# СОВМЕСТНАЯ ПУБЛИКАЦИЯ

АССОЦИАЦИИ МЕЖДУНАРОДНЫХ ФАРМАЦЕВТИЧЕСКИХ ПРОИЗВОДИТЕЛЕЙ И ГК РЕМЕДИУМ





Association of International Pharmaceutical Manufacturers Ассоциация международных фармацевтических производителей

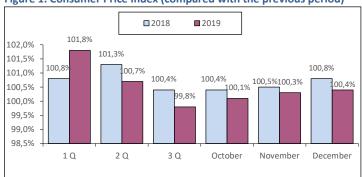
### **MACROECONOMIC INDICES**

### Inflation

According to Federal State Statistics Service's data, the Consumer Price Index was estimated at 100.4% in December 2019 compared to November, and 103.0% compared to December of 2018.

In December 2019, Industrial Producer Price Index (for goods intended for sale on the domestic market) was 99.6%, whereas in the month-earlier period it had amounted to 99.2%. The index accounted for 95.7% against December of 2018.

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



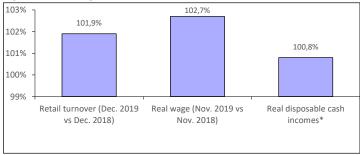
# **Living standard**

In November of 2019, a gross monthly average wage $^1$  of corporate employees reached RUB 46,285 (USD 724.68). It increased by 106.3% compared to the same period 2018, and 99.4% compared to the previous period. In November 2019, the real gross wage accounted for 102.7% as compared to November of 2018, and 99.1% against the prior period. According to estimates $^2$ , in 2019 real disposable cash incomes increased by 0.8% compared to the same period of 2018 (Fig. 2).

# Retail turnover

In December of 2019, the retail turnover was RUB 3474.4 bil. or 101.9% against the level of the same period of the previous year, and RUB 33532.1 bil. or 101.6% in 2019 compared to 2018 (at comparable prices) (Fig. 2).

Figure 2. Real wage and retail turnover



<sup>\* 2019</sup> vs 2018

# **Industrial Production**

According to Federal State Statistics Service's data, Industrial Production Index accounted for 102.1% in December 2019 compared to the same period in the previous year, and 102.4% compared to 2018.

According to Federal State Statistics Service's data, Industrial Production Index of drugs and medical products in December 2019 accounted for 132.8% compared to the relevant period of 2018, and 119.6% in 2019 compared to 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 December 2019.

Table 1. Top ten Russian chemical and pharmaceutical manufacturers by sales. December 2019

Rank	Manufacturer	RUB mil.
1	Biocad	2308.3
2	Otcpharm	2214.3
3	Pharmstandart	1282.8
4	Valenta	1139.0
5	Stada	1084.3
6	Veropharm	1030.4
7	Akrihin	909.1
8	Grotex	900.1
9	Sotex	888.0
10	Vertex	875.9

Source - Remedium according to IQVIA data

Table 2 provides pharmacy sales data from 10 regions of the Russian Federation. Sales (in terms of roubles) reduced in all regions in November 2019 as compared to the previous month. The deepest slump was observed in Tyumen (-24%), the smallest one in Moscow (-1%).

Table 2. Pharmacy sales in the regions, 2019

	Pharmacy sales, \$ mil. (wholesale prices)			Growth gain, % (roubles)		
Region	Septem- ber 2019		Novem- ber 2019	Septem- ber/ August 19	October/ September 19	Novem- ber/ October 19
Moscow	191.4	185.2	184.3	20%	-4%	-1%
St. Petersburg	63.9	63.1	60.3	16%	-2%	-5%
Krasnodar Krai	34.9	36.7	33.0	-9%	4%	-11%
Krasnoyarsk Krai	27.5	28.5	27.2	-1%	3%	-5%
Tatarstan	18.3	19.4	16.8	15%	5%	-14%
Rostov Region	21.9	22.0	19.9	3%	-1%	-10%
Novosibirsk Re- gion	19.7	20.1	17.2	15%	1%	-15%
Voronezh Re- gion	12.4	12.6	11.8	1%	1%	-7%
Perm	7.5	7.2	5.9	2%	-6%	-19%
Tyumen	6.2	6.6	5.1	12%	6%	-24%

# **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 December 2019

Rank	Company*	Quantity of broad- casts
1	Sanofi	11,024
2	Sandoz	10,525
3	Evalar	6,371
4	Reckitt Benckiser	6,302
5	Bayer	5,839

Source - Remedium according to Mediascope's data

Table 4. Top five trade names in mass media in December, 2019

 abic 4. Top i	ive trade names in mass media in Dec	ciliber, 2015
Rank	Brand*	Quantity of broad- casts
1	Evalar	6,371
2	Lasolvan	4,671
3	Broncho-munal	2,823
4	Strepsils	2,404
5	Nurofen	2,399

Source - Remedium according to Mediascope's data

 $<sup>^1</sup>$  Starting with the report "Information on the socio-economic situation of the Russian Federation" (January-September 2019), the indicators of nominal and real accrued wages of employees of organizations will be published only after receiving reporting data. Preliminary estimates will not be presented.

<sup>\*</sup> Only products registered with State Register of Medicines were considered.

<sup>&</sup>lt;sup>2</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

According to data of the Committee for Statistics of the National Statistical Committee of Belarus, the Consumer Price Index was estimated at 100.5% in December 2019, and 104.7% in 2019 compared to December 2018. At year-end 2019, the Consumer Price Index was 105.6% as compared to 2018.

In December 2019, Industrial Producer Price Index was 100.3% compared to November 2019, and 104.4% compared to December 2018. In 2019, Industrial Producer Price Index was 106.3% as compared to 2018.

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



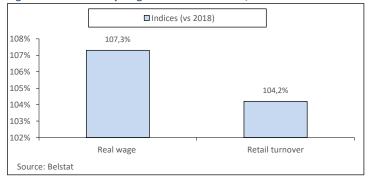
# **Living standard**

According to the preliminary Belstat's data, in December 2019 the average monthly nominal accrued wage of the workers of the Republic of Belarus was BYR 1238,7 (USD 588.01³), and BYR 1090.9 (USD 521.61) in 2019, which accounted for 110.5% against December 2018 and 113.3% against 2018. In December 2019, the real wage accounted for 105,5% as compared to the same period of 2018, and 107.3% in January-December 2019 (Fig. 2). According to Belstat's data, in January-November 2019 the real disposable cash income accounted for 106.3% as compared to January-November 2018.

#### Retail turnover

In December 2019, the retail turnover was estimated at RUB 4658.7 mil. which accounted for 112.7% compared to the previous period and 102.3% compared to the same period of the previous year. Based on the results for 2019, it amounted to RUB 49.28 bil. or 104.2% at comparable prices to 2018 level (Fig. 2).

Figure 2. Real monthly wage and retail turnover, 2019



# **Industrial Production**

According to the National Statistical Committee of the Republic of Belarus, in 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 113.5 bil. in current prices or 101% against 2018 in comparable prices.

According to Belstat's data, in 2019 the pharmaceutical production output of essential pharmaceutical products and pharmaceutical preparations was estimated at BYR 1349.7 mil., which accounted for 101.3% against 2018 indicators in comparable prices.

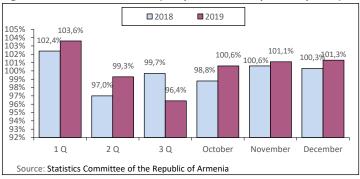
# <sup>3</sup> The official average arithmetic exchange rate was used to calculate the above indices from the website of the National Bank of the Republic of Belarus <a href="https://www.nbrb.by">www.nbrb.by</a>.

# MACROECONOMIC INDICES OF THE REPUBLIC OF ARMENIA

According to data of Statistics Committee of the Republic of Armenia, in December 2019 consumer price index amounted to 101.3% against the previous month and 100.7% compared to December 2018. The Consumer Price Index accounted for 101.4% in January-December 2019 compared to the same period of 2018.

The Industrial Producer Price Index was 102.6% in December 2019, as compared to the previous month, and 101.4% compared to December 2018. In 2019, index accounted for 100.5% as compared to 2018.

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



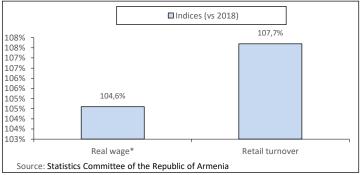
### Living standard

According to preliminary estimates of the Statistics Committee of RA, in December 2018 the average monthly nominal wage<sup>4</sup> of the workers of the Republic of Armenia was Dram 224,517 (USD 469.47) which accounted for 126.4% compared to the previous period and 105.3% compared to the same period of 2018. In January-December 2019, the average monthly nominal wage per worker was Dram 182,673 (USD 380.21) or 105.8% against the same period of 2018. The real wage (according to Eurasian Economic Commission) accounted for 104.6% in December of 2019 as compared with December of 2018 (Fig. 2).

#### Retail turnover

The retail turnover amounted to AMD 193,642.6 mil. in December 2019, and AMD 1,548,903.8 mil. at the end of 2019, which accounted for 101.0% and 107.7% as compared to the same period of the previous year, respectively (Fig. 2).

Figure 2. Real monthly wage and retail turnover, 2019



<sup>\*-</sup> December 2019 Vs. December 2018

# **Industrial Production**

According to the preliminary data of Statistics Committee of the Republic of Armenia, in December 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 247826.7 mil., and AMD – 2103913.7 mil. in January- December 2019 or 106.4% and 109.0% against the same periods of 2018, respectively.

According to Statistics Committee of the Republic of Armenia, the pharmaceutical output was estimated at AMD 1117.4 mil. in December 2019, and AMD 9662.7 mil. from the beginning of the year, which accounted for 120.1% and 104.1% as compared to the respective periods 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.

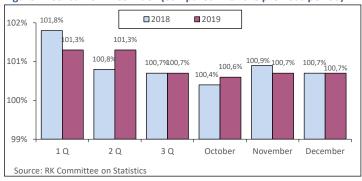
<sup>&</sup>lt;sup>4</sup> Since January 1, 2018, the monthly indicators also include data from micro and small organizations as the Statistics Committee of the Republic of Armenia (RA) uses a new information

# MACROECONOMIC INDICES OF THE REPUBLIC OF KAZAKHSTAN

According to the data of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan, the Consumer Price Index accounted for 100.7% in December 2019 as compared to the previous month, 105.4% as compared to December 2018. In January-December 2019, the Index reached 105.3% as compared 2018.

The Industrial Producer Price Index was 100.5 % in December 2019, as compared to the previous month, and 101.4% as compared to December 2018. In January-December 2019, the prices of manufacturers of industrial products increased by 5.1% as compared to 2018.

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



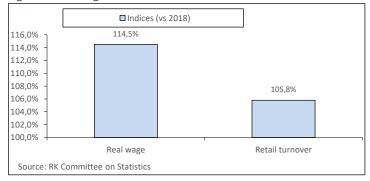
# Living standard

According to the preliminary data of the RK Committee on Statistics, the gross monthly average wage per worker reached KZT 208,585 (USD 543,39<sup>5</sup>) in December 2019, and KZT 186,924 (USD 488.37) in January-December of 2019. The Nominal Wage Index against the respective period of the previous year accounted for 114.1% in December 2019, and 114.5% in January-December 2019, and the real wage index was 108.3% in December 2019 as compared to December 2018. According to the preliminary data, in January-November 2019 the real cash income index was 105.8% compared to the same period of 2018 (Fig. 2).

## Retail turnover

Retail trade volume in December 2019 was equal to KZT 1393.6 bil., which accounted for 107.3% against December 2018. In January-December 2019, its volume amounted to KZT 11,345.7 bil., which was 5.8% more than in 2018 (in comparable prices) (Fig. 2).

Figure 2. Real wage index and retail turnover in 2019



# **Industrial Production**

According to the Committee for Statistics of RK, in December 2019 the industrial output was KZT 2,712.7 bil., in January-December of 2019 - KZT 29,103.0 bil. As compared to the same period of 2017, the indices accounted for 106.4% and 103.8%, respectively.

According to the Statistics Committee of RK, in January-December of 2019 the industrial output of basic pharmaceutical products amounted to KZT 92.0 bil., in December of 2019 - KZT 5816 mil. In January-December of 2019, the Industrial Production Volume Index for Pharmaceuticals was 112.2% to January-December of 2018, and 62.1% in September of 2019 as compared to the same period of 2018.

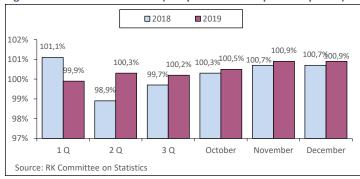
# MACROECONOMIC INDICES OF THE KYRGYZ REPUBLIC

#### Inflation

According to the National Statistics Committee of the Kyrgyz Republic, the Consumer Price Index was estimated at 100.9% in December 2019 compared to the previous month, and 103.1% compared to December of 2018. In January-December of 2019, the index reached 103.1% compared to January-December of 2018.

In December 2019, the Producer Price Index for industrial production and services was 99.2% as compared to the previous month. Throughout the Republic, in January-December of 2019 the prices of producers for industrial products and services increased by 8.5% and accounted for 104.1% compared to the relevant period.

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



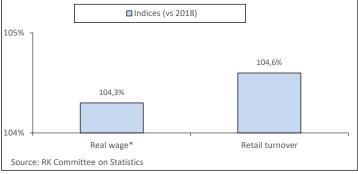
### Living standard

According to data of the Committee for Statistics of the Kyrgyz Republic, in November 2019 the average monthly nominal wage per worker was KGS 16,809 (USD 240.75), in January-November 2018 - KGS 16,586 (USD 237.7), which accounted for 107.7% and 105.3% compared to the relevant period of the previous year, respectively. In January-November of 2019, the real wage accounted for 104.3% as compared to January-November of 2018, and 105.9% in November of 2019 as compared to November of 2018 (Fig. 2).

### **Retail turnover**

In December of 2019, the retail turnover (without cars and motorcycles sales) amounted to KGS 53246.8 mil, in January-December of 2019 - KGS 304,124.6 mil. in January-December of 2019. The Volume of Retail Turnover Index accounted for 106.2% and 104.6% to the same period of the previous year (Fig.2).

Figure 2. Real monthly wage and retail turnover, 2019



<sup>\*</sup> data for January-November 2019

# **Industrial Production**

According to data of the National Committee for Statistics of the Kyrgyz Republic, in December 2019 the industrial output was KGS 28,385.4 mil., and KGS 278,565.0 mil. in January-December of 2019. The Physical Index of Industrial Production accounted for 86.6% and 106.9% 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 44.6 mil. in December 2019, and KGS 342.8 mil. from the start of the year. At the end of December 2019, the Industrial Products Volume Index for Pharmaceuticals was 116.5% compared to the same period of the last year, 113.2% as compared to December 2018, and it was 113.2% against December 2018, and 97.8% in January- December 2019 compared to 2018.

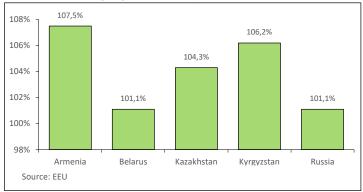
<sup>&</sup>lt;sup>5</sup> The average exchange rate to calculate the above indices was used from the official website of the National Bank of Kazakhstan www.nationalbank.kz

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

## **GDP**

According to Eurasian Economic Commission's data (EAEC), at the end of January-September of 2019 GDP of EAEU member-states amounted to USD 1386.9 bil. and increased by 1.4% as compared to January-September of 2018 in fixed prices. GDP growth was recorded in all countries, the highest one in Armenia (+ +7.5%) and Kyrgyzstan (+6.2%), a bit lower - in Kazakhstan (+ +4.3%). GDP increased by 1.1% in Belarus and Russia (Fig. 1).

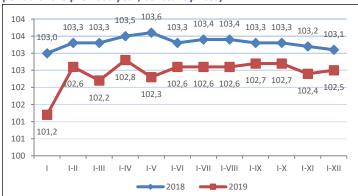
Figure 1. GDP growth rates in the EAEU member-states (January-September 2019 vs. January-September 2018)



### **Industrial Production**

The industrial output of the EAEU in January – December 2019 amounted to 1.2 tril. USD and increased by 2.5% compared to 2018 in fixed prices (Fig. 2). In individual countries, the Industrial Production Index accounted for: 109.0% in Armenia, 101% in Belarus, 103.8% in Kazakhstan, 106.9% in Kyrgyzstan and 102.4% in Russia.

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

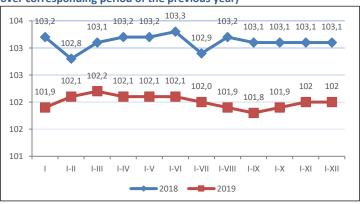


Note. The data for the period from January 2016 to April 2018 were updated due to recalculation of the industrial production indices of the Russian Federation for the specified period.

# Retail turnover

According to the EEC, the retail turnover (through all sales channels) of EEU member-states in January-December of 2019 amounted to USD 580.1 bil. Compared with the same period of 2018, the volume of retail sales (in comparative prices) increased by 2.0%. In the analysed period, all member-states showed growth in the retail turnover. In this case, the indices accounted for 107.9% in Armenia, 104.2% in Belarus, 105.8% in Kazakhstan 104.1% Kyrgyzstan and 101.6% 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 the Economic Commission for Europe (ECE), the gross monthly average nominal wage per worker increased by 5.9% in Armenia, 14.1% in Belarus, 14.6% in Kazakhstan, 4.2% in Kyrgyzstan, 7.2% in Russia in January-September of 2019. The real wage (adjusted for the consumer price index for goods and services) increased by 4.2% in Armenia, 7.8% in Belarus, 8.9% in Kazakhstan, 3.6% in Kyrgyzstan, 2.3% in Russia.

Table 1. Nominal and real wage in January-September 2019

Country	Real	Nominal
	wage, % against the same	wage,
	period of 2018	USD
Armenia	104.2	371
Belarus	107.8	510
Kazakhstan	108.9	477
Kyrgyzstan	103.6	235
Russia	102.3	708

## **Budget performance**

According to ECE, in January-September 2019 the republican budget was executed with surplus in Armenia, Belarus and Russia and with deficit in Kazakhstan and Kyrgyzstan. At the same time, the deficit increased in Kazakhstan and Kyrgyzstan as compared to the relevant period of the previous year, whereas the budget surplus increased in Russia.

Compared to the previous year, the growth rates of the republican budget indicators had multidirectional dynamics. The growth rates of the republican budgets were as follows: revenues - 122% in Armenia, 104% in Belarus, 113% in Kazakhstan, 102% Kyrgyzstan and 107% Russia; expenditures - 110% in Armenia, 110% in Belarus, 120% in Kazakhstan, 104% in Kyrgyzstan, 105% in Russia.

Table 2. Republican budget in January-September 2019

Country	USD bil.				
	Income	Expenditure	Deficit (surplus)		
Armenia	2.4	2.2	0.2		
Belarus	8.5	7.1	1.3		
Kazakhstan	20.3	22.4	-2.1		
Kyrgyzstan	1.4	1.5	-0.1		
Russia	231.2	183.7	47.6		
EAEU	263.8	216.9	46.9		

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

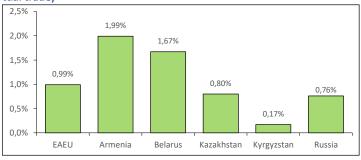
Volume of mutual trade in goods of the Member States of the Eurasian Economic Union in January-November 2019 amounted to USD 55.3 bil. or 100.2% as against the same period of 2018.

Table 3. Export volumes of the EEU member-states in the mutual trade in January-November 2019

Countri	Countries		As % of January	Share in total,
			November 18	%
EAEU		55310.2	100.2	100.0
Armenia		694.7	110.7	1.3
	Russia	671.5	110.8	96.7
Belarus		13235.1	104	23.9
	Russia	12345.1	104.1	93.3
Kazakhstan		5561.9	100.4	10.0
	Russia	4944.9	102.3	88.9
Kyrgyzstan		551.2	99.2	1.0
	Russia	234.7	78.4	42.6

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

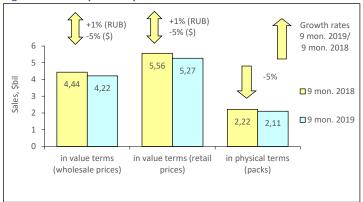
Table 4. The structure of mutual trade between EEU member-states within the Customs Commodity Code group "Pharmaceutical products" for January-November 2019 (as percentage over the total volume of mutual trade)



### PHARMACY OTC MARKET IN RUSSIA: 2019 FIRST NINE MONTHS RESULTS

According to the results of the Retail Audit of Over-the-Counter Drugs (OTC) in Russian Federation™, at the end of the first nine months of 2019 the sales of OTC drugs in physical terms in Russia saw a 5% decrease to 2.106 bil. packs. In money terms, the OTC drugs market increased by 1% in rouble terms and reduced by 5% in dollar terms and reached RUB 274.852 bil. (USD 4.221 bil.) in wholesale prices (Fig. 1). The share of Over the Counter (OTC) drugs accounted for 66.2% of sales in physical terms and 48.8% in retail prices in terms of roubles. At the end of January-September 2019, the average cost of an OTC pack was USD 2.50, whereas in year-earlier period its cost was USD 2.51 in retail prices. In the analysed period, Russians spent an average of USD 35.90 on the purchase of OTC drugs in the pharmacies.

Figure 1. Russian pharmacy market for 9 months of 2018 – 9 months 2019



At the end of the first nine months of 2019, OTCPHARM (-1%), BAYER (5%), SANOFI (+1%) and GLAXOSMITHKLINE (+8%) held their previous leading positions in the top-10 manufacturers ranking in the non-prescription drugs market, despite the negative growth sales shown by the former two leaders (Table 1). JOHNSON & JOHNSON (-2%) also showed a decrease in sales, lost two ranks and moved down to rank seven. At the same time, it pushed SANDOZ one rank down (+ 0.2%) and allowed the manufacturers STADA and TEVA (+ 5% each) to move up to rank five and six. BERLIN-CHEMIE/MENARINI (+0.1%) and SERVIER (+6%) held their previous two ranks in the top ten ranking. The cumulative share of the top 10 manufacturers didn't virtually change and accounted for 38.7%.

Table 1. The top ten drug manufacturers by pharmacy sales

Rank in the top ten		Manufacturer*	Share in total phar- macy sales, %		
9 mon. 2019	9 mon. 2018	- Manufacturer	9 mon. 2019	9 mon. 2018	
1	1	OTCPHARM	5.9	6.1	
2	2	BAYER	4.6	5.0	
3	3	SANOFI-AVENTIS	4.2	4.2	
4	4	GLAXOSMITHKLINE	4.0	3.8	
5	6	STADA	3.8	3.6	
6	8	TEVA	3.6	3.5	
7	5	JOHNSON & JOHNSON	3.6	3.7	
8	7	SANDOZ	3.5	3.5	
9	9	BERLIN-CHEMIE/MENARINI	2.8	2.9	
10	10	SERVIER	2.6	2.5	
Total			38.7	38.8	

<sup>\*</sup>AIPM members are in bold

NUROFEN (+ 8%) moved up to rank one in the top ten brands ranking, displacing DETRALEX (+ 3%) from that rank to rank two (Table. 2). Due to pronounced downward trend, the brand INGAVIRIN (-18%) moved down from rank three to eighth. This allowed CARDIOMAGNYL (-4%) and KAGOCEL (-1%) to move up one rank, despite the downward trend. In addition to them, MIRAMISTIN (+ 4%), PENTALGIN (+ 5%) and THERAFLU (+ 9%) moved up to ranks five through seven, and the newcomer CANEPHRON (+14 %) broke into the top ten, coming in at rank ten from twelve. The brand ESSENTIALE reduced its sales by 5% and moved down from rank eight to nine. The total share of the top 10 brands didn't change and remained the same -11.4%

Table 2. The top ten brands by pharmacy sales

Rank in the top ten		Brand	Share in tot sale	al pharmacy s, %
9 mon. 2019	9 mon. 2018	Diallu	9 mon. 2019	9 mon. 2018
1	2	NUROFEN	1.6	1.5
2	1	DETRALEX	1.5	1.5
3	4	CARDIOMAGNYL	1.1	1.2
4	5	KAGOCEL	1.1	1.2
5	6	MIRAMISTIN	1.1	1.1

<sup>&</sup>lt;sup>6</sup>Hereinafter, unless otherwise stated, growth gains are stated in the rouble equivalent or national currency.

Rank in the top ten		Brand	Share in total pharmacy sales, %	
9 mon. 2019	9 mon. 2018	Dialiu	9 mon. 2019	9 mon. 2018
6	7	PENTALGIN	1.1	1.1
7	10	THERAFLU	1.0	0.9
8	3	INGAVIRIN	1.0	1.2
9	8	ESSENTIALE	0.9	1.0
10	12	CANEPHRON	0.9	0.8
Total			11.4	11.4

Top five leaders from the top 10 INN and group names ranking remained unchanged (Table 3). They were XYLOMETAZOLINE (+1%), IBUPROFEN (+4%), DIOSMIN\*HESPERIDIN (+5%), PANCREATIN (+10%) and ACETYLSALICYLIC ACID\* MAGNESIUM (+0.3%). KAGOCEL (-1%) also held its previous rank seven. The other four INNs of the top 10 ranking improved their positions in the ranks. DEXPANTHENOL (+6%) moved up to rank six from nine and MIRAMISTIN (+4%) moved up to rank eight from ten, and the newcomers DICLOFENAC (+23%) and NAFTIFINE (+1%) broke into the ranks of the top ten, coming in at numbers nine and ten. The total share of the top ten ranking increased by 0.5 p.p. to 16.7%.

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

Ra	nk	INNs/Grouping Names	Share in total phar- macy sales, %		
9 mon. 2019	9 mon. 2018	invits/Grouping Ivallies	9 mon. 2019	9 mon. 2018	
1	1	XYLOMETAZOLINE	3.2	3.2	
2	2	IBUPROFEN	2.3	2.3	
3	3	DIOSMIN*HESPERIDIN	2.3	2.2	
4	4	PANCREATIN	2.1	1.9	
5	5	ACETYLSALICYLIC ACID* MAGNE- SIUM	1.2	1.3	
6	9	DEXPANTHENOL	1.2	1.1	
7	7	KAGOCEL	1.1	1.2	
8	10	MIRAMISTIN	1.1	1.1	
9	14	DICLOFENAC	1.1	0.9	
10	11	NAFTIFINE	1.1	1.1	
Total		·	16.7	16.2	

The top 10 ATC groups ranking didn't change in composition (table 4). Its leaders C05 Vasoprotectors (+4%) and R01 Nasal preparations (+1%) didn't change either. In addition, another four ATC groups held their own in the ranking. R05 Cough and cold preparations (+2%) and J05 Antivirals for systemic use (-10%) held their previous ranks five and six, and L03 Immunostimulants (-5%) and R02 Throat preparations (+4%) rounded out the top ten ranking. However, two shifts took place in the top ten ranking. Due to reduction in sales, the groups A07 Antidiarrheals (-2%) and A11 Vitamins (-12%) moved down one rank, giving way to N02 Analgesics (+4%) and M01 Anti-inflammatory and anti-rheumatic drugs (+3%). In total, the top - ten ATC groups accumulated 46.5% of the retail market, whereas in the year— earlier period they accounted for 47.5%.

Table 4. The top ten ATC Groups by pharmacy sales

Rank		ATC			otal phar- acy es, %
9 mon. 2019	9 mon. 2018	code	Aregioup	9 mon. 2019	9 mon. 2018
1	1	C05	VASOPROTECTIVES	6.0	5.8
2	2	R01	NASAL PREPARATIONS	5.7	5.8
3	4	N02	ANALGESICS	5.7	5.5
4	3	A07	ANTIDIARR.,INTEST. ANTIINFL./ ANTIINFECT. AGENTS	5.5	5.7
5	5	R05	COUGH AND COLD PREPARA- TIONS	5.2	5.2
6	6	J05	ANTIVIRALS FOR SYSTEMIC USE	4.0	4.5
7	8	M01	ANTIINFLAMMATORY AND AN- TIRHEUMATIC PRODUCTS	3.9	3.9
8	7	A11	VITAMINS	3.6	4.2
9	9	L03	IMMUNOSTIMULANTS	3.4	3.7
10	10	R02	THROAT PREPARATIONS	3.4	3.3
Total				46.5	47.5

**Conclusion.** On the basis of the results for the first nine months of 2019, the OTC retail market of Russia amounted to RUB 343.108 bil. (USD 5.270 bil.), which was 1% higher in terms of roubles and 5% less in terms of dollars than in January-September 2018. In pack terms, the market also showed the negative growth rates (-5%) and brought in 2.106 bil. packs. The average cost of OTC-pack in the Russian pharmacies based on the results for nine months 2019 was USD 2.50 which was as much as in the year-earlier period (USD 2.51). However, the average expenses of Russian residents for the purchase of OTC drugs in pharmacies in the period under review decreased (USD 35.90 vs. USD 37.87).

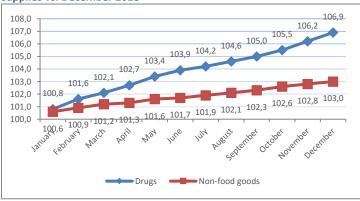
#### **Price Indices**

Table 1. Inflation rates in the Russian Federation in December 2019

	December 2019 as against December 2018	January-Decem- ber 2019 as against January- December 2018
CPI	103.0	104.5
CPI for non-food products	103.0	103.8
CPI for medications	106.9	106.4

Rosstat data

Figure 1. Dynamics of the price index for non-food items and medicines supplies vs. 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 1-4 Q 2018 - 1-4 Q, 2019

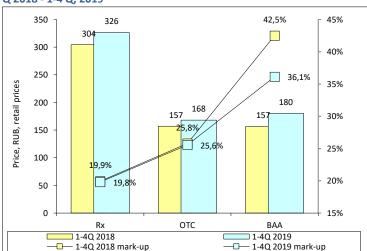


Figure 3. Dynamics of weighted average prices and retail margins in 1-4 Q 2018 - 1-4 Q, 2019

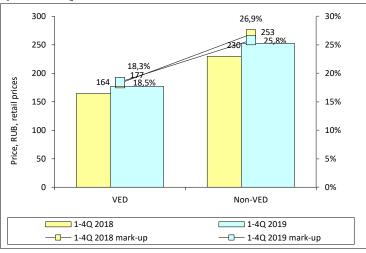
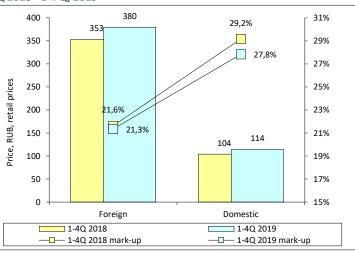


Figure 4. Dynamics of weighted average prices and retail margins in 1-4 Q 2018 - 1-4 Q, 2019



Indicators of price dynamics in the reimbursable market segment
Figure 5. Dynamics of weighted average purchase prices in 1-4 Q 2018 1-4 Q, 2019

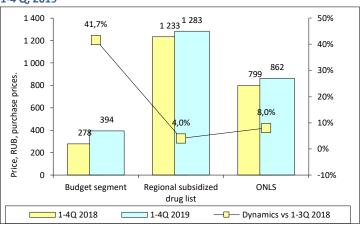


Figure 6. Dynamics of weighted average purchase prices for domestic drugs, 1-4 Q 2018 - 1-4 Q, 2019

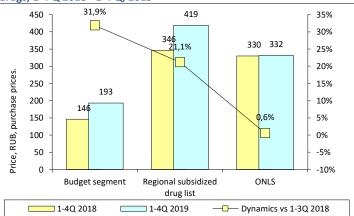
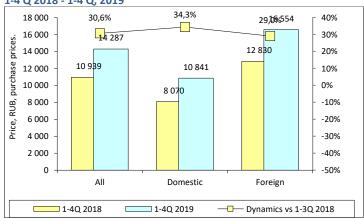


Figure 7 Dynamics of weighted average purchase prices in VZN segment, 1-4 Q 2018 - 1-4 Q, 2019

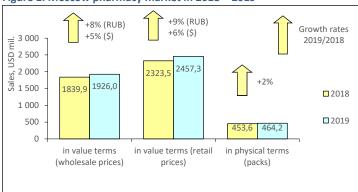


### **MOSCOW CITY PHARMACY MARKET: RESULTS 2019**

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 City Statistics Committee, it's estimated that the average monthly accrued wage in Moscow amounted to in December 2019 - RUB 88656.5. (USD 1408.59), in January-December – RUB 90247.6. (USD 1394.00), which was 91% higher than the average wage in Russia in 2019 (RUB 47468)

According to the results of the Retail Audit of Over-the-Counter Drugs (OTC) in Russian Federation™, at the end of 2019 the sales of OTC drugs in physical terms in pharmacies of Moscow saw a 2% increase to 464.218 mil. packs. In value terms, the market showed positive growth rates both in terms of roubles (+8%) and in terms of dollars (+5%) and reached RUB 124.535 bil. (USD 1.926 mil.) at wholesale prices (Fig. 1). The region market share accounted for 15.6% of the Russian pharmacy retail sales. An average retail cost of a pack increased as compared to the previous year: USD 5.29 vs. USD 5.12. At the end of 2019, the average amount spent by the Muscovites for OTC drugs in pharmacies amounted to USD 194.79.

Figure 1. Moscow pharmacy market in 2018 - 2019



According to the results for 2019, the top ten manufacturers rating in the retail market of Moscow showed high stability: it remained unchanged in composition, and most of the top ten ATC groups held their own in the ranking (Table 1). BAYER (+6%), SANOFI (-4%), TEVA (+5%), SERVIER and ABBOTT (+3% each) held their previous five ranks despite lagging growth and decrease of the market share. The more dynamic GLAXOSMITHKLINE (+18%), SANDOZ and BERLIN-CHEMIE/MENARINI (+20% each) held their previous three ranks. And only manufacturers rounding out the top ten swapped their ranks: JOHNSON & JOHNSON (+16%) moved up to rank nine, displacing PFIZER (+6%) from that rank to rank ten. In total, top ten manufacturers accumulated 36.3% of the market, whereas in the year-earlier period they accounted for 36.4%.

Table 1. The top ten drug manufacturers by pharmacy sales

Rank in the top ten			Share in total	
in the top ten		Manufacturer*	pharmacy sales, 9	
2019	2018		2019	2018
1	1	BAYER	6.0	6.1
2	2	SANOFI	4.3	4.8
3	3	TEVA	3.6	3.7
4	4	SERVIER	3.5	3.7
5	5	ABBOTT	3.4	3.6
6	6	GLAXOSMITHKLINE	3.4	3.2
7	-	SANDOZ	3.4	3.1
8	8	BERLIN-CHEMIE/MENARINI	3.1	2.8
9	10	JOHNSON & JOHNSON	2.9	2.7
10	9	PFIZER	2.7	2.8
Total	•		36.3	36.4

<sup>\*</sup>AIPM members are in bold

XARELTO (+17%) held and reinforced its dominant position in the top ten trade names ranking in the top ten brands ranking (Table 2). 2). DETRALEX (+4%) held its previous rank two. In addition to the leader, another five brands from the top ten ranking showed outperformance in sales. NU-ROFEN (+28%) and CIALIS (+25%) moved up to ranks three and four, and the newcomers LINEX, KREON (+18% each) and VOLTAREN (+29%) rounded out the top ten ranking. The brands CONCOR (-0.5%) and HEP-TRAL (+1%) also moved up to the higher ranks six and seven. And only MIRAMISTIN (+6%) lost one rank, being displaced by the more dynamic brands. In total, the top-ten brands ranking accumulated 8.2%, in the year-earlier period they accounted for 7.8%.

Table 2. The top ten brands by pharmacy sales

	ink top ten	Brand	Share in total pharm sales, %	
2019	2018		2019	2018
1	1	XARELTO	1.8	1.6
2	2	DETRALEX	1.0	1.0
3	6	NUROFEN	0.9	0.7
4	5	CIALIS	0.9	0.8

Rank in the top ten		Brand		al pharmacy s, %
2019	2018		2019	2018
5	4	MIRAMISTIN	0.8	0.8
6	7	CONCOR	0.7	0.7
7	9	HEPTRAL	0.6	0.6
8	15	LINEX	0.6	0.5
9	16	KREON	0.6	0.5
10	19	VOLTAREN	0.6	0.5
Total			8.2	7.8

Just as the corresponding trade name, INN RIVAROXABAN (+ +17%) held and strengthened its leading rank in the top -10 INN and grouping names (Table 3). XYLOMETAZOLINE (+15%), PANCREATIN (+14%) and MIRA-MISTIN (+8%) placed at ranks two, six and nine, respectively, also held their previous ranks. Four ATC groups of the top 10 managed to rise in the ranks. DIOSMIN\*HESPERIDIN (+9%), and INN HYALURONIC ACID (+21%) and IBU-PROFEN (+16%) moved up to ranks three through five respectively. In addition, the most dynamic among the top ten ATC groups TADALAFIL (+27%) moved up from rank ten to eight. At the same time, ROSUVASTATIN moved down to rank seven from three, reducing its sales by 18%. The cumulative share of the top 10 under review increased by 0.3 p.p. to 11.7%.

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

Ra	nk	INNs/Grouping Names	Share in total phar- macy sales, %	
2019	2018		2019	2018
1	1	RIVAROXABAN	1.8	1.6
2	2	XYLOMETAZOLINE	1.7	1.6
3	4	DIOSMIN*HESPERIDIN	1.3	1.3
4	5	HYALURONIC ACID	1.2	1.1
5	7	IBUPROFEN	1.1	1.0
6	6	PANCREATIN	1.1	1.0
7	3	ROSUVASTATIN	1.0	1.4
8	10	TADALAFIL	0.9	0.8
9	9	MIRAMISTIN	0.8	0.8
10	8	BISOPROLOL	0.8	0.9
Total			11.7	11.4

C09 Agents acting on the rennin-angiotensin system (+19%) became the bestselling and dynamic group in the regional market, moving up to rank one from two (Table 4). At the same time, B01 Anticoagulants (+4%) moved down to rank two. The same shift took place in the bottom part of the ranking. The more dynamic C05 Vasoprotectors (+8%) moved up from rank nine to eight, displacing J01 Antibacterials for systemic use (+6%) down to rank nine. The only newcomer G04 Urologicals (+15%) broke into the ranks of the top 10 ranking, coming in at number seven. M01 Anti-inflammatory and antirheumatic products (+13%), R01 Nasal preparations (+15%), A07 Antidiarrheals, intestinal anti-inflammatory/ antiinfective agents (+2%) and G03 Sex hormones (+2%) held their previous ranks three through six, respectively. N06 Psychoanaleptics (+7%) rounded out the top ten. In total, the top ten ATC groups accumulated 36.5% 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

Ra	nk	ATC code	ATC group	Share in t	otal phar- sales, %
2019	2018	code		2019	2018
1	2	C09	AGENTS ACTING ON THE RENIN- ANGIOTENSIN SYSTEM	4.6	4.1
2	1	B01	ANTITHROMBOTIC AGENTS	4.4	4.6
3	3	M01	ANTIINFLAMMATORY AND AN- TIRHEUMATIC PRODUCTS	4.2	4.0
4	4	R01	NASAL PREPARATIONS	4.1	3.9
5	5	A07	ANTIDIARR.,INTEST. ANTIINFL./ ANTIINFECT. AGENTS	3.5	3.6
6	6	G03	SEX HORMONES AND MODULA- TORS OF THE GENITAL SYSTEM	3.4	3.6
7	11	G04	UROLOGICALS	3.2	3.0
8	9	C05	VASOPROTECTIVES	3.1	3.1
9	8	J01	ANTIBACTERIALS FOR SYST USE	3.1	3.1
10	10	N06	PSYCHOANALEPTICS	3.0	3.0
Total			·	36.5	36.1

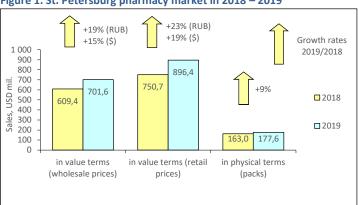
Conclusion. At year-end 2019, the pharmacy market of Moscow reached RUB 158.876 bil. (USD 2.457 bil.), which was more than in 2018: by 9% in terms of robles and 6% in terms of dollars. In pack terms, the market increased by 2% and amounted to 464.218 mil. packs. According to the results for 2019, the average cost of an FPP pack in the city pharmacies was USD 5.29 — which was more than in 2018 (USE 5.12), and higher than the national average across the country (USD 3.42). The average expenses of the regional residents for purchase of OTC drugs in pharmacies were also higher than the national average (USD 194.79 vs. USD 107.25).

### SAINT PETERSBURG PHARMACY MARKET: 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 RUB 83,582 in December 2019 (USD 1327.96), and RUB 63,157 in January-December (USD 975.55), which was 33% higher than the national average in January-September (RUB 47468).

According to the results of the Retail Audit of FPP (Finished Pharmaceutical Products) in Russian Federation™, at year-end 2019 the sales of drugs in natural terms in St. Petersburg pharmacies saw a 9% increase to 177.612 mil. packs. In value terms, the market saw a 19% increase in terms of roubles and 15% in terms of dollars. At the same time, the volume of the market achieved RUB 45.395 bil. (USD 701.568 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 increased as compared to 2018 (USD 4.61) and reached USD 5.05 at retail prices. In 2019, the average amount spent by residents of the city for drugs in the pharmacies amounted to USD 166.50.

Figure 1. St. Petersburg pharmacy market in 2018 - 2019



The manufacturers BAYER (+16%), SANOFI (+10%), SERVIER (+15%) and TEVA (+16%) held their leading positions in the top ten manufacturers ranking on the retail market of Saint Petersburg based on the results for 2019 despite lagging growth and decrease of the market share (Table 1). As before, OTCPHARM (+30%) held its previous rank ten in the top ten. Two of the other top ten manufacturers moved up to the higher ranks in the ranking. The manufacturers ABBOTT (+20%) and KRKA (+38%) moved down to ranks five and seven, respectively. At the same time, they moved the manufacturers SANDOZ and GLAXOSMITHKLINE (+19% each), and PFIZER (+17%) down one rank. The total share of the top 10 drug manufacturers reduced from 38.2% to 37.9%.

Table 1. The top ten drug manufacturers by pharmacy sales

Rank Share in total phar-						
in the top ten		Manufacturer*	macy sales, %			
2019	2018		2019	2018		
1	1	BAYER	5.7	6.0		
2	2	SANOFI	4.5	4.9		
3	3	SERVIER	4.2	4.4		
4	4	TEVA	3.7	4.0		
5	6	ABBOTT	3.7	3.7		
6	5	SANDOZ	3.7	3.7		
7	9	KRKA	3.2	2.8		
8	7	GLAXOSMITHKLINE	3.2	3.2		
9	8	PFIZER	3.0	3.1		
10	10	OTCPHARM	2.9	2.6		
Total			37.9	38.2		

<sup>\*</sup>AIPM members are in bold

The top three leaders in the top ten brands ranking did not change in the ranking: XARELTO (+37%), DETRALEX (+15%) and ELIQUIS (+42%) continued to hold the first ranks of the top ten ranking (Table 2). Also, HEPTRAL (+23%), NOLIPREL (+22%) and LINEX (+12%) held their previous ranks six through eight, respectively. NUROFEN moved up to rank four from five, showing a 53% growth in sales. At the same time, despite outperformance CONCOR (+22%) moved down one rank. The newcomers LOZAP (+17%) and KREON (+29%) broke into the ranks of the top ten, coming in at numbers nine and ten. The total share of the top 10 increased from 7.3% to 7.8%.

Table 2. The top ten brands by pharmacy sales

Rank in the top ten		Brand		al pharmacy s, %
2019	2018		2019	2018
1	1	XARELTO	1.4	1.3
2	2	DETRALEX	1.0	1.1
3	3	ELIQUIS	1.0	0.8
4	5	NUROFEN	0.8	0.6

Rank in the top ten		Brand		al pharmacy s, %
2019	2018		2019	2018
5	4	CONCOR	0.8	0.7
6	6	HEPTRAL	0.6	0.6
7	7	NOLIPREL	0.6	0.6
8	8	LINEX	0.6	0.6
9	11	LOZAP	0.5	0.5
10	15	KREON	0.5	0.5
Total			7.8	7.3

In contrast to the above ranking, the top ten INNs and grouping names ranking didn't change in composition (Table 3). However, its leader changed: RIVAROXABAN (+37%) moved up to rank one from three, displacing DIOSMIN \* HESPERIDIN and XYLOMETAZOLINE (+21 each) down one rank. In addition to the leader, PANCREATIN (+29%), IBUPROFEN (+45%) and APIXABAN (+42%) placed at ranks four, six and seven, moved up to the higher ranks. At the same time, ROSUVASTATIN (+26%) moved down one rank, while ATORVASTATIN (+19%) and BISOPROLOL (+25%) lost two rating positions each. NIMESULIDE (+28%) maintained the last rank of the top ten rating. As a result, the top ten INN and grouping names accounted for 10.8%, while a year earlier it was 10.0%.

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

Rank		INNs/Grouping Names	Share in total phar- macy sales, %	
2019	2018	1	2019	2018
1	3	RIVAROXABAN	1.4	1.3
2	1	DIOSMIN*HESPERIDIN	1.4	1.3
3	2	XYLOMETAZOLINE	1.3	1.3
4	5	PANCREATIN	1.0	0.9
5	4	ROSUVASTATIN	1.0	1.0
6	8	IBUPROFEN	1.0	0.8
7	9	APIXABAN	1.0	0.8
8	6	ATORVASTATIN	0.9	0.9
9	7	BISOPROLOL	0.9	0.9
10	10	NIMESULIDE	0.8	0.8
Total			10.8	10.0

The only change took place in the top 10 ATC groups in the regional market: the newcomer S01 Ophthalmologicals (+ 15%) broke into the top ten ranking (Table 4). Nine ATC groups of the top ten held their own in the ranking. On top of that, six ATC groups reinforced their positions due to outperformance of the sales: C09 Agents acting on the renin-angiotensin system (+33%), B01 Anticoagulants (+24%), M01 Anti-inflammatory and antirheumatic products (+30%), G03 Sex hormones (+23%) and R01 Nasal preparations (+21%) and C05 Vasoprotectors (+20%). The ATC groups A07 Antidiarrheals, intestinal anti-inflammatory/ antiinfective agents (+12%), J01 Antibacterials for systemic use (+13%) and R05 Cough and cold preparations (+16%) held their own in the top ten ATC groups ranking. The total share of the top ten ATC groups increased from 36.6% to 37.5%.

Table 4. The top ten ATC Groups by pharmacy sales

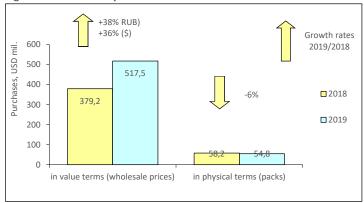
Table 4. The top ten ATC Groups by pharmacy sales					
Ra	Rank		ATC group	Share in total phar- macy sales, %	
2019	2018	code		2019	2018
1	1	C09	AGENTS ACTING ON THE RENIN- ANGIOTENSIN SYSTEM	5.7	5.1
2	2	B01	ANTITHROMBOTIC AGENTS	4.6	4.5
3	3	M01	ANTIINFLAMMATORY AND AN- TIRHEUMATIC PRODUCTS	4.3	4.0
4	4	G03	SEX HORMONES AND MODULA- TORS OF THE GENITAL SYSTEM	4.0	3.9
5	5	R01	NASAL PREPARATIONS	3.6	3.5
6	6	C05	VASOPROTECTIVES	3.4	3.3
7	7	A07	ANTIDIARR.,INTEST. ANTI- INFL./ANTIINFECT. AGENTS	3.1	3.3
8	8	J01	ANTIBACTERIALS FOR SYST USE	3.0	3.2
9	9	R05	COUGH AND COLD PREPARA- TIONS	3.0	3.0
10	12	S01	OPHTHALMOLOGICALS	2.8	2.8
Total				37.5	36.6

**Conclusion.** On the basis of the results for 2019, the retail pharmacy market of St. Petersburg brought in RUB 57.989 bil. (USD 896.409 mil.) in retail prices. It increased by 23% in terms of roubles, and 19% in terms of dollars as compared to the previous year. In pack terms, the market expanded by 9% and amounted to 177.612 mil. packs. At the end of 2019, the average cost of an FPP pack in the city pharmacies was USD 5.05, which was more than in the year-earlier period (USD 4.61), and more than the national average (USD 3.42). The average medicine expenses of St. Petersburg residents in the pharmacies were higher than the national average expenses in Russia (USD 166.50 vs. USD 107.25).

### **MOSCOW CITY HOSPITAL MARKET: RESULTS 2019**

According to the results of the Budget Audit of Finished Pharma Products (FFP) in the Russian Federation, at year-end 2019 the Moscow hospital market in physical terms reduced by 6% compared to 2018 and amounted to 54.830 mil. packs. In money terms, the market showed positive growth rates both in terms of roubles (+38%) and in terms of dollars (+36%) and reached RUB 33.303 bil. (USD 517.534 mil.) in wholesale prices. At year-end 2019, the average cost of an FPP pack in the hospital sector of Moscow was USD 9.44, whereas in the year-earlier period its cost was USD 6.52.

Figure 1. Moscow hospital market in 2018 - 2019



At the end of 2019, the manufacturer SANOFI became the leader of the hospital market in Moscow due to a 3.6-fold increase in procurement volumes (Table 1). Apart from SANOFI, another five drug manufacturers of the top ten showed high growth rates. MSD (2-fold growth in purchases) held its previous rank two, BIOCAD (2.3-fold growth) moved up to rank four and the newcomers ROCHE (4.1-fold growth) and BRISTOL MYERS (7.7-fold growth) moved up to ranks five and seven of the top ten ranking, respectively. The market of the manufacturer JOHNSON & JOHNSON (+47%) developed at a fast pace, however it lost one rank and moved down to rank nine. Due to lagging dynamics and downward trend, PFIZER (+11%), ABBVIE (-12%) and MICROGEN (+8%) also moved down to the lower ranks. The manufacturer BAYER (+25%) held its previous rank six. In total, based on the results for the year, the top ten ATC groups accumulated 44.5% of the market, while they accounted for 33.6% 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, %	
2019	2018		2019	2018
1	7	SANOFI	9.0	3.5
2	2	MSD	7.3	5.0
3	1	PFIZER	4.8	6.0
4	9	BIOCAD RF	4.4	2.7
5	19	ROCHE	3.9	1.3
6	6	BAYER	3.2	3.5
7	38	BRISTOL MYERS SQU	3.1	0.6
8	3	ABBVIE	3.0	4.7
9	8	JOHNSON & JOHNSON	2.9	2.8
10	5	MICROGEN	2.9	3.7
Total			44.5	33.6

<sup>\*</sup>AIPM members are in bold

In the top 10 leading brands, only PREVENAR 13 (+ 49%) held its previous rank two (Table 2). Thanks to 7.8- fold growth in purchases, another PENTAXIM vaccine moved up to rank one from eight. Six newcomers broke into the top ten brands ranking, showing the multiple growth in purchases. OPDIVO (9-fold growth), KEYTRUDA (11-fold growth), HERTICAD (5.6-fold growth), PNEUMOVAX-23 (2.3-fold growth), MENACTRA (3-fold growth) and POLIMILEX (3.8-fold growth) moved up to ranks three, five through seven and the last two ranks. Not so dynamic SOVIGRIPP (+ 6%) and SYNAGIS (+ 25%) moved down from rank one to four and from four to eight, respectively. The total share of the top 10 increased by more than 11 p.p. and reached 22.1%.

Table 2. The top 10 brands by hospital purchases

Rank in the top ten		Brand	Share in total hospi- tal purchases, %	
2019	2018		2019	2018
1	8	PENTAXIM	6.1	1.1
2	2	PREVENAR 13	2.7	2.5
3	36	OPDIVO	2.3	0.3
4	1	SOVIGRIPP	2.2	2.9
5	40	KEYTRUDA	2.1	0.3
6	35	HERTICAD	1.5	0.4
7	13	PNEUMOVAX-23	1.5	0.9
8	4	SYNAGIS	1.3	1.5
9	22	MENACTRA	1.2	0.6
10	31	POLIMILEX	1.2	0.4
Total			22.1	10.7

The newcomer VACCINE, ACEL.PERT.DIP.TET.POLIO & HIB became the leader of the top ten INN and grouping names due to a 7.8-fold increase in purchases (Table 3). Another three newcomers NIVOLUMAB (9-fold growth in purchases), PEMBROLIZUMAB (11.2-fold growth) and TRASTUZUMAB (5.2-fold growth) moved up to ranks four through six respectively. At the same time, VACCINE, INFLUENZA (+35%), IMMUNO-GLOBULIN BASE (+4%), ALBUMIN (+12%) and PALIVIZUMAB (+25%), in contrast, moved down to the lower ranks of the top ten ranking. Two INNs, VACCINE, PNEUMOCOCCAL (+71%) and AFLIBERCEPT (+47%) as before held their previous ranks two and nine. The total share of the analysed top ten also increased to 25.8% from 15.8%.

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

Rank		INNs/Grouping Names	Share in total hospi- tal purchases, %	
2019	2018		2019	2018
1	13	VACCINE, ACEL.PERT.DIP.TET. POLIO & HIB	6.1	1.1
2	2	VACCINE, PNEUMOCOCCAL	4.2	3.3
3	1	VACCINE, INFLUENZA	3.8	3.9
4	37	NIVOLUMAB	2.3	0.3
5	40	PEMBROLIZUMAB	2.1	0.3
6	33	TRASTUZUMAB	1.7	0.5
7	3	IMMUNOGLOBULIN BASE	1.5	2.0
8	5	ALBUMIN	1.4	1.7
9	9	AFLIBERCEPT	1.3	1.3
10	7	PALIVIZUMAB	1.3	1.5
Total			25.8	15.8

Numerous shifts took place in the top-10 ATC Groups Ranking (table 4). Only one ATC group B05 Blood substitutes and perfusion solutions (+5%) held its previous rank four. The most dynamic group L01 Antineoplastic drugs, which purchases increased 3 times, managed to take on leadership in the top ten ranking based on the results for the year. At the same time, J07 Vaccines (2.2-fold growth in purchases) and J01 Antibacterials for systemic use (+2%) moved down one rank. In addition to the leader, the groups V08 Contrast media (+5%) and J06 Immune sera and immunoglobulins (+19%) moved up to the higher ranks five and seven, and the newcomers L04 Immunosuppressants (+38%) and S01 Ophthalmologicals (+36%) moved up to ranks eight and ten, respectively. In contrast, two ATC groups with downward trend J05 Antivirals for systemic use (-16%) and B01 Anticoagulants (-1%) moved down to the lower ranks six and nine, respectively. The total share of the top ten ranking increased by 8.5 p.p. to 74.9%.

Table 4. The top ten ATC groups by hospital purchases

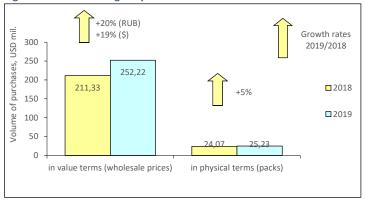
Rank		ATC code	ATC group	Share in total hospital purchases, %	
2019	2018	coue		2019	2018
1	3	L01	ANTINEOPLASTIC AGENTS	21.1	9.8
2	1	J07	VACCINES	19.7	12.4
3	2	J01	ANTIBACTERIALS FOR SYST USE	7.6	10.3
4	4	B05	PLASMA SUBSTITUTES AND PER- FUSION SOLUTIONS	6.0	7.9
5	6	V08	CONTRAST MEDIA	3.9	5.1
6	5	J05	ANTIVIRALS FOR SYSTEMIC USE	3.9	6.3
7	8	J06	IMMUNE SERA & IMMUNO- GLOBULIN	3.6	4.1
8	11	L04	IMMUNOSUPPRESSANTS	3.2	3.2
9	7	B01	ANTITHROMBOTIC AGENTS	3.1	4.3
10	12	S01	OPHTHALMOLOGICALS	2.8	2.8
Total 74.9				74.9	66.4

Conclusion. Based on the results for 2019, the Moscow hospital market grew by 38% in rouble terms and by 36% in dollar terms and brought in RUB 33.303 bil. (USD 517.534 mil.). In pack terms, the market also showed negative growth rates (-6%) and achieved 54.830 mil. packs. At year-end 2019, the average cost of an FPP pack in the Moscow hospital market has been racing up compared to the previous year (USD 9.44 vs. USD 6.52).

### SAINT PETERSBURG HOSPITAL MARKET: RESULTS 2019

According to the results of the Budget Audit of FPPs in the Russian Federation (without DLO and regional benefit), in 2019 the St. Petersburg hospital market expanded in physical terms by 5% and amounted to 25.229 mil. packs. In money terms, the hospital purchases movement was positive both in rouble (+20%) and in dollar (+19%) terms, and the volume amounted to RUB 16.230 bil. (USD 252.215 mil.) at wholesale prices. In 2019, the average cost of FPP pack in the city hospitals was USD 10, whereas in the year-earlier period its cost was USD 8.78.

Figure 1. St. Petersburg hospital market in 2018 - 2019



At year-end 2019, the top manufacturers changed in the hospital market of St. Petersburg (Table 1). MSD (+73%) and PFIZER (+23%) moved up one rank, coming in at numbers one and two, and ROCHE, which purchases increased 3.7 times moved up to rank three from 16. Another newcomer BRISTOL MYERS (3.1-fold growth) broke into the top-10 drug manufacturing ranking, moving up to rank six. Another three manufacturers developed their markets by outstripping rates. NOVARTIS (+24%) and BAYER (+14%) held their previous ranks four and nine, and BIOCAD (+36%) moved up to rank five. The manufacturers JOHNSON & JOHNSON (-40%), PHARMASYNTEZ (-15%) and ABBVIE (-30%), in contrast, showed downward trend and moved down to the lower ranks seven, eight and the last one, respectively. The total share of the top 10 drug manufacturers expanded by 2.4 p.p. to 46.2%.

Table 1. The top 10 drug manufacturers by hospital purchases

Table 1. The top 10 drug manufacturers by hospital purchases					
Rank in the top ten		Manufacturer*	Share in total hospi- tal purchases, %		
2019	2018		2019	2018	
1	2	MSD	7.5	5.2	
2	3	PFIZER	5.3	5.2	
3	16	ROCHE	5.3	1.7	
4	4	NOVARTIS	5.2	5.0	
5	6	BIOCAD RF	5.1	4.5	
6	11	BRISTOL MYERS SQU	4.9	1.8	
7	1	JOHNSON & JOHNSON	4.1	8.2	
8	7	PHARMASYNTEZ	3.0	4.2	
9	9	BAYER	3.0	3.1	
10	5	ABBVIE	2.8	4.8	
Total	•		46.2	43.8	

<sup>\*</sup>AIPM members are in bold

Four newcomers broke into the ranks of the top ten brands ranking (Table 2). On top of that, OPDIVO (4.5-fold growth in purchases) and KEYTRUDA (8.2-fold growth) moved up to the higher ranks. Two more "newcomers", PERJETA (4.6-fold growth in purchases) and AVEGRA (2.1-fold growth) moved up to ranks seven and ten. In addition, HERTICAD (+66%) and TIVICAY (+40%), which moved up to ranks five and nine, respectively, also rose in the ranks. At the same time, ISENTRESS (-6%) and SOVIGRIPP (+11%) moved down one rank. The brands NATRIUM CHLORIDUM (+10%) and PREVENAR (+25%) held their previous ranks four and six. The total share of the top ten ranking expanded from 11.4% to 18.4%.

Table 2. The top 10 brands by hospital purchases

Rank in the top ten		Brand		Share in total hospital pur- chases, %	
2019	2018		2019	2018	
1	13	OPDIVO	3.7	1.0	
2	25	KEYTRUDA	3.3	0.5	
3	2	ISENTRESS	1.6	2.0	
4	4	NATRIUM CHLORIDUM	1.6	1.7	
5	8	HERTICAD	1.6	1.1	
6	6	PREVENAR 13	1.5	1.4	
7	35	PERJETA	1.4	0.4	
8	7	SOVIGRIPP	1.3	1.4	
9	10	TIVICAY	1.3	1.1	
10	18	AVEGRA BIOCAD	1.2	0.7	
Total			18.4	11.4	

Following the corresponding brand, NIVOLUMAB (4.5-fold growth in purchases) moved up to rank one from fourteen in the top ten INN and grouping names ranking (Table 3). Another three newcomers PEMBROLIZUMAB

(8.2-fold growth in purchases), PERTUZUMAB (6.4-fold growth) and BEVACIZUMAB (2.1-fold growth) moved up to ranks two, eight and ten. INNS VACCINE, PNEUMOCOCCAL (+24%), TRASTUZUMAB (+49%) and DOLUTEGRAVIR (+40%) moved up to the higher ranks, coming in at numbers four, five and nine. INN VACCINE, INFLUENZA (+60%) held and reinforced its previous rank three, while SODIUM (+10%) and RALTEGRAVIR (-6%), which reduced its purchases, moved down to ranks six and seven. The total share accumulated by the top-ten INNs and grouping names increased from 12.3% to 20.0%.

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

Rank		INNs/Grouping Names	Share in total hospi- tal purchases, %	
2019	2018		2019	2018
1	14	NIVOLUMAB	3.7	1.0
2	30	PEMBROLIZUMAB	3.3	0.5
3	3	VACCINE, INFLUENZA	2.6	2.0
4	7	VACCINE, PNEUMOCOCCAL	1.7	1.7
5	8	TRASTUZUMAB	1.6	1.3
6	4	SODIUM	1.6	1.7
7	2	RALTEGRAVIR	1.6	2.0
8	39	PERTUZUMAB	1.4	0.4
9	10	DOLUTEGRAVIR	1.3	1.1
10	21	BEVACIZUMAB	1.3	0.7
Total			20.0	12.3

In contrast to the above rankings, the leaders of the top ten ATC groups ranking did not change: LO1 Antineoplastic agents (+71%) and JO5 Antivirals for systemic use (-19%) as before held their previous top two ranks (Table 4). Another four ATC groups held their own in the top ten ranking. BO5 Blood substitutes and perfusion solutions (+20%), LO4 Immunosuppressants (+19%), BO1 Anticoagulants (+5%) and NO1 Anaesthetics (+7%) retained ranks five and three bottom lines. Three manufacturers from the top 10 rose in the ranks. JO1 Antibacterials for systemic use (+23%) and VO5 Contrast media (-2%) moved up one rank, coming in at number three and six. The only newcomer LO2 Endocrine therapy (+97%) broke into the top-10 ranking, coming in at number seven. And only JO7 Vaccines (+15%) lost one rank, moving down to rank four, despite the outstripping growth rates and expansion of the market share. In total, the top ten ATC groups accumulated 76.9% of the regional market, whereas in the year-earlier period they accounted for 73.3%.

Table 4. The top ten ATC groups by hospital purchases

Rank		ATC code	ATC group	Share in total hospital purchases, %	
2019	2018	code		2019	2018
1	1	L01	ANTINEOPLASTIC AGENTS	38.5	27.0
2	2	J05	ANTIVIRALS FOR SYSTEMIC USE	10.3	15.2
3	4	J01	ANTIBACTERIALS FOR SYST USE	6.5	6.3
4	3	J07	VACCINES	6.4	6.6
5	5	B05	PLASMA SUBSTITUTES AND PERFUSION SOLUTIONS	4.7	4.7
6	7	V08	CONTRAST MEDIA	3.4	4.1
7	12	L02	ENDOCRINE THERAPY	3.0	1.8
8	8	L04	IMMUNOSUPPRESSANTS	2.7	2.7
9	9	B01	ANTITHROMBOTIC AGENTS	2.2	2.5
10	10	N01	ANESTHETICS	2.1	2.4
Total				79.6	73.3

**Conclusion**. At the end of 2019, the St. Petersburg hospital market grew by 20% in rouble terms and by 19% in dollar terms and brought in RUB 16.230 bil. (USD 252.215 mil). In pack terms, the market also showed positive growth rates (+5%) and amounted to 25.229 mil. packs. At year-end 2019, the average cost of an FPP pack on the city hospital sector was higher than that in the year-earlier period (USD 10.0 vs. USD 8.78).