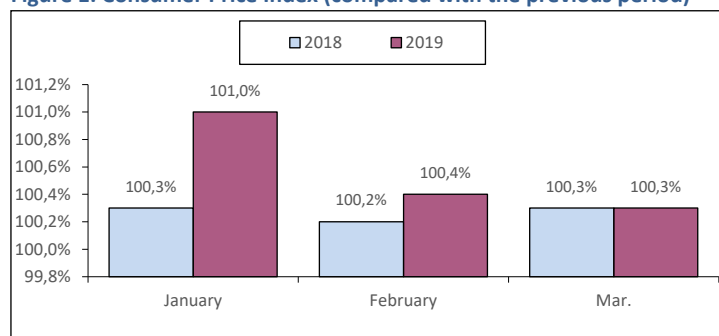


## MACROECONOMIC INDICES

### Inflation

According to Federal State Statistics Service's data, the Consumer Price Index was estimated at 100.3% in March 2019, compared to February, and 101.8% against December 2018. In March of 2019, Industrial Producer Price Index (for goods intended for sale on the domestic market) was 100.9%, whereas in the month-earlier period it had amounted to 100.1%. The index accounted for 98.9% against December of 2017.

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



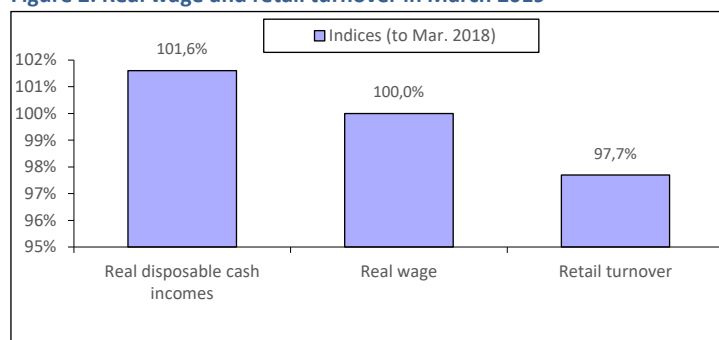
### Living standard

According to Federal State Statistics Service's data, in March of 2019 a gross monthly average wage of corporate employees reached RUB 45,000 (USD 690.82), and increased by 5.2% compared to the same period in the previous year, and by 4.5% compared to the previous period. In March of 2019, the real gross wage accounted for 100.0% as compared to March of 2018, and 104.2% against the prior period. According to estimates<sup>1</sup>, in the first quarter of 2019 real disposable cash incomes decreased by 2.3% compared to the same period of the previous year (Fig. 2).

### Retail turnover

In March 2019, the retail turnover was equal to RUB 2668.0 bil. 2019 101.6% (in comparable prices) against the level of the same period of the previous year, in Quarter I, 2019 - RUB 7,614.7 bil. or 101.8% (Fig. 2).

**Figure 2. Real wage and retail turnover in March 2019**



\* Quarter I 2019 vs Quarter I 2018

### Industrial Production

According to Federal State Statistics Service's data, in March 2019 Industrial Production Index accounted for 101.2% compared to the same period in the previous year, and 102.1% in January-March 2019.

According to Federal State Statistics Service's data, Industrial Production Index for drugs and medical products in March 2019 accounted for 110.8% compared to the same period of 2018, and 113.1% in January-March against January-March in 2018.

### 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 2019.

**Table 1. The top ten Russian chemical and pharmaceutical manufacturers by sales, March 2019**

Rank	Manufacturer	RUB mil.
1	Otcpharm	2217.3
2	Biocad	1698.7
3	Valenta	1303.8
4	Pharmstandart	1148.7
5	Stada	1034.5
6	Sotex	964.9
7	Akrikhin Pharma	799.1
8	Veropharm	740.4
9	Vertex	692.8
10	Servier	675.1

Source - Remedium according to IQVIA data

Table 2 provides pharmacy sales data from 10 regions of the Russian Federation. Sales (in terms of roubles) increased in most regions in February 2019 as compared to the previous month. The most pronounced growth in sales was observed in St. Petersburg (+22%), the least one in Krasnoyarsk Krai (+4%), Tyumen (-3%), Novosibirsk region (-4%) and Perm (-6%) saw a decline in sales.

**Table 2. Pharmacy sales in the regions, 2018-2019**

Region	Pharmacy sales, \$ mil. (wholesale prices)			Growth gain, % (roubles)		
	December 2018	January 2019	February 2019	December/November 18	January 19/December 18	February/January 19
Moscow	188.4	141.2	156.6	18%	-25%	9%
St. Petersburg	63.6	52.9	65.9	12%	-17%	22%
Krasnodar Krai	28.0	28.9	34.0	-4%	3%	15%
Krasnoyarsk Krai	27.8	26.9	28.6	14%	-3%	4%
Tatarstan	17.9	17.1	21.1	-0.3%	-5%	21%
Rostov Region	21.6	20.5	24.2	11%	-5%	16%
Novosibirsk Region	20.8	19.9	19.5	9%	-4%	-4%
Voronezh Region	14.6	12.9	14.0	13%	-11%	6%
Perm	7.1	7.4	7.2	4%	4%	-6%
Tyumen	6.4	6.7	6.6	14%	5%	-3%

### 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 2019**

Rank	Company*	Quantity of broadcasts
1	GSK Consumer Healthcare	14,883
2	Otcpharm	13,232
3	Sandoz	12,630
4	Berlin-Chemie/Menarini	11,068
5	Sanofi	9,156

Source - Remedium according to Mediascope's data

**Table 4. Top five brand names in mass media in March, 2019**

Rank	Brand*	Quantity of broadcasts
1	Evalar	6,309
2	Theraflu	4,775
3	Linex	3,970
4	ACC	3,703
5	Exoderil	3,000

Source - Remedium according to Mediascope's data

\* Only drugs registered with State Register of Medicines were considered

<sup>1</sup> Due to switching of Federal State Statistics Service to the updated methodology for calculating real disposable cash incomes of the population, the data will be published once a quarter.

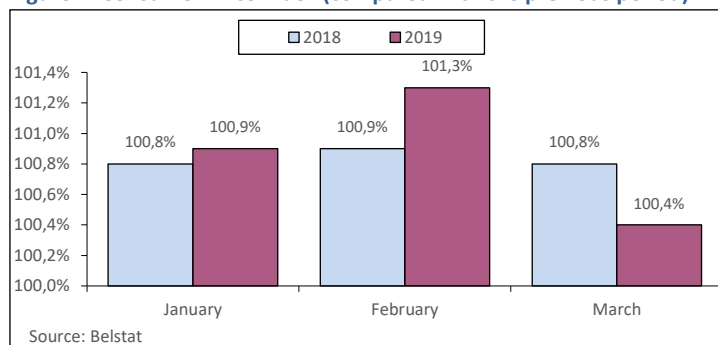
## MACROECONOMIC INDICES OF THE REPUBLIC OF BELARUS

### Inflation

According to the National Statistics Committee of Belarus, the Consumer Price Index was estimated at 100.4% in March 2019, and 102.6% against December 2018. At the end of the first quarter of 2019, the Consumer Price Index was 105.9% as compared to the first quarter of 2018.

In March 2019, Industrial Producer Price Index was 100.6% compared to February 2019, and 102.1% against December 2018. In January- March 2018, the Industrial Producer Price Index was 107.2% as compared to 2018.

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



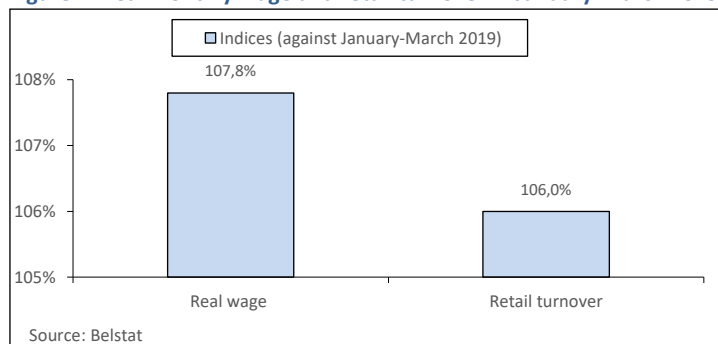
### Living standard

According to the preliminary data of the National Statistics Committee of the Republic of Belarus, in March 2019 a gross monthly average wage of corporate employees of the Republic of Belarus was BYR 1056.9 (USD 496.92<sup>2</sup>), and BYR 1056.9 (USD 471.07) in the first quarter of 2019. In March 2019, the real wage accounted for 107.3% as compared to the same period of 2018, and 107.8% in the first quarter of 2019 (Fig. 2). According to the National Statistical Committee of the Republic of Belarus, in January-February 2019 the real disposable cash incomes accounted for 107.1% compared to January-February 2018.

### Retail turnover

In March 2019, the retail turnover was estimated at BYR 4030.0 mil., which accounted for 115.5% compared to the previous period and 107.5% compared to the same period of the last year. According to the results for the first quarter of 2019, the turnover amounted to BYR 11.0 bil. or 106% against 2018 level in comparable prices (Fig. 2).

**Figure 2. Real monthly wage and retail turnover in January-March 2019**



### Industrial Production

According to the National Statistical Committee of the Republic of Belarus, in the first quarter of 2019 the industrial output by economic activities "Mining industry", "Processing Industry" and "Supply of electricity, gas, steam, hot water and conditioned air" and "Water supply; sewerage, waste management and remediation activities" amounted to BYR 27.7 bil. in current prices or 100.9% against the first quarter of 2018 in comparable prices.

According to Belstat's data, in the first quarter of 2019 pharmaceutical production output of essential pharmaceutical products and pharmaceutical preparations was estimated at BYR 328.1 mil., which accounted for 96.2% against the indicators of the first quarter of 2018 in comparable prices.

<sup>2</sup> The official average arithmetic exchange rate was used to calculate the above indices from the website of the National Bank of the Republic of Belarus [www.nbrb.by](http://www.nbrb.by).

<sup>3</sup> Since January 1, 2018, the monthly indicators also include data from micro and small organizations as the Statistics Committee of the Republic of Armenia (RA) uses a new information

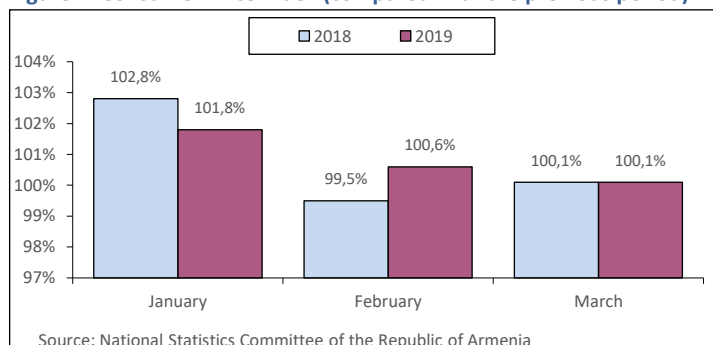
## MACROECONOMIC INDICES OF THE REPUBLIC OF ARMENIA

### Inflation

According to the National Statistics Committee of the Republic of Armenia, in March 2018 consumer price index amounted to 100.1% against the previous month and 102.6% against December 2018. The Consumer Price Index accounted for 101.5% in January-March 2019 compared to the same period of 2018.

The Industrial Producer Price Index was 100.7% in March 2019, as compared to the previous month, and 102.0% against December 2018. In the first quarter of 2019, the Index reached 100.3% as compared to 2018.

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



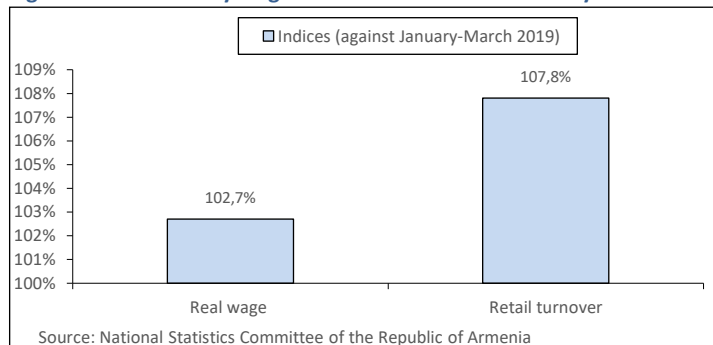
### Living standard

According to the preliminary data of the Statistics Committee of RA, in March 2019 the average monthly nominal wage<sup>3</sup> of the workers of the Republic of Armenia was Dram 177,239 (USD 363.58), which accounted for 103.0% compared to the previous period and 105.9% compared to the same period of 2018. In January-March 2019, the average monthly nominal wage per worker was Dram 174,069 (USD 357.26) or 104.3% against the same period of 2018. The real wage (according to Eurasian Economic Commission) accounted for 102.7% in January-March 2019 as compared to January-March 2018.

### Retail turnover

The retail turnover amounted to Dram 116,772.6 mil. in March 2018, and Dram 314,730.0 mil. in January - March 2019, which accounted for 106.6% and 107.8% respectively, as compared to the same period of the previous year (Fig. 2).

**Figure 2. Real monthly wage and retail turnover in January-March 2019**



### Industrial Production

According to the preliminary data of Statistics Committee of the Republic of Armenia, in March 2019 the industrial output by economic activities "Mining industry", "Processing industry" and "Supply of electricity, gas, steam, hot water and conditioned air" and "Water supply; sewerage, waste management and remediation activities" amounted to AMD 160,898.7 mil., and AMD 423,792.1 mil. in January- March 2019 or 102.2% and 102.0% against the same periods of 2018, respectively.

According to Statistics Committee of the Republic of Armenia, the pharmaceutical output was estimated at AMD 793.4 mil. in March 2019, and AMD 2,078.1 mil. from the beginning of the year, which accounted for 116.8% and 86.8% as compared to the same periods of 2018.

source for calculation - the database of the State Revenue Committee of the RA (KGA RA). Detailed explanations are available on the website of the RA Statistical Committee <http://www.armstat.am>.

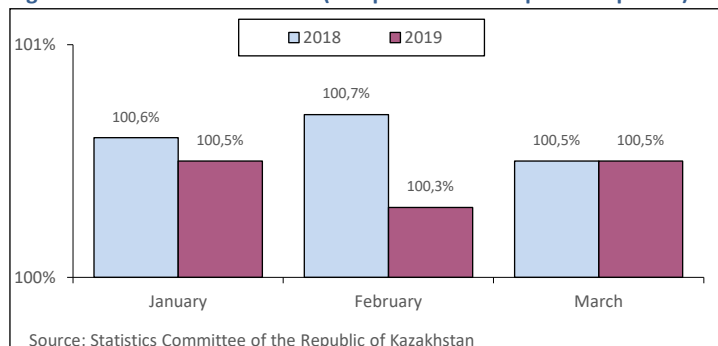
## MACROECONOMIC INDICES OF THE REPUBLIC OF KAZAKHSTAN

### Inflation

According to the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan, the Consumer Price Index was estimated at 100.5% in March 2019 compared to the previous month, 100.5% compared to December 2018. In January-March 2019, the index reached 105.0% compared to January-March 2018.

The Industrial Producer Price Index was 102.5% in March 2019, as compared to the previous month, 101.4% against December 2018. In January-March 2019, the prices of producers of industrial products increased by 9.5% as compared to January-March 2018.

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



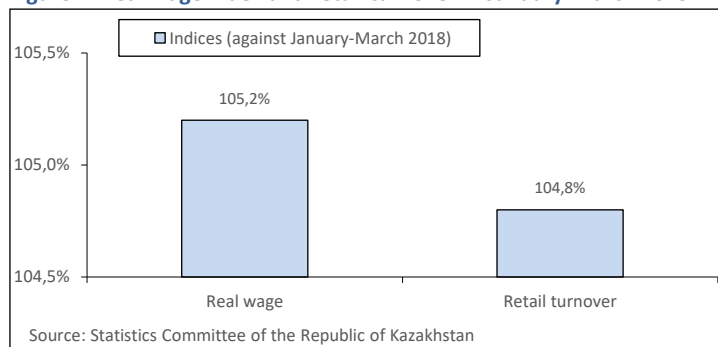
### Living standard

According to the preliminary data of the Statistics Committee of RK, the gross monthly average nominal wage per worker reached KZT 172,066 (USD 455.63<sup>4</sup>) in March 2019, KZT 168489 (USD 446.06) in the first quarter of 2019. The nominal wage index accounted for 108.8% in March 2019 against the respective period of the previous year, 110.5% in January-March 2019, and the real wage index was 103.8% and 105.2%, respectively. According to the preliminary data, in January-February 2019 the real cash income index was 109.4% compared to the same period of 2018 (Fig. 2).

### Retail turnover

In March 2018, the retail volume was KZT 824.9 bil., which is 106.2% against March 2018. In January-March 2019, the volume amounted to KZT 2,216.6 bil. or 4.8% more than in the same period of 2018 (in comparable prices) (Fig. 2).

**Figure 2. Real wage index and retail turnover in January-March 2019**



### Industrial Production

According to data of the Committee for Statistics of RK, in March 2019 the industrial output was KZT 2,460.3 bil., in January-March of 2018 – KZT 6845 bil. As compared to the same period of 2017, the indices accounted for 104.2% and 103.2%, respectively.

According to the Statistics Committee of RK, in January-March 2019 the industrial output of basic pharmaceutical products amounted to KZT 20.69 bil., in March of 2019 - KZT 7,182 mil. In January-March 2019, the volume of industrial pharmaceutical production index was 93.3% against January-March 2018, and 84.1% in March 2019 compared to the same period of 2018.

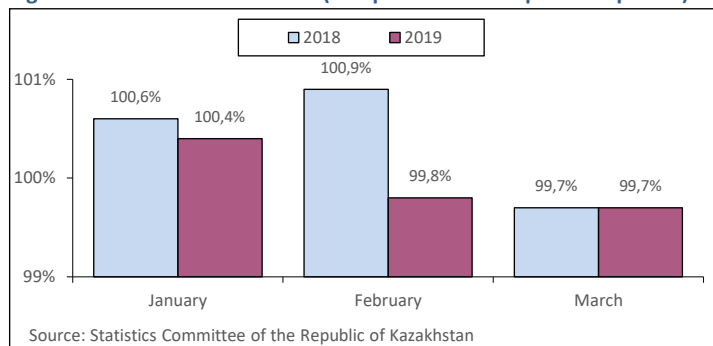
## MACROECONOMIC INDICES OF THE KYRGYZ REPUBLIC

### Inflation

According to the National Statistics Committee of the Kyrgyz Republic, the Consumer Price Index was estimated at 99.7% in March 2019 compared to the previous month, and 100.0% against December of 2018. In January-March 2019, the index reached 99.7% compared to January-March 2018.

In March 2019, the Producer Price Index for industrial production and services was 100.3% as compared to the previous month, and 103.1% against December of 2018. Throughout the Republic, in January-March 2019 the prices of producers for industrial products and services increased by 0.9% compared to the same period 2018.

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



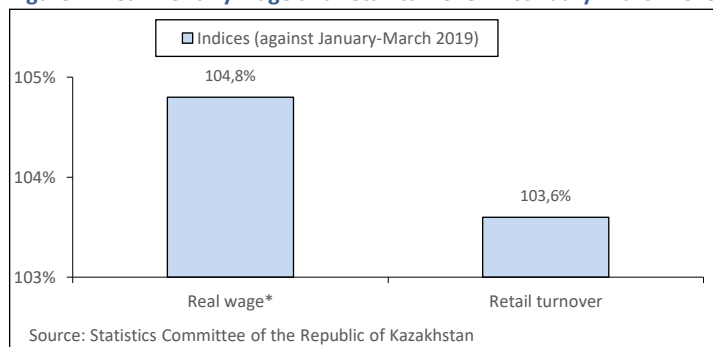
### Living standard

According to the Statistics Committee of the Kyrgyz Republic, in November 2018 the average monthly nominal wage per worker was KGS 15,125 (USD 216.75), in January-February 2019 - KGS 15,226 (USD 218.1), which is 4.4% and 4.6% more than in the same period of the previous year, respectively. In January-February 2019, the real wage accounted for 104.8% as compared to January-February 2018, 105.1% in February 2019 against February 2018 (Fig. 2).

### Retail turnover

In March 2019, the retail turnover (without cars and motorcycles sales) amounted to KGS 16,882.2 mil, in January-March 2019 - KGS 46,489.8 mil. The Volume of Retail Turnover Index accounted for 103.9% and 103.6% to the same period of the previous year (Fig.2).

**Figure 2. Real monthly wage and retail turnover in January-March 2019**



\* data for January-February 2019

### Industrial Production

According to the National Statistics Committee of the Kyrgyz Republic, the industrial output was KGS 26,057.1 mil. in March 2018 and KGS 64,145.2 mil. in January-March 2019. The Physical Index of Industrial Production accounted for 117.8% and 114.2% as compared to the same periods of 2018, respectively.

According to the National Committee for Statistics of the Kyrgyz Republic, the pharmaceutical output amounted to KGS 18.3 mil. in March 2019, and KGS 64.8 mil. from beginning of the year. At the end of March 2019, the Industrial Products Volume Index for Pharmaceuticals was 84% compared to the previous period, and it accounted for 70% against March 2018, and 78.6% in January-March 2019 as compared to January-March 2018.

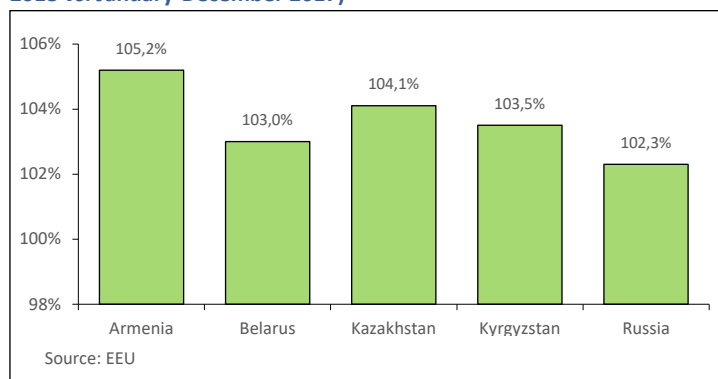
<sup>4</sup> The average exchange rate to calculate the above indices was used from the official website of the National Bank of Kazakhstan [www.nationalbank.kz](http://www.nationalbank.kz)

## COMPARATIVE MACROECONOMIC INDICES OF THE EURASIAN ECONOMIC UNION (EAEU)

### GDP

According to Eurasian Economic Commission (EAEC), at the end of January-December 2018 GDP of EAEU member-states amounted to USD 1,913,999.8 mil. and increased by 2.5% as compared to 2017 in fixed prices. GDP growth was recorded in all countries, the highest one in Armenia (+ 5.2%), high in Kazakhstan (+ 4.1%), Kyrgyzstan (+ 3.5%) and Belarus (+ 3.0%). In Russia, GDP increased by 2.3% (Fig. 1).

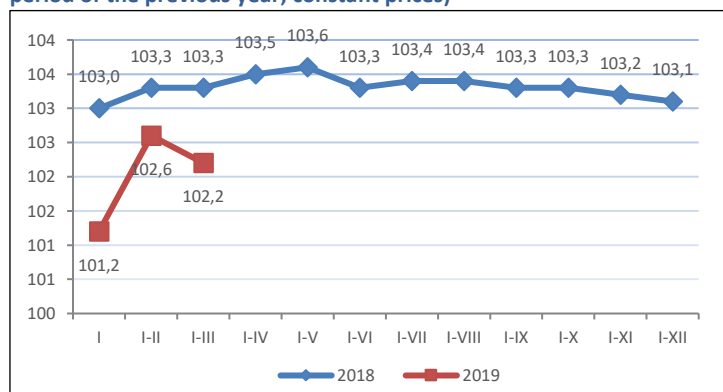
**Figure 1. GDP growth in the EAEU member-states (January-December 2018 vs. January-December 2017)**



### Industrial Production

According to preliminary EAEC data, in January-March 2019 the volume of industrial output of the EAEU member-states amounted to USD 280.5 bil. and increased by 2.2% in fixed prices as compared to 2018. In individual countries, the Industrial Production Index accounted for: - 102.0% in Armenia, - 100.9% in Belarus, - 103.2% in Kazakhstan - 114.2% Kyrgyzstan and - 102.1% in Russia (Fig. 2).

**Figure 2. Dynamics of the industrial output in EAEU (as % over the same period of the previous year; constant prices)**

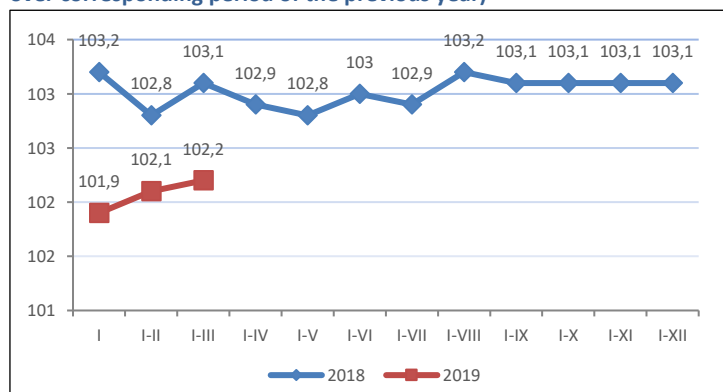


Note. The data for the period from January 2016 to April 2018 were updated due to recalculation of the industrial production indices of the Russian Federation for the specified period.

### Retail turnover

According to the EEC, the retail turnover (through all sales channels) of EEU member-states in January-March 2019 amounted to USD 127.7 bil. Compared with the same period of 2018. the retail sales (in comparative prices) increased by 2.2%. In the analysed period, all member-states showed growth in the retail turnover. In this case, the indices accounted for 107.2% in Armenia, 106.0% in Belarus, 104.8% in Kazakhstan 104.9% Kyrgyzstan and 101.8% in Russia (Fig. 2).

**Figure 3. The dynamics of the retail turnover in the EAEU (as a percentage over corresponding period of the previous year)**



### Nominal and real wage

According to EEU, the gross monthly average nominal wage per worker increased by 4.3% in Armenia, 14.2% in Belarus, 10.5% in Kazakhstan, 6.5% in Kyrgyzstan in January-March of 2019. The real wage (adjusted for the consumer price index for goods and services) increased: by 2.7% in Armenia, 7.8% in Belarus, 5.2% in Kazakhstan, 4.4% in Kyrgyzstan, 0.4% in Russia.

**Table 1. Nominal and real wage in January-March 2019**

Country	Real wage, % against the same period of 2018	Nominal wage, USD
Armenia	102.7	357
Belarus	107.8	471
Kazakhstan	105.2	446
Russia	100.4	658
Kyrgyzstan	104.4	225

### Budget execution

According to the ECE, in January-December 2018 the republican budget was executed with a deficit in Armenia, and with a surplus in Kazakhstan and Kyrgyzstan, and in Belarus and Russia. At the same time, over the past three quarters, a sharp reduction in the deficit was observed in Armenia, Kazakhstan, and Kyrgyzstan, while in Russia an increase in budget surplus was reported. Compared to the previous year, the growth rates of the republican budget indicators had multidirectional dynamics.

The growth rates of the republican budgets were: revenues - 108% in Armenia, 123% in Belarus, 91% in Kazakhstan, 101% Kyrgyzstan and 129% Russia; expenditures - 96% in Armenia, 116% in Belarus, 86% in Kazakhstan, 93% in Kyrgyzstan, 102% in Russia.

**Table 2. Republican budget in January-September 2018**

Country	USD bil.		
	Income	Expenditure	Deficit (surplus)
Armenia	2.8	3.0	-0.2
Belarus	11.9	9.6	2.3
Kazakhstan	25.9	27.9	-2.0
Kyrgyzstan	2.0	2.1	-0.1
Russia	309.4	266.1	43.3
EAEU	352.0	308.1	43.3

### Mutual trade of EAEU member-states in January- February 2019

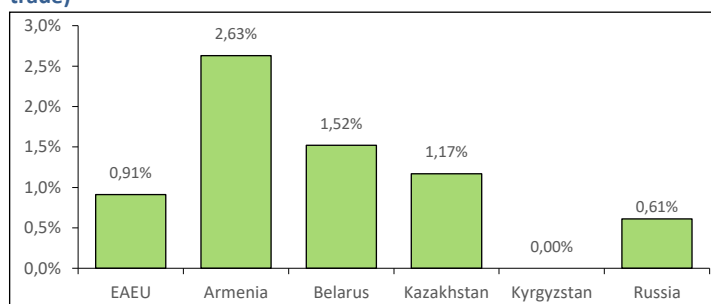
Volume of mutual trade in goods of the Member States of the Eurasian Economic Union in January-February 2019 amounted to USD 8.2 bil. or 91.4% as against the same period of 2018.

**Table 3. Export volumes of the EAEU member-states in the mutual trade in January-February 2019\***

Countries	USD bil.	% against January-February 2018	Share in total, %
EAEU	8240.2	91.4	100.0
Armenia	85.1	95.7	1.0
Russia	82.6	96.4	97.1
Belarus	2038.7	99.5	24.7
Russia	1913.2	98.8	93.8
Kazakhstan	850.3	94.2	10.4
Russia	764.9	97.6	90.0
Kyrgyzstan	74.5	75.2	0.9
Russia	26.8	53.0	36.0

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

**Table 4. The mutual trade pattern of EAEU member-states within the Customs Commodity Code group "Pharmaceutical products" for January-February 2018 2015 (as percentage over the total volume of mutual trade)**

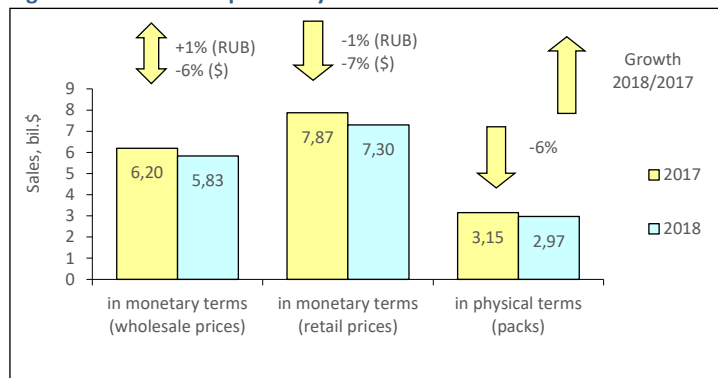




## PHARMACY OTC MARKET IN RUSSIA: 2018 RESULTS

According to the results of the Retail Audit of Over-the-Counter Drugs (OTC) in Russian Federation™, at the end of 2018 the sales of OTC drugs in physical terms in pharmacies of Russia saw a 6% decrease to 2,966 bil. packs. In value terms, the OTC drugs market increased by 1% in rouble terms, but decreased by 6% in dollar terms and reached RUB 363.681 bil. (USD 5.829 bil.) in wholesale prices (Fig. 1). The share of Over-the-Counter (OTC) drugs accounted for 66.1% of sales in physical terms and 52.3% at retail prices in terms of roubles. At year-end 2018, the average cost of an OTC pack was USD 2.46, whereas in year-earlier period its cost was USD 2.50 at retail prices. At year-end 2018, the average amount spent by residents of Russia for OTC drugs in the pharmacies amounted to USD 49.71.

**Figure 1. Russian OTC pharmacy market in 2017 – 2018**



At year-end 2018, OTC PHARM (+ 1%<sup>5</sup>), BAYER (-4%) and SANOFI (-5%) held their previous leading positions in the top-10 manufacturers ranking in the non-prescription drugs market (Table 1). BERLIN-CHEMIE/MENARINI (-3%) held its previous rank nine. JOHNSON & JOHNSON, GLAXOSMITHKLINE and TEVA that showed the same dynamics (+ 2%) moved up from the lower ranks to numbers four through six respectively. At the same time, TEVA, which reduced sales by 7% and STADA, which showed almost zero dynamics (+ 0.3%), moved down to ranks seven and eight. The only newcomer of the top ten VALENTA (+13%) broke into the ranks of the top ten, moving up to rank ten. The total share of the top 10 drug manufacturers reduced from 40.2% to 39.7%.

**Table 1. The top ten drug manufacturers by pharmacy sales**

Rank in the top ten	Rank in the top ten	Manufacturer*	Share in total pharmacy sales, %	
			2018	2017
1	1	OTCPHARM	6.1	6.1
2	2	BAYER	5.2	5.4
3	3	SANOFI	4.3	4.5
4	5	JOHNSON & JOHNSON	3.9	3.9
5	6	GLAXOSMITHKLINE	3.9	3.8
6	8	TEVA	3.7	3.7
7	4	STADA	3.7	4.0
8	7	SANDOZ	3.7	3.7
9	9	BERLIN-CHEMIE/MENARINI	2.9	3.0
10	12	VALENTA	2.5	2.2
Total			39.7	40.2

\*AIPM members are in bold

Numerous shifts took place in the top ten brands ranking (table 2). It changed its leader: DETRALEX (+ 8%) moved up to rank one from two, displacing the less dynamic NUROFEN (+ 1%) down to rank two. In addition to the leader, another three brands showed outperformance and rose in the ranks. These are INGAVIRIN (+ 9%), MIRAMISTIN (+ 7%) and PENTALGIN (+ 8%), which moved up to ranks three, six and seven, respectively. The newcomer LINEX (-1%) broke into the ranks of the top ten, improving its positions by one rank, coming in at number ten. At the same time, KAGOCEL (+ 0.5%), CARDIOMAGNYL (-0.4%) and ESSENTIALE (-17%) moved down to ranks four, five and nine, respectively. The brand THERAFLU (+ 2%) managed to hold its previous rank eight. The total share of the top 10 brands did not virtually change and accounted for 11.7%.

**Table 2. The top ten brands by pharmacy sales**

Rank in the top ten	Rank in the top ten	Brand	Share in total pharmacy sales, %	
			2018	2017
1	2	DETRALEX	1.5	1.4
2	1	NUROFEN	1.4	1.4
3	6	INGAVIRIN	1.3	1.2
4	3	KAGOCEL	1.3	1.3
5	4	CARDIOMAGNYL	1.2	1.2
6	7	MIRAMISTIN	1.1	1.1
7	9	PENTALGIN	1.0	1.0
8	8	THERAFLU	1.0	1.0

<sup>5</sup>Hereinafter, unless otherwise stated, growth gains are stated in the rouble equivalent or national currency.

Rank in the top ten	Rank in the top ten	Brand	Share in total pharmacy sales, %	
			2018	2017
9	5	ESSENTIALE	1.0	1.2
10	11	LINEX	0.9	0.9
Total			11.7	11.6

XYLOMETAZOLINE (-1%) retained its previous rank number one in the top ten INN and grouping names ranking (Table 3). INN IBUPROFEN (+ 7%) and the combination DIOSMIN \* HESPERIDIN (+ 13%) moved up one rank, coming in at numbers two and three. At the same time, they displaced the less dynamic PANCREATIN (+ 2%) down from rank two to four. Due to outperformance dynamics, IMIDAZOLYL ETHANAMIDE PENTANDIOIC ACID (+ 9%), ACETYLSALICYLIC ACID \* MAGNESIUM (+ 3%) and the newcomer MIRAMISTIN (+ 7%) moved up to the higher ranks, coming in at numbers five, seven and ten, respectively. Two INNs with negative dynamics, PHOSPHOLIPIDS (-17%) and CHONDROITINSULFURIC ACID \* GLUCOSAMINE (-9%) moved down to ranks eight and nine, respectively. The brand KAGOCEL (+0.5%) held its previous rank six. The total share of the top ten ranking increased by 0.2 p.p. to 17%.

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

Rank	Rank	INNs/Grouping Names	Share in total pharmacy sales, %	
			2018	2017
1	1	XYLOMETAZOLINE	3.2	3.2
2	3	IBUPROFEN	2.2	2.1
3	4	DIOSMIN*HESPERIDIN	2.2	2.0
4	2	PANCREATIN	2.1	2.1
5	9	IMIDAZOLYL ETHANAMIDE PENTANDIOIC ACID	1.3	1.2
6	6	KAGOCEL	1.3	1.3
7	8	ACETYLSALICYLIC ACID* MAGNESIUM	1.3	1.2
8	5	PHOSPHOLIPIDS	1.2	1.4
9	7	CHONDROITINSULFURIC ACID* GLUCOSAMINE	1.1	1.2
10	11	MIRAMISTIN	1.1	1.1
Total			17.0	16.8

At year-end, R01 Nasal preparations remained the best-selling ATC group on the OTC market, despite a 1% decline in sales (Table 4). M01 Anti-inflammatory and antirheumatic agents (-0.3%), L03 Immunostimulants (-3%) and R02 Throat preparations (+ 1%) rounded out the top ten, keeping their positions unchanged. Among remaining ATC groups, only the groups C05 Vasoprotectors (+ 9%) and J05 Antivirals for systemic use (-4%), which moved up to ranks two and six respectively, managed to improve their positions. They displaced N02 Analgesics (-2%), R05 Cough and cold preparations (+ 1%), A07 Antidiarrheals (+ 4%) and A11 Vitamins (-10%) down one rank. In total, the top - ten ATC groups accumulated 48.3% of the retail market, whereas in the year-earlier period they accounted for 48.9%.

**Table 4. The top ten ATC Groups by pharmacy sales**

Rank	Rank	ATC code	ATC group	Share in total pharmacy sales, %	
				2018	2017
1	1	R01	NASAL PREPARATIONS	5.8	5.9
2	5	C05	VASOPROTECTIVES	5.7	5.3
3	2	N02	ANALGESICS	5.7	5.9
4	3	R05	COUGH AND COLD PREPARATIONS	5.6	5.6
5	4	A07	ANTI-DIARR.,INTEST. ANTI-INFL./ANTIINFECT. AGENTS	5.5	5.3
6	7	J05	ANTIVIRALS FOR SYSTEMIC USE	4.7	4.9
7	6	A11	VITAMINS	4.4	4.9
8	8	M01	ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS	3.9	3.9
9	9	L03	IMMUNOSTIMULANTS	3.6	3.7
10	10	R02	THROAT PREPARATIONS	3.5	3.5
Total				48.3	48.9

**Conclusion.** At year-end 2018, the OTC retail pharmacy market of Russia brought in RUB 6.199 bil. (USD 7.301 bil.), which is by 1% in terms of roubles and 7% in terms of dollars more than in 2017. In pack terms, the market also showed negative growth rates (-6%) and achieved 2.966 bil. packs. The average cost of OTC-pack in the pharmacies of Russia was USD 2.46 based on the results for 2018, which is slightly lower than 2017 figure (USD 2.50). The average expenses of Russian residents for the purchase of OTC drugs in pharmacies in the period under review decreased (USD 49.71 vs. USD 53.58).

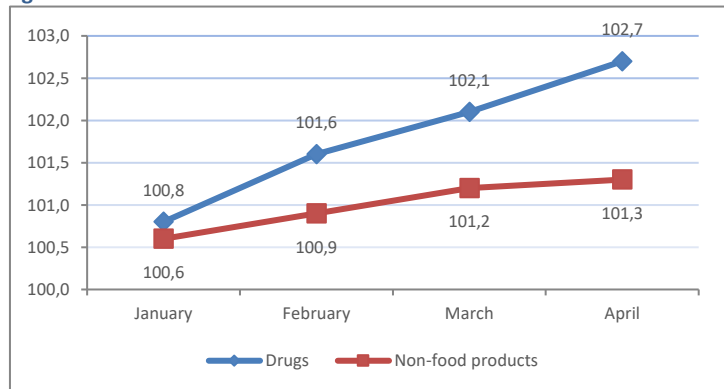
Price Indices

Table 1. Inflation rates in the Russian Federation April 2019

	April 2019 vs. December 2018	January-April 2019 vs. January-April 2018
CPI	102.1	105.2
CPI for non-food products	101.3	104.6
CPI for medications	102.7	105.8

Rosstat data

Figure 1. Dynamics of price index for non-food products and medicines against December 2018



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 1Q, 2018 - 1Q 2019

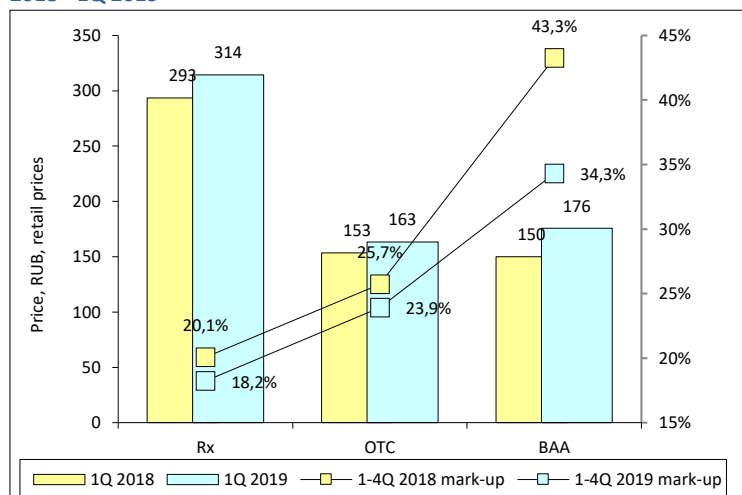


Figure 3. Dynamics of weighted average prices and retail margins in 1Q, 2018 - 1Q 2019

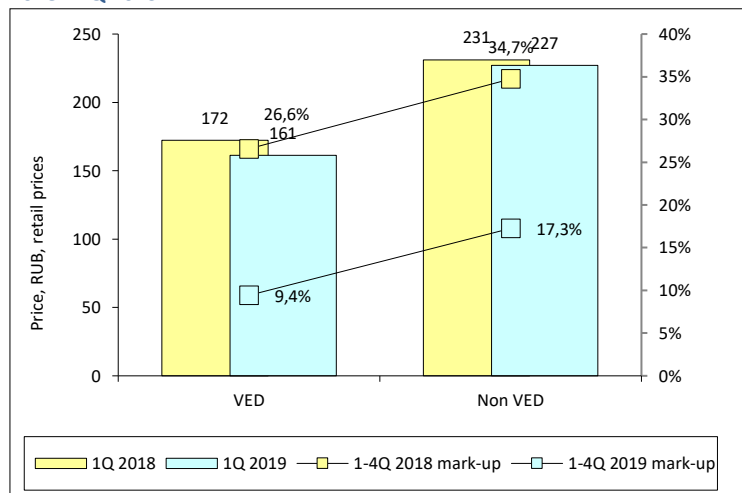
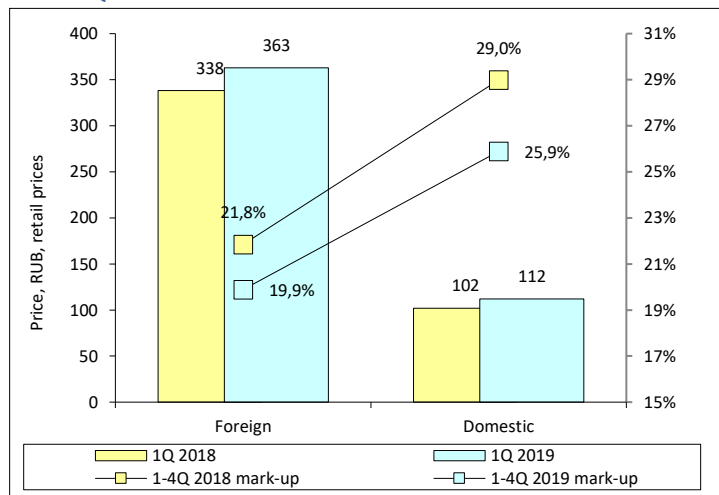


Figure 4. Dynamics of weighted average prices and retail margins in 1Q, 2018 - 1Q 2019



Indicators of price dynamics in the reimbursable segment of the market

Figure 5. Dynamics of weighted average purchase prices in 1Q, 2018 - 1Q 2019

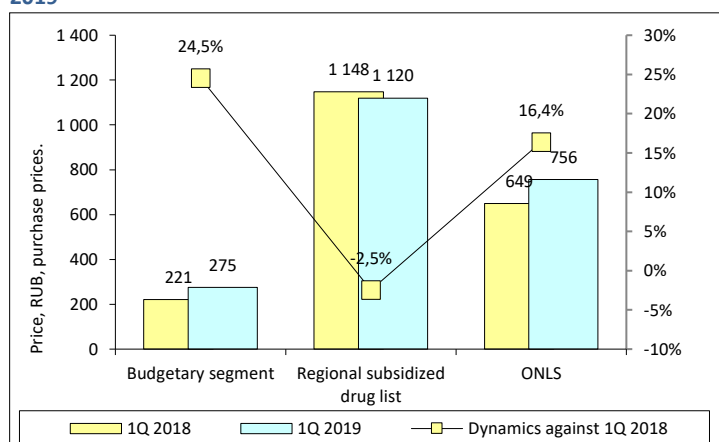


Figure 6. Dynamics of weighted average purchase prices for domestic drugs in 1Q, 2018 - 1Q 2019

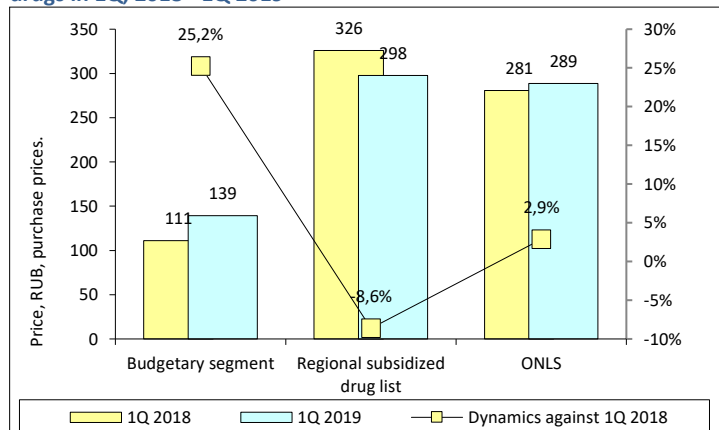
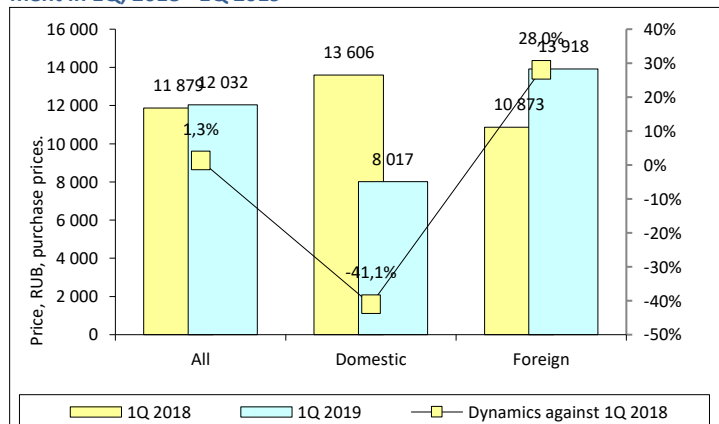


Figure 7 Dynamics of weighted average purchase prices in the VZN segment in 1Q, 2018 - 1Q 2019

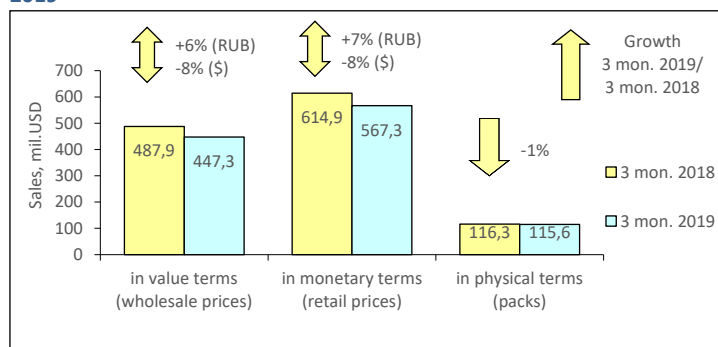


## MOSCOW CITY PHARMACY MARKET: FIRST THREE MONTHS RESULTS 2019

According to Federal State Statistics Service, as of January 1, 2019 Moscow's estimated population was 12.615 mil., which accounted for 8.6% of the total Russian Federation population and 32.0% of Central FO (CFO). According to Moscow territorial body of the Federal State Statistics Service, in Moscow the gross average monthly wage amounted to RUB 79680 in January (USD 1183.42), - RUB 85,370 in February (USD 1296.23), which was 98% higher than the average wage in Russia (RUB 43,062).

According to the results of the Retail Audit of Over-the-Counter Drugs (OTC) in Russian Federation™, at the end of the first three months of 2019 the sales of OTC drugs in physical terms in the pharmacies of Moscow saw a 1% decrease to 115.619 mil. packs. In value terms, the OTC drugs market increased by 6% in rouble terms and reduced by 8% in dollar terms, amounting to RUB 29.534 bil. (USD 447.255 mil.) in wholesale prices (Fig. 1). The region market share accounted for 14.5% of the Russian pharmacy retail sales. An average retail cost of a pack reduced as compared to the previous year: USD 4.91 vs. USD 5.29. At Quarter I-end 2019, the average amount spent by residents of Moscow for medicinal drugs in pharmacies amounted to USD 44.97.

**Figure 1. Moscow pharmacy market for 3 months of 2018 – 3 months 2019**



At 1Q 2019, three of the top ten manufacturers of the retail market of Moscow held their own in the ranking (Table 1). BAYER (+ 8%), SANOFI (+ 2%) and TEVA (-3%) held the top three ranks, although the share of the market decreased in two of them. BERLIN-CHEMIE / MENARINI (+ 13%) also maintained its previous rank eight. ABBOTT (+ 13%), which showed the same dynamics, moved up one rank, to number four, displacing SERVIER (-0.2%) one rank down. SANDOZ saw a 5% decrease in sales and lost one ranking point, letting GLAXOSMITHKLINE (+ 5%) take the lead. The only newcomer PFIZER (+ 11%) moved up to rank nine, and JOHNSON & JOHNSON (+ 0.1%) that had been placed at that position earlier, moved down to rank ten in the rating. In total, the top ten ATC groups accumulated 36.2% of the Russian market, whereas in the year-earlier period they had accounted for 37.0%.

**Table 1. The top ten drug manufacturers by pharmacy sales**

Rank in the top ten		Manufacturer*	Share in total pharmacy sales, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
1	1	<b>BAYER</b>	6.3	6.2
2	2	<b>SANOFI</b>	4.6	4.9
3	3	<b>TEVA</b>	3.7	4.1
4	5	<b>ABBOTT</b>	3.7	3.5
5	4	<b>SERVIER</b>	3.5	3.7
6	7	<b>GLAXOSMITHKLINE</b>	3.3	3.3
7	6	<b>SANDOZ</b>	3.1	3.4
8	8	<b>BERLIN-CHEMIE/MENARINI</b>	2.9	2.7
9	12	<b>PFIZER</b>	2.6	2.5
10	9	<b>JOHNSON &amp; JOHNSON</b>	2.6	2.7
Total			36.2	37.0

\*AIPM members are in bold

XARELTO (+43%) remained the best-selling drug and one of the most dynamic brands in the regional market (Table 2). NUROFEN (+36%) moved up to rank two from nine, DETRALEX (+1%) and CIALIS (+30%) moved up to ranks three and four. MIRAMISTIN (+11%) held its previous rank five. KAGOCEL (+ 20%) and the newcomer of the top ten KREON (+ 47%) (+ 47%) and HEPTRAL (+ 13%) rose in the ranks, moving up to ranks six, nine and ten, respectively. INGAVIRIN, which reduced its sales (-23%) and CONCOR (+ 1%), which showed low dynamics, on the contrary, moved down to ranks 7 and 8. In total, the top - ten ATC groups accumulated 8.5% of the retail market, whereas in the year-earlier period they accounted for 7.7%.

**Table 2. The top ten brands by pharmacy sales**

Rank in the top ten		Brand	Share in total pharmacy sales, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
1	1	XARELTO	1.8	1.4
2	9	NUROFEN	0.8	0.7
3	4	DETRALEX	0.8	0.9
4	7	CIALIS	0.8	0.7
5	5	MIRAMISTIN	0.8	0.7
6	8	KAGOCEL	0.8	0.7

Rank in the top ten		Brand	Share in total pharmacy sales, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
7	3	INGAVIRIN	0.7	1.0
8	6	CONCOR	0.7	0.7
9	20	KREON	0.7	0.5
10	11	HEPTRAL	0.7	0.6
Total			8.5	7.7

RIVAROXABAN (+43%) moved up to rank number one in the top 10 INNs and group names ranking (Table 3). The composition DIOSMIN\* HESPERIDIN (+9%) and INN PANCREATIN (+17%), HYALURONIC ACID (+39%), MIRAMISTIN (+13%) and the only newcomer TADALAFIL (+33%) also rose in the ranks, moving up to ranks three through five and ranks five and eight, respectively. Due to reduction in sales, XYLOMETAZOLINE (-1%) and ROSUVASTATIN (-26%) moved down to ranks two and six, respectively. BISOPROLOL (+6%) moved down to rank ten, being displaced by more dynamic INNs from the top ten ranking. And only IBUPROFEN (+19%) held its previous rank seven. The cumulative share of the top 10 under review increased by 0.6 to 11.3%.

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

Rank		INNs/Grouping Names	Share in total pharmacy sales, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
1	3	RIVAROXABAN	1.8	1.4
2	1	XYLOMETAZOLINE	1.6	1.7
3	4	DIOSMIN*HESPERIDIN	1.1	1.1
4	5	PANCREATIN	1.1	1.0
5	8	HYALURONIC ACID	1.1	0.8
6	2	ROSUVASTATIN	1.1	1.5
7	7	IBUPROFEN	1.1	1.0
8	15	TADALAFIL	0.8	0.7
9	10	MIRAMISTIN	0.8	0.8
10	9	BISOPROLOL	0.8	0.8
Total			11.3	10.7

Numerous shifts took place in the top 10 ATC groups ranking and none of the ATC groups maintained their previous ranks (Table 4). The top ten ranking changed its leader: due to 15% growth of sales, C09 Agents acting on the renin-angiotensin system moved up to rank one from four. Another six ATC groups moved to yet higher ranks. B01 Anticoagulants and M01 Anti-inflammatory and antirheumatic agents (+ 12% each), A07 Antidiarrheals, intestinal anti-inflammatory and anti-infective agents (+ 7%) and G03 Sex hormones (+ 12%) moved up one rank, coming in at ranks two, four, six and seven, respectively. The newcomers N06 Psychoanaleptics (+ 10%) and G04 Urologicals (+ 15%) broke into the ranks of the top ten ranking, coming in at numbers nine and ten. At the same time, the former leader, but less dynamic R01 Nasal preparations (+ 6%), and J05 Antivirals for systemic use (-5%) that reduced their sales moved down to ranks three and five. J01 Antibacterial drugs for systemic use (-3%) also lost two ranks. In total, the top ten ATC groups accumulated 36.7% of the regional market, whereas in the year-earlier period they accounted for 36,1%.

**Table 4. The top ten ATC Groups by pharmacy sales**

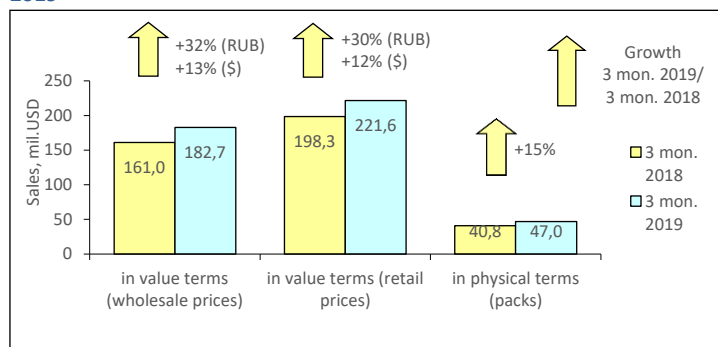
Rank		ATC code	ATC group	Share in total pharmacy sales, %	
3 mon. 2019	3 mon. 2018			3 mon. 2019	3 mon. 2018
1	4	C09	AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM	4.4	4.0
2	3	B01	ANTITHROMBOTIC AGENTS	4.3	4.1
3	1	R01	NASAL PREPARATIONS	4.3	4.3
4	5	M01	ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS	4.0	3.8
5	2	J05	ANTIVIRALS FOR SYSTEMIC USE	3.8	4.3
6	7	A07	ANTIDIARR.,INTEST. ANTIINFL./ ANTIINFECT. AGENTS	3.3	3.3
7	8	G03	SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM	3.3	3.2
8	6	J01	ANTIBACTERIALS FOR SYST USE	3.2	3.5
9	12	N06	PSYCHOANALEPTICS	3.0	2.9
10	13	G04	UROLOGICALS	2.9	2.7
Total				36.7	36.1

**Conclusion.** At the end of the first quarter of 2019, the pharmacy market of Moscow reached RUB 37.456 bil. (USD 567.268 mil.), which was 7% more in terms of roubles and 8% less in terms of dollars than in the same period of 2018. In pack terms, the market reduced by 1% and amounted to 115.619 mil. packs. The average cost of FPP pack in the city pharmacies based on the results for the first quarter of 2018 was USD 4.91, which is less than in the year-earlier period (USD 5.29), but higher than the national average (USD 3.21). The average expenses of the regional residents for purchase of OTC drugs in pharmacies were also higher than the national average (USD 44.97 vs. USD 26.55).

## SAINT PETERSBURG PHARMACY MARKET: FIRST THREE MONTHS RESULTS 2019

According to Federal State Statistics Service, St. Petersburg's population as of January 1, 2019 was estimated at 5.384 mil., which accounted for 3.7% of the total Russian Federation population and 38.5% of North West FD (NWFD). According to the territorial body of the Federal State Statistics Service in St. Petersburg and the Leningrad region, the average monthly salary in the city was in January 2019 - RUB 56,586 (USD 840.43), in February 2019 RUB 58625. (USD 890.15), which was 36% higher than the average wage in Russia (RUB 43062). According to the results of the Retail Audit of FPP (Finished Pharmaceutical Products) in Russian Federation™, at the end of the first quarter of 2019 the sales of drugs in natural terms in St. Petersburg pharmacies saw a 15% increase to 47.031 mil. packs. In value terms, the market saw a 32% increase in terms of roubles and 13% in terms of dollars. At the same time, the volume of the market achieved RUB 12.055 bil. (USD 182.675 mil.) in wholesale prices (Fig. 1). The regional market share accounted for 5.7% of the Russian pharmacy sales (in terms of roubles). The average cost of a pack decreased as compared to a year earlier (USD 4.86) and reached USD 4.71 at retail prices. For 3 months of 2019, the average amount spent by residents of the city for drugs in the pharmacies amounted to USD 41.15.

**Figure 1. St. Petersburg pharmacy market for 3 months 2018 – 3 months 2019**



A newcomer broke into the top ten manufacturers ranking in the retail market of St. Petersburg in January-March 2019 (Table 1). Due to the highest dynamics among the leaders, KRKA (+74%) moved up from rank 11 to 7, displacing GLAXOSMITHKLINE (+21%), OTCPHARM (+22%) and PFIZER (+36%) down one rank. At the same time, BERLIN-CHEMIE/MENARINI (+42%), despite the outperformance dynamics, dropped out of the top 10. SERVIER (+39%) and ABBOTT (+46%) also showed high growth rates, moving up to ranks 3 and 5. The market of SANOFI (+34%), which held its previous rank two, developed at a fast pace. Despite lagging growth and decrease of the market share, BAYER (+17%) remained the leader of the top ten ranking. TEVA (+24%) held its previous rank four. Only one manufacturer of the top ten, SANDOZ (+3%), fell in the ranks and moved down from rank three to six. The total share of the top 10 drug manufacturers reduced by 0.8 p.p. to 38.2%.

**Table 1. The top ten drug manufacturers by pharmacy sales**

Rank in the top ten		Manufacturer*	Share in total pharmacy sales, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
1	1	<b>BAYER</b>	5.7	6.4
2	2	<b>SANOFI</b>	4.8	4.7
3	5	<b>SERVIER</b>	4.2	4.0
4	4	<b>TEVA</b>	3.9	4.2
5	6	<b>ABBOTT</b>	3.8	3.4
6	3	<b>SANDOZ</b>	3.6	4.6
7	11	<b>KRKA</b>	3.2	2.4
8	7	<b>GLAXOSMITHKLINE</b>	3.1	3.3
9	8	<b>OTCPHARM</b>	3.0	3.2
10	9	<b>PFIZER</b>	2.9	2.8
Total			38.2	39.0

\*AIPM members are in bold

The top ten brands rating also retained its leader: XARELTO (+67%) held and reinforced its previous rank number one. 2). KAGOCEL (+36%) held its previous rank eight, while the rest of the top-10 brands changed their ranks, and all of them rose in the ranks. DETRALEX (+51%), ELIQUIS (+96%), CONCOR (+51%) and NUROFEN (+49%) moved up to ranks 2 through 5, respectively. The newcomers NUVARING (3.5-fold growth in sales), HEPTRAL (+59%), KREON (+83%) and LOZAP (+64%) moved up to ranks six, seven and two bottom ranks. The total share of the top 10 increased from 6.1% to 7.8%.

**Table 2. The top ten brands by pharmacy sales**

Rank in the top ten		Brand	Share in total pharmacy sales, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
1	1	XARELTO	1.3	1.1
2	3	DETRALEX	1.0	0.8
3	10	ELIQUIS	0.9	0.6
4	6	CONCOR	0.7	0.6
5	7	NUROFEN	0.7	0.6
6	46	NUVARING	0.7	0.3

Rank in the top ten		Brand	Share in total pharmacy sales, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
7	13	HEPTRAL	0.7	0.5
8	8	KAGOCEL	0.6	0.6
9	18	KREON	0.6	0.4
10	15	LOZAP	0.6	0.5
Total			7.8	6.1

Despite the considerable updating of the previous ranking, only one newcomer entered the top ten INN and grouping names ranking (Table 3). It was the INN APIXABAN (+96%), which moved up to rank nine from 20. In addition, another seven INNs from the top ten ranking rose in the ranks due to outperformance rates. Therefore, RIVAROXABAN (+67%) moved up to rank one from two, displacing the former leader XYLOMETAZOLINE (+21%) one rank down. The composition DIOSMIN \* HESPERIDIN (+55%) and INN ROSUVASTATIN (+52%) and IBUPROFEN (+47%) also improved their ranks by one position, moving up to ranks three, six and seven, respectively. INNs PANCREATIN (+64%) and BISOPROLOL (+53%) moved up two ranks, coming in at numbers four and eight, while the more dynamic ATORVASTATIN (+79%) moved up from rank nine to five. The composition AMOXICILLIN\* CLAVULANIC ACID (+9%), which showed a low dynamics, moved down to rank ten of the top ten ranking. The total share of the top 10 increased from 9.3% to 10.6%.

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

Rank		INNs/Grouping Names	Share in total pharmacy sales, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
1	2	RIVAROXABAN	1.3	1.1
2	1	XYLOMETAZOLINE	1.3	1.4
3	4	DIOSMIN*HESPERIDIN	1.2	1.0
4	6	PANCREATIN	1.2	0.9
5	9	ATORVASTATIN	1.1	0.8
6	7	ROSUVASTATIN	1.0	0.9
7	8	IBUPROFEN	0.9	0.8
8	10	BISOPROLOL	0.9	0.8
9	20	APIXABAN	0.9	0.6
10	3	AMOXICILLIN*CLAVULANIC ACID	0.9	1.0
Total			10.6	9.3

The most dynamic group C09 Agents acting on the rennin-angiotensin system (+61%) held and strengthened its previous rank number one in the top ten ATC groups ranking in the regional market (Table 4). Group A07 Antidiarrheals, intestinal anti-inflammatory/anti-infective agents (+20%) still rounds out the top ten, while the other ATC groups changed their ranks. B01 Anticoagulants (+57%), M01 Anti-inflammatory and antirheumatic agents (+41%) and G03 Sex hormones (+47%) that showed outperformance dynamics moved up to ranks two through four respectively, and the newcomer C05 Vasoprotectors (+43%) broke into the ranks of the top ten, moving up to rank nine. Due to lagging growth, R01 Nasal preparations (+23%), R05 Cough and cold preparations (+6%), J05 Antivirals for systemic use (+7%) and J01 Antibacterials for systemic use (+13%) moved down to the lower ranks, coming in at numbers five through eight, respectively. The total share of the top 10 ATC groups remained unchanged and accounted for 37.8%.

**Table 4. The top ten ATC Groups by pharmacy sales**

Rank		ATC code	ATC group	Share in total pharmacy sales, %	
3 mon. 2019	3 mon. 2018			3 mon. 2019	3 mon. 2018
1	1	C09	AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM	5.5	4.5
2	6	B01	ANTITHROMBOTIC AGENTS	4.5	3.7
3	7	M01	ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS	4.0	3.7
4	9	G03	SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM	3.8	3.4
5	4	R01	NASAL PREPARATIONS	3.7	4.0
6	2	R05	COUGH AND COLD PREPARATIONS	3.5	4.3
7	3	J05	ANTIVIRALS FOR SYSTEMIC USE	3.5	4.3
8	5	J01	ANTIBACTERIALS FOR SYST USE	3.4	3.9
9	13	C05	VASOPROTECTIVES	3.1	2.8
10	10	A07	ANTIDIARR.,INTEST. ANTIINFL./ANTIINFECT. AGENTS	2.9	3.2
Total				37.8	37.8

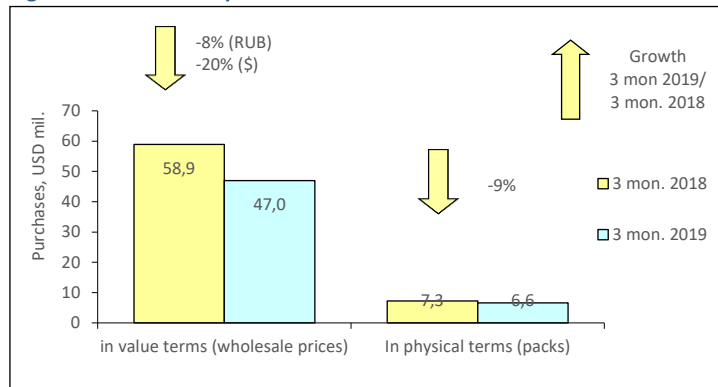
**Conclusion.** Following the results for the first 3 months of 2019, the retail pharmacy market of St. Petersburg reached RUB 14.622 bil. (USD 221.567 mil.) at retail prices, which was by 30% in terms of roubles and 12% in terms of dollars more than in the year-earlier period. In physical terms, the market expanded by 15% and amounted to 47.031 mil. packs. At the end of Quarter I, 2019, the average cost of an FPP pack in the city pharmacies was USD 4.71, which was lower than in the year-earlier period (USD 4.86), but more than the national average (USD 3.21). The average medicine expenses of St. Petersburg residents in the pharmacies were higher than the national average expenses in Russia (USD 41.15 vs. USD 26.55).



## MOSCOW CITY HOSPITAL MARKET: FIRST THREE MONTHS RESULTS 2019

According to the results of the Budget Audit of Finished Pharma Products (FFP) in the Russian Federation, at the end of the first nine months of 2018 the Moscow hospital market in physical terms reduced by 9% compared to the same period in 2018 year and amounted to 6.589 mil. packs. In money terms, the market also showed negative growth rates both in terms of roubles (-8%) and in terms of dollars (-20%) and reached RUB 3.099 bil. (USD 47.018 mil.) in wholesale prices. At the first quarter-end 2019, the average cost of an FPP pack in the hospital sector of Moscow was USD 7.14, whereas in the year-earlier period its cost was USD 8.10.

**Figure 1. Moscow hospital market for 3 months of 2018 – 3 months 2019**



Summarizing the results for the first quarter of 2019, the drug manufacturer ABBVIE (-13%) continued to be the leader of the top ten manufacturers ranking, though it posted negative growth (Table 1). MSD (-47%) and PFIZER (-41%) placed at ranks two and three significantly reduced their purchases, due to which they fell in ranks and the manufacturers moved down to ranks three and seven, respectively. The other brands showed positive growth rates and five of them rose in the ranks. BAXTER (+76%) moved up to rank two from seven, SANOFI (+26%) moved up to rank four from six. At the same time, the less dynamic manufacturers BAYER (+13%) and BIOCAD (+23%) moved down one rank, to numbers five and six. FRESENIUS and NOVARTIS (+25% each) moved up one rank, coming in at numbers eight and nine. The only newcomer of the top ten drug manufacturers JOHNSON & JOHNSON (+91%) moved up to rank ten. In total, based on the results for the first quarter, the top ten ATC groups accumulated 44.1% of the market, while they accounted for 42.2% in the year-earlier period.

**Table 1. The top 10 drug manufacturers by hospital purchases**

Rank in the top ten		Manufacturer*	Share in total hospital purchases, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
1	1	<b>ABBVIE</b>	11.7	12.4
2	7	<b>BAXTER INT</b>	4.9	2.6
3	2	<b>MSD</b>	4.5	7.8
4	6	<b>SANOFI</b>	4.1	3.0
5	4	<b>BAYER</b>	4.1	3.4
6	5	<b>BIOCAD RF</b>	4.0	3.0
7	3	<b>PFIZER</b>	3.1	4.8
8	9	<b>FRESENIUS</b>	2.7	2.0
9	10	<b>NOVARTIS</b>	2.7	2.0
10	21	<b>JOHNSON &amp; JOHNSON</b>	2.2	1.1
Total			44.1	42.2

\*AIPM members are in bold

The top ten brand names ranking was half updated, it acquired five newcomers (Table 2). MENACTRA (142-fold growth in purchases), EYLEA (2.3-fold growth), OPDIVO (6.8-fold growth), GARDASIL (4.9-fold growth) and LUCENTIS (2.1-fold growth) moved up to ranks three, four, six, seven and ten, respectively. In addition, DIANEAL PD4+GLUCOS (2.3-fold growth) rose in the ranks, moving up to rank two from six. The other four brands of the top ten showed the negative growth rates. Among them were SYNAGIS (-14%) that held its leadership position. The other three brands fell in the ranks: NATRIUM CHLORIDUM (-12%), MYCAMINE (-19%) and SEVORAN (-24%) moved down to the lower ranks five, eight and nine, respectively. The total share of the top 10 increased by almost 7 p.p. and accounted for 24.5%.

**Table 2. The top 10 brands by hospital purchases**

Rank in the top ten		Brand	Share in total hospital purchases, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
1	1	SYNAGIS	9.8	10.6
2	6	DIANEAL PD4+GLUCOS	2.7	1.1
3	44	MENACTRA	2.5	0.0
4	14	EYLEA	1.7	0.7
5	2	NATRIUM CHLORIDUM	1.6	1.7
6	37	OPDIVO	1.5	0.2
7	34	GARDASIL	1.3	0.3
8	4	MYCAMINE	1.2	1.3
9	3	SEVORAN	1.1	1.4

Rank in the top ten		Brand	Share in total hospital purchases, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
10	21	LUCENTIS	1.1	0.5
Total			24.5	17.7

Just like respective brand, INN PALIVIZUMAB (-14%) held its rank number one, despite reduction in purchases (Table 3). The other three INNs of the top ten also showed the negative growth rates: IMMUNOGLOBULIN BASE (-45%), SODIUM (-12%) and SEVOFLURANE (-4%) moved down to ranks six through eight respectively. MEROPENEM (+0.3%), which showed almost zero dynamics, continued to hold rank four. The ranks of the rest of the top 10 INNs improved. Due to a 2.3-fold increase in purchases, GLUCOSE\* SODIUM\* DL-LACTIC ACID\* CALCIUM\* MAGNESIUM moved up to rank two from eight. The newcomers VACCINE, MENINGOCOCCAL POLYSACCHARIDE AND OMV (142-fold growth in purchases), AFLIBERCEPT (+90%), ALBUMIN (+29%) and NIVOLUMAB (6.8-fold growth) moved down to ranks three, five and two bottom ranks. The total share of the analysed top ten ranking accounted for 26.9% instead of 21.7% in the year-earlier period.

**Table 3. The top 10 INNs and grouping names by hospital purchases**

Rank		INNs/Grouping Names	Share in total hospital purchases, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
1	1	PALIVIZUMAB	9.8	10.6
2	8	GLUCOSE*SODIUM*DL-LACTIC ACID*CALCIUM*MAGNESIUM	3.2	1.3
3	45	VACCINE, MENINGOCOCCAL POLYSACCHARIDE AND OMV	2.5	0.0
4	4	MEROPENEM	1.8	1.7
5	18	AFLIBERCEPT	1.7	0.8
6	2	IMMUNOGLOBULIN BASE	1.7	2.9
7	3	SODIUM	1.6	1.7
8	5	SEVOFLURANE	1.6	1.5
9	11	ALBUMIN	1.5	1.1
10	41	NIVOLUMAB	1.5	0.2
Total			26.9	21.7

The top 10 ATC groups ranking did not change in composition; however, numerous shifts took place in it (Table 4). In addition, the ranking changed its leader: due to increase in purchases by almost a quarter, L01 Antineoplastic drugs (+24%) moved up to rank number one from two, displacing J06 Immune sera and immunoglobulins (-23%) down one rank. The same shifts took place in the lower part of the top ten. The groups with positive growth rates: B05 Blood substitutes and perfusion solutions (+26%) and S01 Ophthalmologicals (+68%) moved up to ranks three and six. At the same time, J01 Antibacterials for systemic use (-15%), J07 Vaccines (-34%), B01 Antithrombotic agents (-22%) and V08 Contrast media (-15%) lost one rank each and the group J02 Antifungals for systemic use (-30%) moved two ranks down, coming in at the bottom rank. N01 Anaesthetics (-17%) continued to hold rank nine. The total share of the top ten ranking increased by 0.5 p.p. to 74.1%.

**Table 4. The top ten ATC groups by hospital purchases**

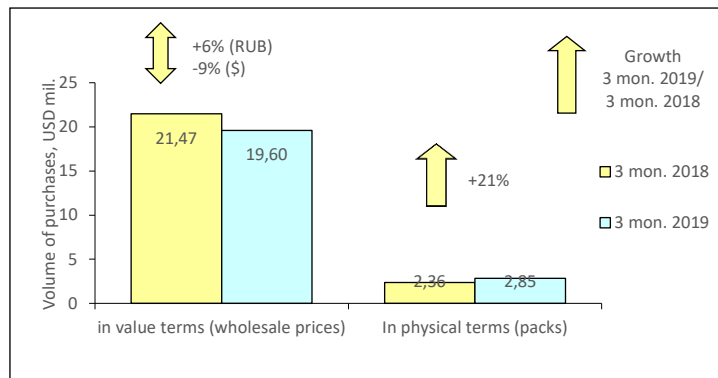
Rank		ATC code	ATC group	Share in total hospital purchases, %	
3 mon. 2019	3 mon. 2018			3 mon. 2019	3 mon. 2018
1	2	L01	ANTINEOPLASTIC AGENTS	14.7	11.0
2	1	J06	IMMUNE SERA & IMMUNOGLOBULIN	11.9	14.2
3	5	B05	PLASMA SUBSTITUTES AND PERFUSION SOLUTIONS	10.6	7.8
4	3	J01	ANTIBACTERIALS FOR SYST USE	9.3	10.1
5	4	J07	VACCINES	5.9	8.3
6	10	S01	OPHTHALMOLOGICALS	5.0	2.8
7	6	B01	ANTITHROMBOTIC AGENTS	4.6	5.5
8	7	V08	CONTRAST MEDIA	4.6	5.0
9	9	N01	ANESTHETICS	3.9	4.4
10	8	J02	ANTIMYCOTICS FOR SYSTEMIC USE	3.6	4.7
Total				74.1	73.6

**Conclusion.** At the end of the first quarter of 2019, the Moscow hospital market reduced by 8% in rouble terms and by 20% in dollar terms and brought in RUB 3.099 bil. (USD 47.018 mil.). In pack terms, the market also showed negative growth rates (-9%) and achieved 6.589 mil. packs. The average cost of an FPP pack in the Moscow hospital market decreased as compared to the same period of the previous year (USD 7.14 vs. USD 8.10).

## SAINT PETERSBURG HOSPITAL MARKET: FIRST THREE MONTHS RESULTS 2019

According to the results of the Budget Audit of FPPs in the Russian Federation (without DLO and regional benefit), at the end of the first quarter of 2019, the St. Petersburg hospital market increased in physical terms by 21% and amounted to 2.852 mil. packs. In money terms, the purchases dynamics was positive in rouble (+6%) and negative in dollar (-9%) terms, and the volume amounted to RUB 1.290 bil. (USD 19.601 mil.) in wholesale prices. Based on the results for three months of 2019, the average cost of an OTC pack in the city hospitals was USD 6.87, whereas in a year-earlier period its cost was USD 9.09.

**Figure 1. St. Petersburg hospital market for 3 months of 2018 – 3 months 2019**



In the first three months of 2019, the Russian manufacturer BIOCAD, who made a significant leap forward thanks to a twofold increase in purchases and moved up from rank seven, became the leader in the hospital market of St. Petersburg. In addition, another four manufacturers of the top ten ranking showed high and outperformance growth. BAYER (+69%) moved up to rank two from six, and MSD +20% moved up to rank three from five. Two newcomers ASTRAZENECA (+84%) and TAKEDA, which increased purchases 2.6 times, broke into the ranks of the top 10, moving up to ranks six and nine, respectively. Five manufacturers from the top ten ranking showed the negative growth rates and four of them fell in the ranks. PFIZER (-34%), JOHNSON & JOHNSON (-66%), SANOFI (-48%) and ABBVIE (-4%) moved down to ranks five, seven, eight and ten. Only NOVARTIS (-13%) held its previous rank four. The total share of the top ten manufacturers decreased by over four p.p. and accounted for 38.3%.

**Table 1. The top 10 drug manufacturers by hospital purchases**

Rank in the top ten		Manufacturer*	Share in total hospital purchases, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
1	7	<b>BIOCAD RF</b>	6.0	3.1
2	6	<b>BAYER</b>	5.2	3.3
3	5	<b>MSD</b>	4.9	4.3
4	4	<b>NOVARTIS</b>	4.6	5.6
5	2	<b>PFIZER</b>	4.1	6.6
6	16	<b>ASTRAZENECA</b>	2.9	1.7
7	1	<b>JOHNSON &amp; JOHNSON</b>	2.8	8.6
8	3	<b>SANOFI</b>	2.8	5.7
9	24	<b>TAKEDA</b>	2.6	1.1
10	8	<b>ABBVIE</b>	2.5	2.7
Total			38.3	42.6

\*AIPM members are in bold

NATRIUM CHLORIDUM (+17%) continued to hold its previous rank number one in the top-ten brand ranking in terms of hospital purchases (Table 2). Shifts took place in the lower part of the top 10 ranking, and most of the brands rose in the ranks. At the same time, the newcomers EYLEA (13-fold growth in purchases) and HERTICAD (2.2-fold growth in purchases) broke into the top ten ranking, moving up to ranks two and three, and three more newcomers, AVEGRA (3.9-fold growth), PHENDIVIA and ALBUMIN (2.1-fold growth) moved down to ranks six and two bottom ranks. OPDIVO (+45%) moved three ranks up, to number four, while ULTRAVIST (+51%) moved up from rank ten to eight. At the same time, the less dynamic SEVORAN (+16%) and OMNIPAQUE (-2%), which reduced its purchases, moved down to ranks five and seven. The total share of the top 10 reduced from 9.2% to 16.4%.

**Table 2. The top 10 brands by hospital purchases**

Rank in the top ten		Brand	Share in total hospital purchases, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
1	1	NATRIUM CHLORIDUM	2.3	2.1
2	39	EYLEA	2.3	0.2
3	12	HERTICAD	1.8	0.9
4	7	OPDIVO	1.6	1.2
5	4	SEVORAN	1.5	1.4
6	29	AVEGRA BIOCAD	1.5	0.4
7	2	OMNIPAQUE	1.4	1.5

Rank in the top ten		Brand	Share in total hospital purchases, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
8	10	ULTRAVIST	1.4	1.0
9	46	PHENDIVIA	1.3	0.0
10	18	ALBUMIN	1.2	0.6
Total			16.4	9.2

The top-ten INN and grouping names ranking was markedly updated: it acquired six newcomers (Table Among them was the leader of the ranking AFLIBERCEPT (3.2-fold growth in purchases). Also, the newcomers of the top-10 ranking TRASTUZUMAB (2.3-fold growth in purchases), FENTANYL (over 3000-fold growth), ALBUMIN (2.3-fold growth), BEVACIZUMAB (3.3-fold growth) and IOPROMIDE (+47%) moved up to ranks three, five, seven, eight and ten, respectively. In addition, INN NIVOLUMAB (+45%) moved up to rank four from seven. Displaced by more dynamic INNs, SODIUM and SEVOFLURANE (+16% each) lost one rank each, despite outperformance. IOHEXOL (-6%) reduced its purchases and moved down from rank three to nine. The total share accumulated by the top-ten INNs and grouping names increased by over 7 p.p. to 17.6%.

**Table 3. The top 10 INNs and grouping names by hospital purchases**

Rank		INNs/Grouping Names	Share in total hospital purchases, %	
3 mon. 2019	3 mon. 2018		3 mon. 2019	3 mon. 2018
1	13	AFLIBERCEPT	2.8	0.9
2	1	SODIUM	2.3	2.1
3	15	TRASTUZUMAB	1.9	0.9
4	7	NIVOLUMAB	1.6	1.2
5	48	FENTANYL	1.6	0.0
6	5	SEVOFLURANE	1.6	1.4
7	19	ALBUMIN	1.5	0.7
8	29	BEVACIZUMAB	1.5	0.5
9	3	IOHEXOL	1.5	1.7
10	11	IOPROMIDE	1.4	1.0
Total			17.6	10.4

Only one newcomer entered the top ten ATC group: J05 Antivirals for systemic use, which showed a two-fold increase in purchases, moved up to rank eight from 13 (Table 4). In addition, the other four ATC groups moved up to yet higher ranks. The groups B05 Blood substitutes and perfusion solutions (+49%), V08 Contrast media (-5%), L04 Immunosuppressants (+60%) and B01 Antithrombotic agents (+28%) moved up to ranks three through six, respectively. Two groups with pronounced negative dynamics, J07 Vaccines (-42%) and N05 Psycholeptics (-46%), on the contrary, rounded out the top ten ranking, moving down to the lower part of it. The top ATC groups L01 Antineoplastic agents (-7%) and J01 Antibacterials for systemic use (+27%) held their own in the ranking and N01 Anesthetics (+18%) kept its previous rank seven. The top ten ATC groups accumulated 69.7% of the regional market, which accounted for 71.6% in the year-earlier period.

**Table 4. The top ten ATC groups by hospital purchases**

Rank		ATC code	ATC group	Share in total hospital purchases, %	
3 mon. 2019	3 mon. 2018			3 mon. 2019	3 mon. 2018
1	1	L01	ANTINEOPLASTIC AGENTS	27.2	31.0
2	2	J01	ANTIBACTERIALS FOR SYST USE	8.2	6.8
3	6	B05	PLASMA SUBSTITUTES AND PERFUSION SOLUTIONS	7.3	5.2
4	5	V08	CONTRAST MEDIA	4.9	5.5
5	9	L04	IMMUNOSUPPRESSANTS	4.2	2.8
6	8	B01	ANTITHROMBOTIC AGENTS	4.1	3.3
7	7	N01	ANESTHETICS	3.8	3.4
8	13	J05	ANTIVIRALS FOR SYSTEMIC USE	3.8	1.9
9	3	J07	VACCINES	3.3	6.0
10	4	N05	PSYCHOLEPTICS	2.9	5.7
Total				69.7	71.6

**Conclusion.** At the end of the first three months of 2019, the St. Petersburg hospital market grew by 6% in rouble terms and by 9% in dollar terms and brought in RUB 1.290 bil. (USD 19.601 mil). In pack terms, the market showed positive growth rates (+21%) and amounted to 2.852 mil. packs. Following the results for January-March of 2019, the average cost of an FPP pack on the city hospital sector was lower than that in the year-earlier period (USD 6.87 vs. USD 9.09).