



Ассоциация международных фармацевтических производителей

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

## **MACROECONOMIC INDICES**

#### Inflation

According to Federal State Statistics Service's data, the Consumer Price Index was estimated at 100.4% in December 2017, compared to the previous month, at 102.5% as against December 2016.

In December this year, Industrial Producer Price Index (for goods intended for sale on the domestic market) was 101.2%, whereas in the month-earlier period it had amounted to 100.9%. The index accounted for 108.4% against December of the previous year.

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



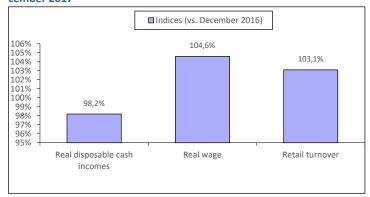
## Living standard

According to preliminary Federal State Statistics Service's data, at year-end 2017 gross monthly average salary per worker reached RUB 39,085 - RUB 50,500. (USD 861.92) which accounted for 130% compared to the previous month and 107.2% compared to December 2016. The real wage accounted for 104.6% in December 2017 compared to July 2016. at 103.4% as against December 2016. In December 2017, the real value of disposable cash incomes accounted for 98.2% as compared with the same period of 2016, — 98.3% in 2017 (Fig. 2).

## **Retail turnover**

In December 2017, the retail turnover was equal to RUB 3081.5 bil., which in comparable prices accounted for 103.1% compared to the same period a year ago. At year-end 2017, the turnover amounted to RUB 29804.0 bil. or 101.2% against 2016 (Fig. 2).

Figure 2. Real values of cash incomes, wages and retail turnover in December 2017



## **Industrial Production**

According to Federal State Statistics Service's data, in December 2016 Industrial Production Index accounted for 98.5% compared to the same period a year ago, 101.0% in 2017.

According to Federal State Statistics Service's data, Industrial Production Index of drugs and medical products in December 2017 accounted for 116.2% compared to the relevant period of the previous year, 112.3% at year-end 2017.

## **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 2017.

Table 1. Top ten Russian chemical and pharmaceutical manufacturers by sales volume in December 2017

saies voiume	in December 2017	
Rank	Manufacturer	RUB mil.
1	Otcpharm	2258.04
2	Stada	1340.92
3	Valenta	1255.44
4	Pharmstandart	1135.90
5	Biocad	1104.75
6	Veropharm	964.66
7	Sotex	922.67
8	Servier	829.45
9	Akrikhin Pharma	739.23
10	Materia Medica	733.75

Source - Remedium according to IMS Health's data

Table 2 provides pharmacy sales data from 10 regions of the Russian Federation. In November 2017 compared to October, sales (in terms of roubles) reduced in six regions. The highest reduction was observed in Tatarstan (-14%), the lowest one in Rostov Region and Tyumen (-5% each). Four regions saw an increase in sales, the highest sales were observed in Krasnoyarsk Krai (+2%).

Table 2. Pharmacy sales in the regions, 2017

	Pharmacy sales, \$ mil. (wholesale prices)		Growth gain, % (roubles)			
Region	Septem- ber 2017		Novem- ber 2017	Septem- ber/ Au- gust 17	Octo- ber/Sep- tember 17	Novem- ber/Octo- ber 17
Moscow	184.1	192.4	169.8	44%	5%	-10%
St. Petersburg	56.0	56.1	55.8	26%	0.2%	1%
Krasnodar Krai	38.4	36.5	32.9	-18%	-5%	-8%
Krasnoyarsk Krai	27.6	28.8	28.6	15%	4%	2%
Tatarstan	24.7	26.4	22.4	17%	7%	-14%
Rostov Region	23.0	24.4	22.6	9%	6%	-5%
Novosibirsk Re- gion	23.5	23.7	23.3	17%	1%	0.3%
Voronezh Re- gion	15.2	14.9	13.2	23%	-2%	-10%
Perm	9.7	9.4	9.3	22%	-3%	1%
Tyumen	7.2	7.6	7.1	13%	5%	-5%

## **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 2017

Rank	Company*	Quantity of broad- casts
1	Berlin-Chemie Menarini Group	13,068
2	Otcpharm	12,615
3	GSK Consumer Healthcare	10,956
4	Johnson & Johnson	8,347
5	Bayer AG	8,006

Source - Remedium according to Mediascope's data

Table 4. Top five trade names in mass media in December, 2017

Rank	Brand*	Quantity of broad- casts
1	Evalar	5,588
2	Polyoxidoni	3,043
3	Pentalgin	2,745
4	Theraflu	2,542
5	Xymelin	2,518

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 National Statistical Committee of the Republic of Belarus, in December 2017 the Consumer Price Index was estimated at 100.2%, compared to the previous month, 104.6% against December 2016. At year-end 2017, Consumer Price Index was estimated at 106.0% compared to 2016.

In December 2017, Industrial Producer Price Index was 100.5% compared to November 2017, and 111.2% as compared to December 2016. In 2017, Industrial Producer Price Index was 109.8% as compared to 2016.

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



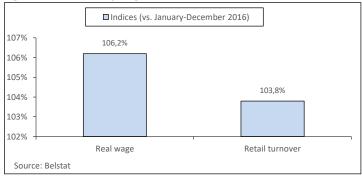
#### Living standard

According to the preliminary Balstat's data, in December 2017 the average monthly nominal accrued wage of the workers of the Republic of Belarus was BYR 995.3 (USD 494.12¹), BYR 815.2 (USD 421.99) in 2017. In December 2017, the real wage accounted for 118.4% as compared to the same period of 2016, 106.2% in 2017 (Fig. 2). According to Balstat's data, in January-November 2017 the real disposable cash income accounted for 101.5% as against January-November 2016.

#### **Retail turnover**

In December 2017, the retail turnover was estimated at RUB 3,945.8 mil., which accounted for 119.6% compared to the previous period and 108.3% compared to the same period of the last year. At year-end 2017, the turnover amounted to RUB 39158.8 mil or 103.8% against 2016 (Fig. 2).

Figure 2. Real monthly wage and retail turnover in 2017



## **Industrial Production**

According to Belstat's data, in 2017 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 93.04 bil, at current prices or 106.1% at comparable prices as against the first half of 2016.

According to Belstat's data, in 2017 the pharmaceutical production output of essential pharmaceutical products and pharmaceutical preparations was estimated at BYR 1147.5 mil., which accounted for 110.1% to January-September 2016 at comparable prices.

## MACROECONOMIC INDICES OF THE REPUBLIC OF ARMENIA

Inflation

According to the National Statistical Service of the Republic of Armenia, in December 2017 the Consumer Price Index was estimated at 101.5%, compared to December 2016 - 102.6% The Consumer Price Index accounted for 101.0% for 2017 as compared to 2016.

In December 2017, the Industrial Producer Price Index was estimated at 100.8%, as compared to the previous month, and at 103.2% as against December 2016. In January-December 2017, the Index reached 103.9% as compared to 2016.

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



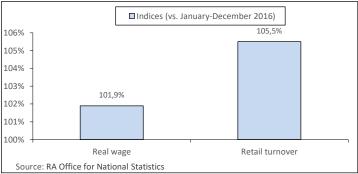
#### Living standard

According to the preliminary data of RA Office for National Statistics, the gross monthly average salary per worker in the Republic of Armenia reached AMD 240277 (USD 497) in December 2017, which accounted for 102.6% as compared to the same period of the last year. In January - December of 2017, the gross monthly average salary per worker was AMD 194259 (USD 402) or 102.9% compared to the same period of 2016, (Fig. 2). The real salary in January-December 2017 accounted for 101.9% as compared with January-December in 2016. The calculation of real disposable cash incomes according to the State Statistical Work Program for 2008 is not carried out.in the Republic of Armenia from January 1, 2008.

### **Retail turnover**

The retail turnover accounted for AMD 181917.4 mil. in December 2017, and AMD 1335742.8 mil. from the beginning of the year, which accounted for 101.3% and 105.5% as compared to the same period of the last year, respectively (Fig. 2).

Figure 2. Real monthly wage and retail turnover in 2017



## **Industrial Production**

According to the preliminary data of RA Office for National Statistics, in December of 2017 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 169619.8 mil, and AMD 1660995.3 mil. from the beginning of the year at current prices or 115.6% and 112.6% as against the same period of 2016, respectively.

According to RA Office for National Statistics data, the pharmaceutical output was estimated at AMD 1041.8 mil. in December 2017, and AMD 9602.4 mil. from the beginning of the year, which accounted for 100.1% and 116.2% as compared to the respective periods of the previous year.

<sup>&</sup>lt;sup>1</sup> The average exchange rate to calculate the above indices was used from the official website of the National Bank of Belarus <u>www.nbrb.by</u>. On July 1, 2016, in the Republic of Belarus the re-denomination was made in a ratio of 1:10.000

# MACROECONOMIC INDICES OF THE REPUBLIC OF KAZAKHSTAN

According to 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 2017, at 107.1% as against December 2016. In January-December 2017, the Index reached 107.4% as compared 2016.

In December 2017, the Industrial Producer Price Index (with due account for production, maintenance and delivery services) was 103.5%, as compare to the previous year and at 117.6% as against December 2016. In January-December 2017, the prices of producers of industrial products increased by 15.3% as compared to January-December 2016.

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



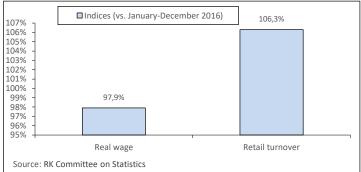
## Living standard

According to the preliminary data of the RK Committee on Statistics , the gross monthly average wage per worker reached KZT 168220 (USD 503.04²), KZT 148497 (USD 455.51) at year-end 2017. In December 2017, the Nominal Wage Index accounted for 98.6% against the respective period of 2016, 103.8% in January-December 2017, the Real Wage Index – 92.1% and 97.9%, respectively. In January-November 2017, the Real Cash Income Index was 97.5% compared to the same period of 2016 (Fig. 2).

#### Retail turnover

In December 2017, the retail turnover was KZT 1076.6 bil., in January-December of 2017 it amounted to KZT 8847.1 bil. or 108.2% and 106.3% respectively, compared to the same period in 2016 (in comparable prices) (Fig. 2).

Figure 2. Real wage index and retail turnover in 2017



## **Industrial Production**

According to the Committee for Statistics of RK, in December 2017 the industrial output was KZT 2338.1 bil., in January-September of the last year KZT 22659.0 bil. As compared to the same period of 2016, the indices accounted for 105.4% and 107.1%, respectively.

According to data of the Committee for Statistics of RK, in December of 2017 the essential pharmaceuticals output amounted to KZT 7568 mil., in January-December 2016 it was KZT 73444 mil. At the end of December 2017, the Index of Physical Volume of Industrial Production for Pharmaceuticals was estimated at 138.6% as compared to December 2015, in January-December 2017 at 141.8% as against January-December 2016.

## MACROECONOMIC INDICES OF THE KYRGYZ REPUBLIC

#### Inflation

According to data of the National Statistical Committee of the Kyrgyz Republic, in December of 2017 the Consumer Price Index was estimated at 100.7% compared to the previous month, and at 103.7% as against December 2016. In January-December 2017, the Index reached 103.2% as compared to 2016.

In December 2017, the Producer Price Index for industrial production and services was 100.1% as compared to the previous month, 104.7% as against December 2016. Throughout the Republic, the prices of producers for industrial products and services have increased by 4.7% compared to the same period of 2016.

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



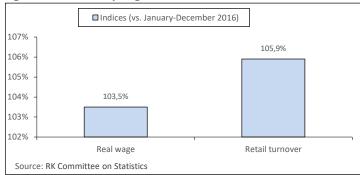
### Living standard

According to data of the Committee for Statistics of the Kyrgyz Republic, in November 2017 the average monthly nominal wage per worker was KGS 14917 (USD 214.48 ³), in January-November 2017 - KGS 14874 (USD 216.2), which is 7% and 6.7% more than in the same period of 2016, respectively. In January-November of 2017, the real wage accounted for 103.5% as compared to January-November of 2016, in November of 2017 102.9% as compared to November 2016 (Fig. 2).

#### **Retail turnover**

In December 2017, the retail turnover (without cars and motorcycles sales) amounted to KGS 46147.9 mil, in January-December 2017 - KGS 268541.0 mil. The Volume of Retail Turnover Index accounted for 108.7% and 105.9% to the same period of the previous year (Fig.2).

Figure 2. Real monthly wage and retail turnover in 2017



<sup>\*</sup> Data for January-August 2017

## **Industrial Production**

According to data of the National Committee for Statistics of the Kyrgyz Republic, in December 2017 the industrial output was KGS 18,710.5 mil., and for the period from January to December of 2017 it was KGS 231,187.8 mil. The Volume of Industrial Products index accounted for 98.3% and 111.5% as compared to the same periods of 2016.

According to data of the National Committee for Statistics of the Kyrgyz Republic, in December 2017 the essential pharmaceuticals output amounted to KGS 28.5 mil., in September - KGS 286.1 mil. At the end of December of 2017, the Physical Index of Industrial Production for Pharmaceuticals was 109.8% compared to November, and in January-December 2017 it was 125.6% compared to January-December 2016.

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

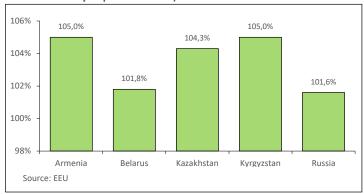
<sup>&</sup>lt;sup>3</sup> The average exchange rate to calculate the above indices was used from the official website of the National Bank of the Kyrgyz Republic http://www.nbkr.kg/

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

#### **GDP**

According to Eurasian Economic Commission's data (EAEC), at the end of January-September of 2017 GDP of EAEU member-states amounted to USD 1289.9 bil. and increased by 1.9% as compared to the same period of 2016 in fixed prices. The growth in GDP was recorded in all EAEU member-states, a more significant increase in Armenia and Kyrgyzstan (+5.0% each), (+5.9%), and Kazakhstan (+4.3%). GDP increased to a lesser extent in Russia (+1.6%) and Belarus (+1.8%) (Fig. 1).

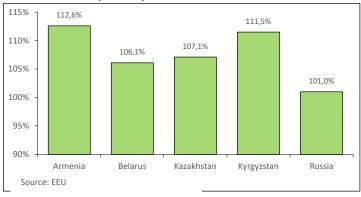
Figure 1. GDP growth in the EAEU member-states (January-September 2017 vs. January-September 2016)



#### **Industrial Production**

According to preliminary EAEC data, in January-December 2017 the volume of industrial output of the EAEU member-states amounted to USD 1.105 bil. and increased in fixed prices by 1.7% as compared to 2016. In individual countries, the Industrial Production Index accounted for: 112.6% in Armenia, 106.1% in Belarus, 107.1% in Kazakhstan, 107.8% in Kyrgyzstan and 111.5% in Russia (Fig. 2).

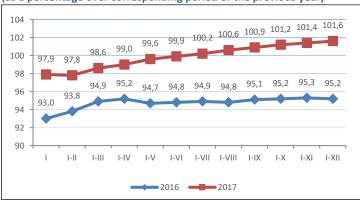
Figure 2. Industrial production in the EAEU member-states in January-December of 2017 (vs. 2016)



## **Retail turnover**

According to the EEC, the retail trade turnover (through all sales channels) of EEU member-states in January-December 2017 amounted to USD 566.1 bil. Compared with the same period of 2016, the volume of retail sales (in comparative prices) increased by 1.6%. In the analysed period, all member-states showed growth in the retail turnover. In this case, the indices accounted for 105.6% in Armenia, 103.8% in Belarus, 106.3% in Kazakhstan 105.8% Kyrgyzstan and 101.2% in Russia (Fig. 2).

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



#### Nominal and real wage

According to the EEC's data, in 2017 the nominal wages increased in all EEU member-states. The gross monthly average wage per worker increased in Armenia by 2.9%, in Belarus by 12.6%, in Kazakhstan by 5.1%, in Kyrgyzstan by 6.7% (in January-November 2017), in Russia by 7.2%. The real wage (adjusted for the consumer price index for goods and services) increased: in Armenia by 1.9%, in Belarus 6.2%, in Kyrgyzstan by 3.4% (in January- November of 2017), in Russia by 3.4%, in Kazakhstan decreased by 2.1%.

Table 1. Nominal and real wage in 2017

Country	Real wage, as % to the same pe- riod of 2016	Nominal wage, USD
Armenia	101.9	402
Belarus	106.2	422
Kazakhstan	97.9	459
Russia	103.4	670
Kyrgyzstan <sup>1</sup>	103.4	216

<sup>&</sup>lt;sup>1</sup> January- November 2017

Budget performance

According to the ECE, in January-September 2017 the republican budget was executed with a deficit in all the member states of the EAEU except for the Republic of Belarus, where the budget was executed with a surplus. The greatest increase in the deficit (more than 2 times) was recorded in the Republic of Kazakhstan. The budget revenue parts showed an increase as compared to the corresponding period of the previous year. At the same time, the budget expenses in Armenia and Belarus decreased, while in other member states of the EAEU they grew. The budget revenue parts showed an increase in all member states as compared to the corresponding period of the previous year (in terms of national currency): in Armenia by 105%, in Belarus by 111%, in Kazakhstan by 139%, in Kyrgyzstan by 119% and in Russia by 118%. At the same time, the budget expenses in Armenia and Belarus decreased, while in other member states of the EAEU they grew. The expenditure growth rates were as follows: in Armenia 99%, in Belarus 98%, in Kazakhstan 146%, in Kyrgyzstan 106%, in Russia 104%.

Table 2. Republican budget in January-September 2017

Country	USD bil.				
	Income	Expenditure	Deficit (surplus)		
Armenia	1.8	2.0	-0.2		
Belarus	7.3	6.0	1.3		
Kazakhstan	22.9	26.6	-3.7		
Russia	188.1	191.9	-3.9		
Kyrgyzstan	1.4	1.5	-0.1		
EAEU	221.5	228.0	-6.6		

## Mutual trade of EAEU member-states in January- November of 2017

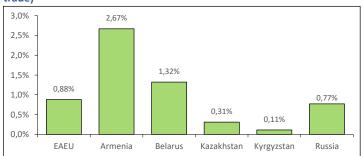
The volume of mutual trade in commodities of EAEU member-states in January-November 2017 amounted to USD 48.8 bil. or 126.4% as against the same period of 2016.

Table 3. Export volumes of the EEU member-states in the mutual trade in January-November 2017

iii Jaiiuai y-ivo	TJanuary-November 2017							
Countr	ies	USD bil.	% vs January-		Share in total,			
			Februai	y 2016.	%			
EAEU		48832.4	126.4		100.0			
Armenia		506.5	140.4		1.0			
	Russia	494.4		144.2		97.6		
Belarus		12429.8	120.9		25.5			
	Russia	11742.0		118.8		94.5		
Kazakhstan		4600.4	131.3		9.4			
	Russia	4074.2		133.0		88.6		
Kyrgyzstan		522.7	125.7		1.1			
	Russia	239.0		140.8		45.7		

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

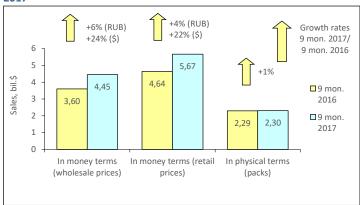
Table 4. The structure of mutual trade between EAEU member-states within the Customs Commodity Code group "Pharmaceutical products" in January-November 2017 (as percentage of the total volume of mutual trade)



#### PHARMACY OTC MARKET IN RUSSIA: 2017 NINE MONTHS RESULTS

According to the results of the Retail Audit of Finished Pharmaceutical Products (FPP) in Russian Federation™, at January-September-end 2017 the sales of OTC drugs in physical terms in the country saw a 1% increase to 2.302 bil. packs. In money terms, the OTC drugs market increased by 6% in rouble terms and by 24% in dollar terms and reached RUB 259.360 bil. (USD 4.449 bil.) in wholesale prices (Fig. 1). The share of Over-the-Counter (OTC) drugs accounted for 69.9% of sales in physical terms and 52.3% in retail prices in terms of roubles. The average cost of a pack increased as compared to the same period of 2016 and reached USD 2.46 (vs. USD 2.03) in retail prices. At the end of the first nine months of 2017, the average amount spent by the residents of Russia for OTC drugs in pharmacies amounted to USD 38.63.

Figure 1. Russian pharmacy OTC market for 9 months of 2016 – 9 months 2017



The top three drug manufacturers in the Russian OTC market held their own in the ranking based on the results of January-September 2017: as before, the drug manufacturers OTCPHARM and BAYER(+9% each<sup>4</sup>), and SANOFI-AVENTIS (-5%) maintained their first three ranks in the top ten ranking (table 1). MENARINI (+4%) also held its previous rank nine. Among the remaining manufacturers are four manufacturers with positive growth rates which showed rating progress. JOHNSON&JOHNSON (+2%), STADA (+11%), SANDOZ (+4%) and SERVIER (+8%) moved up to ranks four, five, seven and ten. On top of that, the latter became the only newcomer of the top 10 ranking. In contrast, GLAX-OSMITHKLINE (-3%) and TEVA (-1%) reduced their sales and moved down to ranks six and eight, respectively. The cumulative share of the top 10 manufacturers reduced from 41.1% to 40.5%.

Table 1. The top ten drug manufacturers by pharmacy sales

Rank		Manufacturer*	Share in total phar- macy sales, %		
9 mon. 2017	9 mon. 2016	Manufacturer	9 mon. 2017	9 mon. 2016	
1	1	OTCPHARM	6.0	5.8	
2	2	BAYER HEALTHCARE	5.4	5.2	
3	3	SANOFI-AVENTIS	4.5	5.0	
4	5	JOHNSON & JOHNSON	4.0	4.1	
5	7	STADA	4.0	3.8	
6	4	GLAXOSMITHKLINE	3.9	4.2	
7	8	SANDOZ	3.7	3.7	
8	6	TEVA	3.7	3.9	
9	9	MENARINI	2.9	3.0	
10	11	SERVIER	2.4	2.3	
Total			40.5	41.1	

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

Due to considerable growth in sales rates, NUROFEN (+15%), DETRALEX (+25%) and CARDIOMAGNYL (+14%) took the lead with the top ten brands ranking (Table 2). The brands MIRAMISTIN (+22%), PENTALGIN (+16%) and THERAFLEX (+12%) also showed high positive growth rates and rose in the ranks, moving up to ranks seven, eight and ten, respectively. On top of that, the latter became the only newcomer of the top 10 ranking. At the same time, the last year leaders KAGOCEL (-25%) and INGAVIRIN (-22%) moved down to ranks five and six, and THERAFLU (+2%), which showed low growth rates, lost two ranks, moving down to rank nine. The brand ESSENTIALE (-4%) held its own rank four in the top ten. The total share of the top 10 brands reduced from 11.9% to 11.6%.

Table 2. The top ten brands by pharmacy sales

Rank		Brand	Share in total pharmacy sales, %		
9 mon. 2017	9 mon. 2016	Diallu	9 mon. 2017	9 mon. 2016	
1	3	NUROFEN	1.5	1.4	
2	5	DETRALEX	1.4	1.2	
3	6	CARDIOMAGNYL	1.2	1.1	
4	4	ESSENTIALE	1.2	1.3	
5	1	KAGOCEL	1.2	1.7	
6	2	INGAVIRIN	1.1	1.5	
7	8	MIRAMISTIN	1.1	0.9	
8	10	PENTALGIN	1.0	0.9	

<sup>&</sup>lt;sup>4</sup> Hereinafter, unless otherwise stated, growth gains are stated in the rouble equivalent or national currency.

	Rank		Brand	Share in total pharmacy sales, %		
	non. 017	9 mon. 2016	Dialiu	9 mon. 2017	9 mon. 2016	
9		7	THERAFLU	1.0	1.0	
10		11	THERAFLEX	0.9	0.9	
Tot	tal			11.6	11.9	

Only the leader of the top ten INN and generic names ranking XYLOMETAZO-LINE (+15%) held and reinforced the leading position (Table 3). IBUPROFEN (+19%) and DIOSMIN\*HESPERIDIN (+25%) moved up to ranks two and three, displacing the less dynamic PANCREATIN (+7%) down to rank four. PHOSPHO-LIPIDS (+1%), ACETYLSALICYLIC ACID\*MAGNESIUM (+16%) and CHONDROITIN-SULFURIC ACID\* GLUCOSAMINE (+6%) and the newcomer of the top ten NAFTIFINE (+15%) moved up to the higher ranks from five through seven. Due to the strong negative growth rates, INNs KAGOCEL (-25%) and IMIDAZOLYL ETHANAMIDE PENTANDIOIC ACID (-22%) moved down to ranks eight and ten respectively. The total share of the top 10 ranking remained unchanged and amounted to 16.6%.

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

Ra	nk	INNs/Group Names	Share in total phar- macy sales, %	
9 mon. 2017	9 mon. 2016	inins/ Group Names	9 mon. 2017	9 mon. 2016
1	1	XYLOMETAZOLINE	3.2	3.0
2	3	IBUPROFEN	2.1	1.9
3	4	DIOSMIN*HESPERIDIN	2.0	1.7
4	2	PANCREATIN	1.9	1.9
5	7	PHOSPHOLIPIDS	1.4	1.5
6	9	ACETYLSALICYLIC ACID* MAGNE- SIUM	1.2	1.1
7	8	CHONDROITINSULFURIC ACID* GLU- COSAMINE	1.2	1.2
8	5	KAGOCEL	1.2	1.7
9	11	NAFTIFINE	1.2	1.1
10	6	IMIDAZOLYL ETHANAMIDE PENTAN- DIOIC ACID	1.1	1.5
Total			16.6	16.5

R01 Nasal preparations (+6%) became the best-selling ATC group in the regional OTC drugs market (Table 4). J05 Antivirals for systemic use, which took the lead in the top ten ATC groups ranking in the earlier period, reduced their sales by 21% and moved down to rank seven only. The groups A11 Vitamins (-1%) and L03 Immunostimulants (-4%) also showed reduction in sales. The former moved up one rank, to number six, and the latter moved down to rank nine. The groups C05 Vasoprotectives (+14%) and M01 Anti-inflammatory and antirheumatic products (+16%) also managed to rise in the ranks, moving up to ranks three and eight, respectively. Four manufacturers from the top 10 managed to hold their own in the ranking. N02 Analgesics (+4%), A07 Antidiarrheals (+6%), R05 Cough and cold preparations (+4%) and R02 Throat preparations (+1%) maintained their previous ranks two, four, five and ten. The consolidated share of the top 10 reduced from 49.4% to 47.7%.

Table 4. The top ten ATC Groups by pharmacy sales

Ra	ank ATC			Share in total phar- macy sales, %	
9 mon. 2017	9 mon. 2016	code	ATC group	9 mon. 2017	9 mon. 2016
1	3	R01	NASAL PREPARATIONS	5.9	5.8
2	2	N02	ANALGESICS	5.8	5.9
3	6	C05	VASOPROTECTIVES	5.5	5.1
4	4	A07	ANTIDIARR.,INTEST. ANTI- INFL./ANTIINFECT. AGENTS	5.4	5.4
5	5	R05	COUGH AND COLD PREPARA- TIONS	5.1	5.2
6	7	A11	VITAMINS	4.8	5.1
7	1	J05	ANTIVIRALS FOR SYSTEMIC USE	4.6	6.1
8	9	M01	ANTIINFLAMMATORY AND AN- TIRHEUMATIC PRODUCTS	3.8	3.6
9	8	L03	IMMUNOSTIMULANTS	3.5	3.8
10	10	R02	THROAT PREPARATIONS	3.3	3.4
Total				47.7	49.4

Conclusion. On the basis of the results for the first nine months of 2017, the OTC retail market of Russia achieved RUB 330.630 bil. (USD 5.672 bil.), which was 4% in terms of roubles and 22% in terms of dollars - higher than the same indicator in the same period of 2016. In pack terms, the market also showed positive growth rates (+1%) and achieved 2.302 mil. packs. The average cost of an OTC-pack in the Russian pharmacies based on the results for January-September of 2017 was USD 2.46 which was more than in the year-earlier period (USD 2.03). The average expenses of Russian residents for the purchase of OTC drugs in pharmacies also increased (USD 38.63 vs. USD 31.68).

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

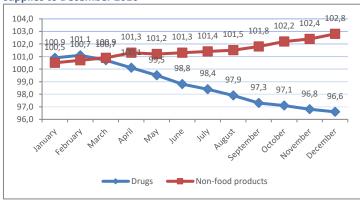
## **Price Indices**

Table 1. Inflation rates in the Russian Federation, December 2017 – January 2018

	December 2017 as against December 2016	January 2018 as against December 2017
CPI	102.5	100.3
CPI for non-food products	102.8	100.3
CPI for medications	96.6	100.3

Rosstat data

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



Rosstat data

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

Figure 2. Dynamics of weighted average prices and retail margins in 1-4 Q 2016 – 1-4 Q 2017

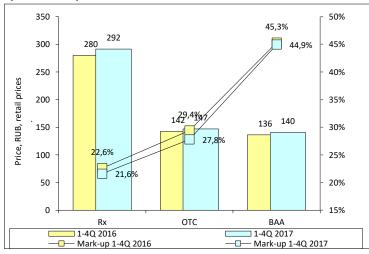


Figure 3. Dynamics of weighted average prices and retail margins in 1-4 Q 2016 – 1-4 Q 2017

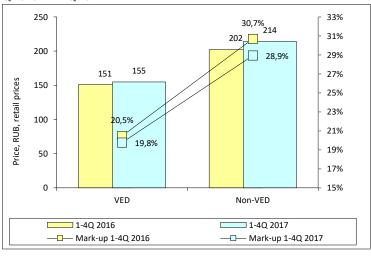
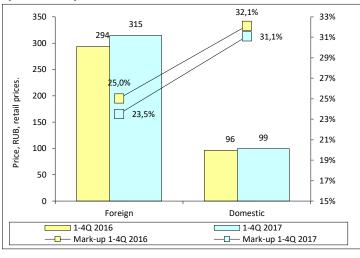


Figure 4. Dynamics of weighted average prices and retail margins in 1-4 Q 2016 – 1-4 Q 2017

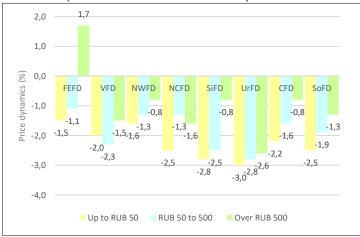


Indicators of dynamics of prices for vital and essential drugs (VED)

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

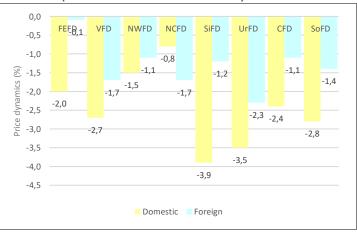
	Price dynamics in I	Price dynamics in December 2017 as against December 2016 (%)			
	Retail prices	Wholesale prices	Manufacturers' prices		
VED total	-1.8	-1.5	0.3		
Not more than RUB 50	-2.1				
From RUB 50 to 500	-1.9				
Over RUB 500	-1.0				
Domestic	-2.5				
Foreign	-1.3				

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



Roszdravnadzor data

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



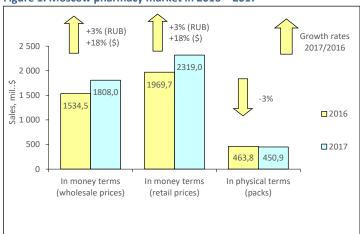
Roszdravnadzor data

#### **MOSCOW CITY PHARMACY MARKET: 2017 RESULTS**

According to Federal State Statistics Service, as of January 1, 2017 Moscow's estimated population was 12.381 mil., which accounted for 8.4% of the total Russian Federation population and 31.6% of Central FO (CFO). According to Moscow territorial body of the Federal State Statistics Service, in Moscow the average monthly accrued wage for January-September of 2017 was RUB 70,459 (USD 1208.14) in November 2017 - RUB 70991. (USD 1204.87), which was 83% higher than the average wage in Russia (RUB 38720).

According to the results of the Retail Audit of Over-the-Counter Drugs (OTC) in Russian Federation™, at the end of 2017 the sales of OTC drugs in physical terms in pharmacies of Moscow saw a 3% decrease to 450.945 mil. packs. In value terms, the OTC drugs market increased by 3% in rouble terms and by 18% in dollar terms and reached RUB 105.320 billion (USD 1.808 billion) in wholesale prices (Fig. 1). The region market share accounted for 14.6% of the Russian pharmacy retail sales. An average cost of a pack grew as compared to the last year: USD 5.14 vs. USD 4.25 in retail prices. At the end of 2017, the average amount spent by the Muscovites for OTC drugs in pharmacies amounted to USD 187.31.

Figure 1. Moscow pharmacy market in 2016 – 2017



At year-end 2017, the drug manufacturer BAYER (+15%) became the leader of the Moscow retail market, displacing SANOFI-AVENTIS (-8%) down one rank from that position (Table 1). TEVA (+2%), SERVIER (+7%), ABBOTT (+9%) and JOHNSON & JOHNSON (+2%) held their previous numbers from three through five and eight, respectively. SANDOZ (+9%) moved up one rank, to number six, displacing GLAXOSMITHKLINE (+2%) down to rank seven. The newcomers MENARINI (+8%) and ASTRAZENECA (+21%) broke into the ranks of the top ten, coming in at numbers nine and ten. The total share of the top 10 drug manufacturers declined by almost 1 p.p. to 37.2%.

Table 1. The top ten drug manufacturers by pharmacy sales

Rank in the top ten		Manufacturer*	Share in total phar- macy sales, %	
2017	2016		2017	2016
1	2	BAYER HEALTHCARE	6.2	5.5
2	1	SANOFI-AVENTIS	5.0	5.6
3	3	TEVA	3.8	3.9
4	4	SERVIER	3.6	3.4
5	5	ABBOTT	3.5	3.3
6	7	SANDOZ	3.4	3.2
7	6	GLAXOSMITHKLINE	3.3	3.3
8	8	JOHNSON & JOHNSON	3.0	3.0
9	11	MENARINI	2.8	2.7
10	13	ASTRAZENECA	2.8	2.4
Total			37.2	36.3

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

Almost all brands from the top ten brands ranking showed outperformance rates and rose in the ranks (Table 2). The most dynamic among the leaders CRESTOR (+46%) and XARELTO (+53%) moved up to the top two ranks from three and four. The brands DETRALEX (+25%), CIALIS (+4%), NUROFEN (+18%) and MIRAMISTIN (+4%) moved up to ranks three through six, respectively. The newcomers of the top ten moved up to ranks seven, nine and ten of the ranking: CONCOR (+10%), HEPTRAL (+25%) and LINEX (+15%). INGAVIRIN reduced its sales by 29% and moved down from rank two to eight. The aggregate share of the top-10 expended from 7.4% to 8.3%.

Table 2. The top ten brands by pharmacy sales

Rank in the top ten		Brand	Share in total pharmacy sales, %	
2017	2016		2017	2016
1	3	CRESTOR	1.3	0.9
2	4	XARELTO	1.2	0.8
3	6	DETRALEX	1.0	0.8
4	5	CIALIS	0.8	0.8
5	9	NUROFEN	0.8	0.7
6	7	MIRAMISTIN	0.8	0.8
7	11	CONCOR	0.7	0.6
8	2	INGAVIRIN	0.7	1.0
9	15	HEPTRAL	0.6	0.5

	nk top ten	Brand	Share in total pharma sales, % 2017 2016	
2017	2016			
10	16	LINEX	0.6 0.5	
Total			8.3	7.4

In contrast to the above rankings, the leaders of -10 top ten INNs and grouping names ranking didn't change (Table 3). XYLOMETAZOLINE (+8%) and ROSUVASTATIN (+42%) maintained and reinforced their first two ranks in the top ten. The markets of the other INNs from the top ten developed at a fast pace, which allowed them to rise up in the ranks. The composition DIOSMIN\* HESPERIDIN (+28%) moved up to rank three from five, and INN PANCREATIN (+6%) and MIRAMISTIN (+4%) moved up to ranks six and seven from seven and ten. Four newcomers of the top ten, RIVAROXABAN (+53%), BISOPROLOL (+11%), TADALAFIL (+4%) and HYALURONIC ACID (+10%) moved up to ranks four and the bottom three ranks. Despite the outstripping growth rates, INN IBUPROFEN moved down one rank, to number five. The total share of the top ten under review increased from 9.6% to 11%.

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

Rank		INNs/Group Names	Share in total phar- macy sales, %	
2017	2016	, ,	2017	2016
1	1	XYLOMETAZOLINE	1.8	1.7
2	2	ROSUVASTATIN	1.6	1.1
3	5	DIOSMIN*HESPERIDIN	1.2	1.0
4	11	RIVAROXABAN	1.2	0.8
5	4	IBUPROFEN	1.1	1.0
6	7	PANCREATIN	1.0	1.0
7	10	MIRAMISTIN	0.8	0.8
8	14	BISOPROLOL	0.8	0.7
9	12	TADALAFIL	0.8	0.8
10	16	HYALURONIC ACID	0.7	0.7
Total		·	11.0	9.6

At year-end 2017, J05 Antivirals for systemic use, which took the lead in the previous top ten ATC groups ranking, reduced their sales by 32% and moved down to rank eight (Table 4). Due to this, R01 Nasal preparations (+6%) and M01 Anti-inflammatory and antirheumatic products (+8%) moved up one rank, to the top two positions. The more dynamic C09 Agents acting on the renninangiotensin system (+13%) moved up to rank three from five, and B01 Antithrombotic agents (+25%) moved up to rank four from nine. The groups A07 Antidiarrheals, intestinal antiinflammatory/antiinfective agents (+7%), G03 Sex hormones (+4%) and G04 Urologicals (+6%) improved their ranks by one point, moving up to ranks five, six and nine respectively. In contrast, the ATC groups with negative sales rates J01 Antibacterials for systemic use (-11%) and A11 Vitamins (-2%) moved down to ranks seven and ten. In total, the top ten ATC groups accumulated 36.0% of the regional market, whereas in the year-earlier period they accounted for 36.8%.

Table 4. The top ten ATC Groups by pharmacy sales

Table 4. The top ten ATC Groups by pharmacy sales					
Rank		ATC	ATC group	Share in total phar- macy sales, %	
2017	2016	code	· .	2017	2016
1	2	R01	NASAL PREPARATIONS	4.2	4.1
2	3	M01	ANTIINFLAMMATORY AND AN- TIRHEUMATIC PRODUCTS	4.1	3.9
3	5	C09	AGENTS ACTING ON THE RENIN- ANGIOTENSIN SYSTEM	3.9	3.6
4	9	B01	ANTITHROMBOTIC AGENTS	3.8	3.1
5	6	A07	ANTIDIARR.,INTEST. ANTI- INFL./ANTIINFECT. AGENTS	3.6	3.5
6	7	G03	SEX HORMONES AND MODULA- TORS OF THE GENITAL SYSTEM	3.4	3.4
7	4	J01	ANTIBACTERIALS FOR SYST USE	3.4	3.8
8	1	J05	ANTIVIRALS FOR SYSTEMIC USE	3.4	5.1
9	10	G04	UROLOGICALS	3.1	3.1
10	8	A11	VITAMINS	3.1	3.3
Total			·	36.0	36.8

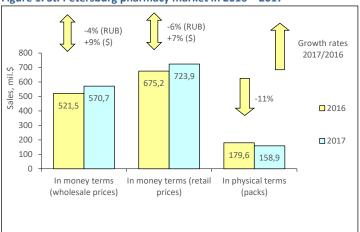
Conclusion. On the basis of the results for 2016, the retail pharmacy market of Moscow brought in RUB 135.079 bil. (USD 2.319 bil.), which was 3% in terms of roubles and 18% in terms of dollars more than in 2016. In pack terms, the market reduced by 3% and amounted to 450.945 mil. packs. According to the results for 2017, the average cost of an FPP pack in the city pharmacies was USD 5.14 which is more than in the year-earlier period (USD 4.25) and 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 187.31 vs. USD 108.08).

#### SAINT PETERSBURG PHARMACY MARKET: 2017 RESULTS

According to Federal State Statistics Service, St. Petersburg's population as of January 1, 2017 was estimated at 5.285 mil., which accounted for 3.6% of the total Russian Federation population and 38% of North West FO (NWFO). According to St.Petersburg territorial body of the Federal State Statistics Service, based on the results for January-September of 2017 the average wage in the city was RUB 45170.8 and in November RUB 54353. (USD 922.49), which was 40% higher than the average wage in Russia (RUB 38720).

According to the results of the Retail Audit of FPP (Finished Pharmaceutical Products) in Russian Federation™, at the end of 2017 the sales of drugs in natural terms in St. Petersburg pharmacies saw a 11% decrease to 158.92 mil. packs. In value terms, the market saw a 4% decrease in terms of roubles, whereas it showed a positive growth (+9%) in terms of dollars. At the same time, the volume of the market achieved RUB 33.287 bil. (USD 570.748 mil.) at wholesale prices (Fig. 1). The regional market share accounted for 4.6% of the Russian pharmacy sales. The average cost of an OTC pack reduced as compared to a year earlier period (USD 3.76) and reached USD 4.56 at retail prices. For 12 months of 2017, the average amount spent by the residents of the city for drugs in the pharmacies amounted to USD 137.07.

Figure 1. St. Petersburg pharmacy market in 2016 – 2017



Based on the results for 2017, the drug manufacturers BAYER (+3%), SANOFI-AVENTIS (-17%) and TEVA (-0.2%) continued to show the largest retail sales on the St. Petersburg market, though the latter two demonstrated the negative growth rates (Table 1). Note, that another four drug manufacturers of the top ten also showed reduction in sales. SANDOZ (-16%) and JOHNSON & JOHNSON (-17%) moved down to ranks five and ten, and ABBOTT (-3%) and GLAX-OSMITHKLINE (-13%) kept their previous ranks six and seven. Three manufacturers showed a rating progress. SERVIER (+4%) and OTCPHARM (0%) moved up one rank, coming in at numbers four and eight, whereas the newcomers of the top ten NYCOMED/TAKEDA (+20%) moved up to rank nine. The cumulative share of the top-ten decreased by 0.2 p.p. and achieved 39.2%.

Table 1. The top ten drug manufacturers by pharmacy sales

Rank		Manufacturer*	Share in total pharmacy sales, %	
2017	2016		2017	2016
1	1	BAYER HEALTHCARE	7.0	6.5
2	2	SANOFI-AVENTIS	5.1	5.9
3	3	TEVA	4.4	4.2
4	5	SERVIER	4.2	3.9
5	4	SANDOZ	3.6	4.1
6	6	ABBOTT	3.6	3.5
7	7	GLAXOSMITHKLINE	3.2	3.5
8	9	OTCPHARM	2.9	2.8
9	14	NYCOMED/TAKEDA	2.8	2.2
10	8	JOHNSON & JOHNSON	2.5	2.9
Total	•		39.2	39.4

\*AIPM members are in bold

Due to 21% growth in sales, the brand XARELTO held and reinforced its previous rank number one in the top ten brand names ranking (Table 2). DETRALEX (+34%) and CONCOR (+13%) showed positive growth rates and moved up to ranks two and three from six and ten, displacing KAGOCEL (-30%), ESSENTIALE (-28%) and NUROFEN (-22%) to ranks four through six respectively. Three newcomers of the top ten HEPTRAL (+4%), BEPANTHEN (+3%) and NOLIPREL (-1%) moved up to ranks seven through nine. At the same time, the brand THERAFLU (-17%) moved down to the last rank of the top ten. The total share of the top 10 brands didn't virtually change and accounted for 7.2%.

Table 2. The top ten brands by pharmacy sales

Rank		Brand	Share in total pharma sales, %	
2017	2016		2017	2016
1	1	XARELTO	1.3	1.0
2	6	DETRALEX	1.0	0.7
3	10	CONCOR	0.7	0.6
4	2	KAGOCEL	0.7	0.9
5	3	ESSENTIALE	0.7	0.9
6	4	NUROFEN	0.6	0.8

Rank		Brand	Share in total pharmacy sales, %	
2017	2016	7	2017 2016	
7	16	HEPTRAL	0.6	0.5
8	17	BEPANTHEN	0.6	0.5
9	14	NOLIPREL	0.6	0.5
10	7	THERAFLU	0.6	0.6
Total			7.2	7.1

Three newcomers broke into the ranks of the top INN and grouping names rating (Table 3). BISOPROLOL (+9%), DROSPIRENONE\*ETHINYLESTRADIOL (+2%) and HYALURONIC ACID (+22%) moved up to the bottom three ranks. In addition, INN RIVAROXABAN (+21%) and the composition DIOSMIN\* HESPERIDIN (+27%) also showed positive growth rates. As before, the former held its previous rank two, and the latter moved up to rank three from nine. The top ten leaders XYLOMETAZOLINE (-16%) and ATORVASTATIN (-3%) reduced their sales and held their previous ranks one and four. INNs ROSUVASTATIN (-13%) and IBUPROFEN (-14%) showed negative growth rates and fell in the ranks, moving down from rank to ranks five and seven respectively, whereas PANCREATIN (-11%) moved up one rank, to number six. The cumulative share of the top10 increased from 9.5% to 9.9%.

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

Rank		INNs/Group Names	Share in total phar- macy sales, %	
2017	2016	•	2017	2016
1	1	XYLOMETAZOLINE	1.5	1.7
2	2	RIVAROXABAN	1.3	1.0
3	9	DIOSMIN*HESPERIDIN	1.2	0.9
4	4	ATORVASTATIN	1.0	0.9
5	3	ROSUVASTATIN	0.9	1.0
6	7	PANCREATIN	0.9	0.9
7	5	IBUPROFEN	0.8	0.9
8	15	BISOPROLOL	0.8	0.7
9	13	DROSPIRENONE*ETHINYLESTRADIOL	0.8	0.7
10	24	HYALURONIC ACID	0.8	0.6
Total			9.9	9.5

The top ten ATC groups ranking didn't change its leader either - C09 Agents acting on the rennin-angiotensin system (+6%) held its rank number one (Table 4). The most dynamic of the top ten ATC groups B01 Antithrombotic agents (+12%) moved up to rank two, displacing M01 Anti-inflammatory and antirheumatic products (-9%) down one rank. The group G03 Sex hormones (+6%), which moved up to rank four from 7, and the newcomer C05 Vasoprotectives (+8%) also showed growth in sales. In contrast, the other five ATC groups of the top ten reduced their sales and fell in the ranks. R01 Nasal preparations (-13%), A11 Vitamins (-9%), J01 Antibacterials for systemic use and A07 Antidiarrheals, intestinal antiinflammatory/antiinfective agents (-11% each) moved down one rank, whereas J05 Antivirals for systemic use (-24%) moved down to rank seven from three. In total, the top ten ATC groups accumulated 37.3% of the market, whereas in the year-earlier period they accounted for 37.5%.

Table 4. The top ten ATC Groups by pharmacy sales

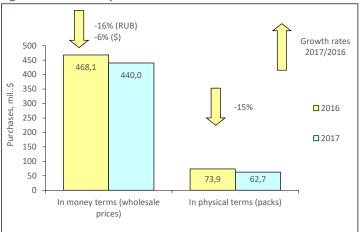
Ra	Rank		ATC group	Share in total ph macy sales, %	
2017	2016	code		2017	2016
1	1	C09	AGENTS ACTING ON THE RENIN- ANGIOTENSIN SYSTEM	4.9	4.4
2	6	B01	ANTITHROMBOTIC AGENTS	4.2	3.6
3	2	M01	ANTIINFLAMMATORY AND AN- TIRHEUMATIC PRODUCTS	4.0	4.2
4	7	G03	SEX HORMONES AND MODULA- TORS OF THE GENITAL SYSTEM	4.0	3.6
5	4	R01	NASAL PREPARATIONS	3.7	4.0
6	5	A11	VITAMINS	3.6	3.8
7	3	J05	ANTIVIRALS FOR SYSTEMIC USE	3.3	4.2
8	12	C05	VASOPROTECTIVES	3.3	2.9
9	8	J01	ANTIBACTERIALS FOR SYST USE	3.2	3.4
10	9	A07	ANTIDIARR.,INTEST. ANTI- INFL./ANTIINFECT. AGENTS	3.2	3.4
Total		37.3	37.5		

**Conclusion.** On the basis of the results for 2017, the pharmacy market of St.Petersburg brought in RUB 42.219 bil. (USD 723.934 mil.), which is 6% less in terms of roubles and 7% more in terms of dollars than in 2016. In physical terms, the market saw a 11% decrease and was equal to 158.921 mil. packs. At year-end 2017, the average cost of FPP pack in the city pharmacies was USD 4.56, which was more than in the year-earlier period (USD 3.76) 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 137.07 vs. USD 108.08).

#### **MOSCOW CITY HOSPITAL MARKET: 2017 RESULTS**

According to the results of the Budget Audit of Finished Pharma Products (FFP) in the Russian Federation, in 2017 the Moscow hospital market in physical terms reduced by 15% compared to the previous year and amounted to 62.737 mil. packs. In money terms, the market showed negative growth rates both in terms of roubles (-16%) and in terms of dollars (-6%) and reached RUB 25.677 bil. (USD 440.039 mil.) in wholesale prices. At year-end 2017, the average cost of an FPP pack in the hospital sector of Moscow was USD 7.01, whereas in the year-earlier period its cost was USD 6.34.

Figure 1. Moscow hospital market in 2016 - 2017



Despite 69% reduction in purchases and significant drop in the market shares, the drug manufacturer PFIZER remained the leader of the top ten manufacturers in the Moscow hospital market at year-end 2017 (Table 1). Note that another three manufacturers of the top ten showed negative growth rates based on the results for 2017. The drug manufacturers ABBVIE (-36%), BIOCAD (-15%) and PHARMASYNTEZ (-25%) moved down to ranks four, seven and nine, respectively. SANOFI-AVENTIS which showed zero growth rates held its previous rank five, whereas the other five drug manufacturers rose in the ranks. JOHNSON & JOHNSON (+64%) and MERCK SHARP DOHME (+53%) moved up to ranks two and three from seven and eight, and the newcomers of the top ten BAXTER (+80%), BRISTOL MYERS (+19%) and BAYER (+70%) moved up to ranks six, eight and ten. The total share of the top 10 drug manufacturers reduced from 39.4% to 37.0%

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 purchases, %			
2017	2016		2017	2016		
1	1	PFIZER	5.6	15.4		
2	7	JOHNSON & JOHNSON	5.3	2.7		
3	8	MERCK SHARP DOHME	4.6	2.5		
4	3	ABBVIE	4.2	5.4		
5	5	SANOFI-AVENTIS	3.5	2.9		
6	16	BAXTER INT	3.0	1.4		
7	4	BIOCAD RF	3.0	2.9		
8	12	BRISTOL MYERS SQU	2.6	1.8		
9	6	PHARMASYNTEZ	2.6	2.9		
10	18	BAYER HEALTHCARE	2.6	1.3		
Total			37.0	39.4		

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

As in the previous ranking, the leader PREVENAR 13 (-86%) held its own in the top ten brands ranking despite high negative growth rates (Table 2). The brand names SOVIGRIPP (-73%) and VIKEYRA PAK (-60%) also showed reduction in purchases, which resulted in the loss of their positions – drugs moved down to ranks four and nine, respectively. The other brands showed positive growth rates and most of them rose in the ranks. NATRIUM CHLORIDUM (+49%) moved up to rank three from five, and KALETRA (+32%) moved up to rank six from ten. Four newcomers of the top ten, SOVRIAD (8-fold growth in purchases), DAKLINZA (+66%), VFEND (+55%) and MYCAMINE (+20%) moved up to ranks two, five, seven and eight, respectively. And only SEVORAN (+2%), which showed relatively low growth rates, moved down to rank ten of the top ten ranking. The total share of the top 10 reduced from 24.9% to 14.6%.

Table 2. The top 10 brands by hospital purchases

Rank in the top ten		Brand	Share in total hospi- tal purchases, %	
2017	2016		2017	2016
1	1	PREVENAR 13	2.2	12.9
2	41	SOVRIAD	2.1	0.2
3	5	NATRIUM CHLORIDUM	1.8	1.0
4	2	SOVIGRIPP	1.5	4.8
5	12	DAKLINZA	1.4	0.7
6	10	KALETRA	1.3	0.8
7	13	VFEND	1.1	0.6
8	11	MYCAMINE	1.1	0.7
9	4	VIKEYRA PAK	1.1	2.3

Rank in the top ten		Brand	Share in total hospi- tal purchases, %	
2017	2016		2017	2016
10 9		SEVORAN	1.0	0.8
Total			14.6	24.9

Four newcomers broke into the ranks of the top ten INN and group names ranking: SIMEPREVIR (8-fold growth in purchases), DACLATASVIR (+66%), ALBUMIN (+57%) and LOPINAVIR\*RITONAVIR (+32%) moved up to ranks three and from seven through nine respectively. The markets of INNs IMMUNO-GLOBULIN BASE (+72%), SODIUM (+48%) and MEROPENEM (+17%) also developed at a fast pace, which allowed the former two to move up to ranks two and five respectively. Despite the growth in purchases, the latter moved down one rank, being displaced by more dynamic INN. Two INNs with negative growth rates VACCINE, INFLUENZA (-82%) and DARUNAVIR (-17%) also fell in the ranks, moving down to ranks four and ten. Despite pronounced negative growth rates and considerable reduction in market share, INN VACCINE, PNEU-MOCOCCAL (-81%) remained the leader of the top ten. The total share of the analysed top ten also decreased from 29.7% to 18.4%.

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

Ra	nk	INNs/Group Names	Share in total hospi- tal purchases, %	
2017	2016		2017	2016
1	1	VACCINE, PNEUMOCOCCAL	3.0	13.2
2	6	IMMUNOGLOBULIN BASE	2.3	1.1
3	45	SIMEPREVIR	2.1	0.2
4	2	VACCINE, INFLUENZA	2.0	9.3
5	7	SODIUM	1.8	1.0
6	5	MEROPENEM	1.8	1.3
7	19	DACLATASVIR	1.4	0.7
8	16	ALBUMIN	1.4	0.8
9	12	LOPINAVIR*RITONAVIR	1.3	0.8
10	4	DARUNAVIR	1.3	1.3
Total			18.4	29.7

In contrast to the above rankings, the top ten ATC groups changed its leader (table 4). J01 Antibacterials for systemic use (+22%) moved up from rank four to one (Table 4). J07 Vaccines which used to dominate the top 10 ranking reduced its sales by 78% and moved down to rank four. Other shifts took place in the bottom part of the rating. V08 Contrast media (+36%) moved up to rank seven from nine, L04 Immunosuppressants (+11%) moved up to rank nine from ten. The only newcomer J02 Antimycotics for systemic use (+36%) broke into the top-10 ranking, coming in at number eight from 11. At the same time, the less dynamic N01 Anesthetics (+4%) moved down from rank eight to ten. The groups J05 Antivirals for systemic use (-2%), L01 Antineoplastic agents (-17%), B05 Blood substitutes and perfusion solutions (+56%) and B01 Antithrombotic agents (+30%) held their previous ranks two and three, and five and six respectively. The total share of the top 10 reduced by more than 7 p.p., 66.5%.

Table 4. The top ten ATC groups by hospital purchases

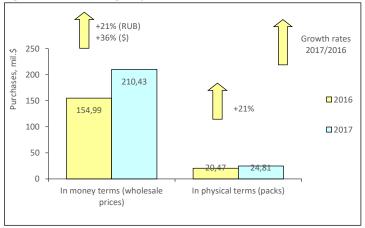
Table	Table 4. The top ten ATC groups by hospital purchases					
Ra	Rank		ATC group	Share in total hospital purchases, %		
2017	2016	code		2017	2016	
1	4	J01	ANTIBACTERIALS FOR SYST USE	12.2	8.4	
2	2	J05	ANTIVIRALS FOR SYSTEMIC USE	11.5	9.8	
3	3	L01	ANTINEOPLASTIC AGENTS	8.8	9.0	
4	1	J07	- VACCINES	7.8	29.5	
5	5	B05	- PLASMA SUBSTITUTES AND PERFUSION SOLUTIONS	6.9	3.7	
6	6	B01	- ANTITHROMBOTIC AGENTS	4.4	2.8	
7	9	V08	- CONTRAST MEDIA	4.2	2.6	
8	11	J02	- ANTIMYCOTICS FOR SYS- TEMIC USE	4.1	2.5	
9	10	L04	- IMMUNOSUPPRESSANTS	3.4	2.6	
10	8	N01	- ANESTHETICS	3.3	2.7	
Total			66.5	73.6		

**Conclusion**. The Moscow hospital market noticeably reduced on the basis of the results for 2017: 16% in terms of roubles and 6% in terms of USD. and brought in RUB 25.677 bil. (USD 440.039 mil.). In pack terms, the market also showed negative growth rates (-15%) and achieved 62.737 mil. packs. The average cost of an FPP pack in the Moscow hospital market increased as compared to the previous year (USD 7.01 vs. USD 6.34).

#### SAINT PETERSBURG HOSPITAL MARKET: 2017 RESULTS

According to the results of the Budget Audit of FPPs in the Russian Federation (without DLO and regional benefit), at the end of 2017 the St. Petersburg hospital market increased in physical terms by 21% and amounted to 24.815 mil. packs. In money terms, the purchases movement was positive both in rouble (+21%) and in dollar (+36%) terms, and the volume amounted to RUB 12.280 bil. (USD 210.432 mil.) in wholesale prices. In 2017, the average cost of FPP pack in the hospital sector of the city was USD 8.48, whereas in the year-earlier period its cost was USD -7.57.

Figure 1. St. Petersburg hospital market in 2016 - 2017



Following the results for 2017, the drug manufacturer JOHNSON & JOHNSON (+14%) held its leading position in the top-ten drug manufacturers ranking in the St. Petersburg hospital market (Table 1). In addition, the drug manufacturer SANOFI-AVENTIS (+35%) also held its previous rank nine. Five drug manufacturers from the top ten with high growth rates rose in the ranks. MERCK SHARP DOHME (+24%), PFIZER (+55%) and BAYER (+58%) moved up two ranks, coming in at numbers two, four and eight respectively. Two newcomers from the top ten, the Russia-based drug manufacturers BIOCAD (+78%) and PHAR-MASYNTEZ (+104%) moved up to ranks six and seven, respectively. At the same time, NOVARTIS (-1%) and ABBVIE (-18%), and ASTRAZENECA (+16%), which showed modest growth rates, moved down to ranks three, five and ten of the top ten ranking. The total share of the top 10 increased from 42.8% to 44.5%.

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 hospi- tal purchases, %		
2017	2016		2017	2016	
1	1	JOHNSON & JOHNSON	9.0	9.6	
2	4	MERCK SHARP DOHME	5.0	4.9	
3	2	NOVARTIS	4.9	6.0	
4	6	PFIZER	4.7	3.7	
5	3	ABBVIE	4.6	5.9	
6	12	BIOCAD RF	3.6	2.5	
7	14	PHARMASYNTEZ	3.5	2.1	
8	10	BAYER HEALTHCARE	3.4	2.6	
9	9	SANOFI-AVENTIS	3.0	2.7	
10	7	ASTRAZENECA	2.7	2.8	
Total	•		44.5	42.8	

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

The top ten brand names ranking in the city hospital market was considerably updated - four new brand names broke into the ranks of the top ten (Table 2). The brand SOVIGRIPP (43-fold growth in purchases), PREVENAR 13 (6-fold growth), and PREZISTA (+71%) moved up to ranks four through six, respectively and INTELENCE (+22%) moved up to rank nine. ISENTRESS (+40%) and NATRIUM CHLORIDUM (+29%) also showed outperformance rates and boost their rating, which allowed them to move up to ranks two and three, respectively. At the same time, SPRYCEL (-4%), IMBRUVICA (-13%) and XEPLION (-15%) reduced their sales and moved down to ranks seven, eight and ten, respectively. The brand KALETRA (-28%) kept its leadership position, showing strong negative growth rates and reduction in the market share. The total share of the top 10 brands increased from 14.8% to 15%.

Table 2. The top 10 brands by hospital purchases

Rank		Brand		Share in total hospital pur- chases, %	
2017	2016	1	2017	2016	
1	1	KALETRA	2.5	4.3	
2	3	ISENTRESS	2.4	2.1	
3	4	NATRIUM CHLORIDUM	2.0	1.9	
4	49	SOVIGRIPP	1.3	0.0	
5	43	PREVENAR 13	1.2	0.3	
6	17	PREZISTA	1.2	0.8	
7	6	SPRYCEL	1.2	1.5	
8	5	IMBRUVICA	1.1	1.5	
9	11	INTELENCE	1.0	1.0	
10	8	XEPLION	1.0	1.4	
Total			15.0	14.8	

As in the previous ranking, four newcomers broke into the ranks of the top ten INN and group names ranking (Table 3). Due to growth in purchases several times, INNs DARUNAVIR (2.3-fold growth in purchases), VACCINE, INFLUENZA (9.6-fold growth in purchases), VACCINE PNEUMOCOCCAL (3.8-fold growth) and AFLIBERCEPT (3.6-fold growth) moved up to ranks four through six and ten respectively. Apart from them, another two trade names showed the rating progress. RALTEGRAVIR (+40%) and SODIUM (+29%) moved up to ranks two and three. The other INNs of the top 10 showed negative growth rates. Among them there was the rating leader - LOPINAVIR\*RITONAVIR (-28%). In contrast, DASATINIB (-4%), IBRUTINIB (-13%) and ATAZANAVIR (-47%) moved down to the lower ranks from seven through nine respectively. The total share accumulated by the top-ten INNs and grouping names increased from 15.7% to 16.3%.

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

Rank		INNs/Group Names	Share in total hospi- tal purchases, %	
2017	2016	•	2017	2016
1	1	LOPINAVIR*RITONAVIR	2.5	4.3
2	3	RALTEGRAVIR	2.4	2.1
3	4	SODIUM	2.0	1.9
4	13	DARUNAVIR	2.0	1.1
5	49	VACCINE, INFLUENZA	1.6	0.2
6	41	VACCINE, PNEUMOCOCCAL	1.4	0.4
7	6	DASATINIB	1.2	1.5
8	5	IBRUTINIB	1.1	1.5
9	2	ATAZANAVIR	1.0	2.4
10	44	AFLIBERCEPT	1.0	0.3
Total			16.3	15.7

L01 Antineoplastic agents (+16%), J05 Antivirals for systemic use (+10%), J01 Antibacterials for systemic use (+32%) and N05 N05 Psycholeptics (+1%) remained the best selling drugs in the regional market (Table 4). The only newcomer J07 Vaccines, which increased its purchases 2.9 times, broke into the ranks of the top ten, moving up to rank five. At the same time, five ATC groups of the top 10 moved down one rank: B05 Blood substitutes and perfusion solutions (+37%), V08 Contrast media (+34%), B01 Antithrombotic agents (+14%), N01 Anaesthetics (+27%) and J02 Antimycotics for systemic use (+17%) moved down to ranks six through ten respectively. Based on the results for 2017, the top ten ATC groups accumulated 72.2% of the regional market, which accounted for 71.6% in the year-earlier period.

Table 4. The top ten ATC groups by hospital purchases

Rank		ATC	ATC group	Share in total hospi purchases, %	
2017	2016	code		2017	2016
1	1	L01	ANTINEOPLASTIC AGENTS	22.1	23.2
2	2	J05	ANTIVIRALS FOR SYSTEMIC USE	16.0	17.6
3	3	J01	ANTIBACTERIALS FOR SYST USE	7.1	6.5
4	4	N05	PSYCHOLEPTICS	5.4	6.4
5	12	J07	VACCINES	5.1	2.1
6	5	B05	PLASMA SUBSTITUTES AND PERFUSION SOLUTIONS	5.0	4.4
7	6	V08	CONTRAST MEDIA	3.7	3.3
8	7	B01	ANTITHROMBOTIC AGENTS	2.9	3.1
9	8	N01	ANESTHETICS	2.7	2.6
10	9	J02	ANTIMYCOTICS FOR SYSTEMIC USE	2.3	2.4
Total				72.2	71.6

**Conclusion**. At year-end 2017, the St. Petersburg hospital market grew by 21% in rouble terms and by 36% in dollar terms and brought in RUB 12.280 bil. (USD 210.432 mil). In natural terms, the market increased by 21% to 24.815 mil. packs. In 2017, the average cost of a FPP pack on the city hospital sector was higher than that in the year-earlier period (USD 8.48 vs. USD 7.57).