



Ассоциация международных фармацевтических производителей

Joint Publication of the Association of International Pharmaceutical Manufacturers in Russia and Remedium Group

MACROECONOMIC INDICES

Inflation

According to Federal State Statistics Service's data, the Consumer Price Index was estimated as 100.1% in March 2017, compared to the previous month, - 101% compared to December 2016.

In February this year, Industrial Producer Price Index (for goods intended for sale on the domestic market) was 99.7%, whereas in the month-earlier period it had amounted to 100.8%.

Figure 1. Consumer Price Index (compared with the previous period)



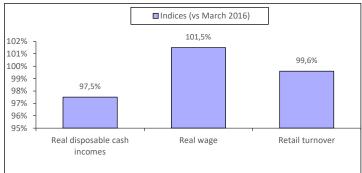
Living standard

According to preliminary Federal State Statistics Service's data, in March 2017 a gross average monthly salary per worker reached RUB 37,640 (USD 647.85) which accounted for 105% as compared to the previous month and 105.8% as compared to March 2016. The real wage in March 2017 accounted for 101.5% as compared with March in 2016. In March 2017, the real value of disposable cash incomes accounted for 97.5% as compared with the same period of 2016 (Fig. 2).

Retail turnover

In March 2017, the retail turnover was equal to RUB 2352.7 bln, which in comparable prices accounted for 99.6% compared to the same period a year ago, in the first quarter of 2017. - RUB 6735.4 bil. or 98.2% (Fig. 2).

Figure 2. Real values of cash income, wage and retail turnover in March 2017



Industrial Production

According to Federal State Statistics Service's data, in March 2017 Industrial Production Index accounted for 100.8% compared to the same period in 2014, and in in the first quarter of 2017 - 100.1%.

According to Federal State Statistics Service's data, Industrial Production Index of drugs and medical products in March 2017 accounted for 115.9% compared to the relevant period of the previous year, and 127.5% to the previous month.

Domestic production

Table 1 provides the top 10 domestic pharmaceutical manufacturers according to their volumes of sales in all segments of the market based on the results for March 2017.

Table 1. The top ten Russian chemical and pharmaceutical manufacturers by sales volume in March 2017

| Rank | Manufacturer | RUB mil. |
|------|-----------------|----------|
| 1 | Otcpharm | 2162.6 |
| 2 | Stada | 1307.5 |
| 3 | Pharmstandart | 1176.5 |
| 4 | Valenta | 940.8 |
| 5 | Biocad | 859.9 |
| 6 | Sotex | 818.6 |
| 7 | Servier | 768.0 |
| 8 | Nativa | 719.9 |
| 9 | Akrikhin Pharma | 717.0 |
| 10 | Materia Medica | 631.0 |

Source - Remedium according to IMS Health's data

Table 2 provides pharmacy sales data from 10 regions of the Russian Federation. In February 2017 compared to January, reduction in pharmacy sales (in terms of roubles) was observed in most analysed regions. The most pronounced growth in sales was in Krasnodarsky Krai and Voronezh Region (+15% each), the least one – in Krasnoyarsky Krai (-0.5%). The pharmacy sales increased in Moscow (+11%) and St. Petersburg (+7%).

Table 2. Pharmacy sales in the regions, 2016-2017

| | | Pharmacy sales, \$ mil. (wholesale prices) | | Growth gain, % (roubles) | | |
|-------------------------|--------------------|---|------------------|-------------------------------|---------------------------------|-------------------------|
| Region | Decem- ber 2016 | January 2017 | February 2017 | December /Novem- ber 16 | January 17/ De- cember 16 | February/ January 17 |
| Moscow | 203.0 | 126.6 | 143.8 | 30% | -40% | 11% |
| St. Petersburg | 58.1 | 43.4 | 47.7 | 15% | -28% | 7% |
| Krasnodar Krai | 40.7 | 34.7 | 31.8 | 24% | -18% | -11% |
| Novosibirsk Re- gion | 22.1 | 20.6 | 19.6 | 5% | -10% | -7% |
| Tatarstan | 26.8 | 23.6 | 22.9 | 23% | -15% | -5% |
| Krasnoyarsk Krai | 27.6 | 26.3 | 26.8 | 13% | -8% | -0.5% |
| Rostov Region | 25.0 | 22.6 | 21.4 | 11% | -13% | -8% |
| Voronezh Re- gion | 18.2 | 15.9 | 14.5 | 19% | -16% | -11% |
| Perm | 8.3 | 7.8 | 7.8 | 18% | -10% | -2% |
| Tyumen | 7.0 | 6.4 | 6.2 | 19% | -12% | -6% |

Advertising

The largest advertisers and pharmaceutical brand names highly publicized in mass media (TV, radio, press, outdoor advertising) are shown in Tables 3 & 4.

Table 3. Top five advertisers in mass media in March 2017

| Rank | Company* | Quantity of broad- casts |
|------|------------------------------|-----------------------------|
| 1 | Berlin-Chemie Menarini Group | 14,797 |
| 2 | Otcpharm | 14,685 |
| 3 | GSK Consumer Healthcare | 12,651 |
| 4 | Bayer AG | 10,666 |
| 5 | Teva | 10,569 |

Source - Remedium according to Mediascope's data

Table 4. Top five brand names in mass media in March, 2017

| Rank | Brand* | Quantity of broad- casts |
|------|-----------|-----------------------------|
| 1 | Evalar | 4,237 |
| 2 | Voltaren | 2,879 |
| 3 | Theraflu | 2,819 |
| 4 | Kagocel | 2,711 |
| 5 | Complivit | 2,665 |

Source - Remedium according to Mediascope's data

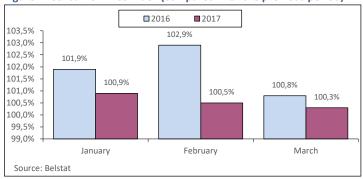
 $^{^{}st}$ Only products registered with State Register of Medicines were considered

MACROECONOMIC INDICES OF THE REPUBLIC OF BELARUS

According to data of National Statistical Committee of the Republic of Belarus, in March 2017 the Consumer Price Index was estimated at 100.3%, compared to the previous month, 101.7% to December 2016. In January - March of 2017, the Consumer Price Index was 107.6% as compared to the same period of 2016.

In March 2017, Industrial Producer Price Index was 100.5% compared to February 2017, and 105.4% as compared to December 2016. In Quarter I, 2017, the Industrial Producer Price Index was 108.6% as compared to 2016.

Figure 1. Consumer Price Index (compared with the previous period)



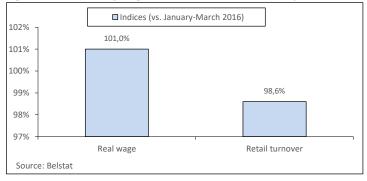
Living standard

According to the preliminary Balstat's data, in March 2016 the average monthly nominal accrued wage of the workers of the Republic of Belarus was BYR 770.6 (USD 406.86¹), in January-March 2017 - BYR 737.6 (USD 385.53). In March 2017, the real wage accounted for 101.9% as compared to the same period of 2016, in January-March 2017 – 101% (Fig. 2). According to Balstat's data, in January-February 2017 the real disposable cash income accounted for 96.8% as against January-February 2016.

Retail turnover

In March 2017, the retail turnover was estimated at RUB 3,119.8 mil. which accounted for 115.0% compared to the previous period and 102.8% compared to the same period of the last year. In January-March 2017, the turnover amounted to RUB 8,493.3 bil. or 98.6% to Quarter I, 2016 (Fig. 2).

Figure 2. Real monthly wage and retail turnover in January-March 2017



Industrial Production

According to Belstat's data, in January-March 2017 the industrial output by economic activities "Mining industry", "Processing Industry" and "Production and distribution of electricity, gas and water" at current prices amounted to BYR 21,059.1 mil. or 104.3% in comparable prices to Quarter I. 2016 level.

According to Belstat's data, in January-December 2017 the pharmaceutical production output of essential pharmaceutical products and pharmaceutical preparations was estimated at BYR 266.7 mil., which accounted for 108.3% to January-March 2016 in comparable prices.

MACROECONOMIC INDICES OF THE REPUBLIC OF ARMENIA

Inflation

According to data of National Statistical Service of the Republic of Armenia, in March 2017 the Consumer Price Index was estimated at 99.7%, compared to December 2016 - 101.4% The Consumer Price Index accounted for 99.7% since the beginning of this year compared to the previous period.

In March 2017, the Industrial Producer Price Index was 99.4%, as compared to the previous month, while as against December 2016 - 99.6%. Since the beginning of 2017, the index accounted for 103.4% as compared with the same period of 2016.

Figure 1. Consumer Price Index (compared with the previous period)



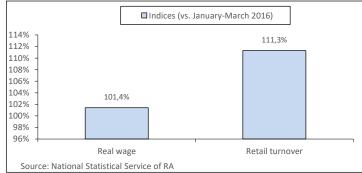
Living standard

According to the preliminary data of the National Statistical Service of RA, in March 2017 the average monthly nominal wage of the workers of the Republic of Armenia was Dram 187,659.0 (USD 387) which accounted for 101.2% to the same period of the last year. In January-March 2017, the average monthly nominal wage per worker was Dram 183,643 (USD 378) or 101.1% to the same period of 2016 (Fig. 2). In March 2017, the real wage accounted for 101,3% as compared to the same period of 2016, in January-March 2017 as compared to January-March 2016 - 101.4%. Calculation of real disposable income in accordance with State Statistical Efforts Program for 2008 has not been performed in the Republic of Armenia since January 1. 2008.

Retail turnover

The retail turnover amounted to Dram 196328.7 mil. in March 2017, and Dram 489203.1 mil. since the start of the year, which accounted for 113.7% and 111.3% respectively, as compared to the same period of the previous year (Fig. 2).

Figure 2. Real monthly wage and retail turnover in January-March 2017



Industrial Production

According to the preliminary data of the National Statistical Service of RA, in March 2017 the industrial output by economic activities "Mining industry", "Processing Industry" and "Supply (service) of electricity, gas, steam and conditioned air" and "Water supply, sewage water, management and disposal of waste" at current prices amounted to Dram 133424.3 mil., from the start of the year - Dram 361858.6 mil. or 117.2% and 116.2% respectively to the same period of 2016.

According to the National Statistical Service of RA, in March 2017 the pharmaceutical production output was estimated at Dram 980.2 mil., and from the start of the year - Dram 2343.2 mil., which accounted for 147.1% and 132.4% respectively against the same periods of the previous year.

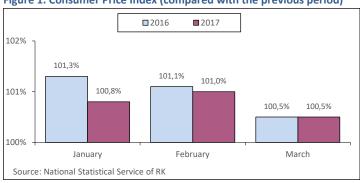
¹ The average exchange rate to calculate the above indices was used from the official website of the National Bank of Belarus www.nbrb.by. On July 1, 2016, in the Republic of Belarus the re-denomination was made in a ratio of 1:10,000

MACROECONOMIC INDICES OF THE REPUBLIC OF KAZAKHSTAN

According to data of the Committee of the Ministry of National Economy for Statistics of the Republic of Kazakhstan, in March 2017 the Consumer Price Index was estimated at 100.5% compared to the previous month, as against to December 2016 - 102.3%. In January-March of 2017, the Index reached 107.8% as compared to the same period of 2016.

In March 2017, the industrial producer price index (with due account for the production services) accounted for 99.5% as compared to the previous month, as against March 2016 - 126.7%. In January-March 2017, the prices of producers of industrial products increased by 27.6% as compared to January-March 2016.

Figure 1. Consumer Price Index (compared with the previous period)



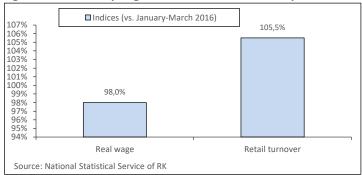
Living standard

According to the preliminary data of the National Statistical Service of RK, in March 2017 the average monthly nominal wage per worker was KZT 144148 (USD 456.06^2), in January-March of 2017 - KZT 140,265 (USD 434.98). In March 2017, the Nominal Wage Index against the respective period of 2016 accounted for 104.0%, in January-March of 2017 - 105.6%, the Real Wage Index -96.6% and 98.0% respectively. In January-March 2017, the Real Cash Income Index was 102.4% compared to the same period of 2016 (Fig. 2).

Retail turnover

In March 2017, the retail turnover was KZT 643.3 bil., in January-March 2017 it amounted to KZT 1,768.5 bil. or 107.3% and 105.5% compared to the same period in 2016 (in comparable prices) (Fig. 2).

Figure 2. Real monthly wage and retail turnover in January-March 2017



Industrial Production

According to data of the Committee for Statistics of RK, in March 2017 the industrial output was KZT 1,815.8 bil., in January-March of the last year KZT 5,330.4 bil. As compared to the same period of 2016, the indices accounted for 108.3% and 105.8%, respectively.

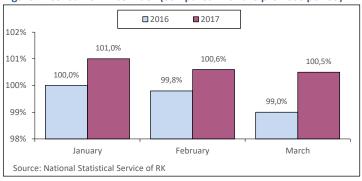
According to data of the Committee for Statistics of RK, in March 2017 the essential pharmaceuticals output amounted to KZT 7,299 mil., in January-March 2016 it was KZT 18,966 mil. At the end of March 2017, the Index of Physical Volume of Industrial Production for Pharmaceuticals was 126.8% as compared to March 2016, - 125.1% in January-March 2017 as against January-March 2016.

Inflation

According to data of the Committee for Statistics of the National Statistical Committee of the Kyrgyz Republic, in March 2017 the Consumer Price Index was estimated at 100.5%, as against December 2016 - 102.1% in January-March 2017 as against January-March 2016. In January-March 2017, the Index accounted for 101.5% as compared to the same period of 2016.

In March 2017, the Producer Price Index for industrial production and services was 100.1% as compared to the previous month. Throughout the Republic, the prices of producers for industrial products and services have increased by 2.1% since the beginning of 2017.

Figure 1. Consumer Price Index (compared with the previous period)



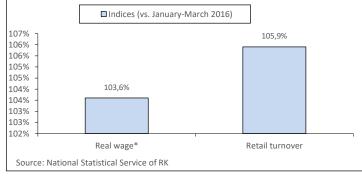
Living standard

According to data of the Committee for Statistics of the Kyrgyz Republic, in February 2017 the average monthly nominal wage per worker was KGS 13,585 (USD 196.54 3), in January-February of 2017 - KGS 13,676 (USD 197.3), which is 3.3% and 4.5% more than in the same period of 2016, respectively. In January-February of 2017, the real wage accounted for 103.6% as compared to Quarter I, 2016, in February 2017 – 102.0% (Fig. 2).

Retail turnover

In March 2017, the retail turnover (without cars and motorcycles sales) amounted to KGS 15434.7 mil, in January-March 2017 - KGS 42338.8 mil. The Volume of Retail Turnover Index accounted for 104.8% and 105.9% to the same period of the previous year (Fig.2).

Figure 2. Real monthly wage and retail turnover in January-March 2017



^{*} Data for January-February 2017

Industrial Production

According to data of the National Committee for Statistics of the Kyrgyz Republic, in March 2017 the industrial output was KGS 22378.7 mil., and in January-December 2017 it was KGS 51,840.2 mil. The Volume of Industrial Products index accounted for 160.0% and 135.9% as compared to the same periods of 2016.

According to data of the National Committee for Statistics of the Kyrgyz Republic, in March of 2017 the essential pharmaceuticals output amounted to KGS 22.8 mil., in January - March of the last year - KGS 52.8 mil. At the end of March 2017, the Physical Index of Industrial Production for Pharmaceuticals was 209.8% compared to the same period of the last year, and in January-March 2017 it was 120.8% compared to January-March 2016.

MACROECONOMIC INDICES OF THE KYRGYZ REPUBLIC

 $^{^2}$ The average exchange rate to calculate the above indices was used from the official website of the National Bank of Kazakhstan www.nationalbank.kz

³ The average exchange rate to calculate the above indices was used from the official website of the National Bank of the Kyrgyz Republic http://www.nbkr.kg/

COMPARATIVE MACROECONOMIC INDICES OF THE EURASIAN ECONOMIC UNION (EAEU)

GDP

According to Eurasian Economic Commission's data (EEC), at the end of January-December 2016 GDP of EAEU member-states amounted to USD 1485.4 bil. and reduced by 0.2% as compared to 2015 in fixed prices. GDP growth was reported in Armenia (+0.2%) and Kazakhstan (+1%). In Russia (-0.2%) and Belarus (-2.6%) GDP reduced as compared to the same period of 2015 (Fig. 1). According to preliminary estimates, in January-December of 2016 the Kyrgyz Republic GDP Index accounted for 103.8%.

Figure 1. GDP growth of EAEU countries (January-December 2016 to January-December 2015)



Industrial Production

According to the preliminary EEC data, in January-March 2017 the industrial output of EAEU was 100.8% as compared to January-March 2016 level. In individual countries, the Industrial Production Index accounted for: Armenia – 116.2%, Belarus – 104.3%, Kazakhstan – 105.8% and Russia – 100.1% (Fig. 2). In the Kyrgyz Republic, in January-March of 2017 the index accounted for 135.9%.

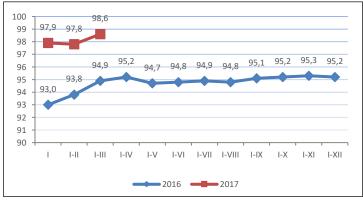
Figure 2. Industrial production in the EAEU member-states in January-March of 2017 (compared to January-March 2016)



Retail turnover

According to the EEC, the retail trade turnover (through all sales channels) of EEU member-states in January-March 2017 amounted to USD 125.8 bil. Compared with the same period of 2016, the volume of retail sales (in comparative prices) decreased by 1.4%. The main reason for the overall decline was the decline in the retail turnover in almost all countries. In this case, the indices accounted for 94.2% in Russia, 95.4% in Armenia, 96.9% in Kazakhstan, 98.8% in Belarus. The retail turnover grew by 4.3% only in the Kyrgyz Republic.

Figure 3. Retail turnover in January-March 2017



Nominal and real wage

According to the EEC, in January-December 2016 the average monthly nominal wage accrued on the average in January-March of 2017 climbed over its level in the same period of 2016 in all EEU member-states. It increased by 1.1% in Armenia, by 8.7% in Belarus, by 5.6% in Kazakhstan, by 4.5% in Kyrgyzstan (in January-February of 2017), by 6.6% in Russia. Given the increase in consumer prices for goods and services, the real wage as compared to the respective period increased by 1.4% in Armenia, by 1% in Belarus, by 3.6% in Kyrgyzstan (in January-February 2017) by 1.9% in Russia, decreased by 2% in Kazakhstan.

Table 1. Nominal and real wage in January-March 2017

| Country | Real wage, % vs the same period of 2016 | Nominal wage, USD |
|-------------------------|---|-------------------|
| Armenia | 101.4 | 378 |
| Belarus | 101 | 386 |
| Kazakhstan | 98 | 435 |
| Russia | 101.9 | 616 |
| Kyrgyzstan ¹ | 103.6 | 197 |

¹ January-February 2017

Budget performance

According to the EEC, in January-December of 2016, the republican budget in all EEU member-states except for Belarus was implemented with a deficit. Armenia showed a decrease in the revenue and expenditure parts of the budget compared with 2015< Belarus, Kazakhstan and Kyrgyzstan showed a growth and Russia showed a growth in expenditures against the background of reduction in revenues, which resulted in the increase of the budget deficit.

The revenue growth amounted to 106% in Belarus, 125% in Kazakhstan, 102% in Kyrgyzstan. The budget revenues declined 1% in Armenia and Russia.

Budget expenditures increased in all EEU member-states, except for Armenia, where they accounted for $94\,\%$ as compared to 2015 level. The rate of growth of spending was estimated at 110% in Belarus, 119% in Kazakhstan, 114% in Ukraine, 105% in Russia.

Table 2. Republican budget in January-September 2016

| Country | | USD bil. | | | | |
|------------|--------|-------------|----------------------|--|--|--|
| | Income | Expenditure | Deficit (surplus) | | | |
| Armenia | 2.4 | 2.8 | -0.4 | | | |
| Belarus | 9.0 | 8.5 | 0.5 | | | |
| Kazakhstan | 22.5 | 24.6 | -2.1 | | | |
| Russia | 203.0 | 247.7 | -44.7 | | | |
| Kyrgyzstan | 1.7 | 2.0 | -0.3 | | | |
| EAEU | 238.5 | 285.5 | -47.0 | | | |

Mutual trade of EAEU member-states in January-February 2017

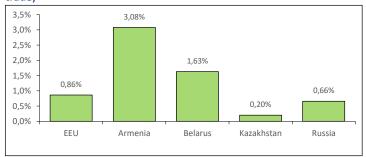
The volume of mutual trade in commodities of EAEU member-states in January-February 2017 amounted to USD 7.4 bil. or 134.2% as against the same period of 2016.

Table 3. Export volumes of the EEU member-states in the mutual trade in lanuary-February 2017*

| In January-February 2017* | | | | | | | | |
|---------------------------|--------|----------|---------|---------------|-------|------------|--|--|
| Countries | | USD bil. | % vs Ja | % vs January- | | % of total | | |
| | | | Februa | ry 2016 | | | | |
| EAEU | | 7383.9 | 134.2 | | 100.0 | | | |
| Armenia | | 65.7 | 152.8 | | 0.9 | | | |
| | Russia | 64.6 | | 153.0 | | 98.2 | | |
| Belarus | | 1808.3 | 141.7 | | 24.5 | | | |
| | Russia | 1737.8 | | 141.7 | | 96.1 | | |
| Kazakhstan | | 742.0 | 142.6 | | 10.1 | | | |
| | Russia | 671.5 | | 140.1 | | 90.5 | | |

Pharmaceutical products account for a small share in the structure of mutual trade (Figure 4).

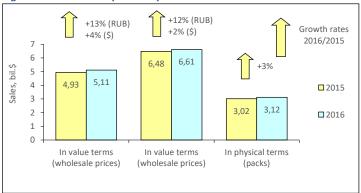
Table 4. The structure of mutual trade between EEU member-states within the Customs Commodity Code group "Pharmaceutical products" in January-February 2017 (as percentage of the total volume of mutual trade)



PHARMACY OTC MARKET IN RUSSIA: 2016 RESULTS

According to the results of the Retail Audit of Finished Pharmaceutical Products (FPP) in Russian Federation™, at year-end 2016 the sales of OTC drugs in physical terms in the country saw a 3% increase to 3.117 bil. packs. In money terms, the OTC drugs market increased by 13% in rouble terms and by 4% in dollar terms and reached RUB 340.629 bil. (USD 5.108 bil.) in wholesale prices (Fig. 1). The share of Over-the-Counter (OTC) drugs accounted for 68.5% of sales in physical terms and 52.4% in retail prices in terms of roubles. The average cost of a pack reduced as compared to 2015 and reached USD 2.12 (vs. USD 2.15) in retail prices. At year-end 2016, the average amount spent by residents of Russia for OTC drugs in pharmacies amounted to USD 45.07.

Figure 1. Russian OTC pharmacy market in 2015 - 2016



At 2016-end, four from the top ten OTC drugs manufacturers on the Russian market showed outperformance rates (Table 1). The Russia-based OTCPHARM (+28%4) moved up to rank number one, STADA (+16%) and JOHNSON & JOHNSON (+17%) moved up one rank, coming to numbers 5 and 7, and the most dynamic among the newcomers of the top ten VALENTA (+52%) broke into the ranks of the top ten. On top of that, despite lagging behind the growth rates the manufacturer GLAXOSMITHKLINE (+11%) succeeded in moving up one rank. At the same time, the manufacturers BAYER (+10%), MENARINI and RECKITT BENCKISER (+8% each) moved down one rank, whereas SANDOZ (+2%) moved down two ranks. The only manufacturer SANOFI-AVENTIS (-1%) held its previous rank three despite the negative growth rates in sales. The cumulative share of the top 10 manufacturers didn't virtually change and accounted for 38.4%.

Table 1. The top ten drug manufacturers by pharmacy sales

| Rank | | Manufacturer* | Share in total phar- macy sales, % | | |
|-------|------|-------------------|---------------------------------------|------|--|
| 2016 | 2015 | | 2016 | 2015 | |
| 1 | 2 | OTCPHARM | 6.0 | 5.3 | |
| 2 | 1 | BAYER HEALTHCARE | 5.3 | 5.4 | |
| 3 | 3 | SANOFI-AVENTIS | 4.2 | 4.8 | |
| 4 | 5 | GLAXOSMITHKLINE | 4.2 | 4.3 | |
| 5 | 6 | STADA | 3.9 | 3.8 | |
| 6 | 4 | SANDOZ | 3.9 | 4.3 | |
| 7 | 8 | JOHNSON & JOHNSON | 3.0 | 3.0 | |
| 8 | 7 | MENARINI | 3.0 | 3.1 | |
| 9 | 14 | VALENTA | 2.5 | 1.9 | |
| 10 | 9 | RECKITT BENCKISER | 2.3 | 2.4 | |
| Total | | | 38.4 | 38.3 | |

^{*}AIPM members are in bold

Neither of the trade names of the top10 brands ranking managed to keep their earlier ranks (Table 2). At the same time, six of them rose in the ranks. Antiviral drugs KAGOCEL (+35%) and INGAVIRIN (+78%) moved up to the top two ranks from ranks three and six. DETRALEX (+33%) moved up to rank six from eight, and the newcomers MIRAMISTIN (+34%), ARBIDOL (+32%) and ERGOFERON (+54%) moved up to the last three ranks of the top ten. In contrast, the other brands of the top ten fell in the ranks. ESSENTIALE N, that used to take the lead in the top ten, reduced its sales by 10% and moved down to rank three. Due to lagging behind the growth rates, NUROFEN and CARDIOMAGNYL (+6% each) moved down to ranks four and five. Despite the outperformance rates, THERAFLU (+20%) moved down two ranks, coming in at rank seven, being displaced by the more dynamic brands. The total share of the top ten brands ranking increased by 1 p.p. and achieved 12.3%.

Table 2. The top ten brands by pharmacy sales

| Rank | | Brand | Share in total pharmacy sales, % | | |
|------|------|--------------|----------------------------------|------|--|
| 2016 | 2015 | | 2016 | 2015 | |
| 1 | 3 | KAGOCEL | 1.7 | 1.5 | |
| 2 | 6 | INGAVIRIN | 1.6 | 1.0 | |
| 3 | 1 | ESSENTIALE | 1.4 | 1.8 | |
| 4 | 2 | NUROFEN | 1.4 | 1.5 | |
| 5 | 4 | CARDIOMAGNYL | 1.2 | 1.2 | |
| 6 | 8 | DETRALEX | 1.2 | 1.0 | |
| 7 | 5 | THERAFLU | 1.1 | 1.0 | |
| 8 | 14 | MIRAMISTIN | 1.0 | 0.8 | |

⁴ Hereinafter, unless otherwise stated, growth gains are stated in the rouble equivalent or national currency.

| Rank | | Brand | Share in total pharmacy sales, % | | |
|-------|------|-----------|----------------------------------|------|--|
| 2016 | 2015 | | 2016 | 2015 | |
| 9 | 13 | ARBIDOL | 1.0 | 0.8 | |
| 10 | 19 | ERGOFERON | 0.9 | 0.7 | |
| Total | | | 12.3 | 11.3 | |

In contrast to the above rankings, the leaders of the top ten INNs and grouping names ranking didn't change: XYLOMETAZOLINE (+11%) and PANCREATIN (+10%) kept the two first ranks in the top ten (Table 3). INN IBUPROFEN (+19%) and the composition DIOSMIN*HESPERIDIN (+33%) moved up to ranks three and four, whereas KAGOCEL (+23%) kept its previous rank five. In contrast, neither INN in the bottom part of the top ten managed to remain in the earlier positions. At the same time, only two of them rose in the ranks. The newcomer of the top ten INN IMIDAZOLYL ETHANAMIDE PENTANDIOIC ACID (+78%) and INTERFERON ALFA-2B (+29%), which moved up one rank, coming in at numbers six and nine, respectively. At the same time, PHOSPHOLIPIDS (-9%) and CHONDROITINSULFURIC ACID*GLUCOSAMINE (+8%) and ACETYLSALICYLIC ACID*MAGNESIUM (+6%) showed relatively low growth rates and moved down to the lower ranks seven, eight and ten, respectively. The cumulative share of the top ten increased by 0.5 p.p. and accounted for 16.9%.

Table 3. The top 10 INNs and group names by pharmacy sales

| Ra | nk | INNs/Group Names | Share in total phar- macy sales, % | | |
|-------|------|---|---------------------------------------|------|--|
| 2016 | 2015 | • | 2016 | 2015 | |
| 1 | 1 | XYLOMETAZOLINE | 3.2 | 3.2 | |
| 2 | 2 | PANCREATIN | 1.9 | 2.0 | |
| 3 | 4 | IBUPROFEN | 1.9 | 1.8 | |
| 4 | 6 | DIOSMIN*HESPERIDIN | 1.6 | 1.3 | |
| 5 | 5 | KAGOCEL | 1.6 | 1.5 | |
| 6 | 12 | IMIDAZOLYL ETHANAMIDE PENTAN- DIOIC ACID | 1.6 | 1.0 | |
| 7 | 3 | PHOSPHOLIPIDS | 1.6 | 1.9 | |
| 8 | 7 | CHONDROITINSULFURIC ACID* GLU- COSAMINE | 1.2 | 1.3 | |
| 9 | 10 | INTERFERON ALFA-2B | 1.2 | 1.0 | |
| 10 | 8 | ACETYLSALICYLIC ACID* MAGNE- SIUM | 1.2 | 1.2 | |
| Total | | | 16.9 | 16.4 | |

J05 Antivirals for systemic use, which sales grew by 47%, became the bestselling and dynamic OTC-group in the Russian market at the year-end (Table 4). N02 Analgesics (+12%) held its previous rank two; whereas the former leaders R01 Nasal preparations (+11%) moved down to rank three. The groups R05 Cough and cold preparations (+12%), A07 Antidiarrheals (+10%) and A11 Vitamins (+13%) moved down one rank, coming in at numbers four through six respectively. C05 Vasoprotectives (+14%) maintained its rank seven in the ranking. In addition to the above leader, the other two ATC groups of the top ten rose in the ranks. L03 Immunostimulants (+31%) moved up one p.p., coming in at rank eight, and the only newcomer of the top ten R02 Throat preparations (+15%) moved up to rank nine. In contrast, the less dynamic M01 Anti-inflammatory and antirheumatic products moved down to rank ten from eight. The consolidated share of the top 10 under review expanded from 49.9% to 51.4%.

Table 4. The top ten ATC Groups by pharmacy sales

| Ra | nk | ATC code | ATC group | | otal phar- ales, % |
|-------|------|----------|---|------|-----------------------|
| 2016 | 2015 | code | | 2016 | 2015 |
| 1 | 6 | J05 | ANTIBACTERIALS FOR SYSTEMIC USE | 6.4 | 4.9 |
| 2 | 2 | N02 | ANALGESICS | 6.1 | 6.2 |
| 3 | 1 | R01 | NASAL PREPARATIONS | 6.1 | 6.2 |
| 4 | 3 | R05 | COUGH AND COLD PREPARATIONS | 6.0 | 6.1 |
| 5 | 4 | A07 | ANTIDIARRHEALS | 5.3 | 5.4 |
| 6 | 5 | A11 | VITAMINS | 5.2 | 5.3 |
| 7 | 7 | C05 | VASOPROTECTIVES | 4.8 | 4.8 |
| 8 | 9 | L03 | IMMUNOSTIMULANTS | 4.2 | 3.6 |
| 9 | 12 | R02 | THROAT PREPARATIONS | 3.6 | 3.6 |
| 10 | 8 | M01 | ANTI-INFLAMMATORY AND AN- TIRHEUMATIC PRODUCTS | 3.6 | 3.8 |
| Total | | | | 51.4 | 49.9 |

Conclusion. On the basis of the results for 2016, the OTC retail pharmacy market of Russia brought in RUB 440.524 bil. (USD 6.605 bil.), which was 12% in terms of roubles and 2% in terms of dollars more than in 2015. In pack terms, the market also showed positive growth rates (+3%) and achieved 3.117 mil. packs. The average cost of OTC-pack in the pharmacies of Russia was USD 2.12 based on the results for 2016, which was less than in the year-earlier period (USD 2.15). However, the average expenses of Russian residents for the purchase of OTC drugs in pharmacies slightly increased (USD 45.07 vs. USD 44.33).

ANALYSIS OF PRICES IN THE OUT-PATIENT SECTOR KEY PERFORMANCE INDICATORS

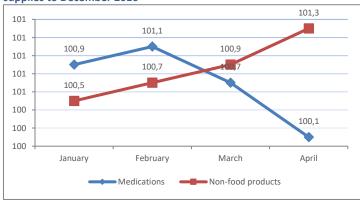
Price Indices

Table 1. Inflation rates in the Russian Federation, April 2017

| | April 2017 vs. December 2016 | January-April 2017 vs. January- April 2016 |
|---------------------------|------------------------------|--|
| CPI | 101.3 | 104.5 |
| CPI for non-food products | 101.1 | 105.4 |
| CPI for medications | 100.1 | 104.6 |

Rosstat data

Figure 1. Dynamics of the price index for non-food items and medicines supplies to December 2016



Rosstat data

Indicators of dynamics of prices and retail margins (according to retail audit data)

Figure 2. Dynamics of weighted average prices and retail margins in Q 1, 2016 - Q 1, 2017

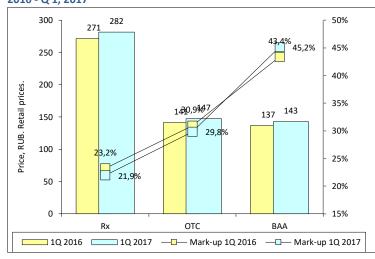


Figure 3. Dynamics of weighted average prices and retail margins in Q 1, 2016 - Q 1, 2017

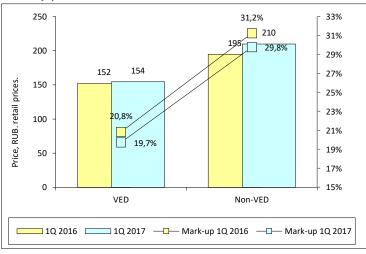
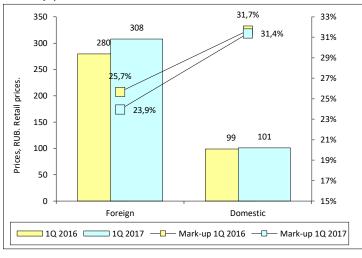


Figure 4. Dynamics of weighted average prices and retail margins in Q 1, 2016 - Q 1, 2017

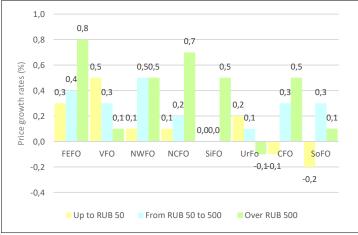


Indicators of dynamics of prices for vital and essential drugs (VED)

Table 2. Results of the VED price monitoring conducted by Roszdravnadzor in the Russian Federation

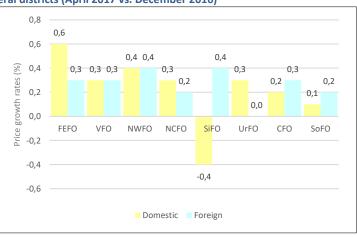
| | Price dynamics in | Price dynamics in April 2017 vs. December 2016 (%) | | | | |
|--------------------|-------------------|--|----------------|--|--|--|
| | Retail prices | Wholesale | Manufacturers' | | | |
| | | prices | prices | | | |
| VED total | 0.2 | 0.4 | 0.7 | | | |
| Up to RUB 50 | 0.1 | | | | | |
| From RUB 50 to 500 | 0.3 | | | | | |
| Over RUB 500 | 0.3 | 1 | | | | |
| Domestic | 0.2 | | | | | |
| Foreign | 0.3 | | | | | |

Figure 5. Dynamics of retail VED prices within various price ranges by federal districts (April 2017 vs. December 2016)



Roszdravnadzor data

Figure 6. Dynamics of retail prices for domestic and foreign VED by federal districts (April 2017 vs. December 2016)



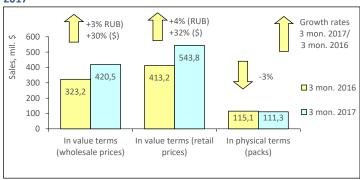
Roszdravnadzor data

MOSCOW CITY PHARMACY MARKET: 2017 FIRST THREE MONTHS RE-SULTS

According to Federal State Statistics Service, as of January 1, 2017 Moscow's estimated population was 12.381 mil., which accounted for 8.4% of the total Russian Federation population and 31.6% of Central FO (CFO). According to Federal State Statistics Service's data, based on the results for January-March of 2017 the average wage in Moscow was RUB 73,836 (USD 1,247.65), which was 107% higher than the average wage in Russia (RUB 35,635).

According to the results of the Retail Audit of Finished Pharma Products (FPP) in Russian Federation™, at the end of January-March of 2017 the sales of drugs in physical terms in the pharmacies of Moscow saw a 3% decrease to 111.257 mil. packs. In money terms, the market saw a 3% increase in terms of roubles and 30% in terms of dollars. At the same time, the volume of the market achieved RUB 24.728 bil (USD 420.527 mil.) at wholesale prices (Fig. 1). The region market share accounted for 13.5% of the Russian pharmacy retail sales. The average cost of an OTC pack reduced as compared to a year earlier period (USD 3.59) and reached USD 4.89 at retail prices. At the end of 2016, the average amount spent by the Muscovites for OTC drugs in pharmacies amounted to USD 43.93.

Figure 1. Moscow pharmacy market for 3 months of 2016 – 3 months of 2017



At the end of the first quarter of 2017, the manufacturers BAYER (+12%) and SANOFI-AVENTIS (-10%) continued showing the largest retail sales on the Moscow market (Table 1). The manufacturers ABBOTT (+16%) and SERVIER (+4%) moved up to ranks three and four from seven and five respectively, displacing TEVA, which reduced its sales by 75, to rank five. GLAXOSMITHKLINE (+2%) kept its previous rank six. The manufacturers showing ranking progress moved up to the four bottom ranks of the top ten. SANDOZ (+17%) moved up one rank, and the newcomers STADA (+28%), MENARINI (+10%) and NY-COMED/TAKEDA (+16%) broke into the top ten manufacturers ranking. The total share of the top-ten manufacturers increased by almost 1.5 p.p. and accounted for 35.9%.

Table 1. The top ten drug manufacturers by pharmacy sales

| Rank in the top ten | | | Share in total pharmacy sales, % | |
|---------------------|----------------|------------------|----------------------------------|-------------------|
| 3 mon. 2017 | 3 mon. 2016 | Manufacturer* | 3 mon. 2017 | 3 mon. 2016 |
| 1 | 1 | BAYER HEALTHCARE | 5.9 | 5.4 |
| 2 | 2 | SANOFI-AVENTIS | 4.5 | 5.1 |
| 3 | 7 | ABBOTT | 3.6 | 3.2 |
| 4 | 5 | SERVIER | 3.5 | 3.4 |
| 5 | 3 | TEVA | 3.4 | 3.8 |
| 6 | 6 | GLAXOSMITHKLINE | 3.4 | 3.4 |
| 7 | 8 | SANDOZ | 3.3 | 2.9 |
| 8 | 13 | STADA | 2.9 | 2.3 |
| 9 | 11 | MENARINI | 2.7 | 2.6 |
| 10 | 12 | NYCOMED/TAKEDA | 2.7 | 2.4 |
| Total | | | 35.9 | 34.5 |

^{*}AIPM members are in bold

Note that all brands from the top ten brands ranking showed outperformance rates and rose in the ranks (Table 2). Due to 72% growth in sales, the anticholesterol drug CRESTOR moved up to rank number one from seven. DETRALEX (+34%), XARELTO (+15%), MIRAMISTIN (+25%), NUROFEN (+15%) and CONCOR (+6%) moved up from the lower ranks to ranks two through five and seven respectively. The newcomers CIALIS (+24%), LINEX (+59%), HEPTRAL (+31%) and ENTEROSGEL (+80%) broke into the ranks of the top ten, coming in at ranks six and the last three ranks of the ranking. The total share of the top-ten increased by 1.8 p.p. and achieved 8%.

Table 2. The top ten brands by pharmacy sales

| | able 2. The top tell brands by pharmacy sales | | | | | |
|------------------------|---|------------|----------------------------------|----------------|--|--|
| Rank in the top ten | | Down of | Share in total pharmacy sales, % | | | |
| 3 mon. 2017 | 3 mon. 2016 | Brand | 3 mon. 2017 | 3 mon. 2016 | | |
| 1 | 7 | CRESTOR | 1.2 | 0.7 | | |
| 2 | 8 | DETRALEX | 0.9 | 0.7 | | |
| 3 | 5 | XARELTO | 0.8 | 0.7 | | |
| 4 | 10 | MIRAMISTIN | 0.8 | 0.7 | | |
| 5 | 6 | NUROFEN | 0.8 | 0.7 | | |
| 6 | 11 | CIALIS | 0.8 | 0.7 | | |
| 7 | 9 | CONCOR | 0.7 | 0.7 | | |

| | nk top ten | Brand | Share in total pharmacy sales, % | |
|----------------|----------------|------------|----------------------------------|----------------|
| 3 mon. 2017 | 3 mon. 2016 | Dianu | 3 mon. 2017 | 3 mon. 2016 |
| 8 | 23 | LINEX | 0.7 | 0.4 |
| 9 | 18 | HEPTRAL | 0.6 | 0.5 |
| 10 | 35 | ENTEROSGEL | 0.6 | 0.4 |
| Total | | | 8.0 | 6.2 |

Four newcomers broke into the ranks of the top 10 INN and generic names ranking (table 3). They were MIRAMISTIN (+25%), RIVAROXABAN (+15%), TADALAFIL (+24%) and SILDENAFIL (+15%). Apart from the leader, another four INNs of the top ten managed to rise in the ranks. INNs ROSUVASTATIN (+56%), IBUPROFEN (+31%) and PANCREATIN (+25%) moved up to ranks two through four and BISOPROLOL (+9%) move up to rank eight from ten. However, INN XYLOMETAZOLINE (+19%) and the composition DIOSMIN*HESPERIDIN (+18%) held their previous ranks one and five. The cumulative share of the top 10 under review increased from 8.9% to 10.7%.

Table 3. The top 10 INNs and group names by pharmacy sales

| Rank | | INNs/Group Names | Share in total phar- macy sales, % | |
|----------------|----------------|--------------------|---------------------------------------|----------------|
| 3 mon. 2017 | 3 mon. 2016 | - INNS/Group Names | 3 mon. 2017 | 3 mon. 2016 |
| 1 | 1 | XYLOMETAZOLINE | 2.0 | 1.7 |
| 2 | 4 | ROSUVASTATIN | 1.4 | 0.9 |
| 3 | 7 | IBUPROFEN | 1.1 | 0.9 |
| 4 | 8 | PANCREATIN | 1.1 | 0.9 |
| 5 | 5 | DIOSMIN*HESPERIDIN | 1.0 | 0.9 |
| 6 | 15 | MIRAMISTIN | 0.8 | 0.7 |
| 7 | 12 | RIVAROXABAN | 0.8 | 0.7 |
| 8 | 10 | BISOPROLOL | 0.8 | 0.8 |
| 9 | 17 | TADALAFIL | 0.8 | 0.7 |
| 10 | 13 | SILDENAFIL | 0.8 | 0.7 |
| Total | | | 10.7 | 8.9 |

At the end of the first three months of 2017, three ATC groups from the top ten ATC groups on the metropolitan market showed the negative growth in sales (Table 4). The groups J01 Antibacterials for systemic use (-2%), A11 Vitamins (-0.2%) and J05 Antivirals for systemic use (-44%) moved down to ranks five through seven, respectively. The sales growth rates of the other ATC groups from the top ten outran the market average, which resulted in the expansion of their market shares and rising in the ranks. At the same time, R01 Nasal preparations and M01 Anti-inflammatory and antirheumatic products (+14% each), C09 Agents acting on the rennin-angiotensin system (+18%) and A07 Antidiarrheals, intestinal anti-inflammatory/anti-infective agents (+25%) moved up to the top four ranks in the top ten. G03 Sex hormones (+15%), which improved their ranks by one p.p., and the newcomers of the top ten G04 Urologicals (+13%) and N02 Analgesics round out the top ten. In total, the top ten ATC groups accumulated 36.8% of the regional market, whereas in the year-earlier period 37.1%.

Table 4. The top ten ATC Groups by pharmacy sales

| | Rank | | . ,, | | in total phar- cy sales, % | |
|-------------------|-------------------|------|--|----------------|-------------------------------|--|
| 3 mon. 2017 | 3 mon. 2016 | code | ATC aroup | 3 mon. 2017 | 3 mon. 2016 | |
| 1 | 2 | R01 | NASAL PREPARATIONS | 4.6 | 4.1 | |
| 2 | 5 | M01 | ANTIINFLAMMATORY AND AN- TIRHEUMATIC PRODUCTS | 4.1 | 3.6 | |
| 3 | 6 | C09 | AGENTS ACTING ON THE RENIN- ANGIOTENSIN SYSTEM | 4.0 | 3.5 | |
| 4 | 8 | A07 | ANTIDIARR.,INTEST. ANTI- INFL./ANTIINFECT. AGENTS | 3.7 | 3.0 | |
| 5 | 3 | J01 | ANTIBACTERIALS FOR SYST USE | 3.6 | 3.7 | |
| 6 | 4 | A11 | VITAMINS | 3.6 | 3.7 | |
| 7 | 1 | J05 | ANTIVIRALS FOR SYSTEMIC USE | 3.6 | 6.5 | |
| 8 | 9 | G03 | SEX HORMONES AND MODULA- TORS OF THE GENITAL SYSTEM | 3.4 | 3.0 | |
| 9 | 11 | G04 | UROLOGICALS | 3.2 | 2.9 | |
| 10 | 12 | N02 | ANALGESICS | 3.1 | 2.9 | |
| Total | | | · | 36.8 | 37.1 | |

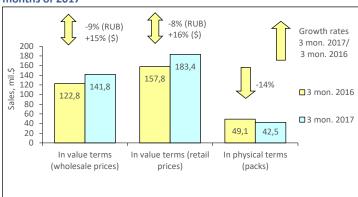
Conclusion. At the end of January-March of 2017, the retail pharmacy market of Moscow brought in RUB 31.979 bil. (USD 543.844 mil.), which is 4% in terms of roubles and 32% in terms of dollars more than in the same period of 2016. In pack terms, the market reduced by 3% and amounted to 111.257 mil. packs. According to the results for three months of 2017, the average cost of an FPP pack in the regional pharmacies was USD 4.89, which is more than in the year-earlier period (USD 3.59) and the national average (USD 3.18). The average expenses of the regional residents for purchase of OTC drugs in pharmacies were also higher than the national average (USD 43.93 vs. USD 27.41).

SAINT PETERSBURG PHARMACY MARKET: 2017 FIRST THREE MONTHS RESULTS

According to Federal State Statistics Service, St. Petersburg's population as of January 1, 2017 was estimated at 5.285 mil., which accounted for 3.6% of the total Russian Federation population and 38% of North West FO (NWFO). According to Federal State Statistics Service's data, based on the results for January-February of 2017 the average salary in the city was RUB 49,425 (USD 835.16), which was 39% higher than the average wage in Russia (RUB 35,635).

According to the results of the Retail Audit of FPP (Finished Pharmaceutical Products) in Russian Federation™, at the end of the first quarter of 2017 the sales of drugs in natural terms in pharmacies of St. Petersburg saw a 0.2% decrease to 42.482 mil. packs. In value terms, the market saw a 9% decrease in terms of roubles, whereas it showed a positive decline (+15%) in terms of dollars. At the same time, the volume of the market achieved RUB 8.340 bil. (USD 141.186 mil.) at wholesale prices (Fig. 1). The regional market share accounted for 4.6% of the Russian pharmacy sales. The average cost of an OTC pack reduced as compared to a year earlier period (USD 3.21) and reached USD 4.32 at retail prices. For 3 months of 2017, the average amount spent by residents of the city for drugs in the pharmacies amounted to USD 34.73.

Figure 1. St. Petersburg pharmacy market for 3 months of 2016 – 3 months of 2017



Based on the results for the first three months of 2017, the upper part of the top ten manufacturers on the St. Petersburg pharmacy market remained unchanged - the first three manufacturers of the top ten held their own in the ranking (Table 1). These were the drug manufacturers BAYER (+2%), SANOFIAVENTIS (-25%) and TEVA (-1%). SERVIER (-3%) that slightly reduced its sales also kept its previous rank six. Showing more strong negative growth rates, SANDOZ (-12%) and GLAXOSMITHKLINE (-30%) moved down to ranks seven and ten, respectively. Four manufacturers managed to rise in the ranks. OTCPHARM (+15%) and ABBOTT (+11%) moved up to ranks four and five from eight and seven, and STADA and NYCOMED/TAKEDA, which increased its sales by 16%, moved up to ranks eight and nine. On top of that, the latter became the only newcomer of the top 10 ranking. The total share of the top 10 increased by 2.3 p.p. and made 40.4%.

Table 1. The top ten drug manufacturers by pharmacy sales

| Table 1. The top ten drug manufacturers by pharmacy sales | | | | | | |
|---|----------------|------------------|----------------------------------|-------------------|--|--|
| Rank | | | Share in total pharmacy sales, % | | | |
| 3 mon. 2017 | 3 mon. 2016 | Manufacturer* | 3 mon. 2017 | 3 mon. 2016 | | |
| 1 | 1 | BAYER HEALTHCARE | 6.9 | 6.1 | | |
| 2 | 2 | SANOFI-AVENTIS | 4.4 | 5.3 | | |
| 3 | 3 | TEVA | 4.3 | 4.0 | | |
| 4 | 8 | OTCPHARM | 4.0 | 3.2 | | |
| 5 | 7 | ABBOTT | 4.0 | 3.3 | | |
| 6 | 6 | SERVIER | 3.9 | 3.7 | | |
| 7 | 4 | SANDOZ | 3.8 | 3.9 | | |
| 8 | 9 | STADA | 3.2 | 2.5 | | |
| 9 | 11 | NYCOMED/TAKEDA | 3.0 | 2.3 | | |
| 10 | 5 | GLAXOSMITHKLINE | 2.9 | 3.8 | | |
| Total | • | | 40.4 | 38.2 | | |

^{*}AIPM members are in bold

Three newcomers broke into the ranks of the top ten brands ranking (table 2). The drugs DETRALEX (+49%), AMIXIN (+2%) and HEPTRAL (+11%) moved up to ranks two, six and nine. The leader was changed as well: XARELTO (+27%) moved up to rank one from five. The other brands of the top ten showed the negative growth in sales. However, despite this fact two of them SUPRADYN (-8%) and CONCOR (-2%) managed to move up to the higher ranks, seven and eight. The drug ARBIDOL (-20%) held its previous rank four, whereas KAGOCEL (-44%), ESSENTIALE N (-30%) and NUROFEN (-28%) which showed more strong reduction in sales, moved down to ranks three, five and ten, respectively. The total share of the top 10 brands didn't virtually change and accounted for 7.7%.

Table 2. The top ten brands by pharmacy sales

| Rank | | Brand | Share in total pharmacy sales, % | |
|----------------|----------------|----------|----------------------------------|----------------|
| 3 mon. 2017 | 3 mon. 2016 | Diallu | 3 mon. 2017 | 3 mon. 2016 |
| 1 | 5 | XARELTO | 1.2 | 0.8 |
| 2 | 16 | DETRALEX | 0.9 | 0.6 |
| 3 | 1 | KAGOCEL | 0.9 | 1.4 |

| Rank | | Brand | Share in total pharmacy sales, % | |
|----------------|----------------|------------|----------------------------------|----------------|
| 3 mon. 2017 | 3 mon. 2016 | Dianu | 3 mon. 2017 | 3 mon. 2016 |
| 4 | 4 | ARBIDOL | 0.7 | 0.8 |
| 5 | 3 | ESSENTIALE | 0.7 | 1.0 |
| 6 | 11 | AMIXIN | 0.7 | 0.6 |
| 7 | 8 | SUPRADYN | 0.7 | 0.7 |
| 8 | 10 | CONCOR | 0.7 | 0.6 |
| 9 | 18 | HEPTRAL | 0.7 | 0.5 |
| 10 | 6 | NUROFEN | 0.7 | 0.8 |
| Total | | | 7.7 | 7.8 |

Despite the reduction in sales, XYLOMETAZOLINE (-13%) remained the leader of the top 10 INN and generic names ranking (Table 3). Another INN, TILORONE (-8%), held its previous rank 4. INN RIVAROXABAN (+27%) and the composition DIOSMIN* HESPERIDIN (+29%) which became one of the three newcomers of the top ten, moved up to ranks two and three from 9 and 14. Another two newcomers SATORVASTATIN (+0,1%) and AMOXICILLIN*CLAVULANIC ACID (-2%) moved up to ranks seven and ten, respectively. PANCREATIN (+7%) and ROSUVASTATIN (-8%) also moved up to the higher ranks five and six. And only KAGOCEL (-44%) and IBUPROFEN (-15%) fell in the ranks, moving down to ranks 8 and 9. The cumulative share of the top10 increased from 9.9% to 10.1%.

Table 3. The top 10 INNs and group names by pharmacy sales

| Ra | nk | INNs/Group Names | Share in total phar- macy sales, % | |
|----------------|----------------|-----------------------------|---------------------------------------|----------------|
| 3 mon. 2017 | 3 mon. 2016 | iivivs/ Group Names | 3 mon. 2017 | 3 mon. 2016 |
| 1 | 1 | XYLOMETAZOLINE | 1.6 | 1.7 |
| 2 | 9 | RIVAROXABAN | 1.2 | 0.8 |
| 3 | 14 | DIOSMIN*HESPERIDIN | 1.1 | 0.8 |
| 4 | 4 | TILORONE | 1.0 | 1.0 |
| 5 | 10 | PANCREATIN | 1.0 | 0.8 |
| 6 | 7 | ROSUVASTATIN | 0.9 | 0.9 |
| 7 | 12 | ATORVASTATIN | 0.9 | 0.8 |
| 8 | 2 | KAGOCEL | 0.9 | 1.4 |
| 9 | 6 | IBUPROFEN | 0.9 | 0.9 |
| 10 | 13 | AMOXICILLIN*CLAVULANIC ACID | 0.8 | 0.8 |
| Total | | | 10.1 | 9.9 |

As in the above rankings, the most ATC groups from the top ten ATC groups ranking showed negative growth rates in the analysed period (Table 4). Among them were J05 Antivirals for systemic use (-34%) which kept their leadership and reduced their sales by one third. A11 Vitamins (-15%), R01 Nasal preparations (-16%) and M01 Anti-inflammatory and antirheumatic products (-9%), lost one rank each and moved down to ranks 3 through 5 respectively. ATC Group R05 Cough and cold preparations (-17%) moved down two ranks, coming in at number eight. At the same time, J01 Antibacterials for systemic use and A07 Antidiarrheals, intestinal anti-inflammatory/anti-infective agents which reduced their sales by 4%, moved up to ranks six and ten, respectively. At the same time, the latter became one of two newcomers of the top ten. The second newcomer, G03 Sex hormones (+3%) moved up to rank nine, C09 Agents acting on the renin-angiotensin system (+5%) and B01 Antithrombotic agents (+2%) also raised in the ranks, moving up to numbers two and seven. In total, the top ten ATC groups accumulated 39.1% of the market, which was less than in the year-earlier period (40.1%).

Table 4. The top ten ATC Groups by pharmacy sales

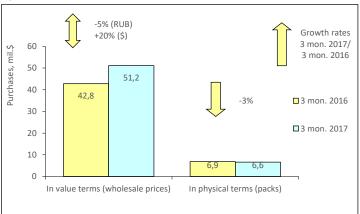
| | nk | ATC | | | otal phar- ales, % |
|-------------------|-------------------|------|--|----------------|-----------------------|
| 3 mon. 2017 | 3 mon. 2016 | code | ATC group | 3 mon. 2017 | 3 mon. 2016 |
| 1 | 1 | J05 | ANTIVIRALS FOR SYSTEMIC USE | 4.6 | 6.4 |
| 2 | 5 | C09 | AGENTS ACTING ON THE RENIN- ANGIOTENSIN SYSTEM | 4.6 | 4.0 |
| 3 | 2 | A11 | VITAMINS | 4.2 | 4.5 |
| 4 | 3 | R01 | NASAL PREPARATIONS | 4.0 | 4.3 |
| 5 | 4 | M01 | ANTIINFLAMMATORY AND AN- TIRHEUMATIC PRODUCTS | 4.0 | 4.0 |
| 6 | 7 | J01 | ANTIBACTERIALS FOR SYST USE | 3.7 | 3.5 |
| 7 | 8 | B01 | ANTITHROMBOTIC AGENTS | 3.7 | 3.3 |
| 8 | 6 | R05 | COUGH AND COLD PREPARA- TIONS | 3.5 | 3.9 |
| 9 | 12 | G03 | SEX HORMONES AND MODULA- TORS OF THE GENITAL SYSTEM | 3.4 | 3.0 |
| 10 | 11 | A07 | ANTIDIARR., INTEST. ANTI- INFL./ANTIINFECT. AGENTS | 3.3 | 3.1 |
| Total | • | • | | 39.1 | 40.1 |

Conclusion. On the basis of the results for the first quarter of 2017, the pharmacy market of St.Petersburg brought in RUB 11.757 bil. (USD 183.427 mil.), It was 8% less in terms of roubles and 16% more in terms of dollars than in January-March 2016. In physical terms, the market saw a 14% decrease and was equal to 42.482 mil. packs. In the first three months of 2017, the average cost of FPP pack in the city pharmacies was USD 4.32, which was more than in the year-earlier period (USD 3.21) and the national average (USD 3.18). The average medicine expenses of St. Petersburg residents in the pharmacies were higher than the national average expenses in Russia (USD 34.73 vs. USD 27.41).

MOSCOW CITY HOSPITAL MARKET: 2017 FIRST THREE MONTHS RESULTS

According to the results of the Budget Audit of Finished Pharma Products (FFP) in the Russian Federation, at the end of 3 months of 2017 the Moscow hospital market in physical terms reduced by 3% compared to the previous year and amounted to 6.638 mil. packs. In money terms, the market showed negative growth rates in terms of roubles (-5%) and positive growth rates in terms of dollars (+20%) and reached RUB 3.007 bil. (USD 51.163 mil.) in wholesale prices. At the end of January-March of 2017, the average cost of an FPP pack in the hospital sector of Moscow was USD 7.71, whereas in the year-earlier period its cost was USD 6.25.

Figure 1. Moscow hospital market for 3 months of 2016 – 3 months of 2017



Due to 62% growth in purchases, the Russia-based manufacturer BIOCAD became a leader of the top 10 manufacturers on the hospital market of Moscow based on the results for three months of 2017, moving up to rank number one from nine (Table 1). In addition to it, PFIZER (+3%), BAXTER (+63%), SANOFIAVENTIS (+27%), ASTRAZENECA (+30%) and BAYER (+34%) also showed positive growth rates, moving up to ranks four through eight respectively. On top of that, the latter two manufacturers broke into the ranks of the top 10 ranking for the first time. VEROPHARM (-14%) became another one manufacturer of the top ten, which moved up to rank eleven from nine despite the negative growth rates. Reduction in purchases was also demonstrated by MERCK SHARP DOHME (-21%), which held its previous rank two, and ABBVIE (-22%) and ASTELLAS PHARMA (-30%), which moved down to ranks three and ten in the top ten. The total share of the top ten manufacturers increased by almost 3.5 p.p. and accounted for 33.6%.

Table 1. The top 10 drug manufacturers by hospital purchases

| Table 1. The top 10 drug manufacturers by nospital purchases | | | | | | |
|--|----------------|-------------------|--------------------------------------|----------------|--|--|
| Rank in the top ten | | | Share in total hospital purchases, % | | | |
| 3 mon. 2017 | 3 mon. 2016 | - Manufacturer* | 3 mon. 2017 | 3 mon. 2016 | | |
| 1 | 9 | BIOCAD RF | 4.3 | 2.5 | | |
| 2 | 2 | MERCK SHARP DOHME | 4.3 | 5.1 | | |
| 3 | 1 | ABBVIE | 4.3 | 5.2 | | |
| 4 | 5 | PFIZER | 4.1 | 3.7 | | |
| 5 | 10 | BAXTER INT | 4.1 | 2.4 | | |
| 6 | 7 | SANOFI-AVENTIS | 3.5 | 2.6 | | |
| 7 | 14 | ASTRAZENECA | 2.7 | 2.0 | | |
| 8 | 17 | BAYER HEALTHCARE | 2.4 | 1.7 | | |
| 9 | 11 | VEROPHARM | 2.1 | 2.3 | | |
| 10 | 8 | ASTELLAS PHARMA | 1.9 | 2.6 | | |
| Total | • | | 33.6 | 30.2 | | |

^{*}AIPM members are in bold

The brand names ranking on the hospital metropolitan market was noticeably updated - six newcomers broke into the ranks of the top ten ranking (Table 2). NOVOTAX (2.4-fold growth in purchases) moved up to rank three, and PENTAGLOBIN (2-fold growth in purchases), MERONEM and CLEXAN (+61% each), ACTILYSE (4-fold growth) and RIBOMUSTIN (+35%) moved up to ranks five through seven and the two bottom ranks. At the end of Quarter I, 2017, the traditional hospital drug NATRIUM CHLORIDUM (+41%) took the lead in the ranking, displacing KALETRA (-41%) down one rank. At the same time, SEVORAN (-24%) also reduced its purchases and moved down from rank two to four. Thanks to the emergence of the newcomers, the cumulative share of the top 10 brand names increased from 10.3% to 13%.

Table 2. The top 10 brands by hospital purchases

| Rank in the top ten | | Brand | Share in total hospi- tal purchases, % | |
|------------------------|----------------|-------------------|---|----------------|
| 3 mon. 2017 | 3 mon. 2016 | branu | 3 mon. 2017 | 3 mon. 2016 |
| 1 | 4 | NATRIUM CHLORIDUM | 2.1 | 1.4 |
| 2 | 1 | KALETRA | 2.0 | 3.2 |
| 3 | 15 | NOVOTAX | 1.5 | 0.6 |
| 4 | 2 | SEVORAN | 1.4 | 1.7 |
| 5 | 22 | PENTAGLOBIN | 1.2 | 0.5 |
| 6 | 16 | MERONEM | 1.0 | 0.6 |
| 7 | 17 | CLEXAN | 1.0 | 0.6 |
| 8 | 10 | UMAN ALBUMIN | 1.0 | 0.8 |
| 9 | 38 | ACTILYSE | 1.0 | 0.2 |

| Rank in the top ten | | Brand | Share in to tal purch | |
|------------------------|----|------------|---------------------------|------|
| 3 mon. 3 mon. 2016 | | Dialiu | 3 mon. 3 mon 2017 2016 | |
| 10 | 12 | RIBOMUSTIN | 1.0 | 0.7 |
| Total | | | 13.0 | 10.3 |

IMMUNOGLOBULIN BASE (+88%), MEROPENEM (2.1-fold growth in purchases), DOCETAXEL (+35%) and SODIUM (+39%) moved up to the top ranks from the lower ones in the top INN and group names ranking. Due to strong negative growth rates, the composition LOPINAVIR*RITONAVIR (-41%), which took the lead in the top ten ranking, moved down to rank five. ALBUMIIN (+1%) and SEVOFLURANE (-19%) also moved down to the lower ranks eight and nine. The remaining three INNs broke into the ranks of the top 10 ranking for the first time. VACCINE PNEUMOCOCCAL, and LINEZOLID (+86%) and ENOXAPARIN SODIUM (+72%) moved up to ranks six, seven and ten. The cumulative share of the top ten under review increased by almost 7 p.p. and achieved 21.4%.

Table 3. The top 10 INNs and Group Names by hospital purchases

| Rank | | INNs/Group Names | Share in total hospi- tal purchases, % | |
|----------------|----------------|-----------------------|---|----------------|
| 3 mon. 2017 | 3 mon. 2016 | inns/Group Names | 3 mon. 2017 | 3 mon. 2016 |
| 1 | 2 | IMMUNOGLOBULIN BASE | 3.7 | 1.8 |
| 2 | 10 | MEROPENEM | 3.1 | 1.4 |
| 3 | 5 | DOCETAXEL | 2.3 | 1.6 |
| 4 | 8 | SODIUM | 2.1 | 1.4 |
| 5 | 1 | LOPINAVIR*RITONAVIR | 2.0 | 3.2 |
| 6 | N/A | VACCINE, PNEUMOCOCCAL | 1.9 | N/A |
| 7 | 16 | LINEZOLID | 1.7 | 0.9 |
| 8 | 4 | ALBUMIN | 1.7 | 1.6 |
| 9 | 3 | SEVOFLURANE | 1.5 | 1.8 |
| 10 | 18 | ENOXAPARIN SODIUM | 1.5 | 0.8 |
| Total | | | 21.4 | 14.5 |

As in the previous rankings, most ATC groups from the top ten showed negative growth rates (Table 4). Among them was the former leader J05 Antivirals for systemic use which due to 76% reduction in purchases moved down to rank seven. In addition, the groups N01 Anesthetics (-24%), V08 Contrast media (-4%) and L04 Immunosuppressants (-2%) lost one rank each, and J02 Antimy-cotics for systemic use (-24%) lost two ranks, moving down to rank six and the three bottom ranks. Some shifts also took place in the upper part of the top ten ranking, as a result of which four ATC groups from the top ten managed to rise in the ranks. J01 Antibacterials for systemic use (+62%) moved up to rank one from three, and the groups B05 Blood substitutes and perfusion solutions (+43%), B01 Antithrombotic agents (+32%) and J06 Immune sera and immunoglobulins (+62%) moved up to ranks three through five respectively. L01 Antineoplastic agents (-17%) held its previous rank two. The total share of the top 10 under review decreased 1 p.p. to 65.0%.

Table 4. The top ten ATC groups by hospital purchases

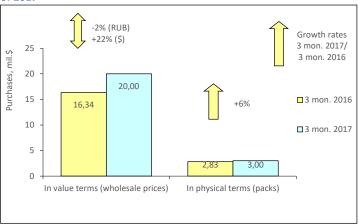
| Ra | nk | ATC | | Share in tot purcha | |
|-------------------|-------------------|------|--|------------------------|----------------|
| 3 mon. 2017 | 3 mon. 2016 | code | All group | 3 mon. 2017 | 3 mon. 2016 |
| 1 | 3 | J01 | ANTIBACTERIALS FOR SYST USE | 16.8 | 9.8 |
| 2 | 2 | L01 | ANTINEOPLASTIC AGENTS | 11.9 | 13.6 |
| 3 | 4 | B05 | PLASMA SUBSTITUTES AND PERFUSION SOLUTIONS | 0.8 | 5.3 |
| 4 | 7 | B01 | ANTITHROMBOTIC AGENTS | 5.7 | 4.1 |
| 5 | 10 | J06 | IMMUNE SERA & IMMUNO- GLOBULIN | 4.8 | 2.8 |
| 6 | 5 | N01 | ANESTHETICS | 3.9 | 4.8 |
| 7 | 1 | J05 | ANTIVIRALS FOR SYSTEMIC USE | 3.7 | 14.7 |
| 8 | 6 | J02 | ANTIMYCOTICS FOR SYSTEMIC USE | 3.6 | 4.5 |
| 9 | 8 | V08 | CONTRAST MEDIA | 3.6 | 3.5 |
| 10 | 9 | L04 | IMMUNOSUPPRESSANTS | 2.9 | 2.8 |
| Total | | | · | 65.0 | 66.0 |

Conclusion. At the end of the first three months of 2017, the Moscow hospital market reduced by 5% in rouble terms and increased by 20% in dollar terms and brought in RUB 3.007 bil. (USD 51.163 mil.). In pack terms, the market reduced by 3% and amounted to 6.638 mil. packs. The average cost of an FPP pack in the Moscow hospital market increased as compared to the previous year (USD 7.71 vs. USD 6.25).

SAINT PETERSBURG HOSPITAL MARKET: 2017 FIRST THREE MONTHS RE-SUITS

According to the results of the Budget Audit of FPPs in the Russian Federation (without DLO and regional benefit), in three months of 2017 the St. Petersburg hospital market increased in physical terms by 6% and amounted to 2.996 mil. packs. In value terms, the purchases growth rates were negative in roubles (-2%) and positive in dollar terms (+22%), and the volume amounted to RUB 1.178 bil. (USD 20.005 mil.) in wholesale prices. In the first quarter of 2017, the average cost of OTC pack in the city hospitals was USD 6.68, whereas in the year-earlier period its cost was USD 5.76.

Figure 1. St. Petersburg hospital market for 3 months of 2016 - 3 months of 2017



Following the results for three months of 2017, the drug manufacturer JOHN-SON & JOHNSON (+5%) held and reinforced its leading position in the top-ten drug manufacturers ranking in the St. Petersburg hospital market (Table 1). The manufacturers showing improvement of their positions moved up to the following five ranks. The most dynamic among the top ten drug manufacturers NOVARTIS (+80%) moved up to rank two from nine, ASTRAZENECA (+57%) moved up to rank three from eight. BAYER (+30%), NYCOMED/TAKEDA (+52%) and SANOFI-AVENTIS (+5%) moved up to ranks four through six respectively. The newcomers B.BRAUN (+78%) and ASTELLAS (+50%) broke into the ranks of the top ten, coming in at ranks eight and ten. In contrast, due to reduction in purchases MERCK SHARP DOHME (-27%) and NOVARTIS (-44%) moved down to the lower ranks seven and nine, respectively. The total share accumulated by the top 10 manufacturers increased by almost 6 p.p. and escalated to 40.1%.

| Fable 1. The top 10 drug manufacturers by hospital purchases | | | | | |
|--|----------------|-------------------|---|----------------|--|
| Rank in the top ten | | Manufacturer* | Share in total hospi- tal purchases, % | | |
| 3 mon. 2017 | 3 mon. 2016 | ivialiulactulei | 3 mon. 2017 | 3 mon. 2016 | |
| 1 | 1 | JOHNSON & JOHNSON | 11.3 | 10.6 | |
| 2 | 9 | PFIZER | 4.7 | 2.6 | |
| 3 | 8 | ASTRAZENECA | 4.2 | 2.6 | |
| 4 | 6 | BAYER HEALTHCARE | 3.6 | 2.7 | |
| 5 | 10 | NYCOMED/TAKEDA | 3.2 | 2.1 | |
| 6 | 7 | SANOFI-AVENTIS | 2.9 | 2.7 | |
| 7 | 5 | MERCK SHARP DOHME | 2.8 | 3.7 | |
| 8 | 17 | B.BRAUN | 2.6 | 1.4 | |
| 9 | 4 | NOVARTIS | 2.4 | 4.2 | |
| 10 | 14 | ASTELLAS PHARMA | 2.4 | 1.6 | |
| Total | • | | 40.1 | 34.2 | |

^{*}AIPM members are in bold

The top ten brand names ranking in the hospital city market has been half updated: five brands broke into the ranking for the first time (Table 2). PREZISTA took the lead in the top ten ranking, and OMNIPAQUE (+56%), SEVORAN (+20%), EVIPLERA and MYCAMINE (2.3-fold growth in purchases) moved up to ranks six through nine, respectively. On top of that, another four brands from the top ten moved up one rank. NATRIUM CHLORIDUM (+55%), XEPLION (-20%), SEROQUEL (+8%) and ULTRAVIST (+15%) moved up to ranks two through five, respectively. And only INVEGA (-12%) moved down from rank seven to ten. The total share of the top 10 brands increased from 10.9% to 19.4%.

Table 2. The top 10 brands by hospital purchases

| Rank | | Brand | Share in total hospital purchases, % | |
|----------------|----------------|-------------------|--------------------------------------|----------------|
| 3 mon. 2017 | 3 mon. 2016 | Dianu | 3 mon. 2017 | 3 mon. 2016 |
| 1 | N/A | PREZISTA | 4.7 | N/A |
| 2 | 3 | NATRIUM CHLORIDUM | 3.3 | 2.1 |
| 3 | 4 | XEPLION | 1.7 | 2.1 |
| 4 | 5 | SEROQUEL | 1.6 | 1.5 |
| 5 | 6 | ULTRAVIST | 1.6 | 1.4 |
| 6 | 13 | OMNIPAQUE | 1.6 | 1.0 |
| 7 | 11 | SEVORAN | 1.3 | 1.1 |
| 8 | N/A | EVIPLERA | 1.2 | N/A |
| 9 | 22 | MYCAMINE | 1.2 | 0.5 |
| 10 | 7 | INVEGA | 1.1 | 1.2 |
| Total | • | | 19.4 | 10.9 |

The top ten INN and group names leaders were noticeably updated: five newcomers appeared in the analysed ranking as in the previous one (Table 3). One of them, DARUNAVIR, topped the top ten ranking. Another four: IOHEXOL (+64%), SEVOFLURANE (+18%), the composition TENOFOVIR DISOPROXIL* EMTRICITABINE*RILPIVIRINE and INN MICAFUNGIN (+133%) moved up to rank six and the three bottom ranks. Due to outperformance rates, SODIUM (+54%), QUETIAPINE (+41%) and IOPROMIDE (+21%) moved up to ranks two, three and five. At the same time, the past year leader RISPERIDONE (-36%) showed pronounced negative growth rates and moved down to rank seven. As before, INN PALIPERIDONE PALMITAT held its previous rank four, despite 20% reduction in purchases. The total share of the top 10 has increased from 14.9% to 21%.

Table 3. The top 10 INNs and Group Names by hospital purchases

| Rank | | INNs/Group Names | Share in total hospi- tal purchases, % | |
|----------------|----------------|--|---|----------------|
| 3 mon. 2017 | 3 mon. 2016 | inivis/ Group Names | 3 mon. 2017 | 3 mon. 2016 |
| 1 | N/A | DARUNAVIR | 4.9 | N/A |
| 2 | 3 | SODIUM | 3.4 | 2.1 |
| 3 | 5 | QUETIAPINE | 2.3 | 1.6 |
| 4 | 4 | PALIPERIDONE PALMITATE | 1.7 | 2.1 |
| 5 | 7 | IOPROMIDE | 1.7 | 1.4 |
| 6 | 13 | IOHEXOL | 1.7 | 1.0 |
| 7 | 1 | RISPERIDONE | 1.6 | 5.0 |
| 8 | 12 | SEVOFLURANE | 1.4 | 1.1 |
| 9 | | TENOFOVIR DISOPROXIL* EMTRICIT- ABINE*RILPIVIRINE | 1.2 | N/A |
| 10 | 27 | MICAFUNGIN | 1.2 | 0.5 |
| Total | • | | 21.0 | 14.9 |

The top ten ATC groups ranking on the regional market appeared to be the most stable: half of the top ten ATC groups managed to retain their positions unchanged (table 4). Among them were the ATC groups in the upper part of the top ten LO1 Antineoplastic agents (-28%) and NO5 Psycholeptics (-25%). The groups B05 Blood substitutes and perfusion solutions (+37%), V08 Contrast media (+32%) and B01 Antithrombotic agents (+9%) held their previous ranks five through seven. Three ATC groups from the top ten rose in the ranks. J01 Antibacterials for systemic use (+37%) and N01 Anesthetics (+23%) moved up one rank, coming in at numbers three and eight, and the newcomers JO2 Antimycotics for systemic use (+82%) broke into the ranks of the top ten, moving up to rank nine. At the same time, J05 Antivirals for systemic use (-16%) and NO3 Antiepileptics (-28%) moved down to ranks four and ten. The total share of the top 10 ATC groups reduced from 69.9% to 69.2%.

Table 4. The top ten ATC groups by hospital purchases

| Ra | ank ATC | | | otal hospital ases, % | |
|-------------------|-------------------|------|--|--------------------------|----------------|
| 3 mon. 2017 | 3 mon. 2016 | code | ATC group | 3 mon. 2017 | 3 mon. 2016 |
| 1 | 1 | L01 | ANTINEOPLASTIC AGENTS | 12.0 | 16.3 |
| 2 | 2 | N05 | PSYCHOLEPTICS | 10.2 | 13.4 |
| 3 | 4 | J01 | ANTIBACTERIALS FOR SYST USE | 9.1 | 6.6 |
| 4 | 3 | J05 | ANTIVIRALS FOR SYSTEMIC USE | 9.0 | 10.5 |
| 5 | 5 | B05 | PLASMA SUBSTITUTES AND PERFUSION SOLUTIONS | 6.9 | 4.9 |
| 6 | 6 | V08 | CONTRAST MEDIA | 6.6 | 4.9 |
| 7 | 7 | B01 | ANTITHROMBOTIC AGENTS | 5.3 | 4.8 |
| 8 | 9 | N01 | ANESTHETICS | 4.0 | 3.2 |
| 9 | 11 | J02 | ANTIMYCOTICS FOR SYSTEMIC USE | 3.6 | 1.9 |
| 10 | 8 | N03 | ANTIEPILEPTICS | 2.6 | 3.5 |
| Total 69.2 | | | | | 69.9 |

Conclusion. At the end of the first quarter of 2017, the St. Petersburg hospital market reduced by 2% in rouble terms and increased by 22% in dollar terms, and brought in RUB 1.178 bil. (USD 20.007 mil.). In natural terms, the market increased by 1 % to 2.996 mil. packs. In January-March 2017, the average cost of a FPP pack on the city hospital sector was higher than that in the year-earlier period (USD 6.68 vs. USD 5.76).