

RUSSIAN PHARMACEUTICAL MARKET

GROUP DSM

2007



Dear colleagues!

Phrase "the conception has changed" is motto of 2007.

Pharmacy chains remembered about profits and stopped purchasing everything sold in the regions. Distributors have changed the focus from the drug sales to pharmacies onto business sale to investors. Manufacturers have well survived the fashion on DLO; moreover, the commercial sector has shown the astonishing growth rate. But what comes next?

Our new president has promised that Russia will enter the five largest world economics by 2020. If he keeps his word, the share of the country on the world drug market will increase from one and a half to three proud percent and this is almost 40 billions dollars.

I hope that this conception will last for a long time!

Alexander Kuzin

Director General of DSM Group

CONTENTS

Summary	3
Pharmaceutical market volume in Russia	4
2. Russian retail drug market in comparison with other world countries	7
3. Commercial segment of drugs	8
4. Drug Reimbursement program	26
5. Sales value in the hospitals segment	37
6. Drug Import	44
7. Pharmacy chains	49
8. Distribution segment of the pharmaceutical market	53
9. Manufacturing	57

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In 2007 the pharmaceutical market volume has amounted to 14.3 billion dollars (including VAT) in consumer prices that correspond to 16% growth compared to the previous year.

The volume of commercial pharmacy market of drugs was in 2007 7.4 billion dollars with 23% increase compared to 2006. The major factor of commercial segment growth is a process of consumers' reorientation to higher-priced drugs. Price index of the commercial segment of drugs was 3.6% which is significantly lower than inflation rate in 2007 (11.9%).

The consumption volume provided by the State Reimbursement Program (DLO) in 2007 exceeded 2 billion dollars with 18% decrease compared to 2006. The main trend of the DLO program has been to increase average prescription value and average cost of consumed unit: while in 2005 the average unit cost was 155 roubles, this cost reached 415 roubles in 2007. At that, in real terms the number of consumed drugs is being inevitably decreased.

The parapharmaceutical market growth rate stays high; in 2007 this segment increased by 31% and amounted to 3.1 billion dollars. It should be noted that the nutritional supplements were the major segment of parapharmaceutical market, but the segment of beauty products became the leader by sales volume in 2007. In 2007 the beauty products at pharmacies amount to about 630 billion dollars, their growth exceeded 75%. Segment of nutritional supplements shows stagnation – in the last years, the segment has been growing slower than the pharmacy market: in 2007 by 20%.

Drug import volume in Russia in 2007 amounted to 7.3 billion dollars, which is 14% higher than that in 2006.

In retail segment, the share of TOP-10 pharmacy chains is about 21%. Growth rate of pharmacy chains becomes slower. In 2007 the pharmacy chain "36.6" is the leader of ranking. The most sales growth rate for the pharmacy chains "Rigla" and "Doctor Stoletov" is related to the major purchases of market participants from TOP-20 at the end of 2006. The appearance in the ranking of "Raduga" chain, which have significantly grown for the year became the sensation in 2007.

The main issue of 2007 - who is to become the leader on the distribution segment - has finished by the triumph of SIA International. By annual results the share of this distributor amounted to 24%, while the share of CV "Protek" in the market was 21%. Rosta and Katren continue to struggle for the third place.

The great number of acquisition overwhelms the drug manufacturing segment on the market. Every manufacturer is influenced by this process: both imported and domestic. All of this brings changes in total ranking of manufacturers on the market. Pharmstandard showed the best result: In 2007 Pharmstandard moved 6 positions upwards in the ranking (from 11th to 5th place) by purchasing the drugs of Masterlek in the previous period.

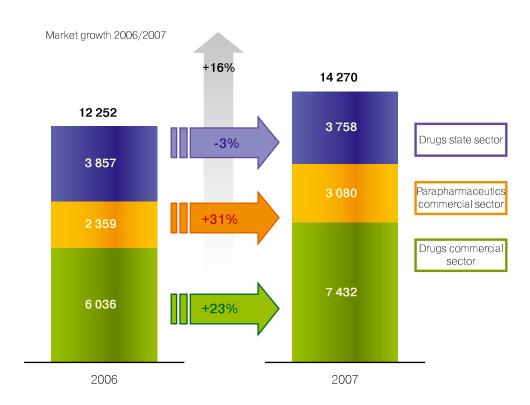
1. PHARMACEUTICAL MARKET VOLUME IN RUSSIA

Russian pharmaceutical market is one of the fast-growing markets worldwide. The main source of this growth is rising of the Russian population living standards.

Diagram 1 shows dynamics of retail sales value of Russian pharmaceutical market in 2006-2007.

Diagram 1

Pharmaceutical market volume, \$ mln



Source: DSM Group. ISO 9001:2000

And so, what do we have?

Russian pharmaceutical market amounted to 14.3 billion dollars which is 16% higher than that in 2006. Is this much or little? Let's remember the results of 2005-2006 and bright headlines stating unprecedented growth of the domestic market by 30-35% and everyone takes its place. Market growth shows 2-fold decrease. And the State (strange as it may seem) became again the principal participant of the market and initiator of such state of affairs.

In 2007 the main subject is the budget economy for Drug Reimbursement Program. For the first time since the Program beginning we observe reduction of the drug consumption in this channel of drug distribution (-18%).

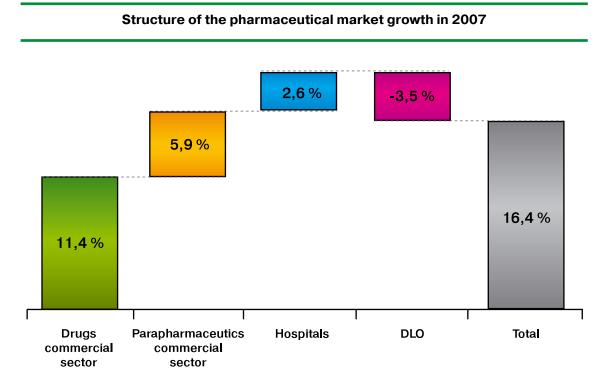


That's why in 2007 the commercial market segment became the exact engine of growth with outstanding value of 23% (this parameter is very high compared to the growth of international pharmaceutical market -6.4%). Although change of the dollar exchange rate against the rouble is responsible for 7.5% out of 23% market growth, further the commercial segment will be an engine for market development.

The parapharmaceutical segment becomes larger on the pharmaceutical market from year to year. In 2007, the capacity of this segment was more than 3 billion dollars. At the same time, it shows the high growth rate in the last 2-3 years. This allowed to increase the parapharmaceutical segment from 17% of total market capacity in 2005 to 22% in 2007. Tendency of the development of selling "goods for beauty and health" in any trade form in the pharmacies yields the great profit and in the future it will be an additional source of pharmacy income.

Diagram 2 shows the shares contributed by different market segments to the overall growth of the pharmaceutical market.

Diagram 2



Source: DSM Group. **ISO 9001:2000**

Retail Audit of the Russian Pharmaceutical Market

Quality management system meets ISO 9001:2000 requirements



Monthly monitoring of retail sales of pharmaceutical goods

Database renewal within 25 calendar days

7100 retail outlets and 98 regional units are in the database Moscow and St. Petersburg data are given up to district detailed

Retail audit database lets you:

- To supervise operatively the market situation
- To analyze supply, demand and consumption of drugs
- To position brands and new drugs in consumption structure
- To merge the action of medical representatives
- To control advertising campaigns efficiency
- To correct distributors price-lists
- To estimate drug manufacturers contracts purchasing volume



Retail audit of the pharmaceutical markets of Ukraine and Moldova



Jointly with company "Business Credit"



Retail audit of the pharmaceutical market of Kazakhstan

Jointly with marketing research agency "Vi-ORTiS"



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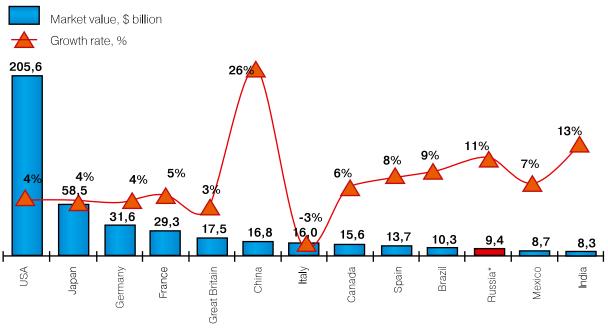
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Fax: +7 (495) 780-72-65 e-mail: info@dsm.ru http://www.dsm.ru Russian pharmaceutical market is only a small part of the world pharmaceutical market. Our company regularly watches the dynamics of the national market development at the background of other countries.

Diagram 3 shows several world countries ranking by retail drug market volume in 2007.

Diagram 3

Drug retail market volume in Russia and other countries in 2007



 * Russian pharmaceutical market volume in 2007 is according to DSM Group data.

Source: IMS Health, DSM Group. ISO 9001:2000

Note: Drug pharmaceutical market = drug commercial segment + DLO

In 2007 world drug sales volume increased by 6.4% and amounted to 712 billion dollars. Russian share in this volume is negligibly small and amounts to 1.3% only.

International market growth occurs due to the Second and Third World countries. The leaders are growing on average by 3-5% in the last years. China has the maximal growth rate among the countries mentioned above. This allowed the Chinese pharmaceutical market to move in the ranking from the 8th position in 2006 up to the 6th position in 2007.

As is shown on diagram 3, in 2007 Russia occupies only the 11th position in ranking of the world pharmaceutical countries. Growth rate reduction has lead to exclusion of the Russia from TOP-10, in which Russia rushed headily in 2006.

3. COMMERCIAL SEGMENT OF DRUGS

Crataegus has being used in medicine since ancient times. Biologically active substances of the fruits of this medicinal herb enhance coronary and cerebral circulation, increase the myocardial sensitivity to cardiac glycosides and decrease its excitability. The tincture prepared from the Crataegus fruits posses moderate cardiotonic, spasmolytic, sedative effects, and it is used in functional disorders of the cardiovascular system and as an adjunct in mild disorders of hearth rhythm.

Till recently, Crataegus tincture was presented in TOP-5 drugs by sales volume in money terms and it was the leader by drug consumption in real terms.

What is the reason of its popularity? It is not a secret that Crataegus tincture is not used for treatment of cardiac diseases only. The excise tax is not levied on the alcohol used in drug manufacture. As a result, the cost of the alcohol-containing drugs is lower than that for alcohol beverages. Being a strong drink and having good flavor and aroma, the Crataegus tincture was the cheapest source of high-quality medical alcohol, that is why this drug is used by consumers as an alcohol beverage.

The experts of this drink affirm that it has the gustatory qualities not inferior to cognac and it produces no "next morning hangover syndrome".

Everything changed in 2007. And Crataegus tincture is on the 20th position only. The change of "consumers'" gustatory preferences and tightening rules of manufacture and sale of alcohol-containing production are the reasons.

Let's stare at the market segment where this drug is sold more attentively.

Commercial segment of drugs is one of the most capacious segments of the pharmaceutical market. Its share has grown from 49% in 2006 to 52% in 2007.

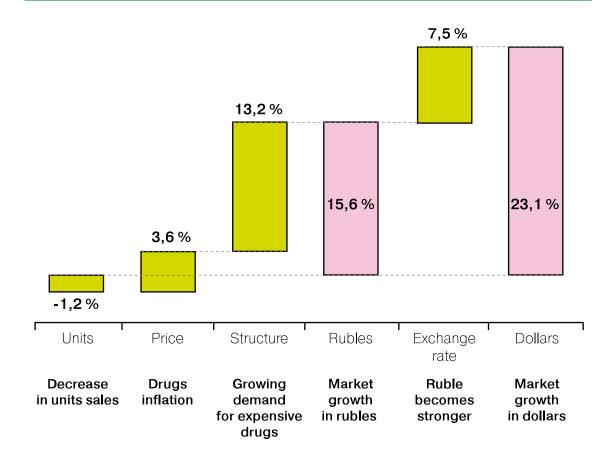
The capacity of the commercial drug market in 2007 exceed 7.4 billion dollars in end user prices or 5.6 billion dollars in pharmacy purchase prices¹ (see. Diagram 5).

Compared to 2006, this segment has grown by 23% in dollars and by 16% in roubles. At the same time, in 2007 the tendencies of the last years were maintained: reduction of consumption in real terms and re-orientation to higher-priced drugs (see Diagram 4).

¹ Thereafter in "Commercial segment of drugs" Section all volumes and prices are given in pharmacy purchase prices with VAT included.



Growth structure of the commercial drug market in 2007



Source: DSM Group. **ISO 9001:2000**

While speaking of high growth rate, we should not forget about rouble strengthening. This factor significantly contributes to the market growth in the dollar equivalent – change in dollar/rouble ratio covers 7.5% of the market growth. If an average index of dollar in 2006 was 27.19 roubles, in 2007 dollar was equal to 25.58 roubles on average which corresponds to more than one rouble and half drop for one year².

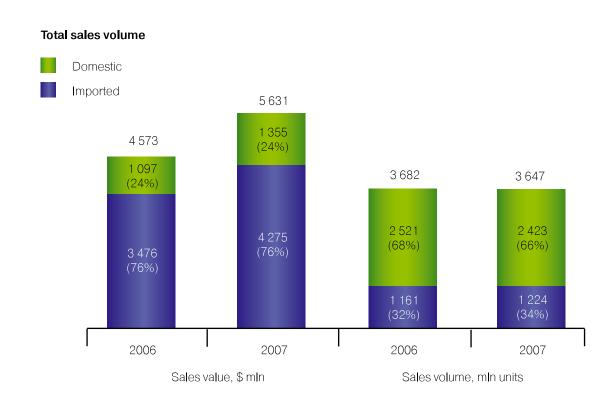
² Data are taken from the report "Monitoring of current economic situation in the Russian Federation in January-December 2007" issued by the Ministry of Economic Development and Trade (MEDT)

1. Proportion of imported and domestic drugs on the commercial market

The structure of commercial drug market by sales value of domestic and imported drugs is shown in Diagram 5.

Diagram 5

Proportion of imported and domestic drug sales



Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group.

ISO 9001:2000

Note: sales values are shown in pharmacies purchasing prices, VAT included

The domestic drugs cover only one forth of the Russian commercial drug market in sales value and this index amounted to 24% in 2007. At the same time the domestic drugs prevail in pharmacy sales in real terms, although their share dropped from 68% in 2006 to 66% in 2007.

In 2007 the average price of domestic drug unit amounted to 0.56 dollars, this price is more than 6-fold lower than that for imported drugs. In 2007 the average price of imported unit amounted to 3.49 dollars.

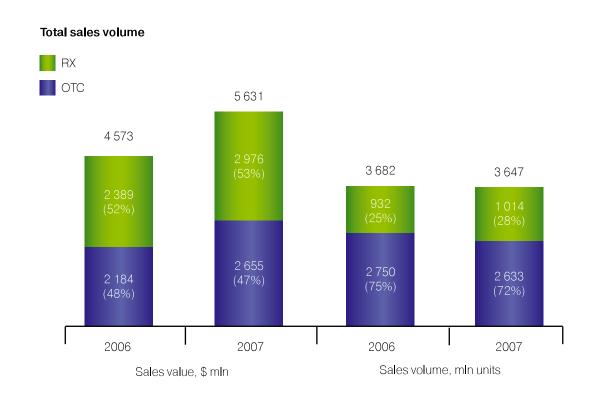


2. Proportion of Rx and OTC drugs on the commercial market

Proportion of Rx and OTC drugs by pharmacy sales is shown in Diagram 6.

Diagram 6

Proportion of Rx and OTC drug sales



Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group.

ISO 9001:2000

Note: sales values are shown in pharmacies purchasing prices, VAT included

Note. When calculating shares of Rx and OTC, drugs were distributed officially according to the OTC list. The fact that Rx drugs in pharmacies are often sold without prescription was disregarded.

In Russia, the shares of both Rx and OTC drugs were growing up in pharmacy sales in 2007. The share of Rx drugs in Russia increased by 1% in the total sales volume and amounted to 53%, OTC drug sales volume dropped and the share of this segment amounted to 47%.

OTC drugs are observed to prevail in Russia in real terms. However, consumption of this drug group (in packages) is being dropped, while consumption of Rx drugs in real terms is being increased. Accordingly, the share of OTC drugs in real terms reduced from 75% to 72%.

It should be noted that the average price of Rx drug unit amounted to 2.93 dollars in 2007 (growth +14% compared to 2006) and that for OTC drugs amounted to 1.00 dollar (growth +27% compared to 2006).

3. Sales structure by ATC groups on the commercial market

Proportion of 1st level ATC groups by pharmacy sales in Russia is shown in Table 1.

Table 1

Sales structure by ATC groups on the commercial market

First level ATC-groups	Sales value, \$ mln	Share of the group in sales value, %	Sales volume, mln units	Share of the group in sales volume, %
A: Alimentary tract and metabolism	1023	18,2	681	18,7
N: Nervous system drugs	756	13,4	774	21,2
C: Cardiovascular system drugs	688	12,2	308	8,4
R: Respiratory system drugs	649	11,5	494	13,5
J: Antibacterials for systemic use	440	7,8	208	5,7
G: Genitourinary system drugs and sex hormones	410	7,3	56	1,5
M: Musculoskeletal system drugs	384	6,8	223	6,1
D: Dermatologicals	304	5,4	378	10,4
[~] Without allocation (homeopathic preparations, plant and animal drugs, substances etc.)	294	5,2	268	7,3
L: Antineoplastic and immunomodulating agents	259	4,6	38	1,0
B: Agents affecting blood and blood forming organs	170	3,0	76	2,1
S: Agents affecting sensory organs	132	2,3	78	2,1
H: Systemic hormonal preparations (excluding sex hormones)	52	0,9	13	0,4
V: Various	41	0,7	30	0,8
P: Antiparasitic products, insecticides and repellents	29	0,5	22	0,6

Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group.

ISO 9001:2000

Note: sales values are given in pharmacies purchasing prices, VAT included

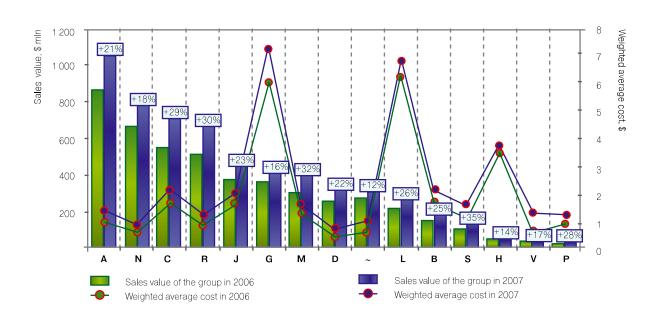


In 2007 the group [A] "Alimentary tract and metabolism" was the leader on Russian commercial market by sales value. Its share amounted to 18.2%. Group [A] "Alimentary tract and metabolism" includes many well advertised and well known drugs, e.g. vitamin and mineral complexes, Vitrum and Complivit, a drug for dysbacteriosis called Linex, being on the 4th position in the brand ranking on the commercial segment of the market, Mezym Forte, Essentiale etc.

The group [N] "Nervous system drugs" is on the second place with 13.4% share and the group [C] "Cardiovascular system drugs" is on the third place - 12.2%.

Diagram 7

Structure of the commercial drug market in 2006-2007



Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group.

ISO 9001:2000

Note: sales values are given in pharmacies purchasing prices, VAT included

The structure of the commercial market by ATC groups is rather stable from year to year and 2007 year is not an exception. The increase in the capacity and average cost of unit in ATC-groups is shown in Diagram 7.

The most relative increase of share was observed in the group [R] "Respiratory system drugs". In 2007 the increase in group [R] capacity amounted to 30% (one of the most maximal by ATC). The leaders of this group are Lazolvan and Terpincod; ACC has the maximal increase. The increase in group [R] capacity may be related to appearance of the new products in 2007: Marimer (seawater-based drug for nasal diseases), and Teraflu BRO (drug for respiratory diseases, particularly for acute and chronic bronchitis), which have shown great increase since their appearance in the pharmacies and occupied the 4th and 17th position in the new drug ranking, respectively.

The weighted average prices per unit significantly differ in the various ATC-groups. In 2007 the weighted average price per sold unit for groups [G] and [L] exceeded 7 dollars that speaks of expensive drugs predominance in the above groups. Group [H] was also characterized by rather high weighted average price per unit exceeding 3.9 dollars. This value did not exceed 1.5 dollars per unit (on average) for all other groups.

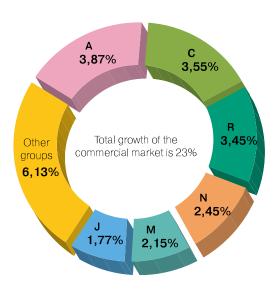
The contributions of different ATC-groups to the overall growth of the commercial market was determined using weighted increase index, the value taking into account the share of each ATC-group multiplied by its growth rate (see Diagram 8).

In 2007 the drugs of the groups [A] "Alimentary tract and metabolism", [C] "Cardiovascular system drugs" and [R] "Respiratory system drugs" made the most contributions to the increase of the value capacity of the commercial drug market.

In 2007 in group [A] "Alimentary tract and metabolism" the highest growth rate was demonstrated by Linex (LEK D.D.) that allowed it to significantly increase its share and to occupy the 1st position in the brands ranking on the commercial market.

Diagram 8

Weighted growth of ATC-groups



Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group. **ISO 9001:2000**

The big contribution of group [C] to the market growth resulted from one and a half times increase in Mildronat (Grinex) and Concor (Nycomed) sales as well as it was in the previous year. For group [R] it is a result of more than double increase in sales of ACC (Hexal).



4. Manufacturers on the commercial market

Table 2 shows TOP-20 manufacturing companies leading by the sales volume on Russian commercial market in 2007.

Table 2

TOP-20 drug manufacturers by pharmacy sales value on the commercial market in Russia in 2006-2007

Rank in 2006	Rating 2007	Manufacturers	Sales value, \$ mln		Sales value increase
Rar in 2	Rat 200		2006	2007	
1	1	SANOFI-AVENTIS	208	241	16
3	2	PHARMSTANDARD	149	226	52
2	3	BERLIN-CHEME /A.MENARINI/	168	205	22
8	4	NYCOMED	117	165	41
4	5	GEDEON RICHTER	133	164	23
7	6	NOVARTIS	118	160	36
5	7	PFIZER	130	151	16
9	8	LEK D.D.	114	143	25
6	9	SERVIER	121	140	16
10	10	BAYER SCHERING PHARMA AG	98	121	24
11	11	KRKA	97	117	21
13	12	SOLVAY PHARMACEUTICALS B.V.	80	108	35
12	13	GLAXOSMITHKLINE	84	104	23
20	14	BOEHRINGER INGELHEIM	56	88	57
19	15	OTECHESTVENNYE LEKARSTVA	58	80	39
15	16	DR.REDDY'S LABORATORIES LTD	64	77	21
14	17	F.HOFFMANN-LA ROCHE LTD	68	76	12
16	18	EGIS	63	74	18
18	19	ASTELLAS PHARMA INC	59	74	25
17	20	SCHERING-PLOUGH	62	73	18

Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group.

ISO 9001:2000

Note: sales values are given in pharmacies purchasing prices, VAT included

In 2007 the drugs produced by 1015 manufacturers (imported drugs - 501 companies, domestic drugs - 514 companies) were presented in Russian pharmacies.

In 2007 TOP-20 companies cover 46% of commercial segment of drugs. At the same time their cumulative growth is higher than average segment growth and amounts to 26%.

In the last years, Sanofi-Aventis is the permanent leader of the retail sales among the manufacturers of drugs. Although in the current ranking this manufacturer holds the first position, the gap between this company and the company occupying the second position is minimal. Therefore, in 2007 it can be really said that the first position was divided between 2 manufacturers: Sanofi-Aventis and Pharmstandard, foreign and domestic manufacturers. Thus, it can be said that the domestic manufacturer appeared on the market, and now this manufacturer has a drug portfolio, which may really compete on the Russian market traditionally oriented towards imported drugs.

"Otechestvennye lekarstva" is another Russian manufacturer presented in TOP-20 list.

Eight companies from TOP-20 manufacturers are growing faster than commercial market of the drugs. Maximal growth rates belong to the companies as follows: Pharmstandard, Nycomed, Boehringer Ingelheim. This allowed these companies to improve significantly their positions in ranking:

- Pharmstandard moved from the 3rd position and is the real candidate to be a leader.
- Nycomed moved from the 8th position in 2006 up to the 4th position in 2007.
- Boehringer Ingelheim moved from the 19th position to the 14th position in ranking.



5. Drugs on the commercial market

Table 3 shows TOP-20 drug brands leading by the sales volume on Russian commercial market in 2007.

Table 3

TOP-20 drug brands by sales value on the Russian commercial market in 2006-2007

, k	ng 7	Brand	Sales	s value, \$ mln	Sales value increase
Rank in 2006	Rating 2007		2006	2007	
1	1	ARBIDOL	44,0	61,5	40
1	2	VIAGRA	44,0	49,0	11
3	3	ACTOVEGIN	39,5	48,1	22
15	4	LINEX	24,0	41,9	75
7	5	TERAFLU	32,3	40,4	25
5	6	ESSENTIALE	35,3	40,3	14
8	7	MEZYM FORTE	31,7	37,9	20
9	8	VITRUM	31,7	37,4	18
6	9	ENAP	32,6	36,8	13
12	10	PENTALGIN	24,9	36,7	47
10	11	NO-SPA	30,1	33,6	12
16	12	MEXIDOL	22,6	32,0	42
13	13	PREDUCTAL	24,3	30,6	26
24	14	NUROFEN	19,2	30,0	56
18	15	ANAFERON	21,5	28,7	33
11	16	XENICAL	26,8	28,2	5
31	17	CONCOR	17,2	28,0	62
28	18	MILDRONATE	18,0	27,4	52
17	19	COLDREX	22,2	27,3	23
4	20	CRATAEGUS	37,2	25,8	-31

Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group.

ISO 9001:2000

Note: sales values are given in pharmacies purchasing prices, VAT included

In 2006 the struggle for the leadership between Arbidol and Viagra has finished in the implicit Arbidol victory in 2007. While in 2006 their sales volume were practically equal, in 2007 Arbidol gain an advantage over Viagra by 25%. Arbidol growth on the commercial market was almost 2-fold higher than the market growth. Viagra growth rate was slowed and amounted to 11% only, while the market growth was 23%. Decreased growth rate of Viagra could be explained by the successful sales of the competitors of this drug – Levitra and Cialis, their sales volume growth is significantly higher than that of Viagra, 26% and 21%, respectively.

Crataegus, the permanent leader of the last years, moved on the 20th position in TOP-20 brands, this was one more great sensation. The changes in sale rules for the alcohol-containing products have lead to decrease in popularity of this drug in certain groups of people. Only this drug from TOP-20 list demonstrates sales decrease. It may be also supposed that decrease of the popularity of Crataegus tincture is caused by demand reorientation to other alcohol-containing drug, Pepper, manufactured as a tincture containing 90% ethyl alcohol. Although this drug is intended for external use (it has local irritant and analgesic effects), certain group of people takes it orally "with pleasure". The growth of Pepper brand amounted to more than 36% compared to 2006.

Linex has significantly strengthened its position in ranking raising from the 15th position up to the 4th position in 2007. Linex sales volume has increased by 25%. Active drug promotion in mass media (trailer on TV - "Absolute freedom from dysbacteriosis"), distribution of drug information sheets in pharmacies, at the specialized exhibitions etc. have resulted in a higher demand on this drug.

6. Segments by price on the commercial market

In 2007 an average cost of drug unit on the commercial market increased by 24% and amounted to 1.54 dollars. The growth in roubles is less significant – 17%, and an average cost per unit is 39.4 roubles.

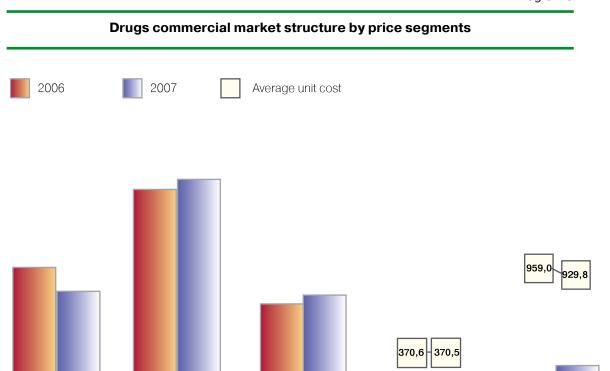
Let us have a look at the components of this value.

The commercial market structure and average cost per unit in different price categories in 2006-2007 are presented in Diagram 9.

11,5% 11,7

More than 500 rbl.





205,6

209,5

21,0

150-300 rbl.

9,0

300-500 rbl.

Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group.

ISO 9001:2000

Under 50 rbl.

10,2

24.8%

10,9

21,7

Note: sales values are given in pharmacies purchasing prices, VAT included

87,2

35,1% 36,5

50-150 rbl.

88,8

The tendency to switch to higher-priced drugs continued in 2007. While in 2006 the drugs with unit price less than 50 roubles occupied the quarter of market, in 2007 their share increased more than by 3% and amounted to 21.7%. In spite of that, this segment has still the greatest capacity in real terms -78% (in 2006-82%). The share of other goods by sales value increased, but in real terms they cover in total 22% only. The drugs at price ranging from 50 to 150 roubles had the maximal growth. It is of interest to note that average cost per unit for every segment increased slightly. At the same time it has even decreased in the segment of higher-priced drugs (over 300 roubles).

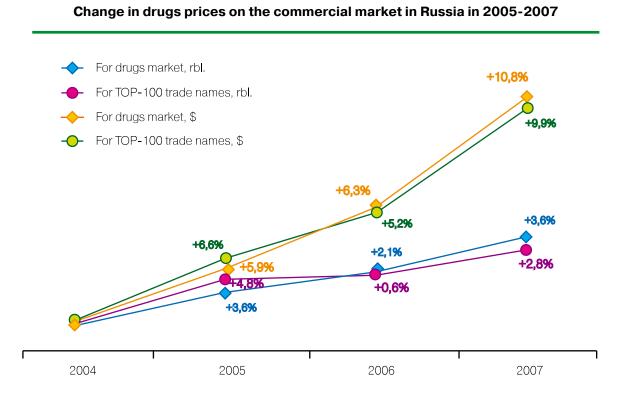
Thus, it can be said that there is a reduction of demand on the low-cost drugs and increase in consumption of expensive drugs. There is a change in consumption structure, transitition from quantity of consumed drugs to quality (higher-priced drug ≈ more effective drug).

7. Price index on the commercial market

To make an objective estimate of drug price change on the commercial market, price index based upon a fixed list of ready-to-use drugs was considered³.

In 2007 the drug price index has amounted to 3.6% only if compared to 2006 and the growth is significantly more than that happened in 2006 (+2.1%). At the same time, the price rise of the most popular drugs on the market was more negligible: in 2006 the price index of TOP-100 brands amounted to 2.8%, although it is significantly higher than that in 2006 (+0.6%).

Diagram 10



Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group. **ISO 9001:2000**

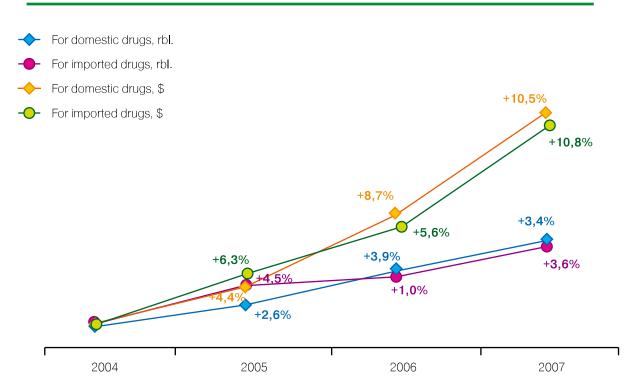
In 2007 the changes in prices for domestic and imported drugs were practically equal. The value of these parameters amounted to 3.4% and 3.6%, respectively. The domestic drugs had less intensive growth than other drugs in the whole. This situation is surprising. It is clear that the contract price for the imported drugs is set either in euros or in dollars. That is why we observe the growth of the imported drugs in dollar terms. In rouble terms this growth is insignificant due to reduction of the of the dollar exchange rate against the rouble. The domestic manufacturers do not increase the price for their drugs as they commonly produce the cheap generics which are not able to compete in the pharmacies if they would have a high price.

The price index for imported and domestic drugs for the period of 2005-2007 is shown in Diagram 11.

⁹ Price index for the current year was calculated on the basis of intersected list of all full names of drugs present on the market in the previous year.



Price index for imported and domestic drugs on the commercial market in Russia in 2005-2007



Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group.

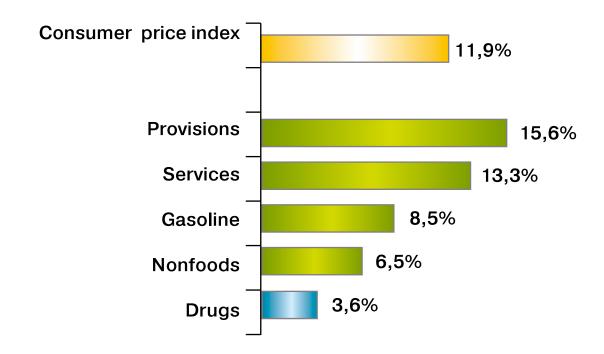
ISO 9001:2000

According to Goskomstat data drugs cover 1.62% of the base structure of consumption expenditure of Russian population.

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

In 2007 the overall consumer price index amounted to 11.9% with the highest price rise (15.6%) observed in the food segment while the non-food products went up by 6.5% only. Among the non-food products the petrol had one of the highest price index (8.5%). In 2007 the price growth for pharmaceuticals was one of the lowest in comparison with other product categories.

Consumer prices index in Russia (December 2007 to December 2006)



Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group. **ISO 9001:2000,** Goskomstat

Thus, it can be said that for consumer the price of the pharmaceuticals has less growth than the other goods have. Firstly, it is related to the fact that Russian consumer mostly prefers the imported drugs. And every increase in manufacturer's price on the final market (in pharmacy) is leveled by the rouble strengthening.

8. New drugs

The range of pharmaceuticals in the Russian pharmacies is wide enough. Many drugs (e.g. Pentalgin, Mezym Forte, Essentiale etc.) have the right to be called "old residents" of the Russian market. Nevertheless, the new drugs appear in the pharmacies every year. Mainly they are generic drugs with the new trade name, however there are absolutely new original drugs. Only the new drugs are referred which were manufactured under the new trade name.

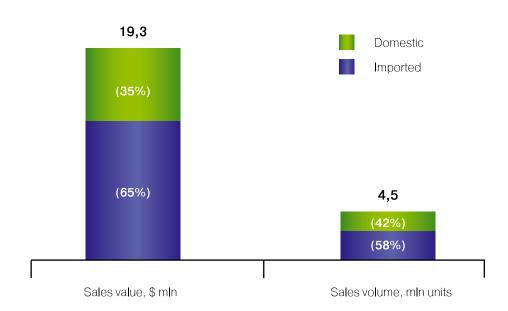
In 2007 more than 230 new drug trade names appeared in the pharmacies. The year 2007 became the leader by production of the new drugs for the last 4 years (while in 2004 there were 150 new trade names appeared in Russian pharmacies, in 2005 there were 160 new trade names, in 2006 their number reduced to 130 names). It should be noted that most of the new drugs belongs to foreign manufacturers (about 140 trade names).

In 2007 in the Russian Federation the sales value of new drugs sold was 19.3 billion dollars (increased by 61% compared to 2006) and 4.5 billion units.

The share of the new drug sales in total sales volume of pharmaceuticals amounted to about 0.34% in value terms (0.12% in real sales volume). The weighted average cost per unit of the new domestic drug amounted to about 90 roubles, and for imported drug – about 125 roubles. The new imported drugs dominate both by sales volume and by the number of units sold (see Diagram 13).



Sales structure of new drugs by their origin



Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group.

ISO 9001:2000

Note: sales values are given in pharmacies purchasing prices, VAT included

Table 4 shows Top-20 mew trade names.

The Russian drug, Amlodipine-Biocom, Biocom ZAO, became the sales leader among the trade names of the new drugs. This drug share among the total amount of the new drugs is more than 15% in money terms. This drug appeared in the Russian pharmacies on April, 2007, and its monthly sales volume growth was headily increasing. On December, 2007, its monthly sales volume was more than 20-fold increase compared to April, 2007!

Antiviral drug Fenistil Pencivir (Novartis) takes the second position. Monthly sales volume of Fenistil Pencivir increased more than thousand folds since it has started to sale, that's why it may be suggested that in the nearest future this drug will encounter worthy competitor represented by Aciclovir (INN) (Zovirax, Virolex etc).

TOP-20 new trade names in 2007 on the Russian commercial market

Nº	Tradename	Registration date	Manufacturer	Sales value, \$ thousands
1	AMLODIPINE BIOCOM	APRIL, 2007	BIOCOM	2 992
2	FENISTIL PENCIVIR	MARCH, 2007	NOVARTIS	1 301
3	RHEOPOLYGLUCINUM -40-ESCOM	APRIL, 2007	ESCOM NPK	890
4	MARIMER	MARCH, 2007	LABORATOIRES GILBERT	886
5	TROXERUTIN VETPROM	JANUARY. 2007	VETPROM-RADOMIR AD	807
6	LINDAXA	AUGUST, 2007	ZENTIVA A.S.	614
7	GAVISCON	JULY, 2007	RECKITT BENSKISER	580
8	MILGAMMA COMPOSITUM	JULY, 2007	WOERWAG PHARMA	571
9	AFALA	JANUARY. 2007	MATERIA MEDICA	562
10	WILPRAFEN SOLUTAB	MARCH, 2007	ASTELLAS PHARMA INC	527
11	LYRICA	MARCH, 2007	PFIZER	456
12	VASOCET	APRIL, 2007	STRAGEN PHARMA S.A.	442
13	SLEEPEX	MARCH, 2007	SAGMEL INC	399
14	VESTIBO	MARCH, 2007	ACTAVIS	357
15	MIG 400	AUGUST, 2007	BERLIN-CHEME /A.MENARINI/	314
16	BEROCCA PLUS	JULY, 2007	F.HOFFMANN-LA ROCHE LTD	300
17	TERAFLU BRO	FEBRUARY, 2007	NOVARTIS	288
18	COMPLIVIT CALCIUM D3	SEPTEMBER, 2007	PHARMSTANDARD	286
19	ZETAMAX RETARD	MARCH, 2007	PFIZER	283
20	SAFOCID	JUNE, 2007	LYKA LABS LTD	269

Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group. **ISO 9001:2000**

Note: sales values are given in pharmacies purchasing prices, VAT included

Biocom ZAO (Amlodipine-Biocom) became the leader among the Russian new drug manufacturers. In 2007 Pharmstandard and Krasnogorsk-Pharmaceuticals introduced to the market the maximum numbers of the new domestic drugs – every per 8 new trade positions.

Novartis became the leader among foreign manufacturers of the new drugs. Four new drugs were introduced by Novartis in 2007: Fenistil Pencivir, Teraflu Bro, Teraflu Lar and Cefazolin Sandoz. Actavis introduced to the Russian market the maximum number of the new drugs among the imported companies (7 drugs).





TOP-20 manufacturers of the new trade names in 2007 on the Russian commercial market

Nº		Sales value, Sthousands	Number of the new trade names	Leader of the manufacturer's new drugs
1	BIOCOM	2 992	1	AMLODIPINE BIOCOM
2	NOVARTIS	1 649	4	FENISTIL PENCIVIR
3	ESCOM NPK OAO	890	1	RHEOPOLYGLUCINUM-40-ESCOM
4	LABORATOIRES GILBERT	886	1	MARIMER
5	RECKITT BENSKISER	816	2	GAVISCON
6	VETPROM-RADOMIR AD	807	1	TROXERUTIN VETPROM
7	ZENTIVA A.S.	800	5	LINDAXA
8	PFIZER	780	4	LYRICA
9	WOERWAG PHARMA	571	1	MILGAMMA COMPOSITUM
10	MATERIA MEDICA	562	1	AFALA
11	SAGMEL INC	548	3	SLEEPEX
12	ASTELLAS PHARMA INC	527	1	WILPRAFEN SOLUTAB
13	ACTAVIS	524	7	VESTIBO
14	PHARMSTANDARD	461	8	IMMUNEX
15	STRAGEN PHARMA S.A.	442	1	VASOCET
16	BERLIN-CHEME /A.MENARINI/	409	2	MIG 400
17	SHREYA CORPORATION	398	4	LEFOXIN
18	KRASNOGORSK-PHARMACEUTICAL	S 328	8	PHYTONEFROL (UREOLOGICAL SPECIES)
19	KRKA	323	8	AMPRILAN
20	MIR-PHARM	301	5	TRANEXAM

Source: "Monthly retail audit of the pharmaceutical market in the Russian Federation", DSM Group.

ISO 9001:2000

Note: sales values are given in pharmacies purchasing prices, VAT included

All of the new drugs, particularly entered TOP-20 list, showed good monthly sales volume growth from the moment of their appearance in pharmacies till the end of the year. The growths of some new drugs (e.g. Marimer, Troxerutin VetProm, Berocca Plus) may be called huge, and possibly in 2008 many of the new drugs addressed in this report will become the leaders on the Russian drug market.

4. DRUG REIMBURSEMENT PROGRAM

Drug Reimbursement Program started in 2005 in the framework of the National Project "Health". Declared objectives of the Drug Reimbursement Program were as follows:

It was supposed that poorly functioning beneficiary pharmacy chain will be replaced by the centralized allocation of drugs to beneficiaries.

The subject matter of the Program is development of the listing of beneficiary drugs by the Ministry of Health Care and Social Development on an annual basis, after which a competitive tender among suppliers is conducted on the federal level.

Every year there are surprises and innovations for Drug Reimbursement Program and its participants as follows:

- 2005 Program formation year, all of the participants kept their eyes on it only. Provided financing was sufficient to cover all issued prescriptions. The Program prospects were very optimistic. At the end of 2005 about half of people receiving social support in the form of DLO refused from participation in the program (preferring money compensation). But there were the people who really needed this help.
- The first surprises were presented in 2006. Sum of budget money for this program was determined by number of beneficiaries without regard to needs and diseases. That is why the budget deficiency appeared in the Program since the first months. The government has started to save money in the Drug Reimbursement Program. It was expressed as the revision of the drug listing for this Program (listing was updated 4 times in 2006), adoption of the law on INN drug prescription (in order to sell the cheaper generics in pharmacies). In spite of the attempts to reduce the volume of prescribed drugs the consumption value under the DLO program in 2006 amounted to 2.4 billion dollars (65 billion roubles) which is 74% more than in 2005.
- 2007 Drug Reimbursement Program was divided into 2 tenders: high-priced drugs and non high-priced drugs; authorized pharmaceutical organization responsible for drug supply was defined for each of them. As a result of passed tenders in some regions the authorized pharmaceutical organizations were replaced, there are the cases of existing of several authorized pharmaceutical organizations in the same region.
- 2008 the new turn: DLO was divided into two parts, one of them to be implemented by the federal center (high-priced drugs for treatment of seven very serious diseases classified into individual group) and the second to be implemented by the subjects of the Russian Federation (common drug list). Finally, throughout the country one high-priced drug was supplied by one distributor, and another high-priced drug was supplied by another distributor (totally, 13 companies have won the competition). The situation concerning the common drug list is more tangled; in one region the great number of distributors may work and have the different drug lists and they may have no relation to the other region.

Thus, it can not be said that the work of this system is stable even after three years from the start of the Drug Reimbursement Program.

Let's look at the results of the Drug Reimbursement Program in 2007. budget austerity measures and actions aimed to it, have lead to decrease in sales volume in the reporting year, for the first time since the Program start. This is despite the fact that the number of the beneficiaries was not practically changed: In 2006 they were counted to 7.5 millions, in 2007 about 7.6 millions were registered in this program.

In 2007 the drug sales value under the Drug Reimbursement Program amounted to 2.0 billion dollars (or about 50 billion roubles).



DLO share on the pharmaceutical market was reduced from 19% to 14%.

The trend of Drug Reimbursement Program is increase in average cost per unit. In 2005 the average cost per unit amounted to 155 roubles, in 2006 it increased in 2 times and amounted to 330 roubles. And in 2007 the average cost per unit has already reached 416 roubles. (compare to 52 roubles on the commercial segment in 2007 – less than 8 times).

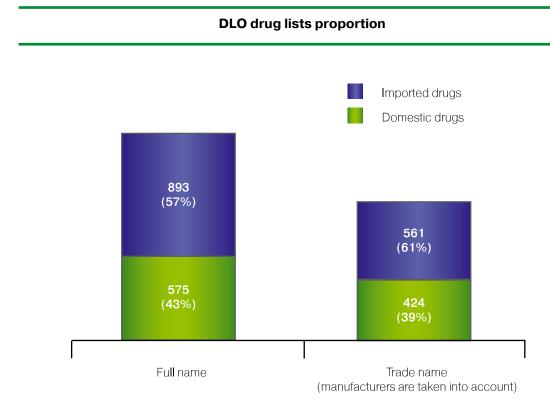
There is a reduction of drug consumption under the Drug Reimbursement Program, while the average cost per unit grows: about 190 million drug units were sold in 2006, and in 2007 this value was smaller - almost in 1.5 times – 120.3 billion units.

1. Proportion of imported and domestic drugs within DLO Program

One of the roots of the DLO program was to provide an additional stimulus for the development of the domestic pharmaceutical industry. In spite of the fact, DLO program turned into an "import" one as the domestic production takes only modest place in the list of the reimbursed drugs.

If we analyze the list by the number of trade names a relative parity between listed imported and domestic drugs can be seen.

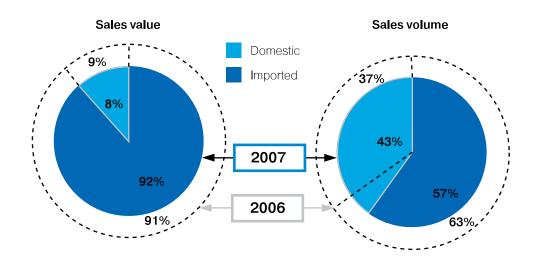




Source: DSM Group. **ISO 9001:2000**

The proportion by sales value is significantly shifted towards imported drugs. This trend keeps throughout the program. In 2007 the proportion is shifted towards increased share of the imported drugs: the share of imported drugs is 92%, and the share of domestic drugs is 8%.

Proportion of imported and domestic drug sales



Source: DSM Group. ISO 9001:2000

Note: sales values are given in consumer prices, VAT included

It should be noted that the share of the domestic drugs in real terms increased. In 2006 it amounted to 37% and in 2007 it amounted to 43%. In general, this is an unusual situation for the market when the imported goods dominate in real terms. This situation developed due to beneficiaries' demand of the high-priced drugs, most of which are the imported drugs.

2. Proportion of Rx and OTC drugs within the DLO program

It is not a great surprise that the Rx drugs prevail in DLO program both by sales value and sales volume as all these drugs are prescribed by doctor and strictly according to the illness specifics.

In 2007 the share of Rx drugs in the DLO program sales value in Russia increased by 1% and amounts to 96%.

Rx drug share by sales volume is 82%.

3. Drug sales structure by ATC groups within the DLO program

Proportion of the 1st level ATC groups by pharmacy sales within the DLO program in 2007 in Russia is shown in Table 6.





Drug sales structure by ATC groups on the DLO market

First level ATC groups	Sales value, \$ mln	Group share in sales value, %	Sales volume, mln units	Group share in sales volume, %
L: Antineoplastic and immunomodulating agents	685,3	34,9	1,3	1,0
A: Alimentary tract and metabolism	345,4	17,6	21,8	18,1
C: Cardiovascular system drugs	235,1	12,0	48,0	39,9
N: Nervous system drugs	187,1	9,5	21,0	17,5
B: Agents affecting blood and blood forming organs	161,6	8,2	3,8	3,1
R: Respiratory system drugs	138,3	7,1	7,0	5,8
M: Musculoskeletal system drugs	71,7	3,7	9,0	7,5
H: Systemic hormonal preparations (excluding sex hormones)	71,5	3,6	1,3	1,1
J: Antibacterials for systemic use	22,3	1,1	2,3	1,9
G: Genitourinary system drugs and sex hormones	17,9	0,9	0,5	0,4
S: Agents affecting sensory organs	15,0	0,8	3,8	3,2
V: Various	7,2	0,4	0,1	0,1
D: Dermatologicals	2,3	0,1	0,6	0,5
P: Antiparasitic products, insecticides and repellents	0,03	0,002	0,01	0,01
[~] Without allocation (homeopathic preparations, plant and animal drugs, substances etc.)	0,004	0,0002	0,002	0,002

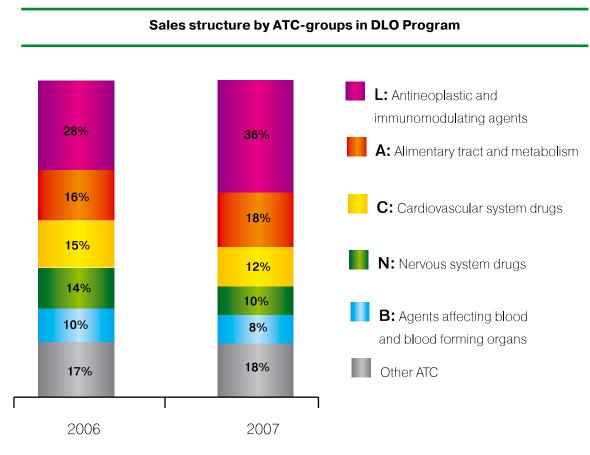
Source: DSM Group. ISO 9001:2000

Note: sales values are given in consumer prices, VAT included

In 2007, as well as it was in the previous years, the group [L] "Antineoplastic and immunomodulating agents" is the leader of the Drug Reimbursement Program by drug sales value. Its share increased from 28% to 35%. Group [A] "Alimentary tract and metabolism" and group [C] "Cardiovascular system drugs" place the second (18%) and the third position (12%), respectively.

In 2007 the DLO structure by ATC groups kept the tend that it had in the previous years. In spite of the fact that more than 80% of consumption is shared between 5 ATC groups (as in 2006), their proportion has significantly changed (see Diagram 16).

Diagram 16



Source: DSM Group. ISO 9001:2000

The share of the group [L] "Antineoplastic and immunomodulating agents" continues to grow from 28% up to 35%. The group growth in value terms was 5%; this is one of the few groups which increased while the total DLO sales volume decreased.

Among TOP-5 ATC, only the group [A] "Alimentary tract and metabolism" increased its share in the consumption volume under the Drug Reimbursement Program. This was due to significant growth of Cerezyme, Lantus, and Levemir. All these drugs are presented in TOP-20 common drug list. It should be noted that Levemir (Novo Nordisk) used in diabetes treatment showed 7-fold increase.

It is interesting to look at how much money is spent for treatment of specific disease under this Program. We classified drug list by diseases. As a result the following ranking was obtained (see Table 7).





Cost ranking in DLO by diseases in 2007

Diseases	Value, \$ mln	Share
ONCOLOGY	469	23,9 %
DIABETES MELLITUS	252	12,9 %
CARDIOVASCULAR DISEASES	235	12,0 %
IMMUNE SYSTEM DISORDERS	216	11,0 %
NERVOUS DISORDERS	187	9,5 %
HEMATOLOGICAL DISORDERS	162	8,2 %
RESPIRATORY DISEASES	138	7,1 %
ALIMENTARY DISORDERS	93	4,7 %
MUSCULOSKELETAL DISORDERS	72	3,7 %
HORMONAL DISORDERS	71	3,6 %
MALE AND FEMALE REPRODUCTIVE DISORDERS	19	0,9%
EYE DISEASES	15	0,8 %
VIRAL, BACTERIAL, FUNGAL, PROTOZOAL DISEASES	14	0,7 %
VACCINES/SERUMS	8	0,4 %
OTHER	7	0,4 %
SKIN DISEASES	2	0,1 %

Note: sales values are given in consumer prices, VAT included

In 2007 the State has spent the maximum funds for treatment of oncology patients – about 470 million dollars. Many antineoplastic drugs included in the Drug Reimbursement Program have rather high price (particularly, the weighted average cost of Gleevec, leader of the brand ranking in DLO segment amounts almost to 115 thousand roubles), and they are used as treatment cycles and that is why the treatment with these drugs requires the greatest material costs. For treatment of the disease of the XXI century, diabetes mellitus, though lower but quite significant sum was spent, more than 250 million dollars. The third position is occupied by cardiovascular diseases.

4. Manufacturers in the DLO program

Table 8 shows TOP-20 manufacturing companies leading by the consumption volume in the DLO program in 2007.

Table 8

TOP-20 drug manufacturers by the consumption volume in the DLO Program in 2006-2007

Rank in 2006	ing 7	Manufacturers	Sales val	ue, \$ mln	Sales value increase
Ran in 20	Rating 2007		2006	2007	
2	1	NOVARTIS	169,0	244,2	44
1	2	JANSSEN PHARMACEUTICA N.V.	232,4	196,9	-15
3	3	F.HOFFMANN-LA ROCHE LTD	168,2	188,1	12
5	4	NOVO NORDISK	120,1	163,8	36
7	5	BAYER SCHERING PHARMA AG	89,6	95,1	6
6	6	ASTRAZENECA UK LTD	106,2	85,1	-19
11	7	TEVA PHARMACEUTECAL INDUSTRIES	63,7	69,5	9
4	8	SANOFI-AVENTIS	123,7	61,5	-50
8	9	ELI LILLY	82,2	49,3	-40
20	10	SCHERING-PLOUGH	30,2	46,7	55
13	11	BOEHRINGER INDUSTRIES	58,3	45,8	-21
18	12	GLAXOSMITHKLINE	37,7	41,9	11
15	13	SOLVAY PHARMACEUTICALS B.V.	56,3	36,1	-36
27	14	MAKIZ-PHARMA	21,0	35,9	71
9	15	SERVIER	69,2	35,4	-49
10	16	KRKA	66,5	33,2	-50
12	17	BERLIN-CHEME /A.MENARINI/	62,1	33,2	-47
43	18	GENZYME CORPORATION	8,9	22,0	147
22	19	OTECHESTVENNYE LEKARSTVA	27,8	21,0	-24
29	20	IVAX CORPORATION	19,5	19,7	1

Source: DSM Group. ISO 9001:2000

Note: sales values are given in consumer prices, VAT included



According to the 2007 lists of drugs allowed for prescription, the number of manufacturers in the DLO program is 179 versus 222 in 2006.

In 2007 Novartis pressed Janssen Pharmaceutica from the first position and became the leader of the DLO Program. Sales value increase of the new leader of the DLO Program amounts to 44.5% in this year.

In 2006 all TOP-20 manufacturing companies have grown, except GEDEON RICHTER, in 2007 the picture has somewhat changed. Only 10 manufacturing companies from TOP list increased their sales value in this year.

The most significant drop among TOP-20 manufacturing companies belongs to Berlin-Chemie (-46.5%).

In this year GENZYME CORPORATION had the highest increase among other TOP-20 manufacturing companies (Cerezyme holds the 19th position in TOP-20 brand names), sales volume of this company increased almost in 2.5 times.

5. Brands in the DLO program

Table 9 shows TOP-20 brands leading by sales volume in the DLO program in 2007.

Table 9

TOP-20 brands by sales value in the DLO Program in 2006-2007

Brand Sales value, \$ min Sales value increases 2006 2007 2 1 GLIVEC 79.9 124.6 56 56 1 2 VELCADE 82.1 78.7 -4 2 5 3 BETAFERON 50.6 77.3 53 3 4 EPREX 58.1 50.8 -13 26 5 COPAXONE-TEVA 21.9 45.7 109 13 6 LANTUS 29.3 39.5 35 28 7 SERETIDE 21.1 38.9 84 4 8 RISPOLEPT 56.8 38.1 -33 33.3 6 4 8 RISPOLEPT 56.8 38.1 33.3 36 7 10 HUMULIN 45.1 32.6 -28 15 11 HERCEPTIN 28.3 32.1 13 115 12 LEVEMIR 4.4 31.7 618 11 13 ARIMIDEX 31.8 31.1 -2 27 14 NOVOSEVEN 21.5 30.5 42 32 15 ZOMETA 19.6 30.3 54 17 16 RECORMON 26.9 29.7 10 10 17 PROTAPHANE 32.6 25.5 -22 18 18 TEMODAL 26.9 24.4 -9 75 19 CEREZYME 8.9 22.0 147 37 20 SANDIMMUN 14.8 20.3 37	, k 206	ng 7	Brand	Sales val	ue, \$ mln	Sales value increase
1 2 VELCADE 82.1 78.7 -4 5 3 BETAFERON 50.6 77.3 53 3 4 EPREX 58.1 50.8 -13 26 5 COPAXONE-TEVA 21.9 45.7 109 13 6 LANTUS 29.3 39.5 35 28 7 SERETIDE 21.1 38.9 84 4 8 RISPOLEPT 56.8 38.1 -33 12 9 MABTHERA 31.3 33.3 6 7 10 HUMULIN 45.1 32.6 -28 15 11 HERCEPTIN 28.3 32.1 13 115 12 LEVEMIR 4.4 31.7 618 11 13 ARIMIDEX 31.8 31.1 -2 27 14 NOVOSEVEN 21.5 30.5 42 32 15 ZOMETA 19.6 30.3 <th>Ran in 20</th> <th>Rati 200</th> <th></th> <th>2006</th> <th>2007</th> <th></th>	Ran in 20	Rati 200		2006	2007	
5 3 BETAFERON 50.6 77.3 53 3 4 EPREX 58.1 50.8 -13 26 5 COPAXONE-TEVA 21.9 45.7 109 13 6 LANTUS 29.3 39.5 35 28 7 SERETIDE 21.1 38.9 84 4 8 RISPOLEPT 56.8 38.1 -33 12 9 MABTHERA 31.3 33.3 6 7 10 HUMULIN 45.1 32.6 -28 15 11 HERCEPTIN 28.3 32.1 13 115 12 LEVEMIR 4.4 31.7 618 11 13 ARIMIDEX 31.8 31.1 -2 27 14 NOVOSEVEN 21.5 30.5 42 32 15 ZOMETA 19.6 30.3 54 17 16 RECORMON 26.9 29.7<	2	1	GLIVEC	79,9	124,6	56
3 4 EPREX 58,1 50,8 -13 26 5 COPAXONE-TEVA 21,9 45,7 109 13 6 LANTUS 29,3 39,5 35 28 7 SERETIDE 21,1 38,9 84 4 8 RISPOLEPT 56,8 38,1 -33 12 9 MABTHERA 31,3 33,3 6 7 10 HUMULIN 45,1 32,6 -28 15 11 HERCEPTIN 28,3 32,1 13 115 12 LEVEMIR 4,4 31,7 618 11 13 ARIMIDEX 31,8 31,1 -2 27 14 NOVOSEVEN 21,5 30,5 42 32 15 ZOMETA 19,6 30,3 54 17 16 RECORMON 26,9 29,7 10 10 17 PROTAPHANE 32,6 25	1	2	VELCADE	82,1	78,7	-4
26 5 COPAXONE-TEVA 21.9 45.7 109 13 6 LANTUS 29.3 39.5 35 28 7 SERETIDE 21.1 38.9 84 4 8 RISPOLEPT 56.8 38.1 -33 12 9 MABTHERA 31.3 33.3 6 7 10 HUMULIN 45.1 32.6 -28 15 11 HERCEPTIN 28.3 32.1 13 115 12 LEVEMIR 4.4 31.7 618 11 13 ARIMIDEX 31.8 31.1 -2 27 14 NOVOSEVEN 21.5 30.5 42 32 15 ZOMETA 19.6 30.3 54 17 16 RECORMON 26.9 29.7 10 10 17 PROTAPHANE 32.6 25.5 -22 18 18 TEMODAL 26.9 <t< td=""><td>5</td><td>3</td><td>BETAFERON</td><td>50,6</td><td>77,3</td><td>53</td></t<>	5	3	BETAFERON	50,6	77,3	53
13 6 LANTUS 29.3 39.5 35 28 7 SERETIDE 21.1 38.9 84 4 8 RISPOLEPT 56.8 38.1 -33 12 9 MABTHERA 31.3 33.3 6 7 10 HUMULIN 45.1 32.6 -28 15 11 HERCEPTIN 28.3 32.1 13 115 12 LEVEMIR 4.4 31.7 618 11 13 ARIMIDEX 31.8 31.1 -2 27 14 NOVOSEVEN 21.5 30.5 42 32 15 ZOMETA 19.6 30.3 54 17 16 RECORMON 26.9 29.7 10 10 17 PROTAPHANE 32.6 25.5 -22 18 18 TEMODAL 26.9 24.4 -9 75 19 CEREZYME 8.9 22.0	3	4	EPREX	58,1	50,8	-13
28 7 SERETIDE 21.1 38.9 84 4 8 RISPOLEPT 56.8 38.1 -33 12 9 MABTHERA 31.3 33.3 6 7 10 HUMULIN 45.1 32.6 -28 15 11 HERCEPTIN 28.3 32.1 13 115 12 LEVEMIR 4.4 31.7 618 11 13 ARIMIDEX 31.8 31.1 -2 27 14 NOVOSEVEN 21.5 30.5 42 32 15 ZOMETA 19.6 30.3 54 17 16 RECORMON 26.9 29.7 10 10 17 PROTAPHANE 32.6 25.5 -22 18 18 TEMODAL 26.9 24.4 -9 75 19 CEREZYME 8.9 22.0 147	26	5	COPAXONE-TEVA	21,9	45,7	109
4 8 RISPOLEPT 56.8 38.1 -33 12 9 MABTHERA 31,3 33,3 6 7 10 HUMULIN 45,1 32.6 -28 15 11 HERCEPTIN 28,3 32,1 13 115 12 LEVEMIR 4,4 31,7 618 11 13 ARIMIDEX 31,8 31,1 -2 27 14 NOVOSEVEN 21,5 30,5 42 32 15 ZOMETA 19,6 30,3 54 17 16 RECORMON 26,9 29,7 10 10 17 PROTAPHANE 32,6 25,5 -22 18 18 TEMODAL 26,9 24,4 -9 75 19 CEREZYME 8,9 22,0 147	13	6	LANTUS	29,3	39,5	35
12 9 MABTHERA 31,3 33,3 6 7 10 HUMULIN 45,1 32,6 -28 15 11 HERCEPTIN 28,3 32,1 13 115 12 LEVEMIR 4,4 31,7 618 11 13 ARIMIDEX 31,8 31,1 -2 27 14 NOVOSEVEN 21,5 30,5 42 32 15 ZOMETA 19,6 30,3 54 17 16 RECORMON 26,9 29,7 10 10 17 PROTAPHANE 32,6 25,5 -22 18 18 TEMODAL 26,9 24,4 -9 75 19 CEREZYME 8,9 22,0 147	28	7	SERETIDE	21,1	38,9	84
7 10 HUMULIN 45.1 32.6 -28 15 11 HERCEPTIN 28.3 32.1 13 115 12 LEVEMIR 4.4 31.7 618 11 13 ARIMIDEX 31.8 31.1 -2 27 14 NOVOSEVEN 21.5 30.5 42 32 15 ZOMETA 19.6 30.3 54 17 16 RECORMON 26.9 29.7 10 10 17 PROTAPHANE 32.6 25.5 -22 18 18 TEMODAL 26.9 24.4 -9 75 19 CEREZYME 8.9 22.0 147	4	8	RISPOLEPT	56,8	38,1	-33
15 11 HERCEPTIN 28,3 32,1 13 115 12 LEVEMIR 4,4 31,7 618 11 13 ARIMIDEX 31,8 31,1 -2 27 14 NOVOSEVEN 21,5 30,5 42 32 15 ZOMETA 19,6 30,3 54 17 16 RECORMON 26,9 29,7 10 10 17 PROTAPHANE 32,6 25,5 -22 18 18 TEMODAL 26,9 24,4 -9 75 19 CEREZYME 8,9 22,0 147	12	9	MABTHERA	31,3	33,3	6
115 12 LEVEMIR 4,4 31,7 618 11 13 ARIMIDEX 31,8 31,1 -2 27 14 NOVOSEVEN 21,5 30,5 42 32 15 ZOMETA 19,6 30,3 54 17 16 RECORMON 26,9 29,7 10 10 17 PROTAPHANE 32,6 25,5 -22 18 18 TEMODAL 26,9 24,4 -9 75 19 CEREZYME 8,9 22,0 147	7	10	HUMULIN	45,1	32,6	-28
11 13 ARIMIDEX 31,8 31,1 -2 27 14 NOVOSEVEN 21,5 30,5 42 32 15 ZOMETA 19,6 30,3 54 17 16 RECORMON 26,9 29,7 10 10 17 PROTAPHANE 32,6 25,5 -22 18 18 TEMODAL 26,9 24,4 -9 75 19 CEREZYME 8,9 22,0 147	15	11	HERCEPTIN	28,3	32,1	13
27 14 NOVOSEVEN 21,5 30,5 42 32 15 ZOMETA 19,6 30,3 54 17 16 RECORMON 26,9 29,7 10 10 17 PROTAPHANE 32,6 25,5 -22 18 18 TEMODAL 26,9 24,4 -9 75 19 CEREZYME 8,9 22,0 147	115	12	LEVEMIR	4,4	31,7	618
32 15 ZOMETA 19,6 30,3 54 17 16 RECORMON 26,9 29,7 10 10 17 PROTAPHANE 32,6 25,5 -22 18 18 TEMODAL 26,9 24,4 -9 75 19 CEREZYME 8,9 22,0 147	11	13	ARIMIDEX	31,8	31,1	-2
17 16 RECORMON 26,9 29,7 10 10 17 PROTAPHANE 32,6 25,5 -22 18 18 TEMODAL 26,9 24,4 -9 75 19 CEREZYME 8,9 22,0 147	27	14	NOVOSEVEN	21,5	30,5	42
10 17 PROTAPHANE 32,6 25,5 -22 18 18 TEMODAL 26,9 24,4 -9 75 19 CEREZYME 8,9 22,0 147	32	15	ZOMETA	19,6	30,3	54
18 18 TEMODAL 26,9 24,4 -9 75 19 CEREZYME 8,9 22,0 147	17	16	RECORMON	26,9	29,7	10
75 19 CEREZYME 8,9 22,0 147	10	17	PROTAPHANE	32,6	25,5	-22
	18	18	TEMODAL	26,9	24,4	-9
37 20 SANDIMMUN 14,8 20,3 37	75	19	CEREZYME	8,9	22,0	147
	37	20	SANDIMMUN	14,8	20,3	37

Source: DSM Group. **ISO 9001:2000**

Note: sales values are given in consumer prices, VAT included



TOP-20 drugs cover 42% of the total sales volume, therefore DLO segment is very concentrated.

Glivec and Velcade were the leaders in TOP-20 brands in the DLO Program in 2007 as well as in 2006, but they have only exchanged their positions. However, while in 2006 Glivec and Velcade had the equal sales volume amounted to 79.9 and 82.1 million dollars, respectively, in 2007 the sales volume of Glivec was higher in more than 1.5 times compared to Velcade.

In 2007 in TOP-20 DLO brands the prevalence of drugs belonging to the ATC group [L] "Antineoplastic and immunomodulating agents" is observed, 9 drugs from this group entered the ranking including Glivec, the leader of TOP-20, which is used for chronic myeloleukemia (blood oncology disease).

On the whole in 2007 TOP brands were significantly changed: only 13 drugs are present both in TOP-20 list -2006 and in that by results of 2007. The share of high-priced drugs in ranking continues to grow. While in 2005 only 2 drugs with average weighted price over 500 roubles were presented in TOP-20 ranking, in 2006 the number of these drugs reached 10 and by results of 2007 every drug from TOP-20 list has the average weighted price over 500 roubles. Moreover, the "lowest" average weighted price was about 900 roubles (Protaphane – the 17th position in the ranking).

6. Segments by price in DLO Program

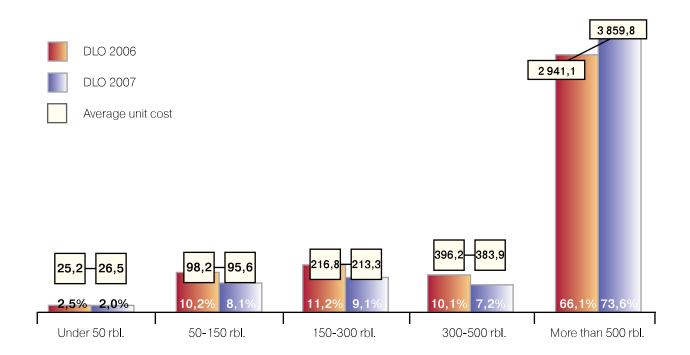
In 2007 the average cost per unit in the DLO Program continued to grow (as already described above) and amounted to about 416 roubles.

Let's see to why is the cost in DLO Program significantly higher than that on the commercial market.

Since the moment when the DLO program was introduced, the consumption structure price in the DLO market segment was being transformed with the share of more expensive drugs increasing. In spite of the measures taken by Roszdravnadzor and aimed to withdraw the high-priced drug categories to separate programs, to shorten the DLO list and to reduce the manufacturers' release prices, the grow of share of the drugs priced more than 500 roubles continues. At the beginning of this Program in 2005 this segment amounted to less than 40% of the DLO market capacity. In 2007 this segment covers 74% of the sales value.

The drug consumption structure within the DLO program is presented in Diagram 17.

DLO structure by price segments



Source: DSM Group. **ISO 9001:2000**

Note: sales values are given in consumer prices, VAT included

As is shown on this Diagram, the average cost per unit in the segments is dropping, except "high-priced" drug segment (price above 500 roubles). In this segment the price of one sold unit was increased by 1000 roubles compared to 2006. It was caused by significant grow of the VERY high-priced drugs. Thus, the price of Glivec amounts to about 115 thousand roubles and its increase amounts to about 50%; Betaferon with the average price of 60 thousand roubles has also increased in 1.5 times; Copaxone-Teva has increased in more than 2 times and its price amounts to 50 thousand roubles.

The most expensive drug in the DLO Program is Novoseven, the price of certain dosages amounts to 200 thousand roubles.

5. SALES VALUE IN THE HOSPITALS SEGMENT

In 2007 the size of hospitals segment amounted to 1.797 million dollars (46 billion roubles) in sales value, and to 721 million units in sales volume.

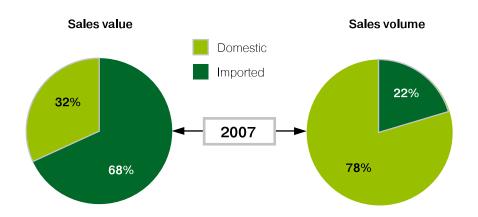
The growth of hospitals segment in 2007 compared to 2006 was 22% in dollars and 16% in roubles.

The cost of one drug unit purchased by hospitals was 2.49 dollars or 87 roubles. This is more than 2 times higher than cost per unit in pharmacy purchase prices on the commercial market segment.

Domestic drugs cover 32% of sales value of the hospitals segment. In real terms there is a significant prevalence of the domestic drugs, their share amounts to 78% (see Diagram 18). In most cases it is related to the large purchase of cheap domestic drugs. The price of one imported unit is 8-fold higher than the price of one domestic unit purchased by hospitals: In 2007 the cost of one imported drug unit amounted to 7.84 dollars on average, that of domestic unit was 1.02 dollars.

Diagram 18

Proportion of imported and domestic drug sales

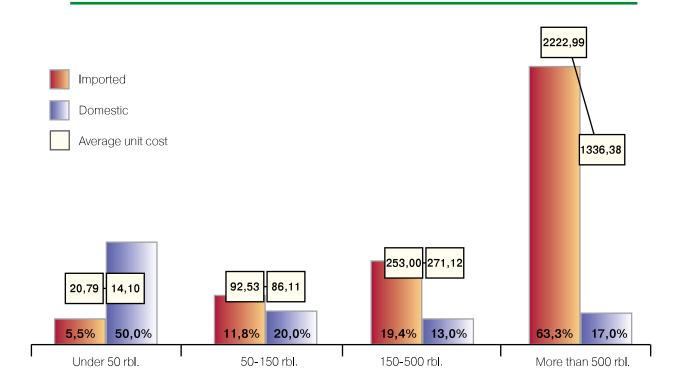


Source: DSM Group. **ISO 9001:2000**

Note: sales values are given in consumer prices, VAT included

The structure of hospitals segment by price categories and origin is shown in Diagram 19.

Hospitals segments structure by price categories and origin in 2007



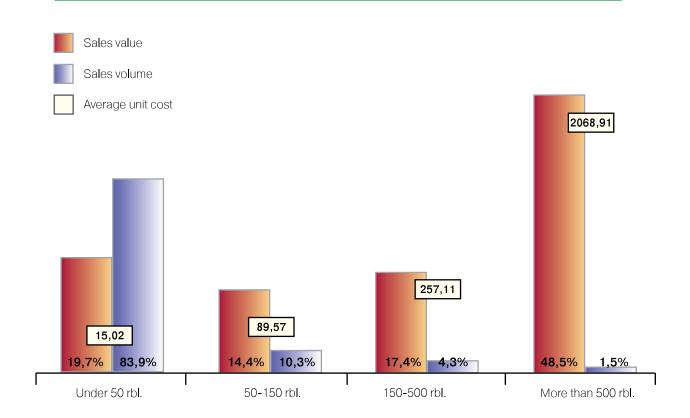
Source: DSM Group. **ISO 9001:2000**

Note: sales values are given in consumer prices, VAT included

That is why the biggest share of the imported drugs is presented in the price category "above 500 roubles" (63%). Domestic drugs cover 50% of the price category "below 500 roubles". On the whole, the segment "above 500 roubles" is the most capacious, it covers almost one half of the sales value of the hospitals sector and it amounts to 1% in real terms (see Diagram 20).



Hospitals segment structure by price categories in 2007



Source: DSM Group. ISO 9001:2000

Note: sales values are given in consumer prices, VAT included

Proportion of 1st level ATC groups by hospital purchases in Russia in 2007 is shown in Table 10.

Structure of the hospital purchases by ATC groups

First level ATC groups	Sales value, \$ mln	Group share in sales value, %	Sales volume, mln units	Group share in sales volume, %
J: Antibacterials for systemic use	908,1	27,8	436,2	34,9
B: Agents affecting blood and blood forming organs	508,4	17,7	269,3	21,6
L: Antineoplastic and immunomodulating agents	483,0	14,8	10,1	8,0
N: Nervous system drugs	422,2	12,9	183,5	14,7
A: Alimentary tract and metabolism	227,2	6,9	108,3	8,7
C: Cardiovascular system drugs	181,3	5,5	74,8	6,0
V: Various	139,3	4,3	13,8	1,1
M: Musculoskeletal system drugs	114,9	3,5	23,2	1,9
R: Respiratory system drugs	77,2	2,4	52,4	4,2
H: Systemic hormonal preparations (excluding sex hormones)	52,8	1,6	17,2	1,4
G: Genitourinary system drugs and sex hormones	23,9	0,7	5,1	0,4
S: Agents affecting sensory organs	23,5	0,7	13,5	1,1
D: Dermatologicals	20,7	0,6	33,2	2,7
[~] Without allocation	13,7	0,4	7,6	0,6
P: Antiparasitic products, insecticides and repellents	1,8	0,1	0,9	0,1

Source: DSM Group. ISO 9001:2000

Note: sales values are given in consumer prices, VAT included



Drug sales distribution by ATC group on the commercial and hospital market segments differs significantly. While ATC group [A] "Alimentary tract and metabolism" is a leader on the commercial market (18.2%), the group [J] "Antibacterials for systemic use" covers 25% on the hospital market. ATC group [J] includes the drugs usually used for courses of treatment for various diseases in the in-patient setting, e.g. antibiotics and systemic antifungal agents ([J01] μ [J02]), antituberculous ([J04]), antiviral agents ([J05]) etc. Group [B] "Agents affecting blood and blood forming organs" occupies the 2nd position in the ATC hospital ranking (17.75%), it includes the drugs most of which should be used in the in-patient setting only, e.g. "Blood substitutes and perfusion solutions" ([B05]) etc. Group [L] "Antineoplastic and immunomodulating agents" tails the group of three sales leaders in the hospital segment. On the commercial market segment the leaders of the hospital segment occupy significantly lower positions: group [J] – the 5th position; group [B] – the 11th position; group [L] – the 10th position. The leaders in the commercial market segment are the ATC groups including OTC drugs or the drugs, which may be purchased in the pharmacies without previous consultation by physician, e.g. vitamins, antidiarrheal and laxative agents belonging to ATC group [A], the leader of the commercial market segment.

Table 11 shows TOP-20 manufacturers in the hospitals segment in 2007. Top-20 is headed by F.HOFFMANN-LA ROCHE LTD (6.26%), SANOFI-AVENTIS is its nearest competitor (5.46%). GLAXOSMITHKLINE takes the 3rd position (3.47%).

TOP-20 manufacturers in the hospitals segment

Rating 2007	Manufacturers	Share in	n 2007 , %
2007		In value terms	In unit terms
1	F.HOFFMANN-LA ROCHE LTD	6,26 %	0,09 %
2	SANOFI-AVENTIS	5,46 %	0,92 %
3	GLAXOSMITHKLINE	3,47 %	0,25 %
4	SYNTEZ AKO	2,98 %	16,39 %
5	GEDEON RICHTER	2,77 %	1,19 %
6	NYCOMED	2,77 %	0,57 %
7	LEK D.D.	2,74 %	0,73 %
8	ASTRAZENECA UK LTD	2,65 %	0,10 %
9	VEROPHARM	2,40 %	1,99 %
10	BRISTOL-MYERS SQUIBB	2,31 %	0,14 %
11	JANSSEN PHARMACEUTICA N.V.	2,29 %	0,08 %
12	BIOCHIMIK (SARANSK)	2,29 %	4,52 %
13	SCHERING-PLOUGH	2,29 %	4,52 %
14	OTECHESTVENNYE LEKARSTVA	1,92 %	5,25 %
15	BIOTEK MFPDK	1,84 %	7,49 %
16	ABBOTT GMBH & CO.KG	1,68 %	0,04 %
17	SCHERING AG	1,61 %	0,05 %
18	A.MENARINI PHARMACEUTICAL	1,57 %	0,68 %
19	ABOLMED	1,54%	1,10 %
20	MERCK SHARP & DOHME	1,46 %	0,07 %

Source: DSM Group. ISO 9001:2000

Note: sales values are given in consumer prices, VAT included

The first positions in Top-20 list for the hospital market were occupied by the drugs as follows: PEGASYS, SODIUM CHLORIDE and GLUCOSE, as various injections and intravenous infusions of different drugs are often required for treatment in the in-patient setting.





TOP-20 trade names in the hospitals segment

Rating 2007	Trade names	Sales value, \$ mln 2007	Share, %
1	PEGASYS	64,2	3,57 %
2	SODIUM CHLORIDE	51,3	2,85 %
3	GLUCOSE	37,5	2,08 %
4	BENZYLPENICILLIN	28,5	1,58 %
5	PEGINTRON	25,8	1,44 %
6	MERONEM	24,3	1,35 %
7	COMBIVIR	24,2	1,34%
8	CEFAZOLIN	23,8	1,32 %
9	KALETRA	20,6	0,15%
10	EPREX	17,3	0,96 %
11	TIENAM	16,8	0,94 %
12	CEFOTAXIME	15,7	0,87 %
13	AMOKSIKLAV	15,1	0,84 %
14	TAXOTERE	14,4	0,80 %
15	REYATAZ	14,2	0,79 %
16	ACTOVEGIN	13,5	0,75 %
17	ELOXATINE	12,6	0,70 %
18	AMIKACIN	11,8	0,65 %
19	VIDEX	11,4	0,63 %
20	ZIAGEN	11,1	0,62 %

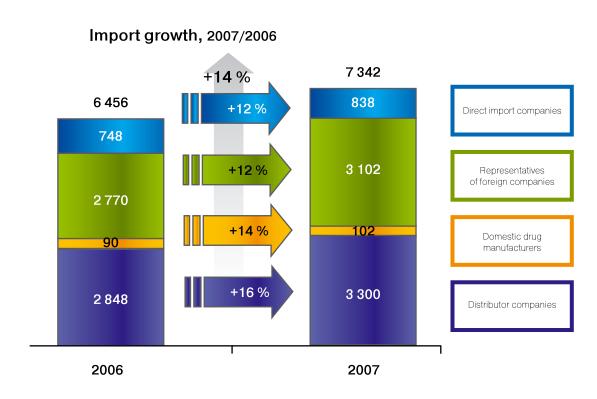
Source: DSM Group. ISO 9001:2000

Note: sales values are given in consumer prices, VAT included

Diagram 21 shows drug import volume in Russia in 2007.

Diagram 21

Import volume (\$ mln)



Source: Diamond Vision

Drug import volume in Russia in 2007 amounted to 7.3 billion dollars (in custom prices⁴), it increased by 14% compared to this parameter in 2006. It is one of the lowest parameters in the last years (earlier the import volume in money terms increased by 60-70% from year to year). One of the reasons for import volume reduction in 2007 is decreased consumption under DLO Program. On the other hand, the manufacturers and distributors supplied the great drug volume at the end of 2006, expecting the same intensive growth rate of the DLO Program. As a result, the reserves were stored up in stocks and they were being sold in 2007. And now we observe the insignificant import growth.

Table 13 shows the shares of different groups of drug importers in Russia (by import value of certain group in 2006 and 2007).

⁴ Customs price does not include customs tax (mainly 10%), VAT (10%) and specific tax (0.15%).





Shares of different groups of drug importers in Russia by drug import value in 2006-2007

ō	Importers	Importers		Shares by import volume, %	
Rating			2006	2007	
1	Distributor companies		44,12	44,93	
2	Representatives of foreign companies		42,91	42,26	
3	Direct import companies		11,58	11,42	
4	Domestic drug manufacturers		1,38	1,39	
		Total:	100	100	
		Import volume, \$ mln:	6 456	7 342	

Source: Diamond Vision

As Table 13 shows, in 2007 about 90% of the total drug import volume is covered by the two groups of importers – distributor companies and representatives of foreign companies. In 2007 import structure by importers was not changed compared to 2006.

Let us look at the leaders in the importer groups heading the ranking - distributor companies and representatives of foreign manufacturers.

Table 14 shows TOP 10 representatives of foreign manufacturers by import volume in 2007.

TOP-10 representatives of foreign manufacturers by import volume in 2007

Rating	Representatives of foreign manufacturers	Share by import volume of the "Represent foreign manufacturer: 2007	tatives of to 2006
1	ROCHE MOSCOW	11,8	2 %
2	AVENTIS PHARMA	11,7	13 %
3	SERVIER	10,9	-5 %
4	NYCOMED DISTRIBUTION CENTRE	6,8	- 2,5 %
5	SCHERING	6,7	60 %
6	NOVARTIS PHARMA	5,6	-19 %
7	LEK	5,5	300 %
8	SOLVAY PHARMACEUTICALS PR.	5,5	-9 %
9	GLAXOSMITHKLINE HEALTHCARE	4,8	38 %
10	IHCC	3,8	48 %
		Total: 73,4	

Source: Diamond Vision

In 2007 group "Representative offices of the foreign companies" increased by 12% only. In 2006 this group showed more than a 2-fold growth. Thus, it can be said that in 2007 the channel, when the imported drugs are supplied to the domestic distributor via warehouses situated in Russia and owned by the foreign drug manufacturer, is stabilized.

Roche Moscow and Aventis Pharma are the leaders of the importer group "Representative offices of the foreign companies".

A considerable increase is observed for Lek and Schering.

Table 15 shows TOP-10 distributors by drug import volume in Russia.



TOP-10 distributors by drug import volume in Russia in 2006-2007

Rating	Distributors Share by import volume of the "Distributor companies"		
Rat		2006	2007
1	SIA International	24,38	25,19
2	CV "Protek"	24,70	21,71
3	Genesis	4,44	7,63
4	Rosta	6,23	6,33
5	R-Farm	3,06	6,19
6	Katren	3,93	5,48
7	Apteka-Holding	3,06	4,62
8	Biotec	4,52	2,71
9	Moron	2,99	2,61
10	Shreya Corporation	2,23	2,02
	Total:	79,34	84,49
	Import volume of the group, \$ mln	2 848	3 300

Source: Diamond Vision

As is shown in Table 15, CV Protek and SIA International remain the largest distributors by import volume in the group "Distributor companies". However, in 2007 these companies exchanged their positions and the gap between them increased by more than 3%. It is mostly related to leadership failure of CV Protek on the commercial market and to supply reduction under the DLO Program. The other distributors fall behind significantly in ranking.

The share of 10 largest distributors-importers in the total import volume of the "Distributor companies" group increased by 5% and amounts to about 85% in 2007.

The positions of the distributors-importers in ranking-2007 are caused by the condition on the DLO market on the one hand. Thus, as supplies of CV Protek and Biotec reduced in value terms under the DLO program, their shares in the drug import decreased as well. Conversely, R-Farm increased its import share to supply the assigned regions with the drugs.

Katren, Genesis and Apteka-Holding have set an aim to grow on the commercial market segment. For this purpose they increased drug import volume. Additionally, one of the reasons of the fast growth of Genesis may be drug supply for its own pharmacy chain, "Pervaya Pomosch", which now is being actively developed on the pharmacy market.

Table 16 shows TOP 20 drug manufacturers by drug import volume in Russia with regard to all groups of importers.

TOP-20 drug manufacturers by drug import volume in Russia with regard to all groups of importers in 2006-2007

ng 6	bu Z	Manufacturers	Shares by imp	oort value, \$, %
Rating 2006	Rating 2007		2006	2007
1	1	SANOFI-AVENTIS	6,60	5,39
9	2	F.HOFFMANN-LA ROCHE LTD	3,01	4,71
5	3	BERLIN-CHEME /A.MENARINI/	3,84	3,84
3	4	SCHERING AG	4,37	3,78
6	5	SERVIER	3,67	3,72
13	6	GEDEON RICHTER	2,52	3,10
11	7	PFIZER	2,60	3,01
2	8	NOVARTIS	6,07	2,89
17	9	BOEHRINGER INGELHEIM	2,16	2,72
15	10	LEK D.D.	2,29	2,64
4	11	JANSSEN PHARMACEUTICA N.V.	3,93	2,54
14	12	NYCOMED	2,37	2,48
16	13	ASTRAZENECA UK LTD	2,23	2,45
85	14	SCHERING-PLOUGH	0,17	2,21
12	15	ABBOTT GMBH &CO.KG	2,59	1,99
18	16	KRKA	2,21	1,96
7	17	NOVO NORDISK	3,38	1,96
16	18	GLAXOSMITHKLINE	2,68	1,84
8	19	SOLVAY PHARMACEUTICALS B.V.	3,22	1,74
106	20	EGIS	0,02	1,30
		Total:	-	56,29

Source: Diamond Vision

SANOFI-AVENTIS, F.HOFFMANN-LA ROCHE LTD and BERLIN-CHEME/A.MENARINI/ are the largest manufacturers by drug import volume in Russia in 2007.

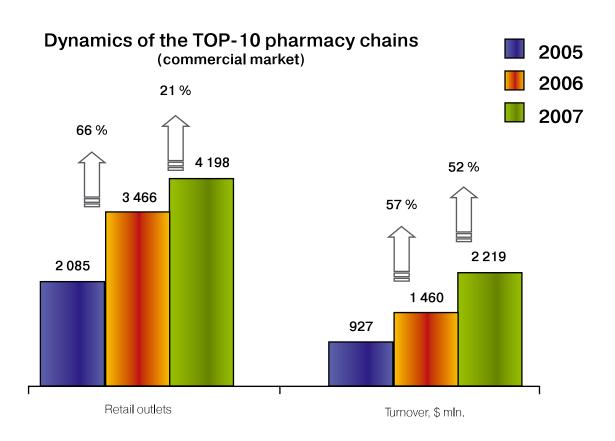
The share of TOP 20 ready-to-use drug manufacturers by import volume in Russia in 2007 amounted to 56%.

Russian pharmacy retail market in 2007 is characterized by high growth rates (its commercial segment increased by 25% in dollars and by 18% in roubles). Such parameters contribute to enhanced competition among the market participants – pharmacy chains. While in 2004-2006 the main objective of the members of the market was the increase in the number of outlets and representative offices in the regions, and market share growth, in 2007 the new tendency appeared: business efficacy and development of already existing outlets become the priority.

Diagram 22 shows TOP-10 pharmacy chains by sales turnover and number of outlets in 2005-2007

Diagram 22

Dynamics in retail outlets and turnover growth for TOP-10 pharmacy chains



Источник: DSM Group. **ISO 9001:2000**

It could be noted that 2 important trends suggest the new turn of the pharmacy chains development:

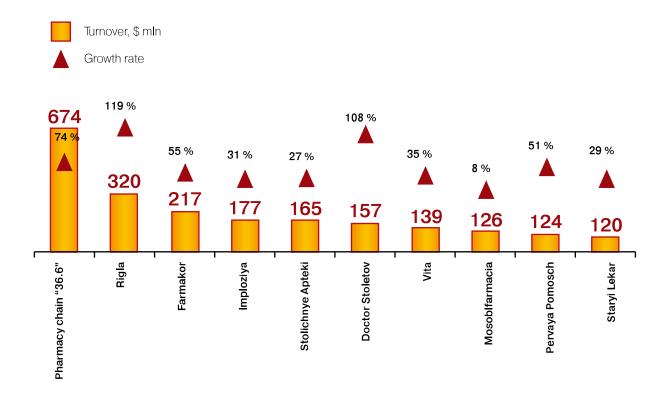
- sales turnover growth is 2 times higher than that of the number of outlets (resulted from the huge number of deals concerning chains purchase in 2006);
- in 2007 the number of outlets growth is significantly lower than that in the previous years (resulted from the small number of deals concerning chains purchase in 2007);

40

This is not by chance! In 2007 there were no "bright" purchases such as in 2006 (i.e. there was no amalgamation of the market participants from TOP pharmacy chains). Only one market participant - pharmacy chain "36.6" has purchased the small regional chains. Pharmakor, Implozia, Pervaya Pomoshc have increased the number of their chains generally due to opening of the new outlets. Diagram 23 shows TOP-10 pharmacy chains in 2007. What is curious in this diagram?

Diagram 23

The leading pharmacy chains in Russia in 2007



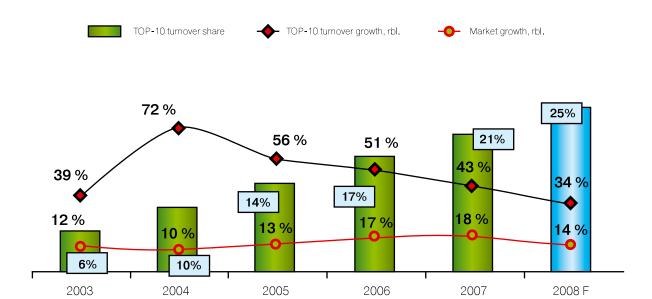
Source: DSM Group. ISO 9001:2000

More than 2-fold sales turnover growth is demonstrated only by the chains that made large purchases at the end of 2006 (O_3 was purchased by Rigla, Saratov Epheda was purchased by Doctor Stoletov). Growth of "36.6" chains is ensured by increase in the chain quantitative composition in 1.5 times. Other commercial chains are growing by 30-50% on average. State unions Stolichnye apteki and Mosoblpharmacia are growing slower. Thus, the reduction of the growth rate of the pharmacy chains may be ascertained. This fact is confirmed by Diagram 24 as well.

In 2007 TOP-20 pharmacy chains was completed by the new participant of the market – pharmacy chain Raduga belonging to pharmaceutical distributor ROSTA. Active position on the market in 2007 permitted this chain to enter the market leaders group. No chain had ever shown such growth rate. Acquisition of the small regional chains and opening of its own pharmacies throughout the country have lead to increase in the total sales turnover in many times, and the company occupied the 11th position in the ranking of pharmacy chains. To date the company is presented in 19 Russian regions.



Concentration of TOP-10 pharmacy chains



Source: DSM Group. **ISO 9001:2000**

What is the next for retail trade? It is hard to imagine what can stop the development of pharmacy chains. Only absence of sufficient financial resources can be the cause. Probably, this is one of the principal questions to date. In spite of the fact that Russian pharmacy market has been waiting for foreign investments for the last three years, in 2007 no foreign participant appeared on the market. The foreign pharmacy chains have plans only and participate in tenders for chains purchase. This explains the fact that the share of foreign capital in the pharmacy chains does not exceed 1% of the pharmacy market turnover.

The beginning of 2007 was marked by purchase of the domestic distributor Moron also owning the pharmacy chain Stariy Lekar (occupying the 11th position in the pharmacy chains ranking) by Finish company Oriola KD. This is the first grave purchase made by the foreign participants on the Russian pharmacy market. Also the "foreigners" are presented now in the pharmacy chain Moya lyubimaya apteka (this project is developed by Alliance Healthcare, now the chain includes about 40 pharmacies only).

Thus, the market is waiting for appearance of foreign pharmacy chains and foreign money flow to Russia. It is important, because now the own money may not be enough for full-scale chain development.

In 2007 only three large pharmacy chains used the borrowed funds for their business: Pharmakor, 36.6, and Doctor Stoletov. No easy receipt of the additional money can be expected during the world financial crisis. In the future this will not allow the pharmacy chains to take loans even they planned to do it earlier. Such situation dictates the new conditions for pharmacy business: pharmacy chains development will transfer from "quantitative" growth to "qualitative" growth. At the same time, the pharmacy chains share will continue growing and in 2008 TOP-10 will amount to one quarter of the pharmacy market.

Table 17 shows pharmacy chains ranking including quantitative and value growth parameters in 2007.

Table 17

Pharmacy chains rating by sales turnover in 2007 (commercial market)

Rating 2007	Pharmacy chains	Number of retail outlets	Turnover in 2007, \$ mln	Turnover increase compared to 2006
1	Pharmacy chain "36.6"	1224	674	74 %
2	Rigla	426	320	119 %
3	Pharmakor	311	217	55 %
4	Implozia	459	177	31 %
5	Stolichnye apteki	240	165	27 %
6	Doctor Stoletov	434	157	108 %
7	Vita	315	139	35 %
8	Mosoblpharmacia	496	126	8 %
9	Pervaya Pomosch	176	124	51 %
10	Stariy Lekar	130	120	29 %
11	Raduga	247	110	233 %
12	NaturProduct	220	95	35 %
13	Gubernskye apteki	410	87	-1 %
14	Biotec	60	74	30 %
15	Pharmland	139	65	42 %
16	Klassika	54	57	3 %
17	Оз	91	53	29 %
18	Opeka	133	44	53 %
19	Samson-Pharma	8	37	-34 %
20	Pharmaimpex	134	37	75 %

Source: DSM Group. ISO 9001:2000, pharmacy chains own data

8. DISTRIBUTION SEGMENT OF THE PHARMACEUTICAL MARKET

Distributors are one of the most important parts in the work and life of the pharmaceutical market. There were many sensations in this sector in 2007.

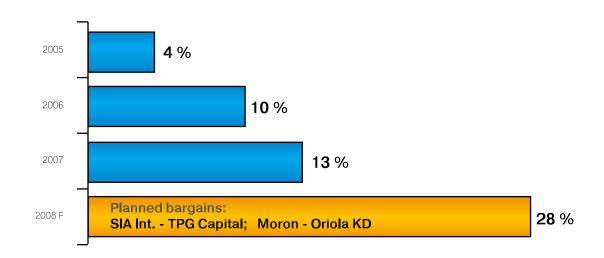
The subject of appearance of the foreign participants in the distributor segment was the principal throughout the year. In 2007 there were no deal but the negotiations were carried on with many companies:

- CV Protek has carried on negotiations with Celesio, European pharmaceutical distributor. The treaty of intent was signed. This contract obliged them to carry on negotiations concerning sale and purchase between them only. The term of this obligation is expired but the deal conclusion is still possible.
- The owners of SIA International have sold 50% to American investment fund TPG Capital.
- Finnish distributor Oriola-KD (wholesale trade company selling drugs and stomatology equipment) purchases the controlling block of shares (75%) of Vitim, the owner of distributor Moron and pharmacy Stariy Lekar.

If in 2008 the deal between SIA International and Moron will complete successfully, we shall get qualitatively new distribution segment where the foreign capital will own a quarter of the company turnover.

Diagram 25

Concentration in the distribution segment



Source: DSM Group. **ISO 9001:2000**

But we can with certainty speak about it in 2009 only. And now let us look at the results of the distributors' work in 2007.

Probably, the change of the leader among the distributors may be considered as one of the main sensations.

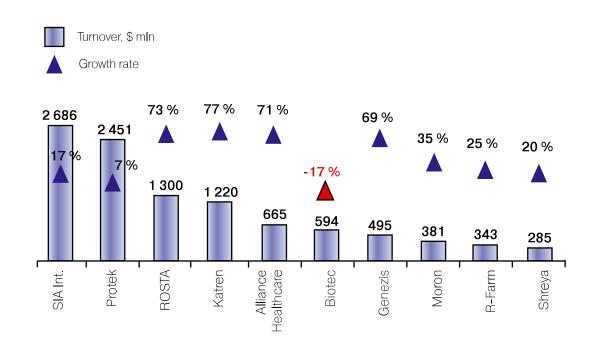
Thus, at the beginning of the 21st century CV Protek was the absolute leader on the pharmaceutical market. The results of 2006 showed us that CV Protek and SIA International possess the equal shares on the pharmaceutical market in the distribution sector: about 23%. The fire at the Moscow warehouse in May, 2006 allowed SIA

International to reach CV Protek. In 2007 there was decrease in CV Protek participation in the drug supply under the DLO Program in many regions; it has lead to reduction of the sales volume of this company under this Program. Conversely, SIA International increased its share in the DLO Program.

In 2007 SIA International has won this rivalry and has become a leader.

Diagram 26

Sales turnover of the leading distributors in 2007 (VAT included)



Source: DSM Group. ISO 9001:2000, VAT included

The fight for the first position is not over yet! It should be noted that in spite of lost of the share in the market in 2007 CV Protek has grown in the commercial market segment in 1.5 times faster than SIA International: while SIA International has the growth rate of 22%, CV Protek demonstrates growth rate of 33%.

Change in DLO Program rules in 2008 has lead to significant reduction of participation of the leading distributors in this Program. That is why the distributors activity in the commercial market segment takes again the first position. Thus, the intrigue is kept and we will be watching for companies activity to tell in 2009 about results of fight for leadership.

DLO Program has negatively affected not only CV Protek's position.

Biotec, occupying In 2006 the 4th position, has dropped on the 6th position in 2007. So this is the single TOP-10 distributor with the sales turnover fallen. Mostly it is caused by reduction of the sales volume under the DLO Program, as this Program covers 2/3 of turnover of this company. In commercial market segment Biotec holds the 10th position only.

Table 18

Shares of TOP-10 distributors on the pharmaceutical market

TOP-10	Share, %	TOP-10	Share without DLO,%
SIA INTERNATIONAL	23,5	SIA INTERNATIONAL	23,3
PROTEK	21,4	PROTEK	22,3
ROSTA	11,4	KATREN	12,7
KATREN	10,7	ROSTA	9,8
ALLIANCE HEALTHCARE	5,8	ALIANCE HEATTHCARE	6,9
BIOTEC	5,2	GENEZIS	5,1
GENEZIS	4,3	MORON	4,0
MORON	3,3	R-FARM	3,2
R-FARM	3,0	SHREYA	3,0
SHREYA	2,5	BIOTEC	2,0

Source: DSM Group.

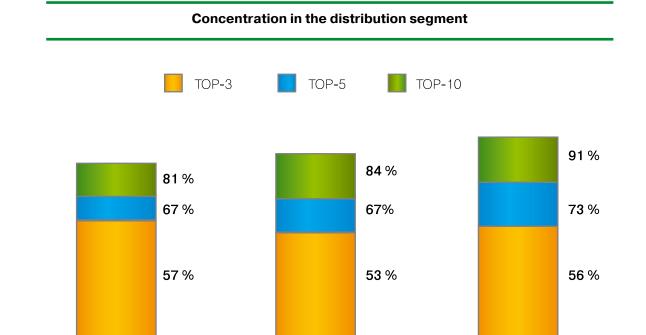
There are 2 challengers for the 3rd position: ROSTA and Katren. At the same time, every company has powerful trumps for triumph.

ROSTA continues to participate actively in the DLO Program. Besides, the growth of the sales volume is possible due to active development of own pharmacy chain Raduga which has entered TOP-10 pharmacy chains in 2007.

Katren stakes on commercial market segment and service provided to the clients. Activity in this direction allowed the company to occupy the 3rd position with regard to commerce turnover in 2007.

The concentration in this sector increased significantly due to growth of the 2nd line distributors (3rd-10th positions in ranking). While in 2005 the share of the 2nd line companies amounted to 24%, in 2007 it reached 35%.

Diagram 27



Source: DSM Group. ISO 9001:2000

In 2007 the manufacturing segment of pharmaceutical market was relatively calm.

The term "Russian manufacturer" has become obsolete over time. The notion itself has become a dilemma. Belonging of factory located in the territory of the Russian Federation to foreign company allow to classify it neither as foreign manufacturer nor as Russian facility. The most acceptable term in this situation is "local manufacture". Sufficiently great numbers of manufacturers are guessing about opening the local manufacture in the territory of the Russian Federation.

It should be remembered that Hemofarm opened its own factory in Kaluga region last year. Servier continue to building. Factory project was developed in that way that in case of its successful realization, constructing of the 2nd line factory would be possible and it can double its capacity. Both companies plan to produce in the factories the drugs participating in the Drug Reimbursement Programs (DLO).

What kind of factors promote the manufacture location in the territory of the Russian Federation?

Firstly, it is an economical factor. Retail segment of the pharmaceutical market (including DLO Program) continue to demonstrate one of the most rapid growth rate in the world and it attracts an attention of the pharmaceutical companies. Taking into account raw-material nature of the Russian economics and permanent increase in petroleum price, Russian pharmaceutical market has rather good prospects. Continuous discussion of the preferences for local manufacturers while state purchases are realized, stimulates the manufacturers. Let us agree with objections that it is being discussed for a long time, but the share of drugs manufactured in the Russian Federation decreased even in the DLO Program in 2007. It is said there is no smoke without fire, and it is practically impossible to forecast the event development in this direction. When the situation with preferences for local manufacturers will happen, it would be too late to open new manufactures i.e. it would take several years for its construction and practically no manufactures to be sold that comply with GMP requirements remained in the territory of the Russian Federation.

The second factor (it is difficult to call it less important than the first one) is political. Russian president has repeatedly paid his attention on development of the pharmaceutical industry in the territory of the Russian Federation. This factor is difficult to be measured in money terms. Power vertical has the clear structure. The desire of the leader of State is deemed by the functionaries as the direct indication for action. Not only visible but hide barriers hindering the company activity on the market may appear. The companies that opened the manufactures in Russia will reach a loyal relationship from the functionaries and finally it can favorably influence their business.

In the end TOP-20 manufacturers in 2007 is presented (see Table 19).

TOP-20 drug manufacturers by sales volume on the Russian commercial market in 2006-2007

Rank in 2006	ing 7	Manufacturers	Manufacturers Sales value, \$ mln		Sales value increase
Ran 200	Rating 2007		2006	2007	
1	1	SANOFI-AVENTIS	517	478	-7 %
2	2	NOVARTIS	341	470	38 %
3	3	F.HOFFMANN-LA ROCHE LTD	331	403	22 %
5	4	A.MENARINI PHARMACEUTICAL INDUSTRY'S GROUP LTD	303	332	9 %
11	5	PHARMSTANDARD	224	319	43 %
4	6	JANSSEN PHARMACEUTICA N.V.	331	314	-5 %
6	7	BAYER SCHERING PHARMA AG	267	295	10%
10	8	NYCOMED	233	284	22 %
7	9	GEDEON RICHTER	264	282	7 %
13	10	LEK D.D.	216	251	16 %
15	11	GLAXOSMITHKLINE	171	241	41 %
8	12	PFIZER	248	234	-6 %
9	13	SERVIER	241	228	-5 %
14	14	KRKA	204	201	-1 %
16	15	SOLVAY PHARMACEUTICALS B.V.	168	189	12 %
17	16	BOEHRINGER INGELHEIM	142	187	32 %
20	17	SCHERING-PLOUGH	122	185	52 %
19	18	NOVO NORDISK	133	184	39 %
12	19	ASTRAZENECA UK LTD	219	176	-20 %
21	20	OTECHESTVENNYE LEKARSTVA	120	161	35 %

Source: DSM Group. ISO 9001:2000

Note: sales values are given in consumer prices, VAT included



In 2007 not all manufacturers succeed to use the situation formed on the pharmaceutical market. There are leaders and outsiders among TOP-20 companies. The maximal growth was shown by: Schering-Plough (52%), Pharmstandard (43%), Glaxosmithkline (41%). It should be noted that such growth allowed Pharmstandard to rise up on the 6th position in ranking (from 11th position to 5th position) – such rise in TOP-20 list is rather complex event. Mostly The rapid growth of these companies mostly had no significant influence on their positions in TIP-20 list.

Only 10 companies from TOP-20 list demonstrated the sales growth rate exceeding the market growth. Correspondingly, the rest 10 companies were growing slower than the market or they had the negative sales dynamics. It has lead to invariability of the manufacturers concentration: In the whole, the share of 20 leading manufacturers remained at the level of 48% and is equal to that in 2006.

About DSM Group



To provide comprehensive, high quality and timely marketing research and full advertising support to the companies on the Russian pharmaceutical market

The marketing agency DSM Group has been on the market since 1999. Two key service fields of the company are marketing research and advertising on the Russian pharmaceutical market.

RESEARCH

QMS meets ISO 9001:2000 requirements

- Monthly retail audits of the Russian pharmaceutical market, which you can see in 25 working days
- Hospitals audits
- BDP database
- Drugs and substances import database
- Multifactor analysis of competitors environment
- Monitoring and analysis of drug sales by distributors
- Monthly analysis of market capacity, tendencies and forecasts
- Ad-hoc research

ADVERTISING

- Design and corporate identity creation
- Souvenirs for pharmaceutical sphere
- Printing (QMS meets ISO 9001:2000 requirements)
- Promo actions and events (from 20 up to 1500 persons)
- Media buying
- Outdoor advertising
- Corporate video
- Direct-mail through Russian pharmacies database
- Marketing plans

There are about 60 specialists in pharmaceutics, marketing and advertising in the staff. Our experts' opinion is highly rated by pharmaceutical and business public.

With us you will use your company's potential more effectively, so reinforce and develop your business.

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