmacy purchase prices, VAT included.

NS price dynamics was analyzed using the Laspeyres price index (Figure 25).

### Change in NS prices on Russian commercial pharmacy market in 2012

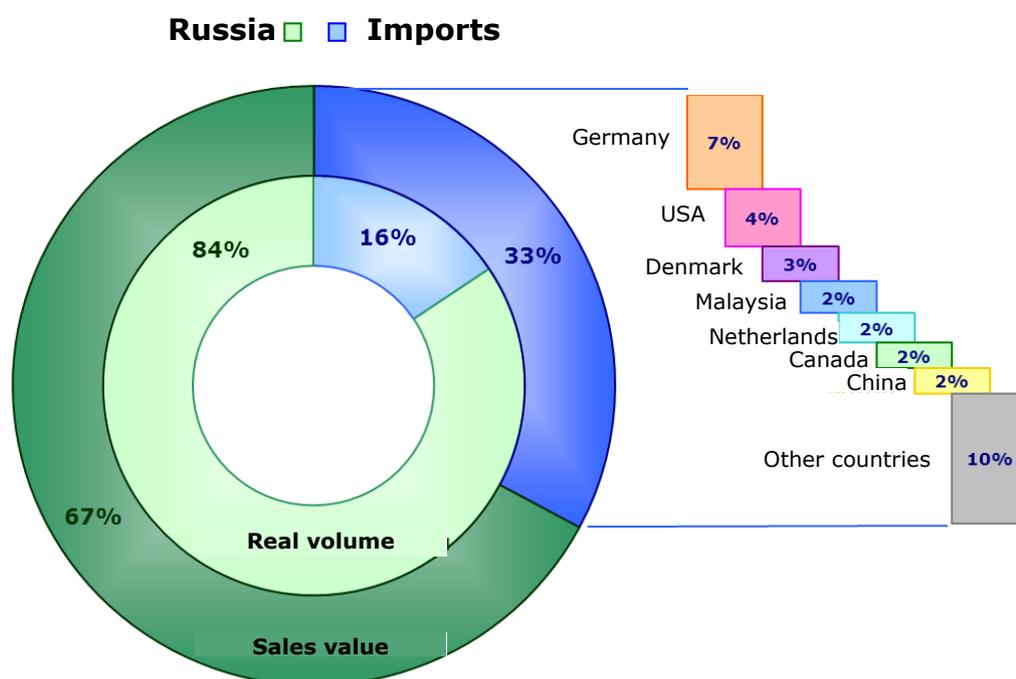


**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. QMS meets the requirements of **ISO 9001:2008**

According to Laspeyres index, in 2012 NS prices increased by only 5.5% in Ruble terms compared to 2011, while in 2010 the price growth was about 6,3%.

If in the drug market, foreign products have the largest share of sales, the nutritional supplement market has domestic products - 67% in value terms and 84% in volume terms (Figure 26). Of the domestic manufacturers, Evalar leads the sales by volume. Year after year, of imported products, nutritional supplements produced in Germany (a 7% share in Ruble terms of the total NS market sales), United States (4%) and Denmark (3%) retain their sales leadership. At the top of the German manufacturers rating is traditionally QUEISSER PHARMA GMBH & CO.KG (DOPPELHERTS NS line); the most popular American products come from PHARMA-MED INC (KIDS FORMULA, LIFE FORMULA and MEN'S FORMULA NS line); and FERROSAN AG (BAD BIFIFOR line and MULTI-TABS vitamin complexes) top the list of Danish manufacturers.

### Sales of domestic and imported NS by country



**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

**Note:** Sales value are given in pharmacy purchase prices, VAT included.

Imported nutritional supplements, like imported drugs, are more expensive than domestics: the price of one package of imported nutritional supplements was 157.8 Rubles, that of a domestic was 60.1 Rubles. In 2012, domestic nutritional supplements became pricier (+17.1%) than the imported ones (+16.5%).

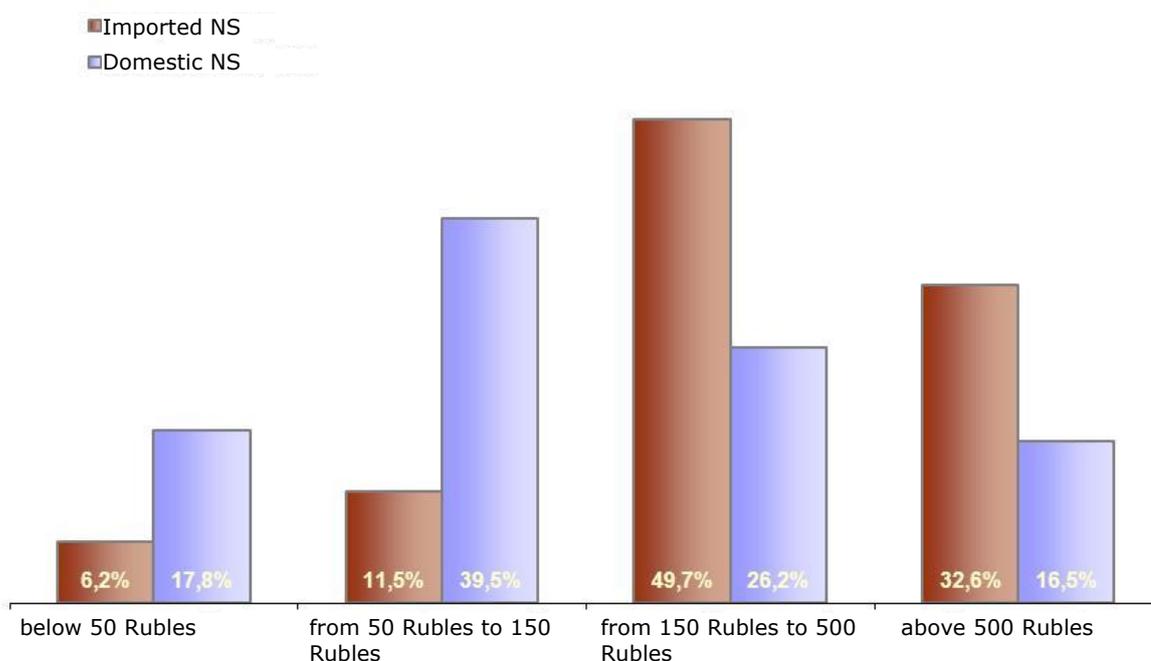
It should be noted that in 2012 consumers became more willing to purchase more expensive nutritional supplements. While in the past year, the bulk of sales came from the 50 to 150 Ruble price range, by the end 2012, around 33.9% of sales in money terms came from nutritional supplements, the weighted average price per conditional package ranged between 150 to 500 Rubles. Approximately 30.4% came from the NS's priced from 50 to 150 Rubles, expensive NS's (priced above 500 rubles) had 21.9%, while the cheapest NS's (below 50 Rubles) had 14% of sales in Rubles.

As in the drug market, in volume terms, the most capacious segment is drugs priced below 50 Rubles (63.2%), and expensive nutritional supplements priced above 500 Rubles occupy only 2.1%.

If you divide the NS market by origin (Figure 27), it becomes obvious that expensive foreign products sell better than domestics: about 82% of the sales volume of imported nutritional supplements comes from the 150+ Ruble segment, for domestics, 57% of the volume comes from the segments priced below 150 Rubles.

Figure 27

**Ratio of imported vs domestic NS sales depending on the price range, based on the results of 2012**



**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

**Note:** Sales value are given in pharmacy purchase prices, VAT included.

Table 14 shows the TOP 20 NS manufacturers. The domestic company EVALAR has been the top NS manufacturer for several years now, having about 22% of total pharmacy NS sales in money terms. The company has a strong lead in the market of nutritional supplements. The growth of its sales in Rubles in 2012 was 14.7%, compared to 2011. The best selling product in 2012, as in the previous year, was the line of slimming products branded TURBOSLIM with about 25% of all

sales in the company's portfolio in money terms. Compared to 2011, the growth of sales in Rubles for this brand in 2012 was +47.5%. The laxative FITOLAX is in the second place (13% share). The third leading brand is OVESOL that support the liver function, with a share of 6.6%.

EVALAR annually brings to market new products: LORA, a so-called beauty NS can be considered as the most successful new product in 2012. Simultaneously to the LORA pills, EVALAR started marketing an anti-aging face cream and an eye contour cream under the same brand. It is recommended to combine the use of pills and creams to achieve the greatest effect.

In addition, in 2012 EVALAR brought to market another 12 new brands. SPORTEXPART and GINGER TEA are the most capacious of them.

Table 14

### TOP-20 NS manufacturers in Russia in 2012

Rating of 2012	Change	Manufacturer	Sales value, mln Rubles 2012	Sales value increase	Share
1	0	EVALAR ZAO	4,912	14.7%	22.2%
2	0	RIA PANDA	2,056	49.4%	9.3%
3	0	AKVION ZAO	816	-13.5%	3.7%
4	0	DIOD OAO	715	-9.7%	3.2%
5	0	FERROSAN AG	595	-8.8%	2.7%
6	0	PHARMA-MED INC	593	38.0%	2.7%
7	+2	QUEISSER PHARMA GMBH & CO.KG	540	54.4%	2.4%
8	+13	POLENS (M) SDN BHD	534	248.3%	2.4%
9	-1	ECOMIR ZAO	480	24.5%	2.2%
10	+71	POLARIS OOO	457	1279.5%	2.1%
11	-4	NATUR PRODUKT	437	12.0%	2.0%
12	-2	PHARM-PRO TD OOO	383	17.8%	1.7%
13	-2	PHARMSTANDARD OOO	377	18.8%	1.7%
14	-2	MIRAXPHARMA ZAO	339	20.4%	1.5%
15	-1	ALTAY-PHARM OOO	243	4.7%	1.1%
16	-3	KRKA	233	-5.1%	1.1%
17	-1	BIOKOR OOO	230	15.1%	1.0%
18	+15	SOLGAR VITAMIN AND HERB	189	85.3%	0.9%
19	-2	LABORATORIES INNEOV	184	-6.5%	0.8%
20	-1	MERK SELBSTMEDIKATION (PROMOTION DR.REDDY 'S)	176	1.6%	0.8%

**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

**Note:** Sales value are given in pharmacy purchase prices, VAT included.

For a second consecutive year, RIA-PANDA ranks second in the NS sales rating. The share of this company increased from the previous year, amounting to about 9.3%. The company had a high sales growth (+49.4%). However, it is substantially behind the leading company EVALAR, so a change of leadership in the coming years is unlikely.

Major sales of RIA PANDA (84% of the sales value in its portfolio) come from two products for correcting erectile dysfunction - SEALEKS FORTE and ALI CAPS, with shares of 52.4% and 31.6%, respectively, of the sales volume of the company. In this case, as in the past year, these NS's were noted for high positive growth in money: sales of ALI CAPS increased by 96.1%, and sales of SEALEX FORTE increased by 30.2%. In addition, in 2012, RIA PANDA introduced 31 new brands, with NABISS and ARTRODOK becoming the best sellers.

AKVION is in the third place. A drop in sales was noted for this company for a second year in a row. At the end of 2011, AKVION was the only TOP-3 manufacturer with declining sales in money. In 2012, this manufacturer showed the highest sales volume decline in value terms of the TOP-10 companies (-13.5% compared to 2011). This situation is primarily due to the fact that the company had previously produced only nutritional supplements, and in 2010 it moved a part of the line of one of its core brands KUDESAN from NS to drugs. Because of this, the company lost a share in the rating of the NS manufacturers. However, if we analyze the total pharmacy sales of the products (drugs and NS's) manufactured by AKVION, we will see that in value terms, the company's sales volume increased by 0.7%, compared to 2011, with the package sales falling 4% however. In general, KUDESAN brand sales (drugs and nutritional supplements) also demonstrate positive growth in monetary terms (+6.5%). However, the share loss in the NS segment was not only due to the re-registration of KUDESAN, of the NS's offered by the company, sales declined for such brands such as ALPHAVIT (-7.3%) and FOCUS (-11%), as compared to 2011.

Returning to the TOP 20 manufacturers, we will note that the greatest increase in money was observed for POLARIS OOO due to the dramatically increased sales of the slimming NS REDUXIN LIGHT (+1955%, compared to 2011). In 2012, the company also launched a new nutritional supplement that promotes normalization of lipid metabolism - ATLANTINOL.

Let us consider the NS brand sales, based on the results of 2012 (Table 15). Since the KAPILAR brand gave up its top place in the NS rating, the struggle for the top spot has been on. In 2010, the TURBOSLIM line took this position. In 2011, the

situation changed again: NS SEALEX FORTE (RIA PANDA) had maximum sales value, slightly ahead of TURBOSLIM. Based on the results of 2012, the TURBOSLIM brand regained its sales leadership with a share of 5.5%.

The biggest sales growth (1,954.5% compared to 2011) of the TOP 20 brands was noted for REDUXINE LIGHT, as a result of which the supplement moved 152 lines up compared with the previous year. High sales growth was also noted for the SUPRADIN brand in the form of chewable vitamins and gel for children.

Table 15

### TOP-20 NS brands by sales in Russia in 2012

Rating of 2012	Change	Brand name	Manufacturer	Sales value, mln Rubles 2012	Sales value increase	Share
1	+1	TURBOSLIM	EVALAR ZAO	1,212	47.5%	5.5%
2	-1	SEALEX FORTE	RIA PANDA	1,077	30.2%	4.9%
3	+3	ALI CAPS	RIA PANDA	649	96.1%	2.9%
4	0	FITOLAX	EVALAR ZAO	637	14.3%	2.9%
5	-2	ALPHAVIT	AKVION ZAO	541	-7.3%	2.4%
6	0	DOPPELHERZ	QUEISSER PHARMA GMBH & CO.KG	540	54.4%	2.4%
7	+20	TONGKAT	POLENS (M) SDN BHD	519	238.4%	2.3%
8	-3	HEMATOGEN	Various manufacturers	482	-3.3%	2.2%
9	+152	REDUXIN LIGHT	POLARIS OOO	441	1954.5%	2.0%
10	-2	OVESOL	EVALAR ZAO	324	11.1%	1.5%
11	-4	CI-CLIM	EVALAR ZAO	306	3.5%	1.4%
12	+1	INDINOL	MIRAXPHARMA ZAO	297	15.5%	1.3%
13	-4	MOTHERWORT	Various manufacturers	277	-3.8%	1.3%
14	-3	BIFIFORM	FERROSAN AG	254	-3.9%	1.1%
15	0	LUTEIN	Various manufacturers	250	6.0%	1.1%
16	+61	SUPRADIN	BAYER AG	244	305.3%	1.1%
17	-7	BLUEBERRY-FORTE	EVALAR ZAO	232	-18.8%	1.0%
18	-4	CAPILAR	DIOD OAO	228	-6.2%	1.0%
19	+4	MEN'S FORMULA	PHARMA-MED INC	200	25.0%	0.9%
20	+4	NATURINO	NATUR PRODUKT	193	21.0%	0.9%

**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

**Note:** Sales value are given in pharmacy purchase prices, VAT included.

Manufacturers market the nutritional supplements as the means for the prevention and/or treatment 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 the prevention/treatment of the same diseases belong to different sections of the classifier (e.g. 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 subsection, and some of which have the 3rd subsection.

NS sales by classifier section are rated in Table 16.

Table 16

**Sales rating by NS classifier section  
based on the result of 2012**

No.	NS register section	Sales value, mln Rubles	Increase to 2012	Leader of each section	Group share, %
1	G DS AFFECTING THE REPRODUCTIVE SYSTEM	4,840	35.8%	SEALEX FORTE	21.9%
2	V DS AFFECTING WHOLE BODY	4,714	18.7%	ALPHAVIT	21.3%
3	A DS AFFECTING DIGESTIVE SYSTEM	3,548	10.5%	FITOLAX	16.0%
4	W SLIMMING AND CLEANSING DS	2,295	42.6%	TURBOSLIM	10.4%
5	N DS AFFECTING FUNCTION OF CENTRAL NERVOUS SYSTEM	1,645	1.6%	MOTHERWORT	7.4%
6	C DS SUPPORTING CARDIOVASCULAR SYSTEM FUNCTION.	1,216	10.7%	KAPILAR	5.5%
7	S DS AFFECTING SENSORY ORGANS.	991	-6.1%	LUTEIN	4.5%
8	D DS FOR SKIN AND HAIR PROBLEMS	623	25.6%	INNEOV	2.8%
9	M SKELETAL SYSTEM DS	591	37.7%	HONDA	2.7%
10	B DS AFFECTING HEMATOPOIETIC SYSTEM	569	-1.9%	HEMATOGEN	2.6%
11	R RESPIRATORY SYSTEM DS	381	6.3%	DR THEISS	1.7%
12	I DS SUPPORTING IMMUNE SYSTEM FUNCTION	188	-12.6%	KIDS FORMULA	0.8%
13	U DS AFFECTING URINARY SYSTEM	183	10.6%	PROLYT	0.8%
14	H DS AFFECTING FUNCTION OF ENDOCRINE GLANDS	163	17.3%	ENDOCRINOL	0.7%
15	T DS USED IN POISONING AND INTOXICATION	162	16.2%	WHITE COAL	0.7%

No.	NS register section	Sales value, mln Rubles	Increase to 2012	Leader of each section	Group share, %
16	O DS USED FOR TREATMENT AND PREVENTION OF ONCOLOGY DISEASES (OTHER THAN REPRODUCTIVE SYSTEM TUMORS)	38	30.3%	PROMISAN	0.2%
17	J DS USED IN VIRUS, BACTERIAL, FUNGOUS DISEASES	2	-18.2%	TANAXOL	0.01%

**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

If in 2011, at the top of the DS rating in the first DSM classifier level was group [V] DS AFFECTING WHOLE BODY, in 2012 the situation changed: group [G] DS AFFECTING THE REPRODUCTIVE SYSTEM is in the first place with 21.9%, having displaced the previous year's leader to the 2nd place. The reason is increased sales, as compared to 2011, of the brands SEALEX FORTE and ALI CAPS, as well as TONGKAT (+238%), SPERMAPLANT (+309%), TESTOGENON (+613%), etc. The last in the TOP 3 leaders is group [A] DS AFFECTING DIGESTIVE SYSTEM with a share of 16%.

The largest increase (+42.6%) was observed for group [W] SLIMMING AND CLEANSING DS, due to the contribution of brands such as TURBOSLIM, REDUXINE LIGHT, etc.

Group [J] DS USED IN VIRUS, BACTERIAL, FUNGOUS DISEASES show the greatest decline in sales (-18.2%). The volume decline is due reduced sales of, largely, the antifungal DS CANDIMIN (-91.3%), the anti-parasitic agent PARAGON (-88.8%) and the BLACK WALNUT brand (-76.7%) that provide anti-parasitic, vermifugal, antibacterial and anti-inflammatory effects.

## 6. Beauty products

Gradually, modern buyers come to believe that they can and should buy products other than drugs at pharmacies. In cities and regional centers, people ever more often come to the pharmacy to buy beauty products for face, body and hair care, and buying beauty products often turns from a secondary into a primary goal of the visit. The reason for this is the high level of trust that people have for the pharmacy as a whole and the pharmacist in particular. In other words, relying on the pharmacist's advice in choosing the drug, the consumer expects high quality advice as it comes to selecting a beauty product.

Pharmacies continue to search for new ways to attract and retain customers, with the beauty segment being a particularly vivid example. Large networks collaborate with manufacturers of cosmeceuticals, conducting joint consumer campaigns.

Russian pharmacies also actively expand sales of skin care products, and have been creating separate retail projects to this end. The Rigla pharmacy network operates pharmacies with Centers of active beauty products. The 36.6 pharmacy network opened up concept stores branded 36,6 Lab that offer exclusively beauty products, nutritional supplements for beauty and hygiene products under the network brand. The First Aid network opened up two outlets called Cosmetic Project medicinal beauty product studios in Petersburg's shopping malls. The islands offer a range of 600 titles, representing 15 brands of pharmaceutical beauty products.

Let us view the situation on the pharmaceutical beauty product market in numbers.

At the end of 2012, pharmaceutical beauty products rank second (after drugs) in the pharmacy sales mix and first in the parapharmaceutic product group mix. This segment accounts for 5% of the total pharmacy sales.

In 2012, sales of pharmaceutical beauty products exceeded 22 billion Rubles or 202 million packages.

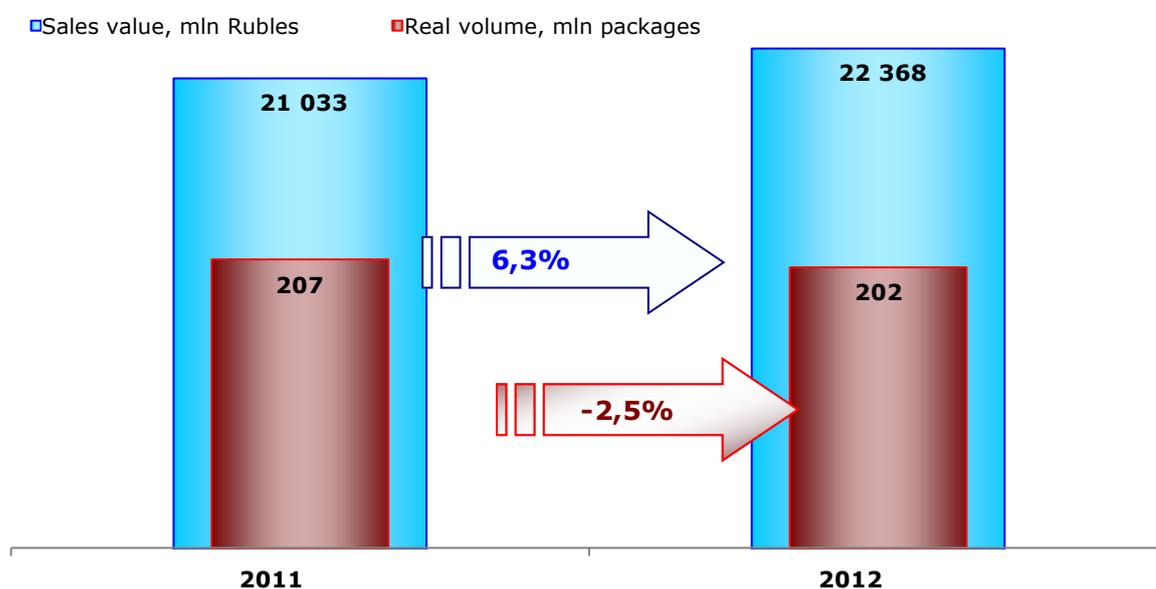
The pharmaceutical beauty product market is slowly regaining its pre-crisis level - the sales value in Rubles is almost as high as in 2009, however, the demand for "beauty products from the pharmacy" shows far less dynamics than drug consumption. The reason is the domestic consumer's conservatism - the pharmacy is first of all visited to get a "medicine", beauty products are rarely the purpose

(buying a beauty product with the claimed therapeutic effect, accompanying purchase, etc.) In cities, greater information awareness gradually destroys the stereotype "pharmacies for drugs, hygiene products shop for beauty products".

For 2012, growth in sales of pharmaceutical beauty products in Rubles amounted to 6.3%. In 2011, a 5.3% growth was registered, as compared to 2010.

Figure 28

### Sales of beauty products in Russia in 2011-2012



**Source:** Monthly retail audit of the pharmaceutical market in the Russian Federation, DSM Group. **ISO 9001:2008**

**Note:** Sales value are given in pharmacy purchase prices, VAT included.

Russia does not have an official classification of beauty products, 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 that 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 Sophie (creams and balms), Boro Plus creams, etc.

**Mass market beauty products** are beauty products available to most consumers, designed for skin, hair and nail care. They are available both in pharmacies and other retail outlets (supermarkets, specialized stores, etc.)

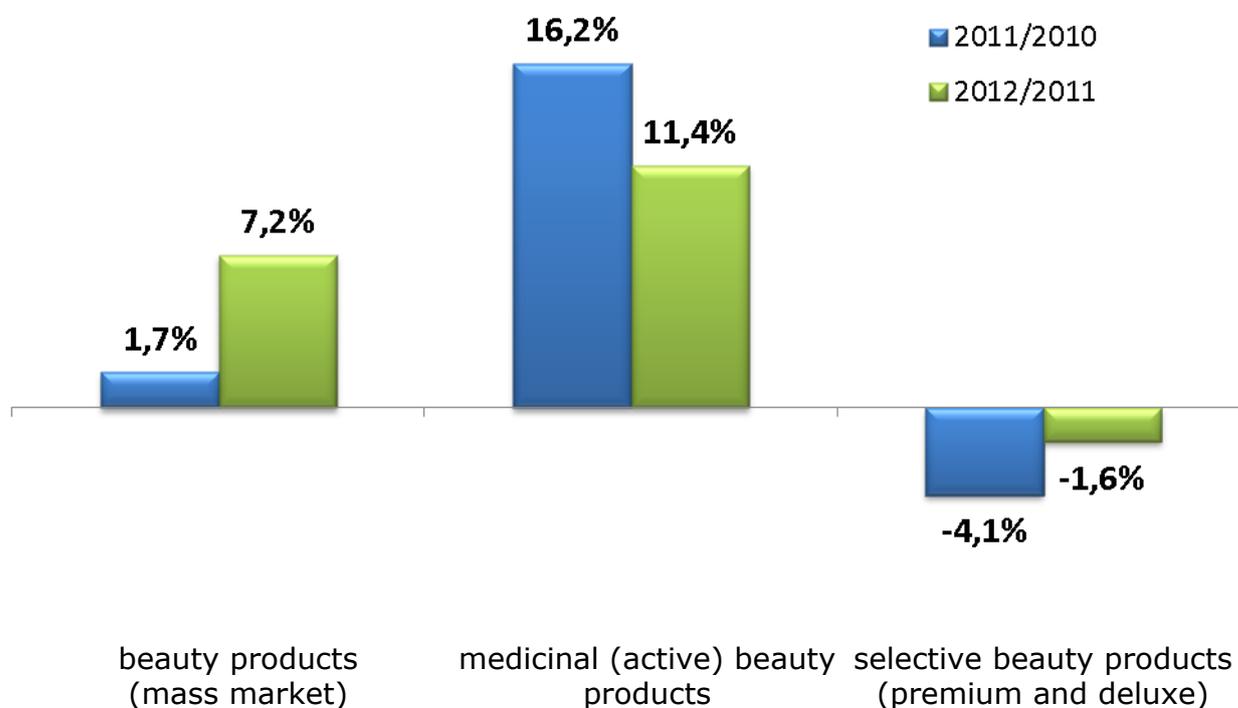
Such beauty products usually do not include any selective preparations eliminating specific problems, such as acne. Mass market beauty products include the goods of such manufacturers as, for example, Garnier Laboratories, Nivea.

**Selective beauty products (Premium and Deluxe class)** are elite, prestigious beauty products which more often feature cosmetic lines intended for certain skin or hair conditions. In general, these products are expensive (approximately from 800 rubles per package) and are sold mostly by pharmacies. For example, Vichy Laboratories is a manufacturer of selective beauty products.

Among the three types of goods, medicinal beauty products demonstrate substantial growth both in money terms (+11%) and in packages (+2%). Sustainable growth (+7%) in 2012 was also noted in the mass market beauty product segment. The selective beauty product segment has seen declining turnover and package sales for a third year in a row. The drop in the value and sales value of premium and deluxe beauty products was -2% in Rubles, and -6% in packages (Figure 29). It should be noted, however, that the dynamics of the demand for selective beauty products gradually shifts toward more positive values (thus, in 2010, premium beauty product sales fell by 9%, in 2011, by 4%, and 2012, already by 2%).

Beauty products sold through pharmacies have a wide price range - from cheap ones priced 10-15 Rubles (soap, wet wipes, cheap domestic hand cream, etc.) to very expensive ones which may be priced above 10,000 Rubles per package. Based on the year results, the weighted average price of one package was about 111 Rubles (+9.11% growth to the 2011 level). The mass market beauty products experienced the most marked increase in the weighted average cost of a package (from 63 Rubles to 73 Rubles). The medicinal beauty product segment grew by 9% (the weighted average cost amounted to 95 Rubles, based on results of 2012).

### Beauty product sales growth depending by type



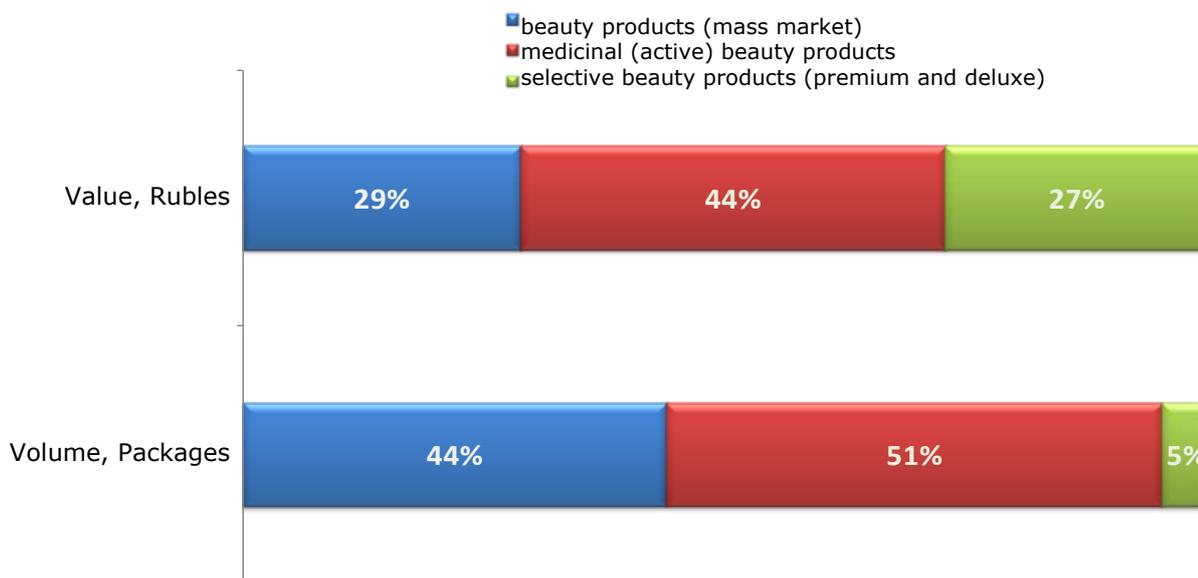
**Source:** DSM Group. ISO 9001:2008

**Note:** Shares are given as proportions of sales volume in pharmacy purchase prices, VAT included.

Sales proportion by beauty products groups is presented in Figure 30.

Proportion of three types of beauty products has gone through some change - the medicinal beauty product segment grew in value, amounting to 44% at the end of 2012 (42% in 2011). The share of the mass market segment remained unchanged at 29%, and the selective beauty products lost 2% of the market (the ratio of this segment is 27%). Due to higher prices, premium and deluxe beauty products have only 5% in packages. Package shares of the mass market beauty product segment and the medicinal beauty product segment are distributed as follows (44% and 51%, respectively).

**Proportion of pharmacy beauty products sales by type, 2012**

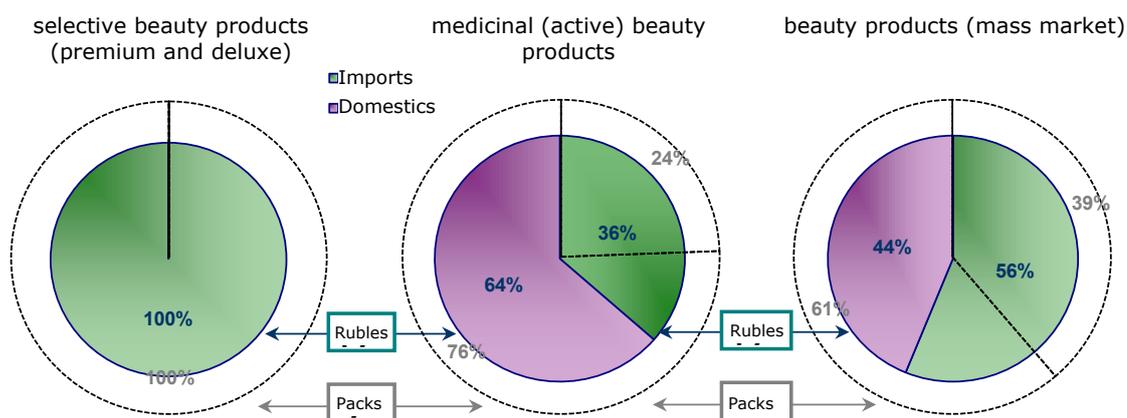


Source: DSM Group. ISO 9001:2008

Note: Shares are given as proportions of sales volume in pharmacy purchase prices, VAT included.

Products of Russian manufacturers enjoy higher demand than those of foreign companies, having nearly 66% of real sales volume. However, imported beauty products are observed to prevail in sales value (the same 59% of sales).

**Proportion of pharmacy beauty products sales by type, 2012**



Source: DSM Group. ISO 9001:2008

Note: Shares are given as proportions of sales volume in pharmacy purchase prices, VAT included.

Within the segments, the domestic and foreign beauty products ratio is different (Figure 31).

In 2012, selective beauty products are 100% imported cosmetics. Domestic companies are not yet able to compete with foreign manufacturers in this segment.

In the mass market segment, as in the past year, the domestic beauty products are ahead of the imported ones by the number of packages sold (61%). Foreign brands retained the advantage by sales value (56%).

In the segment of medicinal beauty products domestic brands are leaders both by sales value (64%) and sales value (76%).

Mostly, pharmacies sell "universal" beauty products designed for any consumer - in sales value, it occupies 73% in money and 79% in packages. The second place goes to beauty products for children, 9% in sales and 15% in real volume. Beauty products for the "middle age (after 25)" are in the third place. In this category, expensive beauty products somewhat dominate (the segment share is 7% in money and a mere 2% in packages) - over 80% of the volume in this category comes from selective beauty products. Beauty products for people older than 45 are in the fourth place (5% in consumption value, and 1% in real volume). According to the results of 2012, the share of male beauty products amounted to only 1% in Rubles and 0.4% in packages. Besides, in comparison with the last year, the share of the male beauty products noticeably decreased.

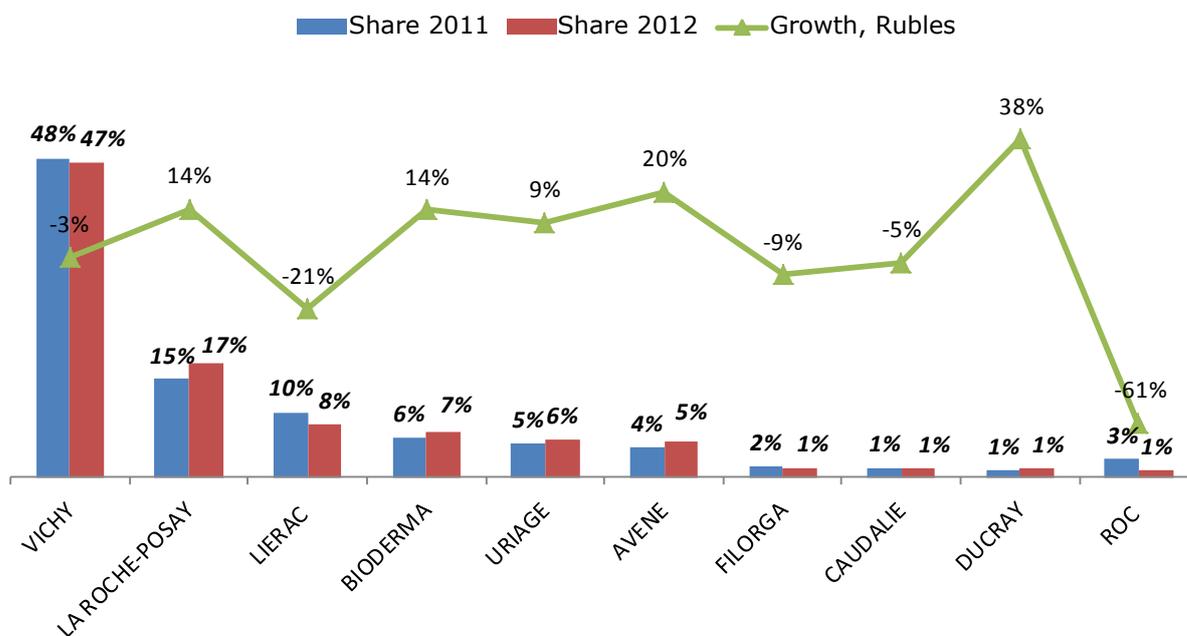
As in previous years, VICHY brand tops the selective beauty products rating (Figure 32). Although compared to 2009 this brand's sales declined by 3%, and its share lost 1%. Of the TOP 10 brands, LIERAC (-21%), ROC (-61%), FILORGA (9%) and CAUDALIE (-5%) showed negative dynamics. Other brands grew both in volume and in share. We note the increase in sales and share of LA ROCHE-POSAY - this trademark is owned by L`OREAL (like VICHY). So in aggregate, the 2 brands occupy 64% of the sales value of the market, which is 1% higher than the share occupied by the brands in 2011. Note that LA ROCHE-POSAY ranked second for a second consecutive year, and according to the results of 2012, the gap between the third line occupied by LIERAC increased to reach 9% in share.

Of the brands occupying places from 4th to 10th, noteworthy are BIODERMA, AVENE, URIAGE - compared to 2011, sales of these brands grew by 14%, 20% and 9%, respectively. DUCRAY demonstrated the record growth of the selective beauty product brands (+38% to the sales level of the previous year).

The 2012 rating is different from the 2011 rating in one player. Due to high growth rates, DUCRAY was able to take the 9th place. While NUXE left the rating - its volumes decreased by 3% during the year.

Figure 32

**TOP-10 selective beauty product brands (Premium and Deluxe class)**

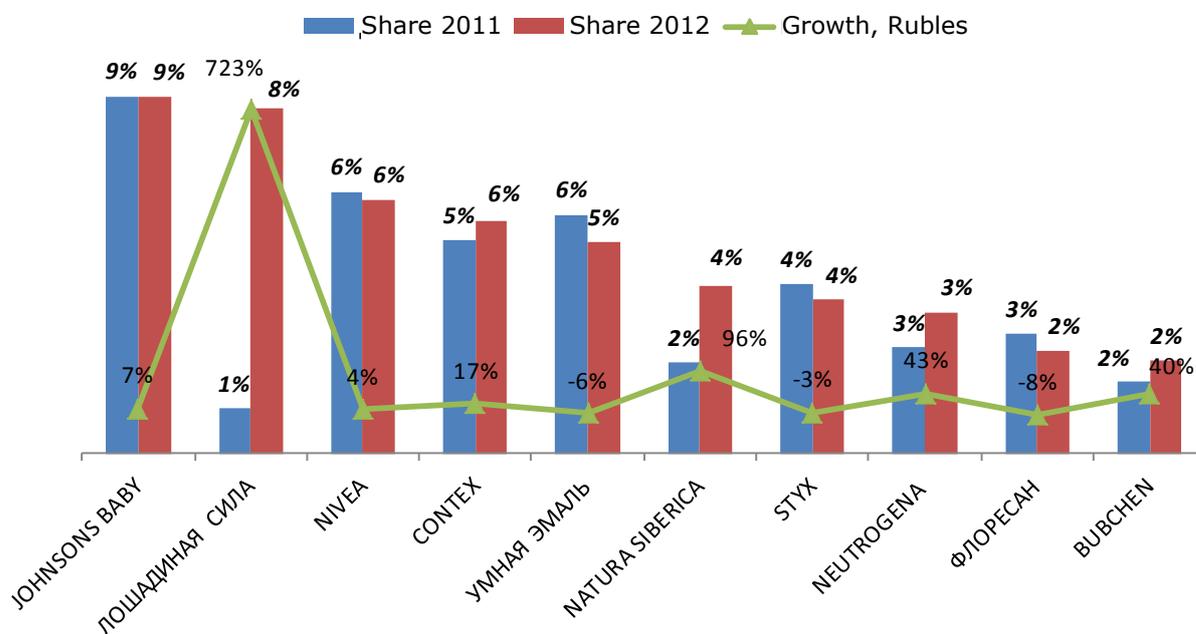


**Source:** DSM Group. ISO 9001:2008

**Note:** Shares are given as proportions of sales volume in pharmacy purchase prices, VAT included.

In the mass market beauty product rating, JOHNSON BABY, a baby beauty products line, is firmly in the first place (Figure 33). The LOSHADINAYA SILA brand is in the second place. NIVEA ranks third in the mass market rating. The domestic brands in the mass market ranking is presented only by the NATURA SIBERICA brand which shows an impressive 96% increase in sales (this brand had 2x sales growth in the past year, when it was new to the parapharmaceutical pharmacy segment). NATURA SIBERICA produces beauty products, part of which are certified natural beauty products. The LOSHADINAYA SILA brand demonstrated the maximum market growth (from 1% in the past year to 8% according to the results of 2012). Pharmacy sales of the brand grew more than 8-fold, helped by the expansion of the product line (in addition to the earlier products for body and joints, they added shampoos and hair conditioners) and a large-scale advertising campaign. Drops were noted for the brands UMNAYA EMAL (-6% to the sales level in 2011), STYX (-3%) and FLORESAN (-8%).

### Top 10 mass market beauty product brands



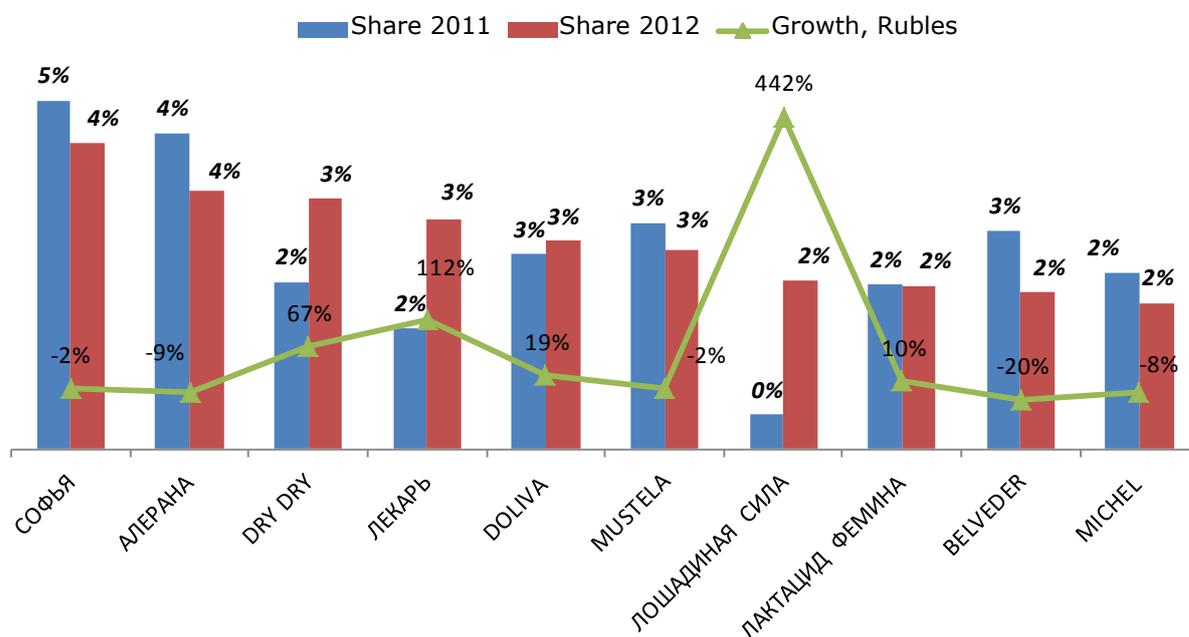
**Source:** DSM Group. **ISO 9001:2008**

**Note:** Shares are given as proportions of sales volume in pharmacy purchase prices, VAT included.

The medicinal beauty product rating has remained the same for the past few years, with the domestic brand SOPHIE at the top. It should be noted that in 2012, sales of the SOFIA brand fell by 2% (in 2011 the drop was 7% compared to 2010), while the ALERANA brand, which is in the second place, shrank by 9%. The two leading brands occupy about 4% of the market.

The LOSHADINAYA SILA trademark demonstrated the maximum growth in Rubles of the TOP 10 brands. In the segment of skin care products, this brand includes body products.

### TOP-10 medicinal (active) beauty product brands



**Source:** DSM Group. ISO 9001:2008

**Note:** Shares are given as proportions of sales volume in pharmacy purchase prices, VAT included.

For the beauty product department of a pharmacy, 2012 was a period of new "outstanding" brands (for example, LOSHADINAYA SILA, NATURA SIBERICA) and a time of market leaders already known to the consumer consolidating their positions (Vichy, Avene, Uriage, Bioderma in the "conservative" selective beauty product sector, and Sophie, Doliva, Mustelle in the medicinal beauty product segment).

## 7. Drug Import

To encourage domestic production, the government is preparing to limit government purchases of imported drugs. Suppliers of foreign drugs will not be allowed to participate in bidding for public procurement, if the Russian register of drugs has two or more of the same drugs, with the exception of drugs from Belarus. This provision is contained in two documents being developed (the draft order of the Ministry of Economic Development "On the conditions of admission of goods originating from foreign countries for the purpose of placing orders for the supply of goods for the needs of customers" and the draft government resolution "On the establishment of additional requirements to bidders when placing orders for the supply of drugs" prepared by the Industry and Trade Ministry).

Also the definition of a "locally manufactured" drug is being prepared. Prior to January 1, 2014 local drugs will mean drugs packaged or marked in Russian, according to a draft order of the Industry and Trade Ministry, after this date, local drugs will only mean drugs entirely manufactured in Russia (including from imported substances).

Adoption of such legislative instruments can dramatically change the Russian market, including with regard to the **RTU drug imported to Russia**. It will also provide an additional stimulus for foreign manufacturers to "speed up" localization in Russia.

Discrimination of foreign drugs in the public procurement field will particularly benefit the domestic producers when in 2014, the import duties on drugs will be reduced: from 15-5% to 6.5-5% during the transitional period, and simultaneously, at even faster rate, the duties on medical equipment and medical substances will be reduced (down to 2-3%). Such rules have been adopted upon Russia's WTO accession.

In the meantime, Russian consumers cannot do without imported foreign-made drugs. And the import of drugs into Russia has been steadily increasing.

Figure 35 shows RTU drug import value in Russia in 2012.



**Shares of different groups of RTU drug importers in Russia  
by RTU drug import value in 2011 and 2012**

Rating	Importers	Share to import value, %	
		2011	2012
1	Distributor companies	31.91	24.41
2	Representative offices of foreign companies	62.57	66.08
3	Direct import companies	2.87	4.42
4	Domestic drug manufacturers	2.65	5.09
	<b>Total</b>	<b>100</b>	<b>100</b>
	<b>Import value, \$ mln</b>	<b>13,187</b>	<b>13,399</b>

**Source:** Diamond Vision

As Table 20 shows, in 2012 about 90% of the total RTU drug import value is covered by two groups of importers - distributor companies and representative offices of foreign companies. The import structure by importer type in 2012 changed, compared to 2011, in favor of foreign manufacturers, as well as direct imports by the domestic drug manufacturers.

The maximum share of imports goes to representative offices of foreign manufacturers, their share in the total value increased by almost 4%, while the distributors lost nearly 7% in the share.

The group Direct import companies grew by value and by share: ITEMS-Warehouses resumed supplies after importing virtually nothing in 2011. The distributor PHARMACEUTICAL IMPORT, EXPORT substantially increased supplies. Direct import by domestic drug manufacturers grows at the fastest pace due to the growth of companies such as UFIMSKI VITAMINNY ZAVOD, NIZHFARM, NATUR PRODUKT, NEARMEDIC.

Let us look at the leaders in the importer groups heading the rating - distributor companies and representative offices of foreign manufacturers.

Table 18 shows TOP 10 representative offices of foreign manufacturers by import value in 2012.

**TOP 10 representative offices of foreign manufacturers  
by import value in 2012**

Rating	Representative office of foreign manufacturers	Share in the import value of the group "Representative offices...", %		Increase to 2011, USD
		2011	2012	
1	SANOFI	10.7%	10.6%	12%
2	NOVARTIS	14.0%	9.7%	-22%
3	BAYER	4.0%	7.8%	118%
4	ABBOTT	6.1%	6.7%	24%
5	JOHNSON & JOHNSON	4.5%	5.8%	45%
6	TEVA	5.9%	5.6%	6%
7	BOEHRINGER INGELHEIM	0.0%	5.2%	new
8	TAKEDA	5.0%	4.6%	2%
9	GLAXOSMITHKLINE	5.8%	4.5%	-13%
10	MSD PHARMACEUTICALS	1.7%	4.1%	177%
	<b>Total</b>		64.6%	

**Source:** Diamond Vision

The group Representative offices of foreign companies increased by 15% in 2012. The trend of the previous years continued: manufacturers wish to have more control over their drug supplies to Russia, independently develop their pricing policy in accordance with the market reality and react to changes of market situation more promptly. Concentration in the importer group Representative offices of the foreign companies was 65%.

As in the previous years, SANOFI and NOVARTIS are the leaders of the importer group Representative offices of foreign companies. The representative office of BAYER is the last of the three leaders. In 2012, it took the third place, moving up from the ninth place; the company showed some of the strongest growth (+118%). It can be stated that the manufacturer switched to its own supplies to Russia. The rating also has a "new" manufacturer - BOEHRINGER that had virtually imported nothing until 2012.

Of the companies that have shown 2-fold or stronger growth, it is worth noting the representative offices of MSD, USB PHARMA. Manufacturers are also switching to their own supplies.

Table 19 shows TOP 10 distributors by RTU drug import value in Russia.

Table 19

**TOP 10 distributors by RTU drug import value  
in Russia in 2011 and 2012**

Rating	Distributor	Share in the import value of the group "Distributors", %		Increase to 2011
		2011	2012	
1	CV Protek	17.5%	17.1%	-15%
2	R-PHARM	17.5%	16.3%	-19%
3	KATREN	9.3%	11.3%	5%
4	SIA INTERNATIONAL	18.1%	10.2%	-51%
5	BIOTEK	5.8%	9.0%	34%
6	ROSTA	8.3%	8.6%	-10%
7	EUROSERVICE	3.2%	4.4%	22%
8	Oriola	3.6%	4.4%	5%
9	Alliance Healthcare Russia	4.8%	3.9%	-26%
10	FC PULS	2.1%	2.7%	12%
	<b>Total</b>		<b>88.0%</b>	

Source: Diamond Vision

As can be seen from Table 22, three companies are the largest distributors by import value in the Distributors group in 2012: PROTEK, R-PHARM, KATREN. With the exception of KATREN, in 2012, the leaders' imports declined in dollar terms.

The value of drugs imported by SIA International fell by almost two times, which reflects this distributor's dynamics on the Russian pharmacy market. As a result, the company was only the fourth of the importer distributors.

The share of the 10 largest importer distributors in the total import value of the Distributors group shrank by 2% and amounts to about 88% in 2012.

In the reporting year, as in 2011, BIOTEK demonstrated the strongest growth, having increased its imports by 34%. Specialized suppliers increasingly make it to the TOP-10 importer distributors. 2012 was not an exception. EUROSERVICE ranking seventh is a distributor specializing in hospital and tender market, its growth is above the import growth, which allowed the company to move up two positions.

Of companies down the rating list, it is worth noting the distributor BSS, whose imports rose by more than 2 times - in 2012, the company was in the 12th place, with a share of 0.77%.

Table 20 shows TOP 20 drug manufacturers by RTU drug import value in Russia with regard to all groups of importers.

Table 20

**TOP 20 RTU drug manufacturers by RTU drug import volume  
in Russia with regard to all groups of importers in 2012**

Rating		Manufacturer	Share by import value, \$, %	
2011	2012		2011	2012
2	1	SANOFI	6.5%	6.7%
1	2	NOVARTIS	7.4%	5.5%
3	3	F.HOFFMANN-LA ROCHE	4.6%	5.0%
7	4	TEVA PHARMACEUTICAL	3.6%	4.4%
15	5	BAYER	2.1%	3.9%
6	6	ABBOTT	3.9%	3.9%
4	7	MERCK	4.1%	3.7%
9	8	TAKEDA	3.2%	3.3%
5	9	BERLIN-CHEMIE	4.1%	3.1%
8	10	GEDEON RICHTER	3.3%	2.9%
12	11	PFIZER	2.3%	2.8%
13	12	BOEHRINGER INGELHEIM	2.3%	2.5%
16	13	SERVIER	2.0%	2.3%
11	14	ASTRAZENECA	2.6%	2.2%
14	15	JANSSEN PHARMACEUTICA	2.2%	2.2%
10	16	GLAXOSMITHKLINE	2.8%	2.1%
18	17	KRKA	1.5%	1.7%
17	18	ASTELLAS PHARMA	2.0%	1.6%
19	19	DR.REDDY 'S LABORATORIES	1.5%	1.5%
23	20	BAXTER HEALTHCARE	1.1%	1.2%
Total:				<b>62.3%</b>

Source: Diamond Vision

The share of TOP 20 RTU drug manufacturers by import value in Russia in 2012 amounted to 62%. SANOFI, NOVARTIS and F.HOFFMANN-LA ROCHE are the largest manufacturers by RTU drug import value in Russia in 2012.

## 8. Pharmacy networks

The pharmacy segment went through substantial changes in 2012.

The first thing to mention is "redistribution" in the pharmacy market. Based on the results of 2012, the Rigla pharmacy network took the first place, with a turnover of 17.4 billion Rubles (+18% increase in sales compared to 2011). The network share amounted to 2.54%. In the past year, Rigla actively developed numerically - it opened 143 new outlets. In addition, the pharmacy network continued to develop pharmacies in the Be Healthy discounter format: outlets in this format more than doubled, totaling 215 pharmacies.

Based on the results of 2012, the A5 network is in the second place (in 2011, it combined the pharmacy networks A5, Mosoblpharmacia and Norma) Today, the company is the largest pharmacy network by number of outlets.

36.6 pharmacy network, the former leader, ranks third in the pharmacy network rating. Based on the year's results, the network's share was 2.41%, down from 2.7% in 2011. This was because in 2012 the pharmacy network set itself the task of reversing the negative customer traffic trend and increasing the network profitability by changing its qualitative composition. To achieve this, in early 2012, it launched a new brand of pharmacies in the economy segment - LEKO. By the end of 2012, 181 pharmacies operated in the LEKO format. Also, in 2012 the company set out to reduce the number of loss-making pharmacies. During the year, 212 pharmacies were shut down, and the number of active pharmacies fell more than 160 outlets, despite this, the company managed to achieve positive sales dynamics. The revenue growth was 3%.

As can be seen, the discounter format is one of the success drivers for pharmacy networks now. All market participants picked up this trend: A5 develops the Norma brand, Pharmacor operates discounter pharmacies branded as "Ekonom!" ("Save Up!"), Raduga uses the name "Raduga ekonom" ("Economy Rainbow"), and Doctor Stoletov now has the brand "Khoroshaya apteka" ("Good Pharmacy"), etc.

On the other hand, we should note development of the polar format - pharmacy premium segment. The A.V.E. network was the pioneer in this field. Since 2012, it has developed A.V.E-Luxury pharmacies. Of the conceptual

pharmacy projects of this year, we should note the Cosmetic Project medicinal beauty product studios developed by the network "Pervaya pomosch" ("The first aid") in Petersburg, health lifestyle product shops of Farmacia OAO, also opened in St. Petersburg, and the Active Beauty Product Studios by Rigla in Moscow.

Speaking of mergers and acquisitions, merger of the Moscow network pharmacies Gorzdrav with A.v.e Group could be called the most important deal of the year. For the Russian pharmacy retail, this is the first merger - previously, market deals had followed the scenario of larger networks taking over smaller ones. The Gorzdrav pharmacy name will be retained to include the rebranded A.v.e. pharmacies of the "discount" format. As a result of the merger, A.v.e now has 184 pharmacies. In 2013, the partners intend to bring the number of pharmacies up to 400.

In 2012, instead of acquisitions, we should rather talk about divestitures. So, in July 2012, the 36.6 pharmacy network sold its retail toy network Early Learning Center (ELC) which included 19 stores in Moscow. Detski mir-tsentr OAO was the buyer. It purchased 10% of the ELC franchisee in Russia - Kub-market OOO. Also, 36.6 is looking for a buyer for its production asset Veropharm. In November, the possibility of this deal was confirmed - the Federal Antimonopoly Service of Russia said that it granted AFK Sistema's request to purchase 100% of Veropharm subject to certain regulations.

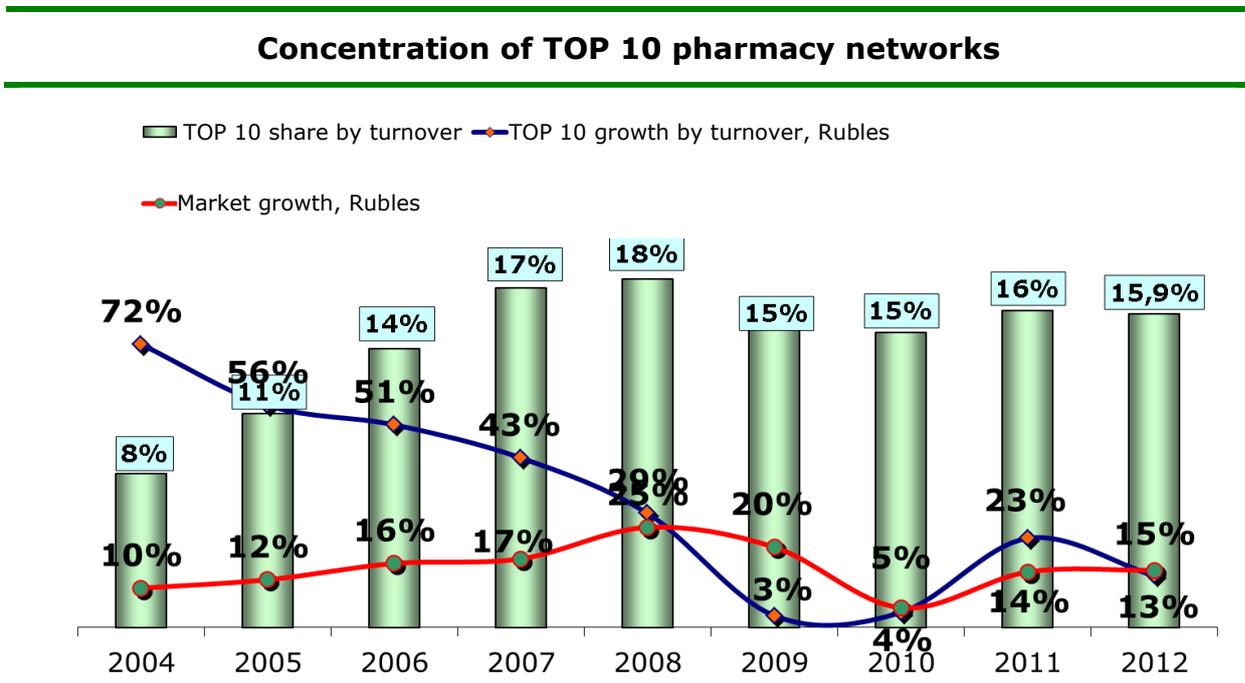
The pharmacy network Doctor Stoletov changed hands. The investment company Haden SA which acted in the interest of the St. Petersburg distribution company Imperia-Pharma was the buyer. The cost of the deal amounted to 70 million Dollars.

In the summer of 2012, the state pharmacy network Stolichnye apteki was reorganized into two companies, one of which would remain a state-owned one (about 70 outlets), while the second one will be privatized (165 outlets). So, in 2013 we can expect the purchase of this network by one of the market players.

In aggregate, the TOP 10 networks grew by 13% in 2012, compared to the similar period of 2011. The TOP had a share of 15.9%. The top ten's turnover

growth (15%) was slightly below the turnover growth for the pharmacy market as a whole (Figure 36).

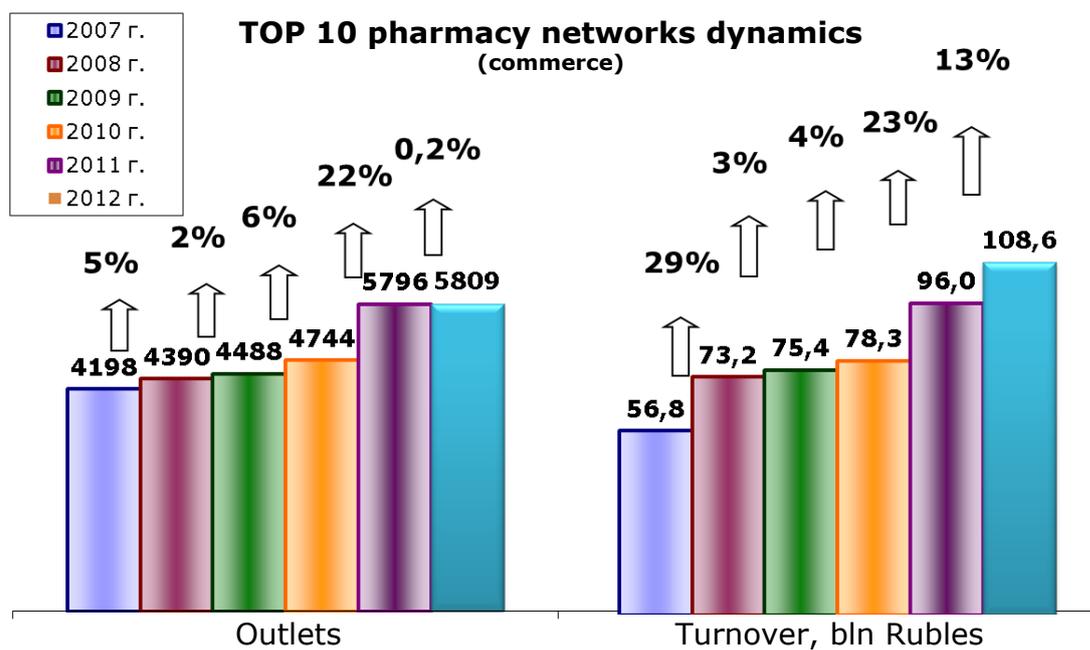
Figure 36



Source: DSM Group. ISO 9001:2008

Figure 37 shows the growth of turnover and number of outlets of the TOP 10 pharmacy networks in 2007-2012. In 2012, there was a slight increase in the number of outlets, as the networks continue to streamline their business, and there were no major mergers and acquisitions at the TOP 10 level. In 2012, it amounted to 0.2%. Thus, the concentration on the market by this indicator did not grow.

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



Source: DSM Group. ISO 9001:2008

Table 21 shows pharmacy networks rating in the commercial sector including quantitative and value growth parameters in 2012.

**Pharmacy networks rating by turnover in 2012  
on the commercial pharmacy market**

Rating	Pharmacy networks	Value, bln Rubles	Share of the commercial segment 2012	Turnover increase compared to 2011	Outlets number
1	Rigla	17.4	2.5%	19%	805
2	A5	16.8	2.4%	39%	1189
3	36.6	16.5	2.4%	3%	842
4	Implozia	13.1	1.9%	6%	895
5	Pharmacor	9.0	1.3%	1%	394
6	Pharmaimpex	8.8	1.3%	29%	338
7	Raduga	8.2	1.2%	7%	530
8	Oriola	6.3	0.9%	8%	240
9	Klassika	6.3	0.9%	18%	145
10	Vita	6.2	0.9%	24%	431
11	Pharmland	6.0	0.9%	23%	229
12	Stolichnye apteki	5.9	0.9%	-6%	240
13	Doctor Stoletov	5.6	0.8%	10%	386
14	Samson-Pharma	5.5	0.8%	34%	23
15	Opeka	5.1	0.7%	38%	350
16	Pervaya Pomosch	4.7	0.7%	26%	175
17	Melodiya Zdorovya	4.3	0.6%	18%	310
18	Zdorovye lyudi	4.2	0.6%	12%	152
19	Nevis	3.9	0.6%	22%	227
20	A.V.E. group	3.1	0.5%	474%	188

**Source:** DSM Group assessments. **ISO 9001:2008**, pharmacy networks own data

## **9. Distribution segment of the pharmaceutical market**

Over the past few years, the pharmaceutical market distribution sector has developed along a clearly defined vector - business diversification. Virtually all national distributors have a pharmacy network subordinate within the controlling structure (Protek, Katren, Rosta, Oriola, etc.). The second actively developed area is own production.

In 2012, it is worth noting the pharmaceutical distributor Imperia-Pharma which took over the pharmacy network Doctor Stoletov that is one of the TOP 15 networks in Russia. The investment company Haden SA, acting on behalf of Imperia-Pharma, acquired the company and its regional subsidiaries for 60 million dollars. Imperia-Pharma now focuses on development not so much in the public procurement sector, as in commerce, and formation of the retail division is quite consistent with the new task. The company also actively develops its regional network by opening new branches and representative offices. At year-end, Imperia-Pharma has 7 branches and 33 representative offices.

The distributor R-Pharm continues to invest in its own production facilities. At present, the company has ready manufacturing facilities in Novosibirsk, Kostroma region, and a pharmaceutical plant in Yaroslavl, it is building a modern scientific-industrial complex Phartoslavl which will perform the full cycle of high-tech pharmaceutical substance development. R-Pharm invested in the organization of production of biopharmaceutical drugs on the basis of the FlexFactory production line of Xcellerex, USA. This venture is the first step toward mass production of biological products, including innovative products and biosimilars. The plant will be simultaneously certified in the U.S. for FDA and GMP requirements, and will be the first facility of its kind in Russia.

In 2012, bankruptcies continued to hit the distribution segment. In 2011, Shreya was declared bankrupt. In the summer of 2012, Medico-Pharmaceutical Firm Akonit OOO, which went after a spot in the TOP 10 Russian pharmaceutical distributors four years ago, was declared bankrupt.

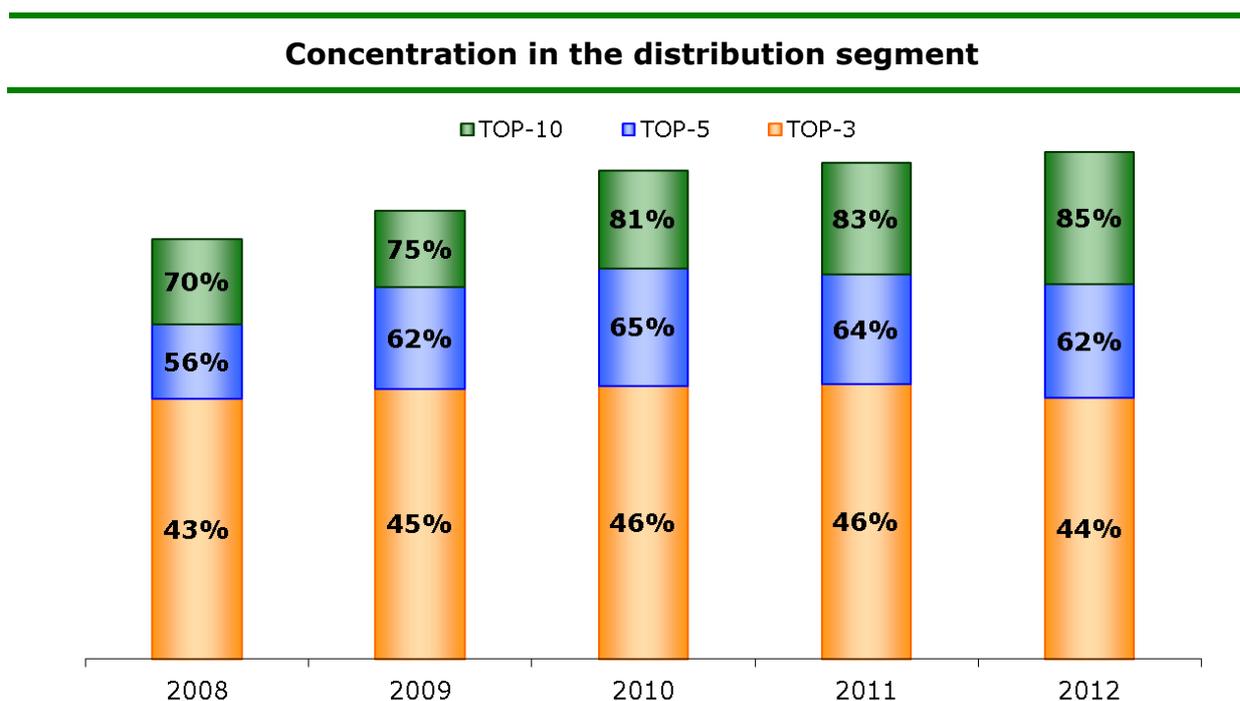
Genesis bankruptcy was announced back in 2008. In 2011, Genesis announced a new partner Pharma Capital ZAO engaged to settle the accounts payable, make a settlement and terminate the wholesaler bankruptcy procedure. Pharma Capital ZAO has extensive development plans, in particular - it plans to build a nation-wide distributor company based on Genesis. Thus, Genesis is now considering a number of offers with respect to both merger with other wholesale pharma market participants and acquisition of separate branches. But in 2012, no activity was noted.

National distributors have lately preferred to avoid public procurements (the program to provide subsidized drugs to people). Because of this, niche distributors were afforded the possibility of further development. For example, in bidding for 2013 under the "7 nosologies" program, the interim public procurement market leader - Intermedpharm OOO that participated in the bidding for the first time and got most lots in INN Imatinib and offered supplies of Gleevec generics. Irvin-2 and Pharmstandart also won large shares of the tenders.

And now let us look at the financial results of the distributors' work in 2012. The valuation of listed companies is one of the performance indicators. In the distribution segment, this is Protek, with its stock value gaining more than 67% in 2012. The reason for this rise lies in the good results that the company showed during the year.

The concentration of distributors continues to grow (Figure 38). In 2012, the share of the TOP 10 distributors amounted to 85%. At the same time, the share of the TOP 3 distributors decreased from 46% to 44%. The aggregate share of the three leaders fell due to SIA's reduced turnover.

At the same time, the distributors ranking 6th to 10th grow at a faster rate than before.



**Source:** DSM Group. **ISO 9001:2008**

In the distribution business, as well as in the retail segment, we can speak of the market "redistribution".

First, in 2010 the leader changed. Protek regained its first place. In 2012, Protek showed a gain of 17%, which is higher than the growth of the market as a whole. This let the distributor increase its share by 1% from 15.7% to 16.5%.

The distributor Katren's second place was the "sensation" of the year. In recent years, the company grew substantially faster than its competition, gradually coming closer to the market leaders. As it continued to grow and SIA sales fell, the distributor took a share of 15%, which is a 1.8% improvement on the 2011 result. It should also be noted that in 2012 Katren ranks second as a distributor with a turnover of over 100 billion Rubles.

The distributor SIA rounds out the TOP 3 (leader based on the result of 2012). This company's sales reduced by almost 21%, its share fell by 5% from 21% to 12.1%. The drop in sales was due to the optimization of business processes: the company dismissed unprofitable trading, introduced a "minimum order" for pharmacies and so on, so as to increase its profitability.

The "second five" distributors - Puls, Oriola and BIOTEK - demonstrate the strongest gains (86%, 43% and 32%, respectively). In recent years, Puls has been actively expanding its regional network, bringing the number of branches up to 8. This allowed the company to grow so much in terms of turnover.

The growth of Oriola was due to active development of the branch network, increased sales in the hospital segment. In 2013, the distributor's growth is also made possible thanks to the company's entering the drug reimbursement segment. In November 2012, the company won a tender to supply one of the lots under the state program "Seven nosologies".

Biotek is actively involved with the drug reimbursement program and is one of the main suppliers under the sub-program "Seven Nosologies". Thus, the company won more than 20 lots for 2013.

Table 22

**TOP 10 distributors on the pharmaceutical market of RTU drugs**

Rating of 2012	Distributor	Value, bln Rubles	Share	Sales value increase
1	Protek	122.8	16.5%	17.0%
2	Katren	111.8	15.0%	26.5%
3	SIA	89.9	12.1%	-20.8%
4	ROSTA	82.0	11.0%	17.0%
5	Alliance Healthcare	58.5	7.9%	14.4%
6	R-Pharm	49.3	6.6%	5.2%
7	Oriola	37.4	5.0%	42.6%
8	Puls	35.6	4.8%	85.6%
9	Biotek	26.3	3.5%	31.5%
10	Imperia Pharma	16.4	2.2%	1.9%

**Source:** DSM Group. **ISO 9001:2008, companies own data, agency expert data**

**Note:** Sales value are given in pharmacy purchase prices, VAT included.

## 10. Manufacturing

For pharmaceutical manufacturers, a major issue in 2012, admittedly as in previous years, was registration of the maximum ex-works prices for the drugs from the vital and essential drug list (VED).

Russian manufacturers were to annually register prices with the Ministry of Health in coordination with the Federal Tariff Service. Since 2010, this possibility was never materialized - the FTS refused to allow the price raises even to match the inflation rate. During the year, the industry organizations voiced the view that many pharmaceutical companies were looking for a way to get off the VED supplier list, as they did not see any reasonable motivation for continuing to be on the list. In the second decade of November 2012, the Ministry of Justice registered the new methodology for determining the VED prices, which will allow manufacturers to annually increase the prices of these drugs to match the inflation rate - within 6%. This only applies to domestic drugs, no indexation is provided for the imported drugs.

Thus, the domestic manufacturers were able to have the prices for the VED's indexed, for the first time in a long time. But there is one "BUT" - price re-registration documents can only be submitted from January 1, 2013. This means the prices can only be increased from 2014.

Another serious problem facing the domestic drug manufacturers is introduction of GMP standards (Good Manufacturing Practice - GMP). The transition to GMP should be completed by January 2014. There is a possibility that in the absence of financial resources to adopt the GMP standards by the due date many small Russian companies that currently produce low-priced drugs will be forced to stop their production. Currently, only about 10% of the companies operate in full compliance with the GMP standards. These are normally companies with mixed capital, and enterprises built from the ground up in accordance with the international quality standards. Another 40% of companies that currently have a quality system and individual production sites that comply with the GMP standards have a plan of the transition to the standards. The remaining 50% of pharmaceutical companies have not started to adopt GMP and lack the quality assurance system or the modernization program.

The past year was not the most abundant in terms of M&A deals in the domestic pharmaceutical production. But still there was one record - the sums for which the assets were put up for sale were higher than in previous years.

At the end of March 2012, it became known that GC Renova sells 100% of CJSC Natur Produkt. Buyer - Canada's Valeant Pharmaceuticals International. Transaction amount - 180 million Dollars Thus, this deal became the largest in the Russian market - the largest previous purchase was of Masterlek by Pharmstandard at 146 million Dollars.

Pharmstandard also showed activity in the past year - three transactions totaling more than 80 million Dollars. In July, the company announced the acquisition of 50.1% stake in Bigpearl Trading Limited, Cyprus. With its purchase, Pharmstandard was able to determine the operation conditions of I.I. Mechnikov Biomed OAO and Pharmapark OOO which are part of the same group. In September 2012, the FAS issued Pharmstandard with a permit to purchase Pharmaceutical Firm Lekko ZAO, with the respective deal closed in November.

It is worth noting that the German pharmaceutical holding company Stada AG sold two production assets in Russia - the Moscow factory Makiz Pharma OOO and Skopinsky pharmaceutical plant OOO located in Ryazan region. A contract with the Russian company DMN Invest was signed in August 2012. Furthermore, according to the plan, all products earlier manufactured on these plants will be gradually moved to the company's other sites in Russia. The transfer will be completed by 2015.

In 2013, another major transaction is possible. In the autumn, the US pharma giant Abbott sent a request to the FAS of Russia to approved the purchase of NPO Petrovax Pharm OOO. According to experts, the deal could be worth 140 million Dollars.

Of foreign deals, it is worth noting that Watson, a U.S. pharmaceutical company, acquired Actavis Group for 4.25 billion Euros. After closing the deal, Watson may become the third largest generics manufacturer in the world with annual revenues of 8 billion Dollars.

In January 2012, STADA announced that the antimonopoly authorities gave it approval to purchase a number of branded drugs from Grünenthal GmbH. The declared transaction value is 152 million Euros. The acquired product portfolio consists of 14 proprietary and licensed brands. This acquisition enabled the company to move a few positions up in the rating of the TOP companies in the pharmaceutical market of Russia.

The drug manufacturers rating in Russia is 95% foreign manufacturers. The total share of imported drugs on the market is 75.9% in money and 40.5% in packages. As mentioned above, the drug segment had a general growth of 11%, while the increase in packages was 1.3%. This low growth in value terms was due to a negative sales growth of domestic drugs in packages (the fall of -4%), while sales of imported drugs grew by 11% in packages.

The TOP 20 manufacturers rating was quite stable, the movements within the rating are within 1 or 2 positions. The overall share of the TOP 20 manufacturers in 2012 was 52.5%.

Three leaders in 2012 did not change compared to 2011. NOVARTIS is at the top - in 2012 the share of segments publicly funded declined markedly, sales fell by more than 30%. At the same time, high sales in the retail segment (77% share in the total turnover) allowed the company to retain the top spot, despite the fact that overall sales of the manufacturer did not change

SANOFI is in the second place. The manufacturer has about 30% of sales from public purchases, but its value also declined in 2012 relative to 2011.

The domestic manufacturer PHARMSTANDARD is in the third place. Compared to 2011, its sales remain virtually unchanged. This was because the company's leading drug Arbidol fell sales.

Table 23

**TOP 20 manufacturers by sales value on Russian pharmaceutical market in 2012**

Ranking 2012	Change	Manufacturer	Sales value, mln Rubles 2012	Sales value increase	Share
1	-	NOVARTIS	42,373.4	0.6%	5.5%
2	-	SANOFI	40,257.3	6.3%	5.2%
3	-	PHARMSTANDARD	27,630.2	0.4%	3.6%
4	-	F.HOFFMANN-LA ROCHE	23,674.5	10.1%	3.1%
5	-	TEVA PHARMACEUTICAL	22,880.8	6.7%	3.0%
6	+ 1	TAKEDA	22,249.4	16.7%	2.9%
7	+ 4	ABBOTT	21,874.3	34.3%	2.8%
8	-	BAYER	20,707.3	12.4%	2.7%
9	- 3	BERLIN-CHEMIE	20,702.9	2.0%	2.7%
10	-	MERCK	18,188.0	7.5%	2.4%

11	+ 2	PFIZER	17,577.2	18.8%	2.3%
12	- 3	GEDEON RICHTER	17,485.5	2.0%	2.3%
13	- 1	GLAXOSMITHKLINE	16,983.9	11.0%	2.2%
14	-	SERVIER	15,688.2	7.9%	2.0%
15	-	JANSSEN PHARMACEUTICA	15,373.8	8.5%	2.0%
16	+ 2	STADA	13,305.2	14.1%	1.7%
17	- 1	BOEHRINGER INGELHEIM	13,282.7	11.6%	1.7%
18	+ 1	KRKA	13,073.5	12.2%	1.7%
19	- 2	ASTRAZENECA	11,283.0	-3.5%	1.5%
20	-	ASTELLAS PHARMA	10,903.7	27.2%	1.4%

**Source:** DSM Group. **ISO 9001:2008**

**Note:** *the sales value shown is in final consumer prices with VAT included.*

Manufacturers represented in the rating generate most sales in the commercial segment - in general, the segment's share is 69.5%. Of the companies with more than 70% of sales concentrated in public procurement, we can only note F.HOFFMANN-LA ROCHE (85%).

ABBOTT (+34%) and ASTELLAS PHARMA (27%) demonstrate maximum gains. ABBOTT increased its sales thanks to the hospital segment. This enabled the company to move up 4 positions to take the 7th place (maximum change in the rating). ASTELLAS PHARMA showed such significant increase thanks to the commercial pharmacy sales segment, where sales grew by 30%.