## 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 as 100.8% in December 2018 compared to the previous month, and 104.3% compared to December 2017. In December 2018, Industrial Producer Price Index (for goods intended for sale on the domestic market) was 96.7%, whereas in the month-earlier period it had amounted to 100.7%. The index accounted for 111.7% against December of the 2017.

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



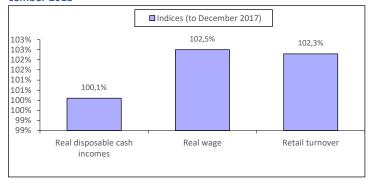
## Living standard

According to preliminary Federal State Statistics Service's data, gross monthly average salary per worker reached RUB 43400 at year-end 2018, and RUB 55,150 (USD 819.47) in December, which accounted for 129.5% compared to the previous month and 106.9% compared to December 2017. The real wage accounted for 102.5% in December 2018 compared to December 2017 and 106.8% at year-end 2018. In December 2018, the real value of disposable cash incomes accounted for 100.1% compared to December 2017 (Fig. 2).

## Retail turnover

In December 2018, the retail turnover was equal to RUB 3306.4 bil., which in comparable prices accounted for 102.3% compared to the same period in 2017 (at comparable prices), at year-end 2018 - - RUB 31,548.0 bil. or 102.6% (Fig. 2).

Figure 2. Real values of cash incomes, wages and retail turnover in December 2018



## **Industrial Production**

According to Federal State Statistics Service's data, in December 2018 Industrial Production Index accounted for 102.0% compared to the same period a year ago, 102.9% in 2018. According to Federal State Statistics Service's data, Industrial Production Index of drugs and medical products accounted for 109.3% in December 2018 compared to the relevant period of the previous year, 98.0% compared to November 2018, and 108.2% 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 December 2018.

Table 1. Top ten Russian chemical and pharmaceutical manufacturers by sales volume in December 2018

Rank	Manufacturer	RUB mil.
1	Otcpharm	1986.5
2	Biocad	1670.2
3	Valenta	1140.1
4	Pharmstandart	1121.8
5	Veropharm	1112.8
6	Stada	1108.9
7	Sotex	926.3
8	Akrikhin Pharma	828.0
9	Servier	711.1
10	Materia Medica	671.9

Source - Remedium according to IQVIA data

Table 2 provides pharmacy sales data from 10 regions of the Russian Federation. Sales (in terms of roubles) decreased in all regions in November 2018, compared to the previous month. The deepest slump was observed in Tyumen (-8%), the lowest one in Moscow (-1%). The growth of sales was observed in three regions, the highest one was in Tatarstan (+3%).

Table 2. Pharmacy sales in the regions, 2018

	Pharmacy sales, \$ mil. (wholesale prices)			Growth gain, % (roubles)		
Region	Septem- ber 2018		Novem- ber 2018	Septem- ber/ August 18.	October/ September 18	Novem- ber/ October 18
Moscow	151.1	165.4	162.7	18%	7%	-1%
St. Petersburg	54.4	57.3	57.7	27%	3%	1%
Krasnodar Krai	34.7	31.8	29.7	-17%	-11%	-6%
Krasnoyarsk Krai	24.4	25.3	24.7	11%	1%	-2%
Tatarstan	18.8	17.8	18.3	29%	-8%	3%
Rostov Region	18.8	20.4	19.8	-3%	6%	-3%
Novosibirsk Re- gion	17.6	20.3	19.3	9%	12%	-5%
Voronezh Re- gion	13.0	13.4	13.1	5%	0.3%	-2%
Perm	7.2	6.9	7.0	1%	-7%	2%
Tyumen	6.2	6.2	5.7	14%	-2%	-8%

## **Advertising**

The largest advertisers and pharmaceutical brand names highly publicized in mass media (TV, radio, press, outdoor advertising) are shown in Tables 3.8.4

Table 3. Top five advertisers in mass media in December 2018

Rank	Company*	Quantity of broad- casts
1	Teva	13,438
2	GSK Consumer Healthcare	11,702
3	Sanofi	9,045
4	Bayer	8,236
5	Evalar	5,925

Source - Remedium according to Mediascope's data

Table 4. Top five trade names in mass media in December, 2018

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Rank	Brand*	Quantity of broad- casts
1	Evalar	5,925
2	Strepsils	3,003
3	Polyoxidoni	2,823
4	Voltaren	2,541
5	Supradin	2,409

Source - Remedium according to Mediascope's data

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

# MACROECONOMIC INDICES OF THE REPUBLIC OF BELARUS

According to data of the Committee for Statistics of the National Statistical Committee of Belarus, in December 2018 the Consumer Price Index was estimated at 100.8%, and 105.6% in 2018. At year-end 2018, the Consumer Price Index was 104.9% as compared to 2017.

In December 2018, Industrial Producer Price Index was 100.4% compared to November 2018, and 106.4% compared to December 2017. In 2018, Industrial Producer Price Index was 106.8% as compared to 2017.

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



## Living standard

According to the preliminary Belstat's data, in December 2018 the average monthly nominal accrued wage of the workers of the Republic of Belarus was BYR 1115.3 (USD 522.66¹), - BYR 958.1 (USD 470.19) in 2018. In December 2018, the real wage accounted for 105.7% as compared to the same period of 2017, 111.6% in January-December 2018 (Fig. 2). According to Belstat's data, in January-November 2017 the real disposable cash income accounted for 108.4% as against January-November 2017.

## **Retail turnover**

In December 2018, the retail turnover was estimated at RUB 4386.9 mil., which accounted for 114.5% compared to the previous period and 105.0% compared to the same period of the last year. Based on the results for 2018, it amounted to RUB 44.7 bil. or 108.4% at comparable prices to 2017 level (Fig. 2).

Figure 2. Real monthly wage and retail turnover in 2018



## **Industrial Production**

According to Belstat's data, in 2018 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 110.1 bil, at current prices or 105.7% at comparable prices as against the first half of 2017.

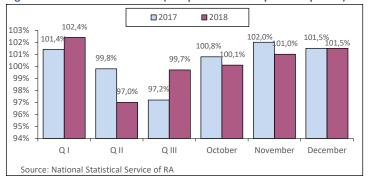
According to Belstat's data, in 2018 the pharmaceutical production output of essential pharmaceutical products and pharmaceutical preparations was estimated at BYR 1240.5 mil., which accounted for 108.9% to 2017 indicators at comparable prices.

## MACROECONOMIC INDICES OF THE REPUBLIC OF ARMENIA

According to data of National Service of the Republic of Armenia, in December 2018 the Consumer Price Index was estimated at 101.5%, 101.8% compared to December 2017. The Consumer Price Index accounted for 102.5% in January- December 2018 compared to the previous period.

The Industrial Producer Price Index was 100.5% in December 2018 compared to the previous month, and 98.8% compared to December 2017. In 2018, index accounted for 101.6% as compared to 2017.

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



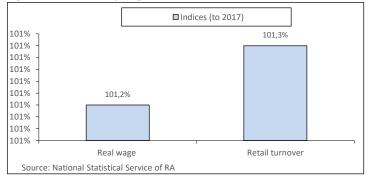
## **Living standard**

According to preliminary estimates of the National Statistical Service of RA, in December 2018 the average monthly nominal wage<sup>2</sup> of the workers of the Republic of Armenia was Dram 208,868 (USD 430.95) which accounted for 123.4% compared to the previous month and 102% compared to the same period of 2017. In January - December of 2018, the gross monthly average salary per worker was AMD 172357 (USD 356.85) or 103.8% compared to the same period of 2017. The real wage (according to Eurasian Economic Commission) accounted for 101.2% in January-December of 2018 as compared with January-December of 2017 (Fig. 2).

## **Retail turnover**

The retail turnover accounted for AMD 189201.9 mil. in December 2018, and AMD 1410774.4 mil. from the beginning of the year, which accounted for 101.0% and 101.3% as compared to the same period of the last year, respectively (Fig. 2).

Figure 2. Real monthly wage and retail turnover in 2018



## **Industrial Production**

According to the preliminary data of Statistics Committee of the Republic of Armenia, in December of 2018 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 174287.1 mil, and AMD 1737685.6 mil. from the beginning of the year at current prices or 108.2% and 108.2% as against the same period of 2017, respectively.

According to Statistics Committee of the Republic of Armenia, the pharmaceutical output was estimated at AMD 955.1 mil. in December 2018, and AMD 9548.2 mil. from the beginning of the year, which accounted for 94.9% and 100.6% as compared to the respective periods 2017.

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.

 $<sup>^1</sup>$ The official arithmetical average exchange rate to calculate the above indices was used from the website of the National Bank of Belarus <a href="https://www.nbrb.by">www.nbrb.by</a>. On July 1, 2016, in the Republic of Belarus the Belarusian rouble was denominated in the ratio of 1:10 000

<sup>&</sup>lt;sup>2</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% as compared to the previous month, and 105.3% compared to December 2017. In January-December 2018, the Index reached 106.0% as compared 2017.

The Industrial Producer Price Index was 93.8% in December 2018, as compared to the previous month, and 112.4% compared to December 2017. In January-December 2018, the prices of manufacturers of industrial products increased by 19.0% as compared to January-December 2017.

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



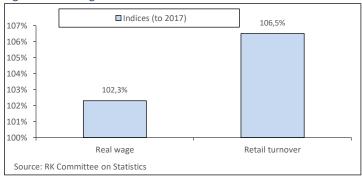
## Living standard

According to the preliminary data of the RK Committee on Statistics , the gross monthly average wage per worker reached KZT 174,642 (USD 522.24³) in December 2018, KZT 161,359 (USD 494.97) in January-December of 2018. The Nominal Wage Index against the respective period of the previous year accounted for 99.3% in December 2018, 107.2% in January-December 2018, the Real Wage Index - 94.3% and 102.3%, respectively. In January-November 2018, the Real Cash Income Index was 104.4% compared to the same period of 2017 (Fig. 2).

#### Retail turnover

Retail trade volume in December 2018 was equal to KZT 1224.4 bil, which accounted for 107.1% against December 2017. In January- December of 2018, it amounted to KZT 10069.7 bil., which is 6.5% more than the level of the same period of 2017 (in comparable prices) (Fig. 2).

Figure 2. Real wage index and retail turnover in 2018



## **Industrial Production**

According to the Committee for Statistics of RK, in December 2018 the industrial output was KZT 2450.5 bil., in January- December of 2018 - KZT 27576.1 bil. As compared to the same period of 2017, the indices accounted for 100.1% and 104.1%, respectively.

According to data of the Committee for Statistics of RK, the essential pharmaceuticals output amounted to KZT 78805 mil. in January- December 2018, it was KZT 8927 mil. in December. In January- December 2018, the Industrial Production Volume Index for Pharmaceuticals was 100.9% against January- December 2017 and 97.8% in December 2018, compared to the respective period of 2017.

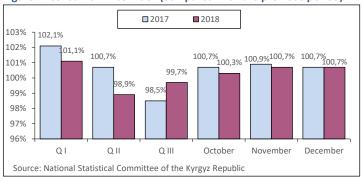
## MACROECONOMIC INDICES OF THE KYRGYZ REPUBLIC

#### Inflation

According to the National Statistical Committee of the Kyrgyz Republic, in December of 2018 the Consumer Price Index was estimated at 100.7%, as against December 2017 and 100.5% compared to December of 2017. In 2018, index accounted for 101.5% as compared to 2017.

In December 2018, the Producer Price Index for industrial production and services was 100.5% as compared to the previous month, and 99.8% compared to December of 2017. In January- December 2018, the producer's prices for industrial products and services nationwide increased by 0.2% compared to the same period of 2017.

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



## Living standard

According to data of the Committee for Statistics of the Kyrgyz Republic, in May 2018 the average monthly nominal wage per worker was KGS 15434 (USD 220.99 $^4$ ), in January-November 2018 - KGS 15747 (USD 229.0), which is 3.5% and 5.9% more than in the same period of 2017 respectively. In January-November of 2018, the real wage accounted for 104.2% as compared to January-November of 2017, in November of 2018 103.0% as compared to November 2017 (Fig. 2).

## **Retail turnover**

In December 2018, the retail turnover (without cars and motorcycles sales) amounted to KGS 52140.7 mil, in January- December 2018 - KGS 286388.7 mil. The Retail Turnover Volume Index accounted for 111.7% and 105.1% to the same period of the previous year (Fig.2).

Figure 2. Real monthly wage and retail turnover in 2018



<sup>\*</sup> Data for January-November 2018

## **Industrial Production**

According to data of the National Committee for Statistics of the Kyrgyz Republic, the industrial output was KGS 29628.9 mil. in December 2018 and KGS 250640.1 mil. in 2018. The Industrial Products Volume Index accounted for 110.0% and 105.4% as compared to the same periods 2017.

According to the National Committee for Statistics of the Kyrgyz Republic, the pharmaceutical output amounted to KGS 19.59 mil. in December 2018, and KGS 297.4 mil. from the start of the year. At the end of December 2018, the Industrial Products Volume Index for Pharmaceuticals was 87.4% compared to the same period of the last year, 53.9% as compared to June 2017, and it was 76.7% in January-December 2018 compared to January-December 2017.

 $<sup>^3</sup>$  The average exchange rate to calculate the above indices was used from the official website of the National Bank of Kazakhstan www.nationalbank.kz

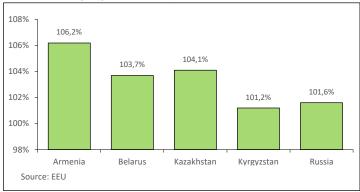
<sup>&</sup>lt;sup>4</sup>The average exchange rate to calculate the above indices was used from the official website of the National Bank of the Kyrgyz Republic http://www.nbkr.kg/

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

#### **GDP**

According to Eurasian Economic Commission's data (EAEC), at the end of January- September 2018 GDP of EAEU member-states amounted to USD 1,385 804,4 mil. and increased by 1.9% as compared to the same period of 2017 in fixed prices. GDP growth was recorded in all countries, the largest - in Armenia (+ 6.2%), high - in Kazakhstan (+4.1%) and Belarus (+ 3.7%). GDP in Kyrgyzstan increased by 1.2%, in Russia - by 1.6% (Fig. 1).

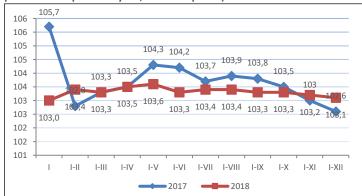
Figure 1. GDP growth in the EAEU member-states (January-September 2018 vs. January-September 2017)



## **Industrial Production**

According to preliminary EAEC data, in January- December 2018 the volume of industrial output of the EAEU member-states amounted to USD 1,245.7 bil. and increased by 3.1% in fixed prices as compared with 2017 (Fig. 2). In individual countries, the Industrial Production Index accounted for: 104.3% in Armenia, 105.7% in Belarus, 104.1% in Kazakhstan, 105.4% in Kyrgyzstan and 102.9% in Russia.

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

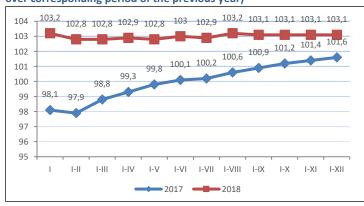


Comment. Data for the period from January 2016 to April 2018 were clarified in connection with the recalculation of industrial production indices of the Russian Federation for the above period.

## Retail turnover

According to the EEC, the retail trade turnover (through all sales channels) of EEU member-states in January- December 2018 amounted to USD 563.8 bil. Compared with the same period of 2017, the volume of retail sales (in comparative prices) increased by 3.1%. In the analysed period, all member-states showed growth in the retail turnover. In this case, the indices accounted for 101.3% in Armenia, 108.4% in Belarus, 106.5% in Kazakhstan 106.4% Kyrgyzstan and 102.6% 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 EEU, in January- December 2018 as compared to the respective period of 2017, the gross monthly average wage per worker increased by 3.8% in Armenia, 17.1% in Belarus , 8.4% in Kazakhstan, 6.5% in Kyrgyzstan, 9.9% in Russia. The real wage (adjusted for the consumer price index for goods and services) increased: by 1.2% in Armenia, 11.6% in Belarus, 2.3 % in Kazakhstan, 3.8% in Kyrgyzstan, 6.8% in Russia.

Table 1. Nominal and real wage in January-December 2018

Country	Real wage, as % to the same pe- riod of 2017	Nominal wage, USD
Armenia	101.2	357
Belarus	111.6	470
Kazakhstan	102.3	471
Russia	106.8	694
Kyrgyzstan	103.8	236

## **Budget performance**

According to the EEC, in January- September 2018 Armenia, Kazakhstan and Kyrgyzstan ran a republican budget deficit, and Belarus and Russia ran a budget surplus. At the same time, a sharp reduction in the deficit was observed in Armenia, Kazakhstan, and Kyrgyzstan for the second quarter in a row, and a growth of budget surplus in Russia. The growth rates of the republican budget indicators saw a variety of trends in comparison with the corresponding date of the last year.

The republican budgets growth rates were as follows: fiscal revenues - 106% in Armenia, 121% in Belarus, 92% in Kazakhstan, 99% in Kyrgyzstan and 127% in Russia; expenditures - 98% in Armenia, 119% in Belarus, 82% in Kazakhstan, 93% in Kyrgyzstan, 102% in Russia.

Table 2. Republican budget in January-September 2018

Country	USD bil.				
	Income	Expenditure	Deficit		
			(surplus)		
Armenia	2.0	2.0	-0.0		
Belarus	8.5	6.8	1.7		
Kazakhstan	20.3	21.1	-0.8		
Kyrgyzstan	1.4	1.4	-0.0		
Russia	227.1	185.8	41.4		
EAEU	259.3	217.1	42.3		

## Mutual trade of EAEU member-states in January- November of 2018

The volume of mutual trade in commodities of EAEU member-states in January- November 2018 amounted to USD 54.6 bil. or 110.3% as against the same period of 2017.

Table 3. Export volumes of the EEU member-states in the mutual trade in January-November 2018

Countries		USD bil.	% vs January November 17	
EAEU		54621.9	110.3	100.0
Armenia		626.6	120.5	1.2
	Russia	605.9	119.3	96.7
Belarus		12696.3	101.7	23.3
	Russia	11828.1	100.2	93.2
Kazakhstan		5257.9	110.0	9.6
	Russia	4631.4	109.8	88.1
Kyrgyzstan		500.1	99.5	0.9
	Russia	269.7	109.0	53.9

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

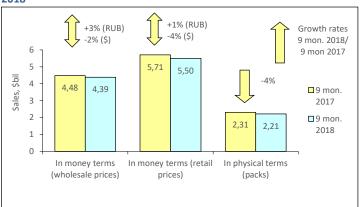
Table 4. The structure of mutual trade between EEU member-states within the Customs Commodity Code group "Pharmaceutical products" for January- November 2018 2015 (as percentage over the total volume of mutual trade)



## PHARMACY OTC MARKET IN RUSSIA: 2018 FIRST NINE MONTHS RESULTS

According to the results of the Retail Audit of Over-the-Counter Drugs (OTC) in Russian Federation, the sales of OTC drugs in physical terms in pharmacies of Russia saw a 4% decrease to 2.214 bil packs at the end of nine months 2018. In money terms, the OTC drugs market increased by 3% in rouble terms and reduced by 2% in dollar terms, and reached RUB 267.790 bil. (USD 4.386 bil.) at wholesale prices (Fig. 1). The share of Over-the-Counter (OTC) drugs accounted for 68.2% of sales in physical terms and 50.9% in retail prices in terms of roubles. The average cost of a pack did not change as compared to a year earlier period and amounted to USD 2.48 at retail prices. At the end of January-September of 2018, the average amount spent by the Russians for OTC drugs in pharmacies amounted to USD 37.45.

Figure 1. Russian OTC pharmacy market for 9 months of 2017 – 9 months 2018



Based on the results for the first nine months of 2018, the top ten drug manufacturers on the OTC market did not change in composition and six of them held their own in the ranking (Table 1). Among them were the rating leaders OTCPHARM (+6% $^5$ ), BAYER (+0%) and SANOFI (-3%), and GLAXOSMITHKLINE (+2%) placed at rank 5 and BERLIN-CHEMIE/MENARINI (+1%)  $\mu$  SERVIER (+9%) rounding out the top ten. Three manufacturers showed a rating progress. JOHNSON&JOHNSON (+4%), SANDOZ (+5%) and TEVA (+4%) moved up to ranks four, six and seven, respectively. Due to 7% reduction in sales, STADA moved down from rank four to eight. The cumulative share of the top 10 manufacturers reduced from 40.0% to 39.7%.

Table 1. The top ten drug manufacturers by pharmacy sales

Rank in the top ten		Manufacturer*	Share in total phar- macy sales, %		
9 mon. 2018	9 mon. 2017	ivialiulactulei	9 mon. 2018	9 mon. 2017	
1	1	OTCPHARM	6.1	5.9	
2	2	BAYER	5.3	5.4	
3	3	SANOFI	4.2	4.5	
4	6	JOHNSON & JOHNSON	3.9	3.8	
5	5	GLAXOSMITHKLINE	3.8	3.9	
6	7	SANDOZ	3.7	3.7	
7	8	TEVA	3.7	3.6	
8	4	STADA	3.6	3.9	
9	9	BERLIN-CHEMIE/MENARINI	2.9	2.9	
10	10	SERVIER	2.5	2.4	
Total			39.7	40.0	

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

Numerous swaps took place in the top-10 Brands (Table 2). Its leader also changed: DETRALEX (+10%) moved up to rank one from two. Another four brand names managed to rise in the ranks. INGAVIRIN (+16%) moved up to rank three from six. MIRAMISTIN (+6%) and PENTALGIN (+14%) move up one rank, to numbers six and seven, and the only newcomer LINEX (+8%) moved up to rank nine. At the same time, NUROFEN (+3%), CARDIOMAGNYL (+4%) and THERAFLU (+0.3%) moved down one rank from numbers two, four and ten. Due to 15% reduction in sales, ESSENTIALE moved down from rank four to eight. Only the brand KAGOCEL (+4%) managed to hold its earlier rank five. The total share of the top 10 brands increased from 11.5% to 11.7%.

Table 2. The top ten brands by pharmacy sales

Rank in the top ten		Brand	Share in total pharmacy sales, %	
9 mon. 2018	9 mon. 2017	Dialiu	9 mon. 2018	
1	2	DETRALEX	1.5	1.4
2	1	NUROFEN	1.5	1.5
3	6	INGAVIRIN	1.2	1.1
4	3	CARDIOMAGNYL	1.2	1.2
5	5	KAGOCEL	1.2	1.2
6	7	MIRAMISTIN	1.1	1.1
7	8	PENTALGIN	1.1	1.0
8	4	ESSENTIALE	1.0	1.2
9	11	LINEX	0.9	0.9

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

Rank in the top ten				Share in total pharmacy sales, %	
9 mon. 2018	9 mon. 2017	Dialiu	9 mon. 2018	9 mon. 2017	
10	9	THERAFLU	0.9	1.0	
Total			11.7	11.5	

The four leaders of the top 10 INNs and group names ranking remained unchanged. As before, XYLOMETAZOLINE (-0.2%), IBUPROFEN (+10%), DIOS-MIN\*HESPERIDIN (+17%) and PANCREATIN (+3%) held their previous top four ranks (Table 3). The rest of them changed their positions; most of them rose in the ranks. The composition ACETYLSALICYLIC ACID\* MAGNESIUM (+7%) and INN IMIDAZOLYL ETHANAMIDE PENTANDIOIC ACID (+16%) and KAGOCEL (+4%) move up to ranks five through seven. Its only newcomer DEXPANTHENOL (+7%) moved up to the bottom rank in the top 10 ranking. Due to reduction in sales, PHOSPHOLIPIDS (-15%) and CHONDROITINSULFURIC ACID\* GLUCOSA-MINE (-2%) moved down to ranks eight and nine, respectively. The cumulative share of the top ten increased by 0.3 p.p. and accounted for 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. 2018	9 mon. 2017	invits/Grouping Ivallies	9 mon. 2018	9 mon. 2017	
1	1	XYLOMETAZOLINE	3.1	3.2	
2	2	IBUPROFEN	2.3	2.1	
3	3	DIOSMIN*HESPERIDIN	2.3	2.0	
4	4	PANCREATIN	1.9	1.9	
5	6	ACETYLSALICYLIC ACID* MAGNE- SIUM	1.3	1.2	
6	10	IMIDAZOLYL ETHANAMIDE PENTAN- DIOIC ACID	1.2	1.1	
7	8	KAGOCEL	1.2	1.2	
8	5	PHOSPHOLIPIDS	1.2	1.4	
9	7	CHONDROITINSULFURIC ACID* GLU- COSAMINE	1.1	1.2	
10	11	DEXPANTHENOL	1.1	1.1	
Total		·	16.7	16.4	

CO5 Vasoprotectors (+ +12%) became the best-selling ATC-group on the OTC drug market in the first nine months of the year, displacing the last year's leader R01 Nasal preparations (0%) to rank two (Table 4). A07 Antidiarrheals (+7%) kept its previous rank three. The groups R05 Cough and cold preparations (+6%), M01 Anti-inflammatory and antirheumatic products (+3%), L03 Immunostimulants (+0.1%)  $\mu$  R02 Throat preparations (+4%) also kept their previous ranks at numbers five and three lower ranks. J05 Antivirals for systemic use (+1%) moved up one rank, to number six. In contrast, the groups N02 Analgesics (+1%) and A11 Vitamins (-6%) moved down to the lower ranks four and seven due to reduction in sales. In total, the top ten ATC - groups accumulated 47.6% of the market, whereas in the year-earlier period they accounted for 47.5%

Table 4. The top ten ATC Groups by pharmacy sales

Ra	nk	ATC			otal phar- ales, %
9 mon. 2018	9 mon. 2017	code	ATC group	9 mon. 2018	9 mon. 2017
1	4	C05	VASOPROTECTIVES	5.9	5.4
2	1	R01	NASAL PREPARATIONS	5.7	5.8
3	3	A07	ANTIDIARR.,INTEST. ANTIINFL./ ANTIINFECT. AGENTS	5.6	5.4
4	2	N02	ANALGESICS	5.6	5.8
5	5	R05	COUGH AND COLD PREPARA- TIONS	5.3	5.1
6	7	J05	ANTIVIRALS FOR SYSTEMIC USE	4.5	4.6
7	6	A11	VITAMINS	4.3	4.7
8	8	M01	ANTIINFLAMMATORY AND AN- TIRHEUMATIC PRODUCTS	3.9	3.9
9	9	L03	IMMUNOSTIMULANTS	3.4	3.5
10	10	R02	THROAT PREPARATIONS	3.3	3.3
Total				47.6	47.5

Conclusion. At the end of January- September 2018, the OTC retail market of the country brought in RUB 335.867 bil. (USD 5.501 bil.), which was 1% more in terms of roubles and 4% less in terms of dollars than in the same period of 2017. In pack terms, the market also showed negative growth rates (-4%) and achieved 2.214 bil. packs. The average cost of OTC-pack in the Russian pharmacies based on the results for nine months 2018 was USD 2.48 and was equal to 2017 level. The average expenses of Russian residents for the purchase of OTC drugs in pharmacies slightly reduced in the analysed period (USD 37.45 vs. USD 38.89).

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

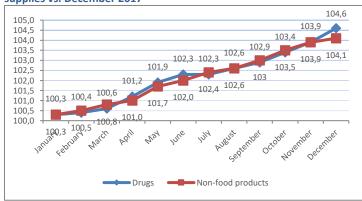
## **Price Indices**

Table 1. Inflation rates in the Russian Federation in December 2018

table 2: illiation rates in the hassian reactation in Determine 2020								
		January-Decem-						
	December 2018 as	ber 2018 as						
	against December	against January-						
	2017	December 2017						
CPI	104.3	102.9						
CPI for non-food products	104.1	103.4						
CPI for medications	104.6	99.9						

Rosstat data

Figure 1. Dynamics of the price index for non-food items and medicines supplies vs. December 2017



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 2017 – 1-4 Q 2018

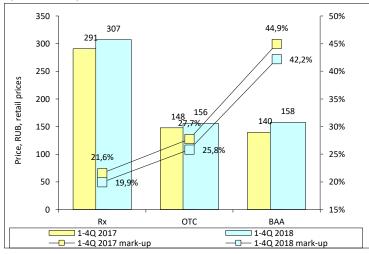


Figure 3. Dynamics of weighted average prices and retail margins in 1-4 Q 2017 – 1-4 Q 2018

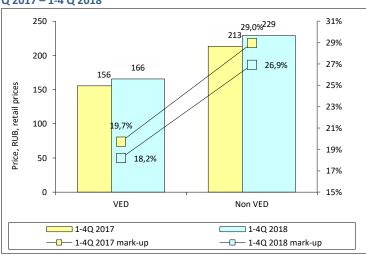
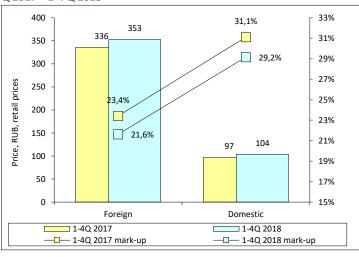


Figure 4. Dynamics of weighted average prices and retail margins in 1-4 Q 2017 – 1-4 Q 2018



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

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

	Price dynamics in N	/lay 2018 * vs. D	ecember 2017 (%)
	Retail prices	Wholesale prices	Manufacturers' prices
VED total	1.0	1.4	0.3
Not more than RUB 50	0.5		
From RUB 50 to 500	1.1		
Over RUB 500	1.5		
Domestic	1.1		
Foreign	0.9		

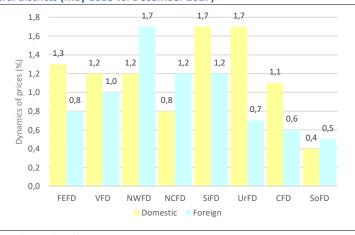
\*Latest published data

Figure 5. Dynamics of retail VED prices within various price ranges by federal districts (May 2018 vs. December 2017)



Roszdravnadzor data

Figure 6. Dynamics of retail prices for domestic and foreign VED by federal districts (May 2018 vs. December 2017)



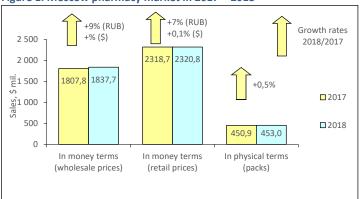
Roszdravnadzor data

## **MOSCOW CITY PHARMACY MARKET: 2018 RESULTS**

According to Federal State Statistics Service, as of January 1, 2018 Moscow's estimated population was 12.506 mil., which accounted for 8.5% of the total Russian Federation population and 31.8% of Central FO (CFO). According to Moscow territorial body of the Federal State Statistics Service, in Moscow the average monthly-accrued wage for January- November 2018 was RUB 80,881 (USD 1299.29), in November 2018 - RUB 78946. (USD 1191.82), which was 85% higher than the average wage in Russia in November (RUB 42,595).

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 Moscow saw a 0.5% increase to 452.977 mil. packs. In value terms, the OTC drugs market increased by 9% in rouble terms and by 2% in dollar terms and reached RUB 114.973 bil. (USD 1.838 billion) in wholesale prices (Fig. 1). The region market share accounted for 15.2% of the Russian pharmacy retail sales. An average cost of a pack reduced as compared to 2017: USD 5.12 vs. USD 5.14. At the end of 2018, the average amount spent by the Muscovites for OTC drugs in pharmacies amounted to USD 185.57.

Figure 1. Moscow pharmacy market in 2017 - 2018



The rating of leading manufacturers in the retail market of the Moscow Eastern Federal District at the year-end 2018 demonstrated high stability (Table 1). Almost all of the drug manufacturers from the top ten held their own in the ranking, only their market shares has been changed. The leader of the top ten BAYER (+11%), SERVIER (+13%) and ABBOTT (+11%) showed outstripping performance rates and expanded their shares. The manufactures TEVA and BERLIN-CHEMIE/MENARINI that showed 8% growth in sales did not change their market shares, whereas SANOFI (+5%), SANDOZ (+5%), GLAXOSMITHKLINE (+5%) and JOHNSON & JOHNSON (+3%) reduced their market shares due to lagging behind the growth rates. The only change affected the last rank of the top ten, where the newcomer PFIZER (+13%) moved up to for the first time. In total, 10 INNs and group names accounted for 36.8%, and 37.1% in the year-earlier period.

Table 1. The top ten drug manufacturers by pharmacy sales

Rank in the top ten		Manufacturer*	Share in total pharmacy sales, %	
2018	2017	ivianulacturer	2018	2017
1	1	BAYER	6.3	6.2
2	2	SANOFI	4.8	5.0
3	3	TEVA	3.8	3.8
4	4	SERVIER	3.7	3.6
5	5	ABBOTT	3.6	3.5
6	6	SANDOZ	3.2	3.4
7	7	GLAXOSMITHKLINE	3.2	3.3
8	8	JOHNSON & JOHNSON	2.8	3.0
9	9	BERLIN-CHEMIE/MENARINI	2.8	2.8
10	11	PFIZER	2.8	2.7
Total	•		36.8	37.1

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

XARELTO (+51%) and DETRALEX (+13%) became the bestselling brands on the regional market at the year-end (Table 2). CRESTOR that used to be its leader before reduced its sales by 19% and moved down to rank three. The other top 10 brands showed the positive sales growth rates. Two of them, MIRAMISTIN (+9%) and ENTEROSGEL (+17%) moved up to the higher ranks, four and ten, respectively. At the same time, the former displaced the brands CIALIS and NUROFEN (+4% each) down one rank, and the later became the only new-comer of the top ten. CONCOR (+16%), INGAVIRIN (+18%) and HEPTRAL (+9%) held their previous ranks seven through nine respectively (Table In total, the top ten brands accumulated 8.5% of the market, whereas in the year-earlier period they accounted for 8.3%.

Table 2. The top ten brands by pharmacy sales

Rank in the top ten		Brand		hare in total pharmacy sales, %	
2018	2017		2018	2017	
1	2	XARELTO	1.6	1.2	
2	3	DETRALEX	1.0	1.0	
3	1	CRESTOR	0.9	1.3	
4	6	MIRAMISTIN	0.8	0.8	
5	4	CIALIS	0.8	0.8	
6	5	NUROFEN	0.7	0.8	
7	7	CONCOR	0.7	0.7	

Rank in the top ten		Brand	Share in total pharm sales, %	
2018	2017		2018 2017	
8	8	INGAVIRIN	0.7	0.7
9	9	HEPTRAL	0.6	0.6
10	12	ENTEROSGEL	0.6	0.6
Total			8.5	8.3

Following the respective brand, RIVAROXABAN (+51%) moved up to rank on in the top ten INNs and group names ranking (Table 3). It displaced XYLOMETAZOLINE (-6%), ROSUVASTATIN (-5%) and DIOSMIN\* HESPERIDIN (+13%) down one rank. HYALURONIC ACID (+53%), the most dynamical name among the leaders, moved up to rank five from ten. IBUPROFEN (+2%), which had been placed at that rank earlier, moved down to rank seven. At the same time, MIRAMISTIN (+11%) and TADALAFIL (+6%) moved down immediately to the bottom of the ranking. PANCREATIN (+12%) and BISOPROLOL (+17%) retained their previous ranks six and eight. The cumulative share of the top 10 under review increased 0.3 p.p. to 11.3%.

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

Rank		INNs/Grouping Names	Share in total phar- macy sales, %	
2018	2017		2018	2017
1	4	RIVAROXABAN	1.6	1.2
2	1	XYLOMETAZOLINE	1.5	1.8
3	2	ROSUVASTATIN	1.4	1.6
4	3	DIOSMIN*HESPERIDIN	1.3	1.2
5	10	HYALURONIC ACID	1.0	0.7
6	6	PANCREATIN	1.0	1.0
7	5	IBUPROFEN	1.0	1.1
8	8	BISOPROLOL	0.9	0.8
9	7	MIRAMISTIN	0.8	0.8
10	9	TADALAFIL	0.8	0.8
Total			11.3	11.0

The top ten ATC - groups ranking changed its leader: B01 Anticoagulants moved up to rank one from four due to 34% increase in sales (Table 4) C09 Agents acting on the renin-angiotensin system (+15%) moved up to rank two from three, displacing M01 Anti-inflammatory and antirheumatic products (+7%) down one rank. The former leader of the top ten ranking R01 Nasal preparations (-0.3%) moved down to rank four. In addition, due to 1% reduction in sales J01 Antibacterials for systemic use moved down to the lower rank eight. The groups G03 Sex hormones (+12%), J05 Antivirals for systemic use (+10%), C05 Vasoprotectors (+11%) and N06 Psychoanaleptics (+15%) showed outstripping performance rates and moved up to ranks six, seven, nine and ten respectively. On top of that, the latter two groups broke into the ranks of the top 10 ranking for the first time. A07 Antidiarrheals, intestinal anti-inflammatory/ antiinfective agents (+8%) kept their previous rank five in the top ten ranking. In total, the top ten ATC groups accumulated 36.4% of the regional market against 35.7% in the year-- earlier period.

Table 4. The top ten ATC Groups by pharmacy sales

Ra	Rank		ATC code ATC group		Share in total phar- macy sales, %	
2018	2017	coue		2018	2017	
1	4	B01	ANTITHROMBOTIC AGENTS	4.6	3.8	
2	3	C09	AGENTS ACTING ON THE RENIN- ANGIOTENSIN SYSTEM	4.1	3.9	
3	2	M01	ANTIINFLAMMATORY AND AN- TIRHEUMATIC PRODUCTS	4.0	4.1	
4	1	R01	NASAL PREPARATIONS	3.8	4.2	
5	5	A07	ANTIDIARR.,INTEST. ANTIINFL./ ANTIINFECT. AGENTS	3.6	3.6	
6	7	G03	SEX HORMONES AND MODULA- TORS OF THE GENITAL SYSTEM	3.5	3.4	
7	8	J05	ANTIVIRALS FOR SYSTEMIC USE	3.4	3.4	
8	6	J01	ANTIBACTERIALS FOR SYST USE	3.1	3.4	
9	11	C05	VASOPROTECTIVES	3.1	3.0	
10	13	N06	PSYCHOANALEPTICS	3.0	2.9	
Total	Total 36.4 35					

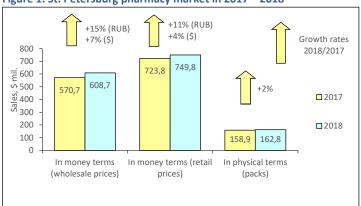
Conclusion. On the basis of the results for 2018, the pharmacy market of Moscow brought in RUB 145.161 bil. (USD 2.321 bil.), which was by 7% in terms of roubles and 0.1% in terms of dollars more than in 2017. In pack terms, the market extended by 0.5% and amounted to 452.977 mil. packs. According to the results for 2018, the average cost of an FPP pack in the city pharmacies was USD 5.12 which was lower than in the year-earlier period (USD 5.14) but higher than the national average (USD 3.25). The average expenses of the regional residents for purchase of OTC drugs in pharmacies were also higher than the national average (USD 185.57 vs. USD 104.41).

#### SAINT PETERSBURG PHARMACY MARKET: 2018 RESULTS

According to Federal State Statistics Service, St. Petersburg's population as of January 1, 2018 was estimated at 5.352 mil., which accounted for 3.6% of the total Russian Federation population and 38.4% of North West FD (NWFD). According to St. Petersburg territorial body of the Federal State Statistics Service, the average wage in the city in January-November 2018 RUB 58526 (USD 940.18), in November 2018 RUB 58310 (USD 880.28), which was 37% higher than the average wage in Russia (RUB 42595).

According to the results of the Retail Audit of FPP (Finished Pharmaceutical Products) in Russian Federation™, at year-end 2018 the sales of drugs in natural terms in St. Petersburg pharmacies saw a 2% increase to 162.783 mil. packs. In money terms, the market saw a 15% increase in terms of roubles and 7% in terms of dollars. At the same time, the volume of the market achieved RUB 38.133 bil. (USD 608.682 mil.) at wholesale prices (Fig. 1). The regional market share accounted for 4.9% of the Russian pharmacy sales. The average cost of an OTC pack reduced as compared to 2017 (USD 4.56) and reached USD 4.61 at retail prices. In 2018, the average amount spent by residents of the city for drugs in the pharmacies amounted to USD 140.10.

Figure 1. St. Petersburg pharmacy market in 2017 – 2018



Based on the results for 2018, the drug manufacturers BAYER (+2%) and SANOFI (+9%) continued to show the highest retail sales on the St. Petersburg market, though their market shares reduced due to lagging behind the growth rates (Table 1). Also, SANDOZ (+20%), ABBOTT (+17%) and GLAXOSMITHKLINE (+15%) held their previous ranks five through seven, respectively. Three from the remaining five manufacturers rose in the ranks. SERVIER (+20%) and PFIZER (+39%) moved one rank up, to numbers three and eight. The newcomer KRKA (+28%) broke into the ranks of the top ten, coming in at number nine. Two manufacturers with negative growth rates, TEVA (+4%) and OTCPHARM (+5%) moved down to ranks four and ten. The total share of the top ten manufacturers decreased by 0.4 p.p. and accounted for 38.6%.

Table 1. The top ten drug manufacturers by pharmacy sales

Rank				in total
in the top ten		Manufacturer*	pharmac	y sales, %
2018	2017		2018	2017
1	1	BAYER	6.2	7.0
2	2	SANOFI	4.9	5.1
3	4	SERVIER	4.4	4.2
4	3	TEVA	4.0	4.4
5	5	SANDOZ	3.8	3.6
6	6	ABBOTT	3.7	3.6
7	7	GLAXOSMITHKLINE	3.2	3.2
8	9	PFIZER	3.1	2.5
9	11	KRKA	2.8	2.5
10	8	OTCPHARM	2.6	2.9
Total	•		38.6	39.0

\*AIPM members are in bold

The top ten brands rating retained its leader: XARELTO (+12%) and DETRALEX (+25%) kept the top two ranks in the top ten (Table 2). As before, brand THERAFLU (+11%) round out the top ten rating. Shifts took place in the lower part of the top 10 ranking, and most of its brands rose in the ranks. The brands NUROFEN (+11%), HEPTRAL (+19%) and NOLIPREL (+20%) moved up to ranks five through seven, respectively. Three newcomers ELIQUIS (+84%), LINEX (+22%) and INGAVIRIN (+27%) broke into the ranks of the top ten, coming in at numbers three, eight and nine respectively. Despite the outstripping growth rates, brand CONCOR (+21%) moved down one rank, to number four. The total share of the top 10 brands increased from 6.9% to 7.4%.

Table 2. The top ten brands by pharmacy sales

Rank in the top ten		Brand	Share in total pharmacy sales, %	
2018	2017		2018	2017
1	1	XARELTO	1.3	1.3
2	2	DETRALEX	1.1	1.0
3	15	ELIQUIS	0.8	0.5
4	3	CONCOR	0.7	0.7
5	6	NUROFEN	0.6	0.6
6	7	HEPTRAL	0.6	0.6
7	9	NOLIPREL	0.6	0.6
8	11	LINEX	0.6	0.6

Rank in the top ten		Brand	Share in tot sale	al pharmacy s, %
2018	2017		2018 2017	
9	13	INGAVIRIN	0.6	0.5
10	10	THERAFLU	0.5	0.6
Total			7.4	6.9

In contrast to the previous rankings, the top-ten INN and group names ranking leader changed - the composition DIOSMIN\*HESPERIDIN (+27%) moved up to rank number one from three (Table 3). It displaced INNs XYLOMETAZOLINE (-2%) and RIVAROXABAN (+12%) one rank down, to numbers two and three. The same shifts took place in the lower part of the top ten. The more dynamic INNs ROSUVASTATIN (+23%), PANCREATIN (+26%) and BISOPROLOL (+21%) rose in the ranks, coming in at numbers four, five and seven, respectively. At the same time, ATORVASTATIN (+13%) and IBUPROFEN (+11%) moved down one rank, to numbers six and eight, respectively. The newcomers APIXABAN (+84%) and NIMESULIDE (+21%) broke into the ranks of the top ten, coming in at numbers nine and ten. The cumulative share of the top10 extended from 9.6% to 10.0%.

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

Ra	nk	INNs/Grouping Names	Share in total phar- macy sales, %	
2018	2017		2018	2017
1	3	DIOSMIN*HESPERIDIN	1.3	1.2
2	1	XYLOMETAZOLINE	1.3	1.5
3	2	RIVAROXABAN	1.3	1.3
4	5	ROSUVASTATIN	1.0	0.9
5	6	PANCREATIN	1.0	0.9
6	4	ATORVASTATIN	0.9	1.0
7	8	BISOPROLOL	0.9	8.0
8	7	IBUPROFEN	0.8	8.0
9	29	APIXABAN	0.8	0.5
10	13	NIMESULIDE	0.8	0.7
Total			10.0	9.6

The top five ATC Groups of the top 10 ATC groups retained their previous ranks (Table 4). C09 Agents acting on the renin-angiotensin system (+19%), B01 Anticoagulants (+22%), M01 Anti-inflammatory and antirheumatic products (+12%), G03 Sex hormones (+10%) and R01 Nasal preparations (+9%). The groups C05 Vasoprotectors (+18%), A07 Antidiarrheals, intestinal anti-inflammatory/ antiinfective agents (+19%), J01 Antibacterials for systemic use (+15%), and the newcomers R05 Cough and cold preparations (+20%) moved up to ranks six through nine. J05 Antivirals for systemic use (+2%) showed the low growth rates and moved down to rank ten of the top ten ranking. The total share of the analysed top 10 ATC groups remained unchanged and accounted for 36.6%.

Table 4. The top ten ATC Groups by pharmacy sales

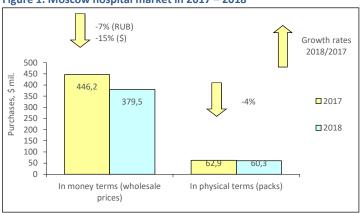
Rank		ATC code ATC group		Share in total phar- macy sales, %	
2018	2017	code		2018	2017
1	1	C09	AGENTS ACTING ON THE RENIN- ANGIOTENSIN SYSTEM	5.1	4.9
2	2	B01	ANTITHROMBOTIC AGENTS	4.5	4.2
3	3	M01	ANTIINFLAMMATORY AND AN- TIRHEUMATIC PRODUCTS	4.0	4.0
4	4	G03	SEX HORMONES AND MODULA- TORS OF THE GENITAL SYSTEM	3.8	4.0
5	5	R01	NASAL PREPARATIONS	3.5	3.7
6	8	C05	VASOPROTECTIVES	3.3	3.2
7	10	A07	ANTIDIARR.,INTEST. ANTIINFL./ ANTIINFECT. AGENTS	3.3	3.2
8	9	J01	ANTIBACTERIALS FOR SYST USE	3.2	3.2
9	12	R05	COUGH AND COLD PREPARA- TIONS	3.0	2.9
10	7	J05	ANTIVIRALS FOR SYSTEMIC USE	3.0	3.3
Total			·	36.6	36.5

Conclusion. On the basis of the results for 2018, the pharmacy market of St. Petersburg brought in RUB 46.979 bil. (USD 749.804 mil.) at retail prices, which was by 11% in terms of roubles and 4% in terms of dollars more than in 2017. In physical terms, the market expanded by 2% and amounted to 162.783 mil. packs. At year-end 2018, the average cost of FPP pack in the city pharmacies was USD 4.61, which was more than in the year-earlier period (USD 4.56) and the national average (USD 3.25). The average medicine expenses of St. Petersburg residents in the pharmacies were higher than the national average expenses in Russia (USD 140.1 vs. USD 104.41).

## **MOSCOW CITY HOSPITAL MARKET: 2018 RESULTS**

According to the results of the Budget Audit of Finished Pharma Products (FFP) in the Russian Federation, in 2018 the Moscow hospital market in physical terms reduced by 4% compared to 2017 and amounted to 60.301 mil. packs. In money terms, the market also showed negative growth rates both in terms of roubles (-7%) and in terms of dollars (-15%) and reached RUB 24.217 bil. (USD 379.506 mil.) at wholesale prices. At year-end 2018, the average cost of an FPP pack in the hospital sector of Moscow was USD 6.29, whereas in the year-earlier period its cost was USD 7.10.

Figure 1. Moscow hospital market in 2017 - 2018



Most of the top ten manufacturers on the Moscow hospital market, as the market in whole, showed negative growth rates based on the results for 2018 (Table 1). Among them was the top 10 leader PFIZER (-11%), which maintained its position. The manufacturer MSD, which moved up to rank two, reduced its purchases by 1%, while the newcomer NOVARTIS, which moved up to rank ten, reduced its purchases by 9%. Three representatives with negative dynamics fell in the ranks. SANOFI (-8%), JOHNSON & JOHNSON (-48%) and BIOCAD (-15%) moved down to ranks seven through nine respectively. At the same time, the manufacturers ABBVIE (+1%), PHARMASYNTEZ (+26%), MICROGEN (+42%) and BAYER (+29%), in contrast, moved up to the higher ranks, from three to six respectively. In total, based on the results for 2018 the top ten ATC groups accumulated 38.3% of the market, while they accounted for 37.4% in the year-earlier period.

Table 1. The top 10 drug manufacturers by hospital purchases

rable 1. The top 10 drug manufacturers by nospital purchases						
Rank in the top ten		Manufacturer*	Share in total hospital purchases, %			
2018	2017		2018	2017		
1	1	PFIZER	6.0	6.2		
2	3	MSD	5.0	4.7		
3	4	ABBVIE	4.7	4.4		
4	7	PHARMASYNTEZ	4.0	2.9		
5	10	MICROGEN	3.7	2.4		
6	9	BAYER	3.5	2.5		
7	5	SANOFI	3.4	3.5		
8	2	JOHNSON & JOHNSON	3.1	5.6		
9	6	BIOCAD RF	2.7	2.9		
10	11	NOVARTIS	2.2	2.3		
Total			38.3	37.4		

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

Four newcomers broke into the ranks of the top-ten brand names (Table 2). SYNAGIS (10-fold growth in purchases), emerging brand KANUMA, as well as EYLEA (+81%) and PENTAXIM (2.6-fold growth) moved up to ranks four, five, seven and nine respectively. In addition, SOVIGRIPP (+77%) and SEVORAN (+9%) rose in the ranks, moving up to the higher ranks one and six. At the same time, the former displaced brands PREVENAR 13 (+9%) and NATRIUM CHLORIDUM (-11%) down one rank. KALETRA (-35%) and MYCAMINE (-16%) also moved down to the lower ranks eight and ten due to negative growth rates. The total share of the Top-10 increased from 10.1% to 15.2%.

Table 2. The top 10 brands by hospital purchases

Rank in the top ten		Brand	Share in total hospi- tal purchases, %	
2018	2017		2018	2017
1	4	SOVIGRIPP	2.9	1.5
2	1	PREVENAR 13	2.5	2.1
3	2	NATRIUM CHLORIDUM	1.7	1.8
4	44	SYNAGIS	1.5	0.1
5	49	KANUMA	1.3	0.0
6	7	SEVORAN	1.2	1.0
7	19	EYLEA	1.1	0.6
8	3	KALETRA	1.1	1.6
9	32	PENTAXIM	1.1	0.4
10	6	MYCAMINE	0.9	1.0
Total			15.2	10.1

The top 10 INN and generic names ranking leader also changed (Table 3). 3). INN VACCINE, INFLUENZA (+79%) moved up to rank one from three,

displacing VACCINE, PNEUMOCOCCAL (+6%) and IMMUNOGLOBULIN BASE (-16%) down one rank. Apart from the leader, INN ALBUMIN (+12%), PALIVIZUMAB (10.4-fold growth in purchases), SEBELIPASE ALFA; SEVOFLURANE (+12%) and AFLIBERCEPT (+89%) also rose in the ranks, moving up to ranks five and four bottom ranks. Due to 10% reduction in purchases, SODIUM kept its previous rank four, whereas MEROPENEM (-11%) that showed almost the same growth rates moved down one rank, to number six. The total share of the analysed top ten accounted for 19.6% instead of 13.9 in the year-earlier period.

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

Rank		INNs/Grouping Names	Share in total hospi- tal purchases, %	
2018	2017	, , ,	2018	2017
1	3	VACCINE, INFLUENZA	3.9	2.0
2	1	VACCINE, PNEUMOCOCCAL	3.3	2.9
3	2	IMMUNOGLOBULIN BASE	2.0	2.2
4	4	SODIUM	1.7	1.8
5	8	ALBUMIN	1.7	1.4
6	5	MEROPENEM	1.7	1.7
7	46	PALIVIZUMAB	1.5	0.1
8	50	SEBELIPASE ALFA	1.3	0.0
9	12	SEVOFLURANE	1.3	1.1
10	27	AFLIBERCEPT	1.3	0.6
Total			19.6	13.9
9	12 27	SEVOFLURANE	1.3 1.3 19.6	1.1

Half of the top 10 ATC groups reduced their purchases in 2018 (Table 4). Among them were J01 Antibacterials for systemic use (-20%) and N01 Anaesthetics (-3%) that held their own in the top ten ranking. Three groups fell in the ranks. The last year leader J05 Antivirals for systemic use (-52%) moved down to rank five, and the groups B01 Anticoagulants (-7%) and J02 Antifungal drugs of systemic use (-15%) lost one rank each and moved down to ranks seven and nine. The groups with positive growth rates, for the most part, rose in the ranks. J07 Vaccines showed the highest growth of purchases among the top ten ATC groups, and moved up to rank one from four and took a lead in the top ten ranking. B05 Plasma substitutes and perfusion solutions (+7%) and V08 Contrast media (+15%) moved up one rank, coming in at numbers four and six. The only newcomer of the top ten-10 J06 Immune sera and immunoglobulins (+24%) moved up to rank eight. Only L01 Antineoplastic agents (+3%) held their previous ranks three. The total share of the top 10 increased from 66.6% to 67.5%.

Table 4. The top ten ATC groups by hospital purchases

Rank		ATC code	ATC group	Share in total hospital purchases, %	
2018	2017	code		2018	2017
1	4	J07	VACCINES	12.4	7.7
2	2	J01	ANTIBACTERIALS FOR SYST USE	10.3	12.1
3	3	L01	ANTINEOPLASTIC AGENTS	9.9	8.9
4	5	B05	PLASMA SUBSTITUTES AND PERFUSION SOLUTIONS	7.8	6.8
5	1	J05	ANTIVIRALS FOR SYSTEMIC USE	6.3	12.2
6	7	V08	CONTRAST MEDIA	5.1	4.2
7	6	B01	ANTITHROMBOTIC AGENTS	4.3	4.3
8	11	J06	IMMUNE SERA & IMMUNO- GLOBULIN	4.1	3.1
9	8	J02	ANTIMYCOTICS FOR SYSTEMIC USE	3./	4.0
10	10	N01	ANESTHETICS	3.4	3.3
Total			`	67.5	66.6

Conclusion. At year-end 2018, the Moscow hospital market reduced by 7% in rouble terms and by 15% in dollar terms and brought in RUB 24.217 bil. (USD 379.506 mil.). In pack terms, the market also showed negative growth rates (-4%) and achieved 60.301 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 6.29 vs. USD 7.10).

## SAINT PETERSBURG HOSPITAL MARKET: 2018 RESULTS

According to the results of the Budget Audit of FPPs in the Russian Federation (without DLO and regional benefit), at year-end 2018 the St. Petersburg hospital market expanded in physical terms by 2% and amounted to 25.454 mil. packs. In money terms, the purchases dynamics was positive in rouble (+8%) and negative in dollar (-2%) terms, and the volume amounted to RUB 13.571 bil. (USD 211.548 mil.) at wholesale prices. In the analysed period, the average cost of OTC pack in the city hospitals was USD 8.31, whereas in the year-earlier period its cost was USD 8.67.

Figure 1. St. Petersburg hospital market in 2017 - 2018



Following the results of the first nine months of 2018, St. Petersburg continued to hold its leading position in the top-ten drug manufacturers ranking in the St. Petersburg hospital market, despite the anemic growth rates (Table 1). However, most of the manufacturers showed outstripping growth rates. As a result, PFIZER (+16%) moved up to rank two, and MSD (+12%) held its previous rank three. NOVARTIS (+13%), BIOCAD (+37%) and SANOFI (+17%) moved up to ranks four, six and eight, and the newcomer MICROGEN (+20%) broke into the ranks of the top ten, coming in at numbers four, six and eight. ABBVIE (-1%), which reduced its purchases, as well as PHARMASYNTEZ (+7%) and BAYER (+2%), which showed rather low growth rates, in contrast, moved down to ranks five, seven and nine, respectively. The total share of the top ten INN and group names ranking increased by 1 p.p. and achieved 46.0%.

Table 1. The top 10 drug manufacturers by hospital purchases

Rank in the top ten		Manufacturer*	Share in total hospi- tal purchases, %	
2018	2017		2018	2017
1	1	JOHNSON & JOHNSON	8.6	9.2
2	4	PFIZER	5.2	4.8
3	3	MSD	5.2	5.0
4	5	NOVARTIS	5.0	4.7
5	2	ABBVIE	4.8	5.2
6	7	BIOCAD RF	4.5	3.5
7	6	PHARMASYNTEZ	4.2	4.2
8	9	SANOFI	3.3	3.0
9	8	BAYER	3.1	3.3
10	12	MICROGEN	2.1	1.9
Total	•		46.0	45.0

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

KALETRA (- 8%) and ISENTRESS (-6%) held their previous top ranks in the top ten brand ranking in terms of hospital purchases (Table 2). PREVENAR 13 (+30%) and ULTRAVIST (+33%) held their previous ranks six and ten. The positions of the remaining top 10 brands changed, and four of them rose in the ranks. IMBRUVICA (+70%) moved up two ranks, coming in at number five. Three newcomers of the top ten EVIPLERA (2.1-fold growth in purchases), SIMANOD (2-fold growth) and HERTICAD (+74%) moved up tor ranks three, eight and nine respectively. On top of that, despite the outstripping growth rates and expansion of the market share they displaced SOVIGRIPP (+20%) down three ranks. Due to 5% reduction in purchases, NATRIUM CHLORIDUM lost one rank and moved down to rank four. The cumulative share of the top-ten increased by 2 p.p. and achieved 16.3%.

Table 2. The top 10 brands by hospital purchases

Rank Share in total hospital pur-						
in the top ten		Brand		Share in total hospital pur- chases, %		
2018	2017		2018	2017		
1	1	KALETRA	2.7	3.2		
2	2	ISENTRESS	2.0	2.3		
3	12	EVIPLERA	1.7	0.9		
4	3	NATRIUM CHLORIDUM	1.7	2.0		
5	7	IMBRUVICA	1.7	1.1		
6	6	PREVENAR 13	1.4	1.2		
7	4	SOVIGRIPP	1.4	1.3		
8	19	SIMANOD	1.2	0.7		
9	16	HERTICAD	1.1	0.7		
10	10	ULTRAVIST	1.1	0.9		
Total			16.3	14.3		

Four INNs maintained their ranks in the top-10 INN and grouping names rating (Table 3). Among them were the composition LOPINAVIR\*RI-TONAVIR (-8%) and INN RALTEGRAVIR (-6%). SODIUM (-5%) and VACCINE, PNEUMOCOCCAL (+34%) held their previous ranks four and seven in the ranking. Five INNs of the top 10 rose in the ranks. VACCINE, INFLUENZA (+32%) and IBRUTINIB (+70%) moved up to ranks three and six from five and ten. The newcomers of the top ten ranking TENOFOVIR DISOPROXIL\* EMTRICITABINE\*RILPIVIRINE (2.1-fold growth in purchases), TRASTUZUMAB (+53%) and PALIPERIDONE PALMITATE (+36%) moved up to ranks five, eight and ten. Only INN ATAZANAVIR (+1%) moved down from rank six to nine. The total share accumulated by the top-ten INNs and grouping names increased by 1.7 p.p. to 17.4%.

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

Rank		INNs/Grouping Names	Share in total hospi- tal purchases, %	
2018	2017	]	2018	2017
1	1	LOPINAVIR*RITONAVIR	2.7	3.2
2	2	RALTEGRAVIR	2.0	2.3
3	5	VACCINE, INFLUENZA	2.0	1.6
4	4	SODIUM	1.7	2.0
5	17	TENOFOVIR DISOPROXIL* EMTRICIT- ABINE*RILPIVIRINE	1.7	0.9
6	10	IBRUTINIB	1.7	1.1
7	7	VACCINE, PNEUMOCOCCAL	1.7	1.3
8	15	TRASTUZUMAB	1.3	0.9
9	6	ATAZANAVIR	1.3	1.3
10	12	PALIPERIDONE PALMITATE	1.2	1.0
Total			17.4	15.7

Only one newcomer entered the top ten ATC Group: L04 Immunosuppressants (+50%) moved up to rank eight from 12 (Table 4). In addition, the other two groups moved up yet to higher positions. J07 Vaccines (+45%) moved up to rank three from five, B05 Blood substitutes and perfusion solutions (+4%) moved up to rank five from six. They displaced J01 Anti-bacterials for systemic use (-2%), B01 Anticoagulants (-4%) and N01 Anesthetics (-3%) down one rank. N05 Psycholeptics (-8%) moved down from rank six to eight. The other three ATC groups of the top 10 held their own in the ranking. These were its leaders L01 Antineoplastic agents (+ +34%) and J05 Antivirals for systemic use (-7%), and V08 Contrast media (+ 23%) placed at rank seven. The top ten ATC groups accumulated 75.9% of the regional market, which accounted for 72.2% 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, %	
2018	2017	coue		2018	2017
1	1	L01	ANTINEOPLASTIC AGENTS	27.0	21.7
2	2	J05	ANTIVIRALS FOR SYSTEMIC USE	15.2	17.6
3	5	J07	VACCINES	6.6	5.0
4	3	J01	ANTIBACTERIALS FOR SYST USE	6.3	6.9
5	6	B05	PLASMA SUBSTITUTES AND PERFUSION SOLUTIONS	4.7	4.8
6	4	N05	PSYCHOLEPTICS	4.4	5.2
7	7	V08	CONTRAST MEDIA	4.1	3.6
8	12	L04	IMMUNOSUPPRESSANTS	2.7	1.9
9	8	B01	ANTITHROMBOTIC AGENTS	2.5	2.8
10	9	N01	ANESTHETICS	2.4	2.7
Total	•	•		75.9	72.2

**Conclusion**. At the-end 2018, the St. Petersburg hospital market grew by 8% in rouble terms and by 2% in dollar terms and brought in RUB 13.571 bil. (USD 211.548 mil). In pack terms, the market showed positive growth rates (+2%) and amounted to 25.454 mil. packs. At year-end 2018, the average cost of an FPP pack on the city hospital sector was lower than that in the year-earlier period (USD 8.31 vs. USD 8.67).