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AIPM®

Association of International Pharmaceutical Manufacturers

Ассоциация международных фармацевтических производителей

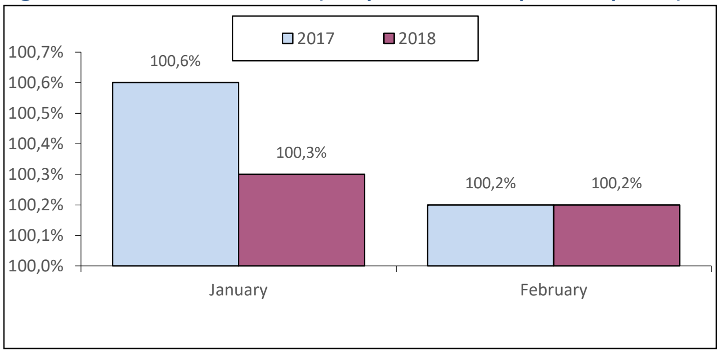
## MACROECONOMIC INDICES

### Inflation

According to Federal State Statistics Service's data, the Consumer Price Index was estimated as 100.2% in February 2018, compared to the previous month, 100.5% as against December of 2017.

In February this year, Industrial Producer Price Index (for goods intended for sale on the domestic market) was 101%, whereas in the month-earlier period it had amounted to 100.1%. The index accounted for 101.1% against December of 2017.

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



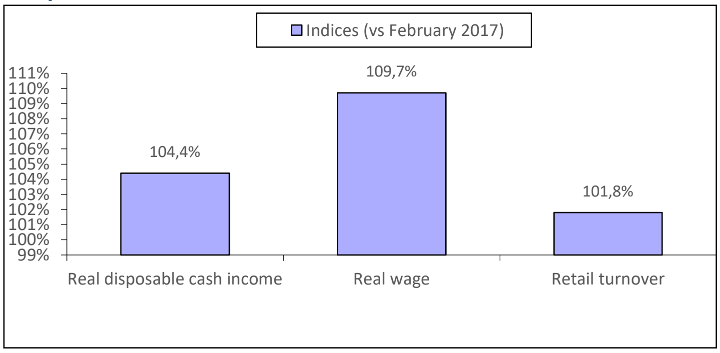

### Living standard

According to preliminary Federal State Statistics Service's data, at the end of February 2018 a gross monthly average wage per worker reached RUB 39,800 (USD 700.58) which accounted for 102% compared to the previous month and 112.1% compared to February 2017. The real wage in February 2018 accounted for 109.7% as compared with February 2017. In February 2018, the real value of disposable cash incomes *(without taking into account a lump sum payment to pensioners in January 2017 in the amount of 5 thousand robles),* accounted for 104.4 % as compared with the same period of 2017, and 134.0% compared with the previous period (Fig. 2).

### Retail turnover

In February 2018, the retail turnover was equal to RUB 2265.8 bil. or 101.8% (in comparable prices) against the level of the corresponding period of the previous year, in January-February 2018 - RUB 4587.0 bil. or 102.3% (Fig. 2).

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




### Industrial Production

According to Federal State Statistics Service's data, Industrial Production Index accounted for 101.5% in February 2018 compared to the same period in the previous year, and 102.2% in January-February 2018.

According to Federal State Statistics Service's data, Industrial Production Index of drugs and medical products in February 2018 accounted for 119.5% compared to the relevant period of the previous year, and 105.9% in January-February 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 February 2018.

**Table 1. The top ten Russian chemical and pharmaceutical manufacturers by sales volume in February 2018**

| Rank | Manufacturer | RUB mil. |
|---|---|---|
| 1 | Otcpharm | 2026.022 |
| 2 | Valenta | 1099.787 |
| 3 | Stada | 982.5121 |
| 4 | Pharmstandart | 917.8222 |
| 5 | Sotex | 673.2452 |
| 6 | Materia Medica | 633.7635 |
| 7 | Servier | 623.0982 |
| 8 | Akrikhin Pharma | 620.7517 |
| 9 | Veropharm | 604.8119 |
| 10 | Biocad | 596.816 |

Source - Remedium according to IMS Health's data

Table 2 provides pharmacy sales data from 10 regions of the Russian Federation. In January 2018 compared to the previous month, sales (in terms of roubles) reduced in all regions. The highest reduction was observed in Novosibirsk Region (-35%) and in St. Petersburg (-34%), the lowest one in Rostov Region (-6%).

**Table 2. Pharmacy sales in the regions, 2017-2018**

| Region | Pharmacy sales, $ mil. (wholesale prices) | | | Growth gain, % (roubles) | | |
|---|---|---|---|---|---|---|
| | November 2017 | December 2017 | January 2018 | November/ October 17 | December /November 17 | January 18 December 17 |
| Moscow | 169.8 | 206.6 | 151.7 | -10% | 21% | -29% |
| St. Petersburg | 55.8 | 59.9 | 40.8 | 1% | 7% | -34% |
| Krasnodar Krai | 32.9 | 37.1 | 31.2 | -8% | 12% | -19% |
| Krasnoyarsk Krai | 28.6 | 32.2 | 26.4 | 2% | 12% | -20% |
| Tatarstan | 22.4 | 26.5 | 21.0 | -14% | 18% | -23% |
| Rostov Region | 22.6 | 24.3 | 23.7 | -5% | 7% | -6% |
| Novosibirsk Region | 23.3 | 31.7 | 21.2 | 0.3% | 35% | -35% |
| Voronezh Region | 13.2 | 15.6 | 14.7 | -10% | 18% | -9% |
| Perm | 9.3 | 9.9 | 8.9 | 1% | 6% | -13% |
| Tyumen | 7.1 | 8.2 | 6.0 | -5% | 15% | -29% |

### 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 February 2018**

| Rank | Company* | Quantity of broadcasts |
|---|---|---|
| 1 | Otcpharm | 14,402 |
| 2 | Bayer AG | 11,341 |
| 3 | Sandoz | 11,301 |
| 4 | Teva | 11,193 |
| 5 | Berlin-Chemie Menarini Group | 11,141 |

Source - Remedium according to Mediascope's data

**Table 4. Top five brand names in mass media in February 2018**

| Rank | Brand* | Quantity of broadcasts |
|---|---|---|
| 1 | Evalar | 5,179 |
| 2 | Polyoxidoni | 4,055 |
| 3 | Miramistin | 3,647 |
| 4 | Nurofen | 3,187 |
| 5 | Cycloferon | 3,066 |

Source - Remedium according to Mediascope's data

* Only products registered with State Register of Medicines were considered

## STATE REIMBURSEMENT PROGRAM (DLO) IN THE RUSSIAN FEDERATION: 2017 RESULTS

According to DLO in RF™, the drugs supplies under the Federal Program amounted to RUB 114.514 bil. on the basis of the results for 2017 (USD 1.969 bil.) in contractual prices[1]. The sector volume increased by 7% in terms of roubles and 26% - in terms of dollars as compared to 2016. Scope of supplies in pack terms reduced by 1% to 79.049 mil. packs. The average cost of a FPP pack through the DLO program was USD 24.90 in contractual prices (a year ago it was USD 19.61).

Based on the results for 2017, the manufacturers CELGENE (+6%[2]), NATIVA (+4%) and BIOCAD (+5%) held their previous top three positions in the top ten manufacturer ranking in the DLO segment (table 1). BAXTER (+44%), GENERIUM (+49%) and OCTAPHARMA (+82%) showed high sales growth rates and moved up to ranks four, five and eight. On top of that, the latter became the only newcomer of the top 10 ranking. The markets of the manufacturers SANOFI-AVENTIS (+9%) and JOHNSON & JOHNSON (+11%) also developed at a swift pace. At the same time, the former moved down one rank, displaced by the more dynamic manufacturers, and the second one moved up one rank. As before, NOVO NORDISK (+4%) held its previous rank nine, and ROCHE, which purchases reduced by 39%, moved down to rank ten from four. The total share of the top ten drug manufacturers under DLO Programme expanded by more than 2 p.p. to 55.2%.

### Table 1. The top 10 drug manufacturers for DLO

| Rank | | Manufacturer* | Share in total DLO volume, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 1 | **CELGENE** | 8.3 | 8.3 |
| 2 | 2 | NATIVA | 7.9 | 8.0 |
| 3 | 3 | BIOCAD RF | 6.8 | 6.9 |
| 4 | 6 | BAXTER INT | 6.3 | 4.6 |
| 5 | 7 | GENERIUM ZAO RF | 6.1 | 4.4 |
| 6 | 5 | **SANOFI-AVENTIS** | 5.3 | 5.2 |
| 7 | 8 | **JOHNSON & JOHNSON** | 4.2 | 4.0 |
| 8 | 14 | OCTAPHARMA | 3.5 | 2.0 |
| 9 | 9 | **NOVO NORDISK** | 3.5 | 3.5 |
| 10 | 4 | **ROCHE** | 3.4 | 6.0 |
| Total | | | 55.2 | 53.0 |

*AIPM members are in bold

REVLIMID (+5%) and ACELBIYA (+1%) continued to hold the lead in the top ten brands ranking in the DLO segment (Table 2). The only brand in the top ten ranking BORAMILAN FS placed at rank three in the previous year, reduced its purchases by 35% and moved down to rank eight. In contrast, the other brands of the top 10 rose in the ranks. COAGIL-VII (+32%) and GENFAXON (+35%) moved up one rank, to numbers 5 and 6. AKSOGLATIRAN FS (+6%) moved up from rank five to three, and ADVATE (+84%) moved up from rank 9 to 4. The newcomers OCTOFACTOR (+89%), OCTANAT (+35%) and FEIBA (+78%) broke into the ranks of the top ten, coming in at ranks 7 and the last two ranks. The total share of 10 brands increased from 27.3% to 29.7%

### Table 2. The top 10 Brands in DLO segment

| Rank in the top ten | | Brand | Share in total DLO volume, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 1 | REVLIMID | 8.1 | 8.2 |
| 2 | 2 | ACELBIYA | 4.4 | 4.6 |
| 3 | 5 | AKSOGLATIRAN FS | 2.6 | 2.6 |
| 4 | 9 | ADVATE | 2.5 | 1.4 |
| 5 | 6 | COAGIL-VII | 2.4 | 1.9 |
| 6 | 7 | GENFAXON | 2.2 | 1.8 |
| 7 | 14 | OCTOFACTOR | 2.1 | 1.2 |
| 8 | 3 | BORAMILAN FS | 1.9 | 3.1 |
| 9 | 11 | OCTANAT | 1.8 | 1.4 |
| 10 | 18 | FEIBA | 1.7 | 1.0 |
| Total | | | 29.7 | 27.3 |

Two newcomers broke into the ranks of the top ten INN and generic names ranking (Table 3). They were IMIDAZOLYL ETHANAMIDE PENTANDIOIC ACID (+77%) and INTERFERON ALFA-1B (+48%) rounding out the top ten ranking. Another four INNs developed their markets at a fast pace: INTERFERON BETA-1A (+26%) moved up two ranks, at number 3, and FACTOR VIII (+9%), INSULIN GLARGINE (+10%) and EPTACOG ALFA (ACTIVATED) (+36%) held their previous ranks. Three INNs showed negative growth rates. At the same time, RITUXIMAB (-5%) and GLATIRAMER ACETATE (-14%) held their own in the ranking, whereas BORTEZOMIB (-31%) moved down to rank five. INN LENALIDOMIDE (+5%) continued to be at the head of the ranking. The total share of the top 10 under review did not virtually change and accounted for 39.6%.

### Table 3. The top ten INN and group names in DLO segment

| Rank in the top ten | | INNs/Group Names | Share in total DLO volume, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 1 | LENALIDOMIDE | 8.1 | 8.2 |
| 2 | 2 | RITUXIMAB | 5.4 | 6.0 |
| 3 | 5 | INTERFERON BETA-1A | 5.0 | 4.2 |
| 4 | 4 | FACTOR VIII | 4.6 | 4.5 |
| 5 | 3 | BORTEZOMIB | 3.3 | 5.1 |
| 6 | 6 | GLATIRAMER ACETATE | 3.0 | 3.7 |
| 7 | 7 | INSULIN GLARGINE | 2.9 | 2.8 |
| 8 | 8 | EPTACOG ALFA (ACTIVATED) | 2.7 | 2.1 |
| 9 | 12 | OCTOCOG ALFA | 2.5 | 1.5 |
| 10 | 11 | INTERFERON BETA-1B | 2.2 | 1.6 |
| Total | | | 39.6 | 39.7 |

The top 10 ATC-groups in the DLO segment did not change in composition (Table 4). Its leader also held its own in the ranking - despite the negative growth rates, the group L01 Antineoplastic agents (-6%) held its previous rank number one. R03 Drugs for obstructive airway diseases (-9%) which held its previous rank six as well as B03 Antianemic preparations (-7%) and J05 Antivirals for systemic use (-32%) which moved down to rank ten also showed reduction in purchases. Four groups with high positive growth rates rose in the ranks. B02 Antihemorrhagics (+42%) and L04 Immunosuppressants (+11%) moved up one rank, and the groups L02 Endocrine therapy and A16 Other alimentary tract and metabolism products (+21% each) moved up two ranks, coming in at numbers 7 and 8. At the same time, L04 Immunosuppressants (+9%) and A10 Drugs used in diabetes (+5%) moved down one rank. The total share of the top ten accounted for 85.3% of the market, which was 1.1 p.p. more than the indicator of the last year.

### Table 4. The top ten ATC groups in DLO segment

| Rank | | ATC code | ATC group | Share in total DLO volume, % | |
|---|---|---|---|---|---|
| 2017 | 2016 | | | 2017 | 2016 |
| 1 | 1 | L01 | ANTINEOPLASTIC AGENTS | 19.5 | 22.0 |
| 2 | 3 | B02 | ANTIHEMORRHAGICS | 17.4 | 13.0 |
| 3 | 2 | L04 | IMMUNOSUPPRESSANTS | 15.4 | 15.1 |
| 4 | 5 | L03 | IMMUNOSTIMULANTS | 10.6 | 10.3 |
| 5 | 4 | A10 | DRUGS USED IN DIABETES | 10.2 | 10.4 |
| 6 | 6 | R03 | DRUGS FOR OBSTRUCTIVE AIRWAY DISEASES | 3.1 | 3.7 |
| 7 | 9 | L02 | ENDOCRINE THERAPY | 2.7 | 2.4 |
| 8 | 10 | A16 | OTHER ALIMENTARY TRACT AND METABOLISM PRODUCTS | 2.4 | 2.1 |
| 9 | 8 | B03 | ANTIANEMIC PREPARATIONS | 2.2 | 2.5 |
| 10 | 7 | J05 | ANTIBACTERIALS FOR SYSTEMIC USE | 1.8 | 2.8 |
| Total | | | | 85.3 | 84.2 |

Data on supplies to the top ten regions of Russia under State Reimbursement Program (DLO) are shown in Table 5. In 2017, the highest supplies were observed in Moscow with an almost 26% market share. It is followed by Moscow region (4.6%), St. Petersburg (3.9%) and Krasnodar Krai (3.1%), which moved up from the second top ten ranking. Note that the positive growth rates were reported in the most regions, except for St. Petersburg. The top ten regions accumulated 51.5% of the DLO market.

### Table 5. The top ten regions by sales in DLO segment

| Rank | | Region | Share in total DLO volume, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 1 | Moscow | 25.7 | 24.8 |
| 2 | 3 | Moscow Region | 4.6 | 4.1 |
| 3 | 2 | Saint Petersburg | 3.9 | 4.2 |
| 4 | 11 | Krasnodar Krai | 3.1 | 1.9 |
| 5 | 4 | Sverdlovsk Region | 2.7 | 2.8 |
| 6 | 5 | Tatarstan Republic | 2.7 | 2.7 |
| 7 | 6 | North Caucasian FD, Rest | 2.6 | 2.7 |
| 8 | 9 | Rostov Region | 2.1 | 2.0 |
| 9 | 10 | Bashkortostan Republic | 2.1 | 1.9 |
| 10 | 8 | Tyumen Region | 2.1 | 2.1 |
| Total | | | 51.5 | 49.2 |

**Conclusion**. On the basis of the results for 2017, the DLO segment brought in RUB 114.514 bil. (USD 1.969 bil.) in contractual prices, which is by 7% in terms of roubles and by 26% in terms of dollars more than in 2016. In physical terms, the supplies decreased by 1% to 79.049 mil. packs. The average cost of FPP participating in the DLO Programme increased as compared to the past year (USD 24.90 vs USD 19.61).

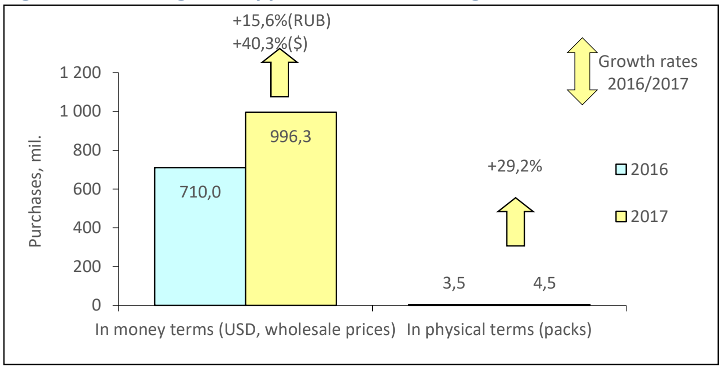
[1] From 2008 until now, data on DLO have been provided as shipments in contractual prices, which are prices at which the government will reimburse moneys to the distributor.

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

## 2017 COST DEMANDING NOSOLOGIES (VZN) PROGRAM

Based on the results for 2017, the purchases under VZN Program in physical terms (packs) grew by 29.2% as compared with the same period of the previous year (Fig. 1). In terms of national currency, the purchases increased by 15.6%, in terms of dollars by 40.3% due to strengthening of the rouble. The purchase volume amounted to RUB 57,871.8 mil. or USD 996.3 mil.

### Figure 1. VZN Program supplies trend in 2017 against 2016




In 2017, supplies in terms of packs increased in all nosological segments, and a growth accounted for approximately 30% and more in most segments. The sales of oncohematological drugs (+ 44%) showed the most significant growth in physical terms, though the purchases of this group reduced by approximately 3% in terms of roubles. The immunosuppressant group (-6%) also showed the negative sales growth rates in money terms. In other segments, the supplies in terms of roubles increased, with the most significant growth being in the haemophilia segment (+ 41%) (Table 1). The drugs used to treat oncohematological diseases remain the leaders in terms of 7 nosology program purchases in terms of value, although their share has decreased from 43% to 36% in comparison with the previous year. With a 29% increase in the supply of haemophilia drugs in terms of packs, the cost volumes increased by 41%, which was determined by a 9% increase in Volume-Weighted Average Price (VWAP). In 2017, this drug group's share in the purchasing pattern of 7 Nosologies Program in money terms increased from 27% to 32% in comparison with the previous year (Table 1). 1). Purchases of the multiple sclerosis group increased by 35% compared to the previous year in physical terms and by 24% in value terms. VWAP reduced by 8%. The nosology group's share in the purchasing pattern of 7 Nosologies Program didn't change much as compared to the previous year and accounted for 22%. Supplies of immunosuppressants used in transplantation increased by 12% in physical terms, and decreased by 6% in value terms, which was caused by a decrease in weighted average prices (by 16%). The negative dynamics of cost parameters was determined primarily by a reduction in the supplies of INN Tacrolimus (-14%) and INN Mycophenolic acid (-1%), which accounted for 46% and 39% of all sales, respectively. INN Mycophenolic acid is represented exclusively by the original Myfortic Novartis, which supplies in physical terms increased by 22% (registration prices decreased by 40-45%, VWAP - by 19%).

### Table 1. Supplies pattern under the VZN Program

| Nosologies | INN | Share in total VZN supplies (RUB), % | |
|---|---|---|---|
| | | 2017 | 2016 |
| **Oncohematology** | | **35.9** | **42.7** |
| | LENALIDOMIDE | 16.0 | 17.5 |
| | RITUXIMAB | 10.1 | 12.0 |
| | BORTEZOMIB | 6.4 | 10.5 |
| | IMATINIB | 2.9 | 2.2 |
| | FLUDARABINE | 0.4 | 0.4 |
| **Haemophilia** | | **32.4** | **26.7** |
| | FACTOR VIII | 9.1 | 9.6 |
| | EPTACOG ALFA (ACTIVATED) | 5.3 | 4.5 |
| | OCTOCOG ALFA | 4.9 | 3.2 |
| | MOROCTOCOG ALFA | 4.2 | 2.5 |
| | FACTOR VIII INHIBITOR BYPASSING FRACTION | 3.3 | 2.2 |
| | FACTOR VON WILLEBRAND*FACTOR VIII | 2.9 | 2.1 |
| | FACTOR IX | 2.7 | 2.4 |
| **Sclerosis Multiplex** | | **22.4** | **21.0** |
| | INTERFERON BETA-1A | 9.9 | 9.1 |
| | GLATIRAMER ACETATE | 6.0 | 7.8 |
| | INTERFERON BETA-1B | 4.4 | 3.4 |
| | NATALIZUMAB | 2.2 | 0.7 |
| **Transplantology** | | **3.4** | **4.2** |
| | TACROLIMUS | 1.6 | 2.1 |
| | MYCOPHENOLIC ACID | 1.3 | 1.5 |
| | CICLOSPORIN | 0.3 | 0.4 |
| | MYCOPHENOLATE MOFETIL | 0.2 | 0.1 |
| **Mucoviscidosis** | | **2.8** | **2.8** |
| | DORNASE ALFA | 2.8 | 2.8 |
| **Gaucher disease** | | **2.7** | **2.4** |
| | IMIGLUCERASE | 2.3 | 2.1 |
| | VELAGLUCERASE ALFA | 0.4 | 0.3 |
| **Pituitary dwarfism** | | **0.3** | **0.3** |
| | SOMATROPIN | 0.3 | 0.3 |

As of the end of 2017, the original drug Revlimid (INN Lenalidomide) Celgene and biosimilar Acelbiya (INN Rituximab) Biocad were ranked 1st and 2nd by purchases in terms of value among the top ten brand names ranking as in the previous year (Table 2). The Revlimid market is under patent protection, and competitors have not yet succeeded in reaching it. Acelbiya accounted for 88% of all sales of INN Rituximab group in value terms. Another Russian biosimilar Axoglatiran FS (INN Glatiramer Acetate) Nativa moved up from rank 4 to 3 in the ranking. In the Glatiramer Acetate INN value sales pattern, this drug accounted for 95%, and the purchases of Copaxone-Teva were reduced to zero. Supplies of another drug produced by Nativa - Boramilan FS (INN Bortezomib) grew by 11% in physical terms and reduced by 37% in value terms. As a result, the drug moved down from rank 3 to 8 in the top ten brand ranking. Boramilan FS accounted for 57% in value terms in the INN group purchases pattern.

### Table 2. Top ten brand names by purchases under the VZN Program

| Rank | | Brand | Share in total VZN supplies, % | |
|---|---|---|---|---|
| **2017** | **2016** | | **2017** | **2016** |
| 1 | 1 | REVLIMID | 16.0 | 17.5 |
| 2 | 2 | ACELBIYA | 8.5 | 9.8 |
| 3 | 4 | AKSOGLATIRAN FS | 5.1 | 5.3 |
| 4 | 9 | ADVATE | 4.9 | 3.1 |
| 5 | 5 | COAGIL-VII | 4.8 | 4.1 |
| 6 | 6 | GENFAXON | 4.4 | 3.8 |
| 7 | 13 | OCTOFACTOR | 4.2 | 2.5 |
| 8 | 3 | BORAMILAN FS | 3.7 | 6.3 |
| 9 | 10 | OCTANAT | 3.5 | 3.0 |
| 10 | 16 | FEIBA | 3.3 | 2.2 |
| Total | | | 58.4 | 59.5 |

Following the results of 2017, the drug manufacturer Celgene, which drug Revlimid (Lenalidomide) held the same rank in the top ten brands, was ranked number one in sales well ahead of the other drug manufacturers (Table 2 and 3). Baxter Int - the leader of the hemophilia segment, whose share increased by 42% from 9.9% to 12.3% due to growth in purchases - moved up to rank 2 in the ranking. The top-10 brands ranking included two products of this manufacturer - Advate and Feiba, which together accounted for 8.2% of all Program purchases). Generium (an affiliate of Pharmstandard) moved up from rank 5 to 3 in the ranking. With sales increasing by almost 1.5 times, its share increased from 9.4% to 12.1%. In addition to Generium, the top ten ranking also included Nativa and Biocad, the other two Russian manufacturers, which moved down two ranks, coming in at numbers 4 and 5 in the rating due to meager growth rates (Table 2). The problems of Nativa were associated with a 32% reduction in purchases of Boralamin F (Bortezomib), which moved down from rank 3 to 8 in the rating. Another Nativa's product broke into the ranks of the top ten ranking - Axoglatiran FS (Glatiramer Acetate), coming in at rank 3. The rank of the manufacturer Biocad depended on its main drug Acelbiya (Rituximab). Although the biosimilar purchases in value terms did not increase, it retained its previous rank 2 in the ranking. Roche fell in the ranks against the backdrop of the dramatic reduction in Mabthera (Rituximab) purchases (until 2015, the manufacturer was number one 7 Nosologies Program supplier by a significant margin). Currently, the manufacturer's rating is only backed up by Pulmozyme (Dornase Alfa) supplies, which is under patent protection.

### Table 3. Top ten manufacturers by purchases under the VZN Program

| Rank in the top ten | | Manufacturer* | Share in total VZN supplies, % | |
|---|---|---|---|---|
| **2017** | **2016** | | **2017** | **2016** |
| 1 | 1 | **CELGENE** | 16.0 | 17.5 |
| 2 | 4 | **BAXTER INT** | 12.3 | 9.9 |
| 3 | 5 | GENERIUM ZAO RF | 12.1 | 9.4 |
| 4 | 2 | NATIVA* | 11.1 | 13.2 |
| 5 | 3 | BIOCAD RF | 9.7 | 10.6 |
| 6 | 7 | OCTAPHARMA | 6.8 | 4.3 |
| 7 | 8 | LABORATORIO TUTEUR | 4.7 | 4.0 |
| 8 | 9 | **JOHNSON & JOHNSON*** | 3.5 | 3.8 |
| 9 | 10 | SERONO | 3.4 | 3.6 |
| 10 | 6 | **ROCHE*** | 2.9 | 5.1 |
| Total | | | 82.6 | 81.4 |

*AIPM members are in bold

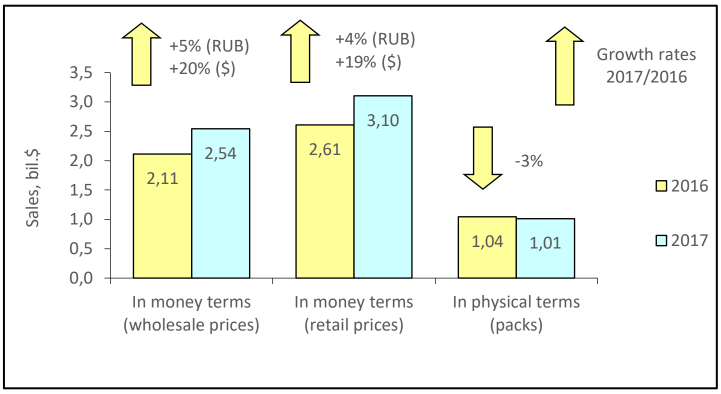
**Conclusion.** In 2017, the purchases of Russian drugs showed a significant growth in physical terms (+ 64%), but rather low in value terms (+ 17%). Compared to the previous year, the growth rate of purchases has almost doubled. The share of domestic medicines in the purchases pattern in terms of roubles slightly increased (by 0.5 pp) and accounted for about 36%. In physical terms, the share expansion was significant - from 24% to 30%. In 2017, the purchases of foreign imported drugs increased by about 26%, as a result of which their share in the market pattern in value terms increased by 1 percentage point and accounted for 11%, in physical terms it decreased by 0.5 percentage points to about 20%. The share of localized products (the final stages of production) accounted for 49% of all sales in packs and 53% in roubles.

## CFD PHARMACY MARKET (WITHOUT MOSCOW): 2017 RESULTS

According to Federal State Statistics Service, as of January 1, 2017 estimated population of the Central Federal District (CFD) (without Moscow) was 26.829 mil., which accounted for 18.3% of the total Russian Federation population. According to Federal State Statistics Service's data, based on the results 2017 the average wage in the CFD (without Moscow) was RUB 48,396 (USD 829.55), which was 24% higher than the average wage in Russia (RUB 39,144).

According to the results of the Retail Audit of Finished Pharmaceutical Products (FPP) in Russian Federation™, at year-end 2017 the sales of drugs in physical terms in the Central Federal District saw a 3% decrease to 1.013 bil. packs. In money terms, the market saw a 5% increase in terms of roubles and 20% in terms of dollars. At the same time, the market volume reached RUB 148.195 bil. (USD 2.541 bil.) at wholesale prices (Fig.1). The region market share accounted for 20.8% of the Russian pharmacy retail sales. An average cost of a pack grew as compared to 2016 year: USD 3.06 vs. USD 2.50 in retail prices. At the end of 2017, the average amount spent by the residents of the region for FPPs in the pharmacies amounted to USD 115.68.

**Figure 1. CFD (without Moscow) pharmacy market in 2016 – 2017**




Based on the results for 2017, the most dynamic among leading manufacturer BAYER (+14%) took the lead in the top ten manufacturers ranking on the Central Federal District market (Table 1). The previous year leader SANOFI-AVENTIS reduced its sale volumes by 1% and moved down to rank two. The other ATC groups from the top ten showed positive rates. The other four INNs held their own in the ranking. TEVA (+2%), SERVIER (+6%), OTCPHARM (+2%) and MENARINI (+6%) held their previous ranks from three through six respectively. The only newcomer of the top ten manufacturers KRKA (+10%) moved up to rank seven. The less dynamic GLAXOSMITHKLINE (+1%), SANDOZ (+3%) and GEDEON RICHTER (+10%) lost one rank each, moving down to three bottom ranks. The cumulative share of the top 10 manufacturers reduced from 33.6% to 33.4%.

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

| Rank | | Manufacturer* | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 2 | **BAYER HEALTHCARE** | 4.7 | 4.3 |
| 2 | 1 | **SANOFI-AVENTIS** | 4.3 | 4.6 |
| 3 | 3 | **TEVA** | 4.0 | 4.1 |
| 4 | 4 | **SERVIER** | 3.5 | 3.5 |
| 5 | 5 | OTCPHARM | 3.1 | 3.2 |
| 6 | 6 | **MENARINI** | 3.1 | 3.0 |
| 7 | 11 | **KRKA** | 2.7 | 2.6 |
| 8 | 7 | **GLAXOSMITHKLINE** | 2.7 | 2.8 |
| 9 | 8 | **SANDOZ** | 2.6 | 2.7 |
| 10 | 9 | GEDEON RICHTER | 2.6 | 2.7 |
| Total | | | 33.4 | 33.6 |

*AIPM members are in bold

The top ten brands rating changed its leaders (Table. 2). CONCOR (+6%) moved up to rank one from three, and the more dynamic drugs MEXIDOL (+14%) and DETRALEX (+22%) moved up to ranks two and three, and from five through eight. The markets of the other five INNs of the top ten also developed at a fast pace. ACTOVEGIN (+7%), NUROFEN (+14%), CARDIOMAGNYL (+11%) and PENTALGIN (+10%) moved up to ranks four, five, seven and nine respectively, and the newcomer XARELTO (+51%), coming in at rank six. At the same time, ESSENTIALE (-9%) and KAGOCEL (-33%) reduced their sales, moving down to ranks eight and ten, respectively. The total share of the top 10 brands did not virtually change and accounted for 6.9%.

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

| Rank | | Brand | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 3 | CONCOR | 0.8 | 0.8 |
| 2 | 5 | MEXIDOL | 0.8 | 0.7 |
| 3 | 8 | DETRALEX | 0.7 | 0.6 |
| 4 | 6 | ACTOVEGIN | 0.7 | 0.7 |
| 5 | 7 | NUROFEN | 0.7 | 0.7 |
| 6 | 12 | XARELTO | 0.7 | 0.5 |
| 7 | 9 | CARDIOMAGNYL | 0.7 | 0.6 |
| 8 | 4 | ESSENTIALE | 0.6 | 0.7 |
| 9 | 10 | PENTALGIN | 0.6 | 0.6 |
| 10 | 1 | KAGOCEL | 0.5 | 0.9 |
| Total | | | 6.9 | 6.8 |

XYLOMETAZOLINE (+11%) maintained and strengthened the leading position in the top -10 INN and group names ranking (Table 3). Note that the markets of the most INNs from the top ten ranking developed at a fast pace, which allowed six of them to rise up in the ranks. At the same time, IBUPROFEN (+15%), DIOSMIN*HESPERIDIN (+26%) and ETHYLMETHYLHYDROXYPYRIDINE (+16%) moved up two ranks, coming in at numbers two, four and seven. The newcomers moved up to the last three ranks of the top ten: BLOOD (+6%), ROSUVASTATIN (+33%) and DICLOFENAC (+7%). INNs BISOPROLOL and PANCREATIN (+6% each) lost one rank each, despite the sales growth that is slightly higher than average for the region. NIMESULIDE that showed zero growth rates moved down from rank three to five. The cumulative share of the top 10 under review increased from 9.4% to 10%.

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

| Rank | | INNs/Group Names | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 1 | XYLOMETAZOLINE | 1.8 | 1.7 |
| 2 | 4 | IBUPROFEN | 1.1 | 1.0 |
| 3 | 2 | BISOPROLOL | 1.1 | 1.0 |
| 4 | 6 | DIOSMIN*HESPERIDIN | 1.0 | 0.9 |
| 5 | 3 | NIMESULIDE | 1.0 | 1.0 |
| 6 | 5 | PANCREATIN | 0.9 | 0.9 |
| 7 | 9 | ETHYLMETHYLHYDROXYPYRIDINE | 0.9 | 0.8 |
| 8 | 11 | BLOOD | 0.8 | 0.8 |
| 9 | 17 | ROSUVASTATIN | 0.8 | 0.6 |
| 10 | 12 | DICLOFENAC | 0.7 | 0.7 |
| Total | | | 10.0 | 9.4 |

M01 Anti-inflammatory and antirheumatic products (+7%) and C09 Agents acting on the rennin-angiotensin system (+10%) remained the bestselling ATC groups in the regional market (Table 4). R01 Nasal preparations (+5%) and N02 Analgesics(-0.2%) moved up to ranks three and four, whereas J01 Antibacterials for systemic use held its previous rank five despite 6% reduction in sales. R05 Cough and cold preparations (-8%) also showed negative growth rates, due to which the group lost one rank. In contrast, the other ATC groups of the top 10 rose in the ranks. G03 Sex hormones (+10%) moved up to ranks six from eight, the newcomers B01 Antithrombotic agents (+25%), C05 Vasoprotectives (+17%) and N06 Psychoanaleptics (+11%) broke into the ranks of the top ten, coming in at ranks seven and two bottom ranks. In total, the top ten ATC groups accumulated 35.3% of the regional market, whereas in the year-earlier period they accounted for 35%.

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

| Rank | | ATC code | ATC group | Share in total pharmacy sales, % | |
|---|---|---|---|---|---|
| 2017 | 2016 | | | 2017 | 2016 |
| 1 | 1 | M01 | ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS | 5.0 | 5.0 |
| 2 | 2 | C09 | AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM | 4.7 | 4.5 |
| 3 | 4 | R01 | NASAL PREPARATIONS | 3.8 | 3.8 |
| 4 | 6 | N02 | ANALGESICS | 3.4 | 3.6 |
| 5 | 5 | J01 | ANTIBACTERIALS FOR SYST USE | 3.4 | 3.8 |
| 6 | 8 | G03 | SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM | 3.3 | 3.1 |
| 7 | 12 | B01 | ANTITHROMBOTIC AGENTS | 3.1 | 2.6 |
| 8 | 7 | R05 | COUGH AND COLD PREPARATIONS | 2.9 | 3.3 |
| 9 | 13 | C05 | VASOPROTECTIVES | 2.8 | 2.6 |
| 10 | 11 | N06 | PSYCHOANALEPTICS | 2.8 | 2.7 |
| Total | | | | 35.3 | 35.0 |

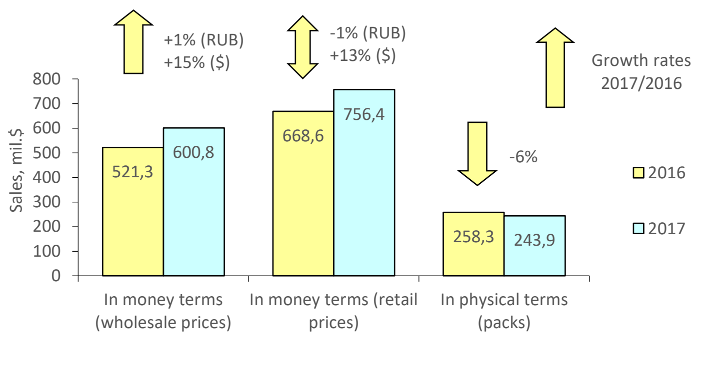
**Conclusion.** On the basis of the results for 2017, the retail pharmacy market of CFD (without Moscow) brought in RUB 180.985 bil. (USD 3.104 bil.), which was by 4% in terms of roubles and 19% in terms of dollars more than in 2016. In pack terms, the market reduced by 3% and amounted to 1.013 bil. packs. At the end of 2017, the average cost of an FPP pack in the regional pharmacies was USD 3.06, which was higher than in the year-earlier period (USD 2.50), and less than the national average (USD 3.33). However, the average medicine expenses of the CFD residents were higher than the national average expenses in Russia (USD 115.68 vs. USD 101.74).

## NWFD (WITHOUT SAINT PETERSBURG) PHARMACY MARKET: 2017 RESULTS

According to Federal State Statistics Service, as of January 1, 2017 estimated population of the North-Western Federal District (NWFD) (without St. Petersburg) was 8.618 mil., which accounted for 5.9% of the total Russian Federation population. According to Federal State Statistics Service's data, based on the results for 2017 the average wage in the NWFD (without St. Petersburg) was RUB 44,696 (USD 766.13), which was 14% higher than the average wage in Russia (RUB 39,144).

According to the results of the Retail Audit of Finished Pharma Products (FPP) in the Russian Federation™, at the end of 2016 the sales of FPPs in physical terms in pharmacies of NWFD (without St. Petersburg) saw a 6% decrease to 243.871 mil. packs. In money terms, the market saw a 1% increase in terms of roubles and 15% in terms of dollars. At the same time, the volume of the market achieved RUB 35.052 bil. (USD 600.792 mil.) at wholesale prices (Fig. 1). The regional market share accounted for 5.1% of the retail pharmacy sales. The average cost of a pack increased as compared to a year earlier (USD 2.59) and reached USD 3.10 at retail prices. In 2017, average amount spent by the region residents for FPPs in the pharmacies amounted to USD 87.77.

**Figure 1. NWFD (without St. Petersburg) pharmacy market in 2016 – 2017**




Based on the results for 2017, the manufacturer BAYER (+7%), which displaced SANOFI-AVENTIS (-4%) down from that position, became the leader of the NWFD (without St. Petersburg) pharmacy market (Table 1). In addition to the leader, another two INNs showed high growth rates. The Russia-based OTCPHARM (+8%) moved up one rank, coming in at number six, and the newcomer of the top ten KRKA (+13%) moved up to rank eight. At the same time, SANDOZ (-2%) and GLAXOSMITHKLINE (-4%) reduced their sales and moved down to ranks seven and ten respectively. Manufacturer SERVIER, TEVA (-1% each) and GEDEON RICHTER (+3%) held their previous ranks from three through five respectively. STADA (+1%) also held its previous rank nine. The total share of the top 10 drug manufacturers increased by 0.3 p.p. and accounted for 36.2%.

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

| Rank | | Manufacturer* | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 2 | **BAYER HEALTHCARE** | 4.8 | 4.5 |
| 2 | 1 | **SANOFI-AVENTIS** | 4.7 | 4.9 |
| 3 | 3 | **SERVIER** | 4.2 | 4.2 |
| 4 | 4 | **TEVA** | 3.9 | 4.0 |
| 5 | 5 | GEDEON RICHTER | 3.8 | 3.7 |
| 6 | 7 | OTCPHARM | 3.5 | 3.2 |
| 7 | 6 | **SANDOZ** | 3.3 | 3.4 |
| 8 | 11 | **KRKA** | 2.8 | 2.5 |
| 9 | 9 | STADA | 2.7 | 2.7 |
| 10 | 8 | **GLAXOSMITHKLINE** | 2.6 | 2.7 |
| Total | | | 36.2 | 35.9 |

*AIPM members are in bold

None of the top ten brands managed to hold its own in the ranking (Table 2). At the same time, four brands moved up one rank: NUROFEN (+9%) and CONCOR (+3%) moved up to the top two ranks, and CARDIOMAGNYL (+9%) and LOZAP (-5%) moved up to ranks four and seven, respectively. DETRALEX (+20%) moved up from rank seven to five. In addition, three newcomers entered the top-10 ranking: LORISTA (+20%), XARELTO (+15%) and THERAFLU (+2%) moved up to the lower part of the top ten ranking. The brands KAGOCEL (-16%) and ESSENTIALE (+4%) lost two ranks each and moved down to ranks three and six. The total share of the top 10 brands increased from 7% to 7.2%.

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

| Rank | | Brand | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 2 | NUROFEN | 1.0 | 0.9 |
| 2 | 3 | CONCOR | 0.9 | 0.9 |
| 3 | 1 | KAGOCEL | 0.8 | 1.0 |
| 4 | 5 | CARDIOMAGNYL | 0.8 | 0.7 |
| 5 | 7 | DETRALEX | 0.8 | 0.6 |
| 6 | 4 | ESSENTIALE | 0.7 | 0.7 |
| 7 | 8 | LOZAP | 0.6 | 0.6 |
| 8 | 17 | LORISTA | 0.6 | 0.5 |
| 9 | 15 | XARELTO | 0.6 | 0.5 |
| 10 | 11 | THERAFLU | 0.6 | 0.6 |
| Total | | | 7.2 | 7.0 |

In contrast to the previous ranking, most of the top-ten INN and grouping names held its own in the ranking (table 3). XYLOMETAZOLINE (+7%), IBUPROFEN (+8%) and BISOPROLOL (+3%) held the top positions, and NIMESULIDE (+2%), PANCREATIN, PHOSPHOLIPIDS and DICLOFENAC (+3% each) maintained their previous ranks five, seven, eight and ten. Two INNs with high growth rates rose in the ranks: the composition DIOSMIN* HESPERIDIN (+26%) and ACETYLSALICYLIC ACID* MAGNESIUM (+9%) moved up to ranks four and nine. On top of that, the latter became the only newcomer of the top 10 ranking. INN KAGOCEL reduced its sales by 16% following its respective brand and moved down to rank six. 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**

| Rank | | INNs/Grouping Names | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 1 | XYLOMETAZOLINE | 1.7 | 1.6 |
| 2 | 2 | IBUPROFEN | 1.2 | 1.2 |
| 3 | 3 | BISOPROLOL | 1.2 | 1.1 |
| 4 | 6 | DIOSMIN*HESPERIDIN | 1.0 | 0.8 |
| 5 | 5 | NIMESULIDE | 0.9 | 0.9 |
| 6 | 4 | KAGOCEL | 0.8 | 1.0 |
| 7 | 7 | PANCREATIN | 0.8 | 0.8 |
| 8 | 8 | PHOSPHOLIPIDS | 0.8 | 0.8 |
| 9 | 11 | ACETYLSALICYLIC ACID* MAGNESIUM | 0.8 | 0.7 |
| 10 | 10 | DICLOFENAC | 0.8 | 0.7 |
| Total | | | 10.0 | 9.6 |

The top ten ATC - groups ranking did not change its leaders either. M01 Antiinflammatory and antirheumatic products (+4%) and C09 Agents acting on the rennin-angiotensin system (+3%) as before held their previous top two ranks (Table 4). In addition, the group J01 Antibacterials for systemic use held its previous eight rank despite the reduction in sales by 6%. R01 Nasal preparations (+1%), G03 Sex hormones (+8%) and N02 Analgesics (-0.1%) moved up to ranks three through five from the lower ranks. A11 Vitamins (-5%) and the newcomer of the top ten B01 Antithrombotic agents (+12%) moved up two ranks. Two ATC groups of the top ten fell in the ranks. Group R05 Cough and cold preparations (-1%) and J05 Antivirals for systemic use (-22%) moved down to ranks five and ten. In total, the top ten ATC groups accumulated 37% of the market, whereas in the year-earlier period they accounted for 37.5%.

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

| Rank | | ATC code | ATC group | Share in total pharmacy sales, % | |
|---|---|---|---|---|---|
| 2017 | 2016 | | | 2017 | 2016 |
| 1 | 1 | M01 | ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS | 5.1 | 4.9 |
| 2 | 2 | C09 | AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM | 5.0 | 4.9 |
| 3 | 4 | R01 | NASAL PREPARATIONS | 3.7 | 3.7 |
| 4 | 7 | G03 | SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM | 3.7 | 3.4 |
| 5 | 6 | N02 | ANALGESICS | 3.6 | 3.6 |
| 6 | 5 | R05 | COUGH AND COLD PREPARATIONS | 3.6 | 3.7 |
| 7 | 9 | A11 | VITAMINS | 3.1 | 3.4 |
| 8 | 8 | J01 | ANTIBACTERIALS FOR SYST USE | 3.1 | 3.4 |
| 9 | 11 | B01 | ANTITHROMBOTIC AGENTS | 3.0 | 2.7 |
| 10 | 3 | J05 | ANTIVIRALS FOR SYSTEMIC USE | 3.0 | 3.8 |
| Total | | | | 37.0 | 37.5 |

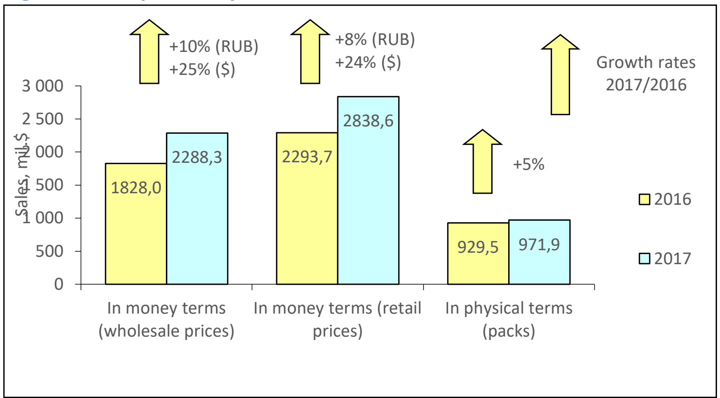
**Conclusion.** On the basis of the results for 2017, the pharmacy market of the NWFD (without St Petersburg) brought in RUB 44.129 bil. (USD 756.369 mil.), which was 1% less in terms of roubles and 13% more in terms of dollars than in 2016. In physical terms, the market saw a 6% decrease and was equal to 243.871 mil. packs. At the end of 2017, the average cost of an FPP pack in the regional pharmacies was USD 3.10, which was more than in the year-earlier period (USD 2.59) and lower than the national average (USD 3.33). The average medicine expenses of the district residents in the pharmacies were less than the national average expenses in Russia (USD 87.77 vs. USD 101.74).

## VFD PHARMACY MARKET: 2017 RESULTS

According to Federal State Statistics Service, as of January 1, 2017 estimated population of the Volga Federal District (VFD) was 29.637 mil., which accounted for 20.2% of the total Russian Federation population. According to Federal State Statistics Service's data, in 2017 the average wage in the VFD was RUB 29,166 (USD 499.93), which was 25% lower than the national average wage (RUB 39,144).

According to the results of the Retail Audit of OTC drugs in Russian Federation™, in 2017 the pharmacy market of VFD in pack terms expanded by 5% and amounted to 971.870 million packs (Fig. 1) In wholesale prices, the market performance also showed sales growth in terms of roubles (+10%) and in terms of dollars (+25%) and reached RUB 133.482 bil. (USD 2.288 bil.), A region's share in the total pharmacy sales in Russia accounted for 19%. At the end of of 2017, the average cost of a finished pharma product (FPP) in the VFD pharmacies amounted to USD 2.92 vs. USD 2.47 in the year earlier period. At the end of 2017, the average per capita expenses for purchase of drugs in the pharmacies were estimated at USD 95.78.

### Figure 1. VFD pharmacy market in 2016 – 2017




Following the results of 2017, the manufacturer SANOFI-AVENTIS (-0.1%) held the lead on the Volga Federal District retail market despite the lagging behind the growth rates and reduction of its market share (Table 1). Due to 14% growth in sales, BAYER and OTCPHARM moved up to ranks two and three, displacing TEVA (-4%) to rank four. The manufacturers SERVIER (+9%), SANDOZ (+8%) and GEDEON RICHTER (+7%) held their previous ranks five, six and ten. The manufacturers ABBOTT and MENARINI (+6% each) moved up one rank, despite the lagging behind. The most dynamic of the top ten drug manufacturers NYCOMED/TAKEDA (+18%) broke into the ranks of the top ten, coming in at number nine. In total, the top ten manufacturers accumulated 30.7% of the market against 31.4% in the year-earlier period.

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

| Rank | | Manufacturer* | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 1 | **SANOFI-AVENTIS** | 4.3 | 4.7 |
| 2 | 3 | **BAYER HEALTHCARE** | 3.9 | 3.7 |
| 3 | 4 | OTCPHARM | 3.6 | 3.4 |
| 4 | 2 | **TEVA** | 3.4 | 3.9 |
| 5 | 5 | **SERVIER** | 2.9 | 2.9 |
| 6 | 6 | **SANDOZ** | 2.7 | 2.8 |
| 7 | 8 | ABBOTT | 2.6 | 2.6 |
| 8 | 9 | **MENARINI** | 2.5 | 2.6 |
| 9 | 12 | **NYCOMED/TAKEDA** | 2.4 | 2.3 |
| 10 | 10 | GEDEON RICHTER | 2.4 | 2.5 |
| Total | | | 30.7 | 31.4 |

*AIPM members are in bold

The top-10 brands ranking on the regional market did not changed in composition, however only one brand held its own in the ranking (Table 2). NUROFEN (+11%) maintained its previous rank seven. ACTOVEGIN (+8%) became the leader according to the results of the year, moving up to rank one from three despite the backlog of dynamics. The former leaders of the top ten ranking KAGOCEL (-4%) and ESSENTIALE (-6%) reduced their sales and moved down to ranks two and four, respectively. In addition to the leader, another three brands showed high growth rates. MEXIDOL (+30%) moved up from rank nine to three, CARDIOMAGNYL (+11%) from rank six to five and PENTALGIN (+15%) from rank ten to eight. At the same time, the brands CONCOR (+4%), INGAVIRIN (-11%) ERGOFERON (+11%) moved down to rank six and two bottom ranks. The total share of the top 10 brands reduced from 6.7% to 6.4%.

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

| Rank | | Brand | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 3 | ACTOVEGIN | 0.7 | 0.8 |
| 2 | 1 | KAGOCEL | 0.7 | 0.8 |
| 3 | 9 | MEXIDOL | 0.7 | 0.6 |
| 4 | 2 | ESSENTIALE | 0.7 | 0.8 |
| 5 | 6 | CARDIOMAGNYL | 0.6 | 0.6 |
| 6 | 5 | CONCOR | 0.6 | 0.7 |
| 7 | 7 | NUROFEN | 0.6 | 0.6 |
| 8 | 10 | PENTALGIN | 0.6 | 0.5 |
| 9 | 4 | INGAVIRIN | 0.6 | 0.7 |
| 10 | 8 | ERGOFERON | 0.5 | 0.6 |
| Total | | | 6.4 | 6.7 |

The top three names in the leading INN and grouping names ranking remained unchanged (table 3). These INNs were XYLOMETAZOLINE (+12%), PANCREATIN (+10%) and BISOPROLOL (+12%). INN BLOOD (+9%) also held its previous rank eight in the top ten. The other top 10 drug manufacturers shifted their ranks; moreover, three of them improved them. INNs IBUPROFEN (+22%) and ETHYLMETHYLHYDROXYPYRIDINE (+25%), and the composition DIOSMIN* HESPERIDIN (+38%) moved down from rank 11 to seven and became the only newcomer of the top ten ranking. The less dynamic PHOSPHOLIPIDS (+4%), and NIMESULIDE (-1%) and KAGOCEL (-4%), which reduced their sales, moved down to the lower rank five and two bottom ranks, respectively. The cumulative share of the top 10 did not change and accounted for 9.3%.

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

| Rank | | INNs/Grouping Names | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 1 | XYLOMETAZOLINE | 1.4 | 1.3 |
| 2 | 2 | PANCREATIN | 1.1 | 1.1 |
| 3 | 3 | BISOPROLOL | 1.0 | 1.0 |
| 4 | 6 | IBUPROFEN | 1.0 | 0.9 |
| 5 | 4 | PHOSPHOLIPIDS | 0.9 | 0.9 |
| 6 | 9 | ETHYLMETHYLHYDROXYPYRIDINE | 0.8 | 0.7 |
| 7 | 11 | DIOSMIN*HESPERIDIN | 0.8 | 0.7 |
| 8 | 8 | BLOOD | 0.8 | 0.8 |
| 9 | 5 | NIMESULIDE | 0.8 | 0.9 |
| 10 | 7 | KAGOCEL | 0.7 | 0.8 |
| Total | | | 9.3 | 9.2 |

One newcomer entered the Top ten ATC groups rating as well B01 Antithrombotic agents (+19%) moved up to rank ten from 14 (Table 4). J01 Antibacterials for systemic use (+3%) and N06 Psychoanaleptics (+15%) improved their ranking positions by one rank, moving up to ranks four and eight. Group G03 Sex hormones (+14%) moved up to rank five from eight. At the same time, J05 Antivirals for systemic use (-3%), N02 Analgesics (+6%) and R01 Nasal preparations (+7%) moved down one rank, to numbers four, six and seven, and R05 Cough and Cold Preparations (+12%) lost two ranks and moved down to the last but one position. M01 Anti-inflammatory and antirheumatic products (+10%) and C09 Agents acting on the rennin-angiotensin system (+14%) held their previous leading ranks in the top ten. In total, the top ten ATC groups accumulated 34.9% of the regional sales, 35.4 % in the year-earlier period.

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

| Rank | | ATC code | ATC group | Share in total pharmacy sales, % | |
|---|---|---|---|---|---|
| 2017 | 2016 | | | 2017 | 2016 |
| 1 | 1 | M01 | ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS | 5.0 | 5.0 |
| 2 | 2 | C09 | AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM | 4.3 | 4.1 |
| 3 | 4 | J01 | ANTIBACTERIALS FOR SYST USE | 3.6 | 3.8 |
| 4 | 3 | J05 | ANTIVIRALS FOR SYSTEMIC USE | 3.4 | 3.9 |
| 5 | 8 | G03 | SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM | 3.3 | 3.2 |
| 6 | 5 | N02 | ANALGESICS | 3.3 | 3.5 |
| 7 | 6 | R01 | NASAL PREPARATIONS | 3.2 | 3.3 |
| 8 | 9 | N06 | PSYCHOANALEPTICS | 3.1 | 2.9 |
| 9 | 7 | R05 | COUGH AND COLD PREPARATIONS | 3.0 | 3.3 |
| 10 | 14 | B01 | ANTITHROMBOTIC AGENTS | 2.7 | 2.5 |
| Total | | | | 34.9 | 35.4 |

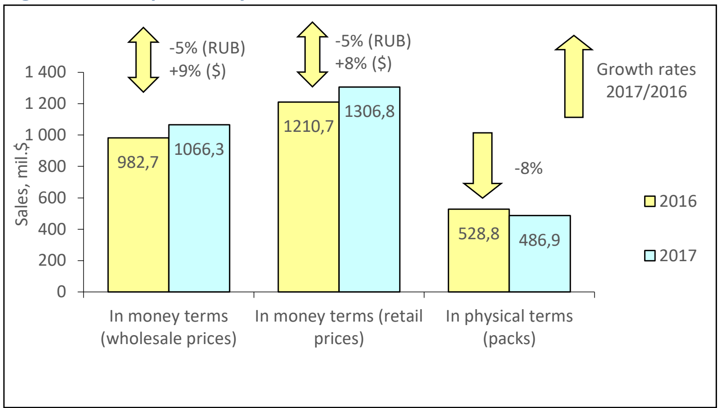
**Conclusion.** At the end of 2017, the pharmacy market in VFD was estimated at RUB 165.579 bil. (USD 2.839 bil.) in retail prices. At the same time, the market behaviour was positive both in rouble (+8%) and dollar (+24%) terms. In natural terms, the sales increased by 5% to 971.870 mil. packs. The average cost of an FPP pack in 2018 grew compared to the same period a year ago (USD 2.47), but continued to be lower than the national average across Russia (USD 3.33). Per capita expenses of the district residents for purchase of medicines in the pharmacies were also lower than the national average figures (USD 95.78 vs. USD 101.74).

## SoFD PHARMACY MARKET: 2017 RESULTS

According to Federal State Statistics Service, as of January 1, 2017 estimated population of the Southern Federal District (SoFD) was 16.428 mil., which accounted for 11.2% of the total Russian Federation population. According to Federal State Statistics Service's data, in 2017 the average wage in the SoFD was RUB 28,653 (USD 491.14), which was 27% lower than the national average wage (RUB 39,144).

According to the results of the Retail Audit of FPP (Finished Pharmaceutical Products) in Russian Federation™, at the end of 2016 the sales of drugs in physical terms in the Southern Federal District saw a 8% increase to 486.868 mil. packs. In money terms, the market showed negative growth rates in rouble terms (-5%) and positive growth rates in dollar terms (+9%), reached RUB 62.245 bil. (USD 1.066 bil.) in wholesale prices (Fig. 1). The city market share accounted for 8.8% of the pharmacy sales in Russia. The average cost of an OTC pack increased as compared to a year earlier period (USD 2.29) and reached USD 2.68 at retail prices. In 2017, the average amount spent by residents of the SoFD for drugs amounted to USD 79.54.

**Figure 1. SoFD pharmacy market in 2016 – 2017**




Following the results of 2017, the top ten drug manufacturers ranking on the Southern Federal District market did not change in composition (Table 1). The top three ATC groups also did not change: BAYER (+2%), SANOFI-AVENTIS (-12%) and TEVA (-8%) continued to top the ranking, while the two latter reduced their sales. Note that almost all manufacturers of the top ten showed negative growth rates in terms of roubles. However, two of them SERVIER (-2%) and MENARINI (-6%) moved up to ranks four and seven. At the same time, OTCPHARM (-11%) and SANDOZ (-10%) moved down one rank, and the manufacturer GLAXOSMITHKLINE (-11%) lost two ranks. As before, STADA (-6%) and ABBOTT (-1%) held their previous ranks nine and ten. The total share of the top 10 ATC groups reduced by 0.5 p.p. and accounted for 32.7%.

**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** | 4.8 | 4.5 |
| 2 | 2 | **SANOFI-AVENTIS** | 4.0 | 4.3 |
| 3 | 3 | **TEVA** | 3.9 | 4.0 |
| 4 | 7 | **SERVIER** | 3.0 | 2.9 |
| 5 | 4 | OTCPHARM | 3.0 | 3.1 |
| 6 | 5 | **SANDOZ** | 2.9 | 3.1 |
| 7 | 8 | **MENARINI** | 2.9 | 2.9 |
| 8 | 6 | **GLAXOSMITHKLINE** | 2.8 | 3.0 |
| 9 | 9 | STADA | 2.8 | 2.8 |
| 10 | 10 | ABBOTT | 2.7 | 2.5 |
| Total | | | 32.7 | 33.2 |

*AIPM members are in bold

Two newcomers broke into the top 10 brands ranking on the regional market (table 2). They were MIRAMISTIN (+9%) and CARDIOMAGNYL (+1%) at numbers nine and ten. NUROFEN (+1%) taking on leadership of the top ten also showed positive growth rates. Due to strong reduction in sales, the last year leaders KAGOCEL (-38%) and INGAVIRIN (-40%) moved down to ranks five and seven. ACTOVEGIN (-4%), ESSENTIALE (-12%) and THERAFLEX (-6%) which rose in the ranks, moved up to ranks two through four respectively. At the same time, CONCOR (-2%) moved up from rank ten to seven. Only one brand, THERAFLU (-12%) held its previous rank six. The total share of the top 10 brands reduced from 6.7% to 6.2%.

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

| Rank | | Brand | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 3 | NUROFEN | 0.8 | 0.7 |
| 2 | 4 | ACTOVEGIN | 0.7 | 0.7 |
| 3 | 5 | ESSENTIALE | 0.6 | 0.7 |
| 4 | 7 | THERAFLEX | 0.6 | 0.6 |
| 5 | 1 | KAGOCEL | 0.6 | 0.9 |
| 6 | 6 | THERAFLU | 0.6 | 0.6 |
| 7 | 2 | INGAVIRIN | 0.6 | 0.9 |
| 8 | 10 | CONCOR | 0.6 | 0.5 |
| 9 | 12 | MIRAMISTIN | 0.6 | 0.5 |
| 10 | 11 | CARDIOMAGNYL | 0.5 | 0.5 |
| Total | | | 6.2 | 6.7 |

The top ten leaders XYLOMETAZOLINE (+2%) and PANCREATIN (-6%) placed at rank five held their own in the top ten INNs and grouping names ranking (Table 3). Note that half of INNs of the top ten ranking showed positive growth rates. IBUPROFEN (+4%), BISOPROLOL (+2%), DIOSMIN*HESPERIDIN (+28%) and SILDENAFIL (+6%) moved up to ranks three, five, seven and ten. However, the latter two INNs broke into the ranks of the top ten for the first time. DICLOFENAC that showed zero growth rates became one more newcomer of the top ten. INNs BLOOD (-4%) and PHOSPHOLIPIDS (-11%) also moved up to the higher ranks six and eight. Only NIMESULIDE (-6%) moved down one ranks, to number four. The total share of the top 10 INNs expanded from 8.8% to 9.3%.

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

| Rank | | INNs/Grouping Names | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 1 | XYLOMETAZOLINE | 1.8 | 1.7 |
| 2 | 2 | PANCREATIN | 1.0 | 1.1 |
| 3 | 4 | IBUPROFEN | 1.0 | 0.9 |
| 4 | 3 | NIMESULIDE | 1.0 | 1.0 |
| 5 | 10 | BISOPROLOL | 0.8 | 0.8 |
| 6 | 8 | BLOOD | 0.8 | 0.8 |
| 7 | 18 | DIOSMIN*HESPERIDIN | 0.7 | 0.6 |
| 8 | 9 | PHOSPHOLIPIDS | 0.7 | 0.8 |
| 9 | 11 | DICLOFENAC | 0.7 | 0.7 |
| 10 | 17 | SILDENAFIL | 0.6 | 0.6 |
| Total | | | 9.3 | 8.8 |

Despite 3% reduction in sales, the group M01 Anti-inflammatory and antirheumatic products held and reinforced rank number one in the top ten ATC groups ranking (Table 4). The other INNs from the top ten showed negative growth rates. Only group G03 Sex hormones showed zero growth rates, which allowed it to move up from rank ten to six. Also, R01 Nasal preparations (-5%), N02 Analgesics (-7%), C09 Agents acting on the rennin-angiotensin system (-1%) and A07 Antidiarrheals, intestinal antiinflammatory/antiinfective agents (-5%) move up to higher ranks, coming up at numbers two, four, five and eight respectively. Due to strong reduction in sale, three groups fell in the ranks. J05 Antivirals for systemic use (-34%), R05 Cough and cold preparations (-15%) and L03 Immunostimulants (-20%) moved down to ranks seven and two bottom ranks, respectively. The group J01 Antibacterials for systemic use (-12%) maintained its previous rank three. In total, the top ten ATC groups accumulated 35.1% of the market against 37.4% in the year-earlier period.

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

| Rank | | ATC code | ATC group | Share in total pharmacy sales, % | |
|---|---|---|---|---|---|
| 2017 | 2016 | | | 2017 | 2016 |
| 1 | 1 | M01 | ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS | 5.0 | 4.9 |
| 2 | 4 | R01 | NASAL PREPARATIONS | 3.8 | 3.8 |
| 3 | 3 | J01 | ANTIBACTERIALS FOR SYST USE | 3.8 | 4.1 |
| 4 | 5 | N02 | ANALGESICS | 3.6 | 3.7 |
| 5 | 7 | C09 | AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM | 3.4 | 3.2 |
| 6 | 10 | G03 | SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM | 3.3 | 3.2 |
| 7 | 2 | J05 | ANTIVIRALS FOR SYSTEMIC USE | 3.3 | 4.7 |
| 8 | 9 | A07 | ANTIDIARR.,INTEST. ANTI-INFL./ANTIINFECT. AGENTS | 3.2 | 3.2 |
| 9 | 6 | R05 | COUGH AND COLD PREPARATIONS | 3.0 | 3.4 |
| 10 | 8 | L03 | IMMUNOSTIMULANTS | 2.7 | 3.2 |
| Total | | | | 35.1 | 37.4 |

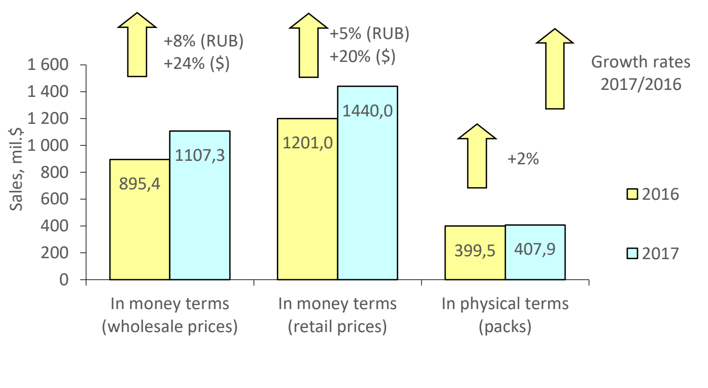
**Conclusion.** On the basis of the results for 2017, the retail pharmacy market of the SoFD brought in RUB 76.286 bil. (USD 1.307 mil.) at retail prices. The sales decreased by 5% in terms of roubles and increased by 8% in terms of dollars. In physical terms, the market showed negative growth rates (-8%) and amounted to 486.868 mil. packs. The average cost of an FPP pack in the district pharmacies was USD 2.68, which was higher than the 2016 figures (USD 2.29), but lower than national average (USD 3.33). At the end of of 2017, the average expenses of the SoFD residents for medications in the pharmacies were also lower than the national average (USD 79.54 vs. USD 101.74).

## UFD PHARMACY MARKET: 2017 RESULTS

According to Federal State Statistics Service, as of January 1, 2017 estimated population of the Ural Federal District (UFD) was 12.346 mil., which accounted for 8.4% of the total Russian Federation population. According to Federal State Statistics Service's data, in 2017 the average wage in the UFD was RUB 43853 (USD 751.68), which was 12% higher than the average wage in Russia (RUB 39,144).

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 UFD saw a 2% increase to 407.882 mil. packs. In money terms, the market also showed positive growth rates both in rouble terms (+8%), and in dollar terms (+24%), and reached RUB 64.575 bil. (USD 1.107 bil.) in wholesale prices (Fig. 1). The regional market share accounted for 9.6% of the total pharmacy sales in Russia. The average retail cost of an FPP pack was USD 3.53, which was higher than in the year-earlier period (USD 3.01). In 2017, the average amount spent by residents of the UFD for drugs amounted to USD 116.64.

### Figure 1. UFD pharmacy market in 2016 – 2017




Based on the results for 2017, the drug manufacturer BAYER (+13%) showed the largest sales and the highest growth rates among the leaders on the Ural Federal District, moving up to rank one from two (Table 1). At the same time, the former leader SANOFI-AVENTIS (+2%) moved down one rank. As before, TEVA (-4%) held its previous rank three. SERVIER, SANDOZ and MENARINI (+6% each) held their previous ranks six, seven and ten. In addition to the leader, another two manufacturers rose in the ranks. OTCPHARM (+11%) and STADA (+6%) moved up one rank, coming in at numbers five and eight. At the same time, the less dynamic manufacturers GEDEON RICHTER (+1%) and ABBOTT (+4%) moved down to ranks five and nine. The total share of the top 10 drug manufacturers decreased by over 1 p.p. to 32.9%.

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

| Rank | | Manufacturer* | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 2 | **BAYER HEALTHCARE** | 4.7 | 4.5 |
| 2 | 1 | **SANOFI-AVENTIS** | 4.7 | 5.0 |
| 3 | 3 | **TEVA** | 3.4 | 3.8 |
| 4 | 5 | OTCPHARM | 3.2 | 3.1 |
| 5 | 4 | GEDEON RICHTER | 3.2 | 3.4 |
| 6 | 6 | **SERVIER** | 3.0 | 3.0 |
| 7 | 7 | **SANDOZ** | 2.8 | 2.9 |
| 8 | 9 | STADA | 2.8 | 2.9 |
| 9 | 8 | ABBOTT | 2.8 | 2.9 |
| 10 | 10 | **MENARINI** | 2.3 | 2.4 |
| Total | | | 32.9 | 34.0 |

*AIPM members are in bold

In contrast to the previous ranking, two newcomers broke into the top 10 brand names ranking on the regional market (Table 2). ARTRA (+32%) and XARELTO (+34%) moved up to ranks seven and ten. In addition to them, another two brands DETRALEX (+18%) and NUROFEN (+10%) placed at ranks two and three, managed to rise in the ranks. INGAVIRIN (-13%) and ACTOVEGIN (+2%) that were placed at these ranks earlier moved down two ranks. KAGOCEL lost three ranks and reduced its sales by 8%. The leader of the top ten ESSENTIALE (+3%), and LOZAP (-0.2%) and CARDIOMAGNYL (+12%) held their previous ranks one, six and nine in the ranking. The cumulative share of the top 10 did not change and accounted for 6.2%.

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

| Rank | | Brand | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 1 | ESSENTIALE | 0.8 | 0.9 |
| 2 | 7 | DETRALEX | 0.7 | 0.6 |
| 3 | 4 | NUROFEN | 0.7 | 0.6 |
| 4 | 2 | INGAVIRIN | 0.6 | 0.8 |
| 5 | 3 | ACTOVEGIN | 0.6 | 0.6 |
| 6 | 6 | LOZAP | 0.6 | 0.6 |
| 7 | 11 | ARTRA | 0.6 | 0.5 |
| 8 | 5 | KAGOCEL | 0.5 | 0.6 |
| 9 | 9 | CARDIOMAGNYL | 0.5 | 0.5 |
| 10 | 19 | XARELTO | 0.5 | 0.4 |
| Total | | | 6.1 | 6.2 |

The top INN and group names leader managed to hold their own in the ranking: due to outperformance rates, XYLOMETAZOLINE (+11%) held and consolidated its hold of its previous rank number one (Table 3). In addition, IBUPROFEN (+16%) held its previous rank five. Six INNs of the top ten raised their ratings. DIOSMIN*HESPERIDIN (+23%), PANCREATIN (+11%), ROSUVASTATIN (+14%), CHONDROITINSULFURIC ACID* GLUCOSAMINE (+15%) and BISOPROLOL (+7%) moved up one rank, coming in at numbers two, three, six, seven and nine respectively. The only newcomer DROSPIRENONE*ETHINYLESTRADIOL (+9%) broke into the ranks of the top ten, coming in at number ten. In contrast, INNs PHOSPHOLIPIDS (+8%) and NIMESULIDE (+2%) lost two ranks each and moved down to ranks four and eight. The cumulative share of the top10 increased from 8.7% to 9.0%.

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

| Rank | | INNs/Grouping Names | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 1 | XYLOMETAZOLINE | 1.4 | 1.3 |
| 2 | 3 | DIOSMIN*HESPERIDIN | 1.0 | 0.9 |
| 3 | 4 | PANCREATIN | 0.9 | 0.9 |
| 4 | 2 | PHOSPHOLIPIDS | 0.9 | 0.9 |
| 5 | 5 | IBUPROFEN | 0.9 | 0.9 |
| 6 | 7 | ROSUVASTATIN | 0.8 | 0.8 |
| 7 | 8 | CHONDROITINSULFURIC ACID* GLUCOSAMINE | 0.8 | 0.8 |
| 8 | 6 | NIMESULIDE | 0.7 | 0.8 |
| 9 | 10 | BISOPROLOL | 0.7 | 0.7 |
| 10 | 12 | DROSPIRENONE*ETHINYLESTRADIOL | 0.7 | 0.7 |
| Total | | | 9.0 | 8.7 |

The dominant three groups held their own in the top ten ATC group ranking (table 4). The groups M01 Anti-inflammatory and antirheumatic products (+11%), G03 Sex hormones (+7%) and C09 Agents acting on the rennin-angiotenzin system (+8%) as before maintained their previous top three ranks. R01 Nasal preparations (+7%) moved up to rank four, displacing J05 Antivirals for systemic use (-8%) and A11 Vitamines (+4%) down one rank. The only newcomer of the top ten B01 Antithrombotic agents (+16%) moved up to rank seven. At the same time, J01 Antimicrobial drugs for systemic use (+3%) and N02 Analgesics (+6%) moved down one rank to numbers eight and nine. As in the year-earlier period, N06 Psychoanaleptics (+8%) rounded out the top ten. In total, the top ten ATC - groups accumulated 34.9% of the regional market against 35.6% in 2016.

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

| Rank | | ATC code | ATC group | Share in total pharmacy sales, % | |
|---|---|---|---|---|---|
| 2017 | 2016 | | | 2017 | 2016 |
| 1 | 1 | M01 | ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS | 4.6 | 4.5 |
| 2 | 2 | G03 | SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM | 4.3 | 4.3 |
| 3 | 3 | C09 | AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM | 4.1 | 4.1 |
| 4 | 6 | R01 | NASAL PREPARATIONS | 3.3 | 3.4 |
| 5 | 4 | J05 | ANTIVIRALS FOR SYSTEMIC USE | 3.3 | 3.9 |
| 6 | 5 | A11 | VITAMINS | 3.3 | 3.4 |
| 7 | 11 | B01 | ANTITHROMBOTIC AGENTS | 3.1 | 2.9 |
| 8 | 7 | J01 | ANTIBACTERIALS FOR SYST USE | 3.0 | 3.2 |
| 9 | 8 | N02 | ANALGESICS | 3.0 | 3.0 |
| 10 | 10 | N06 | PSYCHOANALEPTICS | 3.0 | 3.0 |
| Total | | | | 34.9 | 35.6 |

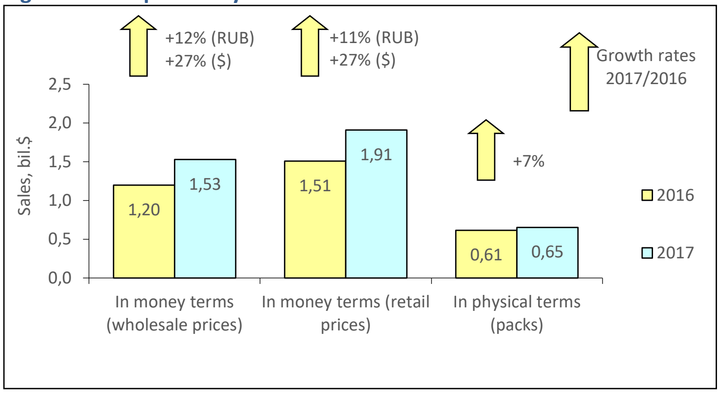
**Conclusion.** On the basis of the results for 2017, the retail pharmacy market of the Ural Federal District brought in RUB 83.973 bil. (USD 1.440 bil.) in retail prices. The sales increased 5% in terms of roubles and 20% in terms of dollars. In pack terms, the market also showed positive growth rates (+2%) and achieved 407.882 mil. packs. At the end of 2017, the average cost of an FPP pack in the district pharmacies was USD 3.53, which was higher than the last year figures (USD 3.01) and the national average (USD 3.33). The average expenses of the UFD residents for medications in the pharmacies also exceeded the national average (USD 116.64 vs. USD 101.69).

## SiFD PHARMACY MARKET: 2017 RESULTS

According to Federal State Statistics Service, as of January 1, 2017 estimated population of the Siberian Federal District (SiFD) was 19.326 mil., which accounted for 13.2% of the total Russian Federation population. According to Federal State Statistics Service's data, based on the results for 2017 the average wage in the SiFD was RUB 33822 (USD 579.74), which was 14% lower than the national average wage (RUB 39,144).

According to the results of the Retail Audit of FPP (Finished Pharmaceutical Products) in Russian Federation™, in twelve months of 2017 the SiFD pharmacy market volume in physical terms increased by 7% to 654.673 million packs (Fig. 1) In wholesale prices, the market showed the positive performance both in terms of roubles (+12%) and in terms of dollars (+27%) and reached RUB 89.182 bil. (USD 1.528 bil.). The district's share accounted for 12.8% of the total pharmacy sales in the Russian pharmacy market pattern. Based on the results for 2017, the average cost of FPP pack in the SiFD pharmacies was USD 2.92, whereas in the year-earlier period its cost was USD 2.46. In 2017, per capita expenses of the SFD residents for purchase of medicines in pharmacies amounted to USD 98.85.

### Figure 1. SiFD pharmacy market in 2016 – 2017




The most dynamic among the top ten drug manufacturers BAYER (+22%) became the leader of the top ten ranking on the SiFD pharmacy market based on the results for 2017 (Table 1). At the same time, the former top ten leader SANOFI-AVENTIS (+2%) moved down one rank. TEVA (+11%), SERVIER (+10%) and SANDOZ (+14%) held their previous ranks three through five, respectively. Three drug manufacturers rose in the ranks in the lower part of the top ten. The OTCPHARM (+17%), STADA (+14%) and KRKA (+17%), which showed outperformance rates, moving up to ranks six, seven and nine, respectively. On top of that, the latter became the only newcomer of the top 10 ranking. In contrast, the less dynamic GEDEON RICHTER (+7%) and GLAXOSMITHKLINE (+6%) moved down to ranks eight and the last rank in the top ten ranking. The total share of the analysed top 10 manufacturers remained unchanged and accounted for 33.1%.

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

| Rank | | Manufacturer* | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 2 | **BAYER HEALTHCARE** | 4.7 | 4.3 |
| 2 | 1 | **SANOFI-AVENTIS** | 4.4 | 4.8 |
| 3 | 3 | **TEVA** | 4.2 | 4.2 |
| 4 | 4 | **SERVIER** | 3.3 | 3.3 |
| 5 | 5 | **SANDOZ** | 3.1 | 3.0 |
| 6 | 7 | OTCPHARM | 3.0 | 2.8 |
| 7 | 8 | STADA | 2.8 | 2.7 |
| 8 | 6 | GEDEON RICHTER | 2.7 | 2.8 |
| 9 | 11 | **KRKA** | 2.6 | 2.5 |
| 10 | 9 | **GLAXOSMITHKLINE** | 2.4 | 2.6 |
| Total | | | 33.1 | 33.1 |

*AIPM members are in bold

Due to outperformance sale rates, CARDIOMAGNYL (+13%) and NUROFEN (+16%) moved up to the upper ranks of the top ten, displacing LOZAP (-1%) and CONCOR (+4%) down to rank three and four respectively (Table 2). Apart from them, another three brands from the top ten showed high growth rates and rose in the ranks. LORISTA (+17%) and PENTALGIN (+13%), as well as the newcomer DETRALEX (+31%) moved up to ranks five, eight and six respectively. The brand names KAGOCEL (-14%) and ESSENTIALE (-1%) reduced their sales and moved down to ranks seven and ten. Despite the growth in sales, ACTOVEGIN (+8%) moved down to rank ten. In total, the top ten brands accumulated 6.1% of sales, which was slightly less than in the year-earlier period (6.4%).

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

| Rank | | Brand | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 4 | CARDIOMAGNYL | 0.7 | 0.7 |
| 2 | 5 | NUROFEN | 0.7 | 0.7 |
| 3 | 1 | LOZAP | 0.7 | 0.8 |
| 4 | 3 | CONCOR | 0.7 | 0.7 |
| 5 | 9 | LORISTA | 0.6 | 0.6 |
| 6 | 13 | DETRALEX | 0.6 | 0.5 |
| 7 | 2 | KAGOCEL | 0.6 | 0.7 |
| 8 | 10 | PENTALGIN | 0.6 | 0.6 |
| 9 | 6 | ESSENTIALE | 0.6 | 0.6 |
| 10 | 8 | ACTOVEGIN | 0.6 | 0.6 |
| Total | | | 6.1 | 6.4 |

Three newcomers broke into the ranks of the top ten INN and generic names ranking (table 3). The composition DIOSMIN*HESPERIDIN (+36%), and INNs ROSUVASTATIN (+27%) and SILDENAFIL (+13%) moved up to ranks six, seven and ten respectively. The other two ATC groups of the top ten moved to yet higher ranks. INNs IBUPROFEN (+24%) and LOSARTAN (+15%) moved up one rank, coming in at numbers two and eight, displacing BISOPROLOL (+9%) and ACETYLSALICYLIC ACID*MAGNESIUM (+13%). The leader of the top ten XYLOMETAZOLINE (+18%), as well as NIMESULIDE (+5%) and PANCREATIN (+7%) held their own in the ranking. The total share of the top 10 reduced from 8.5% to 8.8%.

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

| Rank | | INNs/Grouping Names | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 1 | XYLOMETAZOLINE | 1.5 | 1.4 |
| 2 | 3 | IBUPROFEN | 1.0 | 0.9 |
| 3 | 2 | BISOPROLOL | 1.0 | 1.0 |
| 4 | 4 | NIMESULIDE | 0.8 | 0.9 |
| 5 | 5 | PANCREATIN | 0.8 | 0.8 |
| 6 | 16 | DIOSMIN*HESPERIDIN | 0.8 | 0.7 |
| 7 | 12 | ROSUVASTATIN | 0.8 | 0.7 |
| 8 | 9 | LOSARTAN | 0.7 | 0.7 |
| 9 | 8 | ACETYLSALICYLIC ACID*MAGNESIUM | 0.7 | 0.7 |
| 10 | 11 | SILDENAFIL | 0.7 | 0.7 |
| Total | | | 8.8 | 8.5 |

Most of the groups from the top ten ATC group rating did not change their positions (table 4). M01 Anti-inflammatory and antirheumatic products (+13%), C09 Agents acting on the rennin-angiotenzin system (+14%), G03 Sex hormones (+15%) and N02 Analgesics (+7%) held their top ranks, and A11 Vitamins (+4%) and G04 Urologicals (+17%) held their previous ranks nine and ten. Two ATC groups from the top ten managed to rise in ranks. R01 Nasal preparations (+11%) and R05 Cough and cold preparations (+10%) moved up one rank, to numbers five and seven. ATC-groups J01 Antibacterials for systemic use (+5%) and J05 Antivirals for systemic use (-5%) moved down one rank. The total share of the Top 10 reduced from 36% to 35.3%.

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

| Rank | | ATC code | ATC group | Share in total pharmacy sales, % | |
|---|---|---|---|---|---|
| 2017 | 2016 | | | 2017 | 2016 |
| 1 | 1 | M01 | ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS | 4.8 | 4.8 |
| 2 | 2 | C09 | AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM | 4.5 | 4.4 |
| 3 | 3 | G03 | SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM | 4.1 | 3.9 |
| 4 | 4 | N02 | ANALGESICS | 3.7 | 3.9 |
| 5 | 6 | R01 | NASAL PREPARATIONS | 3.4 | 3.5 |
| 6 | 5 | J01 | ANTIBACTERIALS FOR SYST USE | 3.4 | 3.6 |
| 7 | 8 | R05 | COUGH AND COLD PREPARATIONS | 3.1 | 3.2 |
| 8 | 7 | J05 | ANTIVIRALS FOR SYSTEMIC USE | 2.8 | 3.3 |
| 9 | 9 | A11 | VITAMINS | 2.8 | 3.0 |
| 10 | 10 | G04 | UROLOGICALS | 2.7 | 2.6 |
| Total | | | | 35.3 | 36.0 |

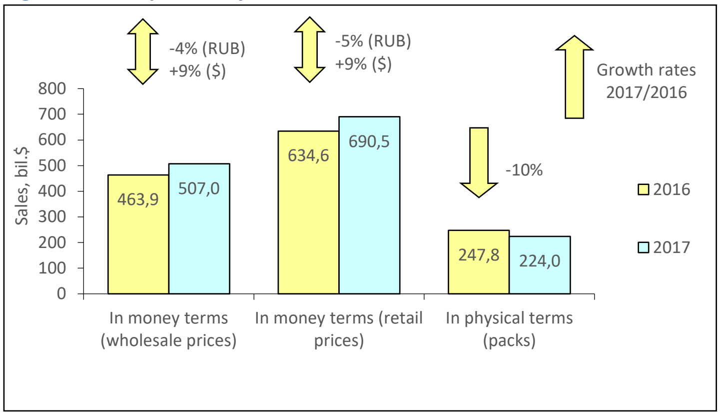
**Conclusion.** At the end of 2017, the pharmacy market in the Siberian Federal District was estimated at RUB 111.482 mil. (USD 1.910 bil.) in final consumer prices. At the same time, the market behaviour was positive both in rouble (+11%) , and in dollar (+27%) terms. In pack terms, the sales increased by 7% and reached 654.673 mil. packs. The average cost of an FPP pack (USD 2.92) increased as compared to a year earlier (USD 2.46), but continued to be lower than the national FPP price average in Russia (USD 3.33). Per capita expenses of the district residents for purchase of medicines in the pharmacies were also lower than the national average figures (USD 98.85 vs. USD 101.74).

## FEFD PHARMACY MARKET: 2017 RESULTS

According to Federal State Statistics Service, as of January 1, 2017 estimated population of the Far Eastern Federal District (FEFD) was 6.183 mil., which accounted for 4.2% of the total Russian Federation population. According to Federal State Statistics Service's data, in 2017 the average wage in the FEFD was RUB 49022 (USD 840.28), which was 25% higher than the average wage in Russia (RUB 39,144).

According to the results of the Retail Audit of Finished Pharma Products (2017) in Russian Federation™, at year-end 2016 the sales of drugs in physical terms in the pharmacies of the FEFD saw a 10% increase to 223.957 mil. packs. In money terms, the OTC drugs market increased by 4% in rouble terms, but increased by 9% in dollar terms and reached RUB 29.582 bil. (USD 506.983 mil.) in wholesale prices (Fig. 1). The district's share reached 4.6% of the all-Russia sales in retail prices. The average cost of a pack increased considerably as compared to the previous year and escalated to USD 3.08 (vs. USD 2.56). At the end of 2017, the average amount spent by the FEFD residents for drugs in the pharmacies amounted to USD 111.69.

### Figure 1. FEFD pharmacy market in 2016 – 2017




At the end of 2017, the manufacturer BAYER which increased its sales by 7% demonstrated the largest sales on the FEFD retail market and moved up to rank number one of the top ten manufacturers (Table 1). At the same time, its former leader SANOFI-AVENTIS (-12%), in contrast, showed negative growth rates and moved down one rank. Note that most of the other drug manufacturers showed reduction in sales. On top of that, SERVIER, TEVA (-7% each), GEDEON RICHTER (-9%), SANDOZ (-7%) and GLAXOSMITHKLINE (-12%) held their previous ranks from three to seven, and STADA (-6%) as before maintained its rank ten. The Russia-based OTCPHARM (-11%) moved down one rank, giving way to KRKA (+2%) with positive growth rates. The total share of the top 10 drug manufacturers reduced from 33.4% to 32.7%

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

| Rank | | Manufacturer* | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 2 | **BAYER HEALTHCARE** | 4.5 | 4.0 |
| 2 | 1 | **SANOFI-AVENTIS** | 3.9 | 4.3 |
| 3 | 3 | **SERVIER*** | 3.5 | 3.6 |
| 4 | 4 | **TEVA** | 3.5 | 3.6 |
| 5 | 5 | GEDEON RICHTER | 3.3 | 3.5 |
| 6 | 6 | **SANDOZ** | 3.2 | 3.2 |
| 7 | 7 | **GLAXOSMITHKLINE** | 2.8 | 3.0 |
| 8 | 9 | **KRKA** | 2.8 | 2.6 |
| 9 | 8 | OTCPHARM | 2.7 | 2.9 |
| 10 | 10 | STADA | 2.6 | 2.6 |
| Total | | | 32.7 | 33.4 |

*AIPM members are in bold

The top 10 brands ranking has changed its leader (table 2). The former leader INGAVIRIN cut its sales by 22% and moved down to rank four, and NUROFEN (-3%), CONCOR and CARDIOMAGNYL (+3%) moved up to the top three ranks. MEXIDOL (-4%) moved up from rank eight to five, and the newcomer of the top ten MIRAMISTIN (+13%) moved up to rank six from 13. Another brand LORISTA (+2%) showed positive growth rates, moving up to rank nine from ten. Despite 14% reduction in sales, THERAFLU held its previous rank seven. The brands ESSENTIALE (-26%) and ACTOVEGIN (-4%) moved down to ranks eight and ten, respectively. The aggregate share of the top-10 reduced from 6.7% to 6.4%.

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

| Rank | | Brand | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 2 | NUROFEN | 0.8 | 0.8 |
| 2 | 3 | CONCOR | 0.7 | 0.7 |
| 3 | 6 | CARDIOMAGNYL | 0.7 | 0.7 |
| 4 | 1 | INGAVIRIN | 0.7 | 0.8 |
| 5 | 8 | MEXIDOL | 0.6 | 0.6 |
| 6 | 13 | MIRAMISTIN | 0.6 | 0.5 |
| 7 | 7 | THERAFLU | 0.6 | 0.7 |
| 8 | 4 | ESSENTIALE | 0.6 | 0.7 |
| 9 | 10 | LORISTA | 0.6 | 0.6 |
| 10 | 9 | ACTOVEGIN | 0.6 | 0.6 |
| Total | | | 6.4 | 6.7 |

XYLOMETAZOLINE (-2%), IBUPROFEN (+5%) and BISOPROLOL (-6%) held their previous top three ranks in the top ten INN and grouping names ranking (Table 3). The other top 10 INNs changed their ranks; of which six INNs improved them. PANCREATIN (-0.4%) and ACETYLSALICYLIC ACID*MAGNESIUM (-4%) moved up two ranks to numbers four and eight. Four newcomers of the top ten: DIOSMIN*HESPERIDIN (+11%), ETHYLMETHYLHYDROXYPYRIDINE (-3%), DICLOFENAC (-8%) andROSUVASTATIN (-17%) moved up to ranks six, seven and two bottom ranks. Only INN NIMESULIDE (-12%) fell in the ranks, moving down one rank, to number five. The cumulative share of the top10 increased from 8.7% to 8.9%.

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

| Rank | | INNs/Grouping Names | Share in total pharmacy sales, % | |
|---|---|---|---|---|
| 2017 | 2016 | | 2017 | 2016 |
| 1 | 1 | XYLOMETAZOLINE | 1.7 | 1.7 |
| 2 | 2 | IBUPROFEN | 1.2 | 1.1 |
| 3 | 3 | BISOPROLOL | 1.0 | 1.0 |
| 4 | 6 | PANCREATIN | 0.8 | 0.8 |
| 5 | 4 | NIMESULIDE | 0.8 | 0.9 |
| 6 | 13 | DIOSMIN*HESPERIDIN | 0.8 | 0.7 |
| 7 | 12 | ETHYLMETHYLHYDROXYPYRIDINE | 0.7 | 0.7 |
| 8 | 10 | ACETYLSALICYLIC ACID*MAGNESIUM | 0.7 | 0.7 |
| 9 | 11 | DICLOFENAC | 0.7 | 0.7 |
| 10 | 21 | ROSUVASTATIN | 0.7 | 0.5 |
| Total | | | 8.9 | 8.7 |

The top three ATC group held their own in the top ten ranking on the regional market (Table 4). The groups M01 Anti-inflammatory and antirheumatic products (-7%), C09 Agents acting on the rennin-angiotensin system (-4%), R01 Nasal preparations (-8%) kept their previous top three positions. In addition, A11 Vitamins (-8%) held its previous rank nine in the top ten. Three ATC groups of the top 10 rose in the ranks. G03 Sex hormones (+10%) and J01 Antibacterials for systemic use (-6%) moved up to ranks four and five, and the only newcomer of the top ten N06 Psychoanaleptics (+2%) moved up to rank ten of the top ten ranking. The groups N02 Analgesics (-14%), J05 Antivirals for systemic use (-20%) and R05 Cough and Cold Preparations (-15%) moved down to ranks six through eight respectively. The total share of the top ten reduced by 1.2 p.p. and accounted for 34.4%.

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

| Rank | | ATC code | ATC group | Share in total pharmacy sales, % | |
|---|---|---|---|---|---|
| 2017 | 2016 | | | 2017 | 2016 |
| 1 | 1 | M01 | ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS | 4.5 | 4.6 |
| 2 | 2 | C09 | AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM | 4.0 | 4.0 |
| 3 | 3 | R01 | NASAL PREPARATIONS | 3.8 | 3.9 |
| 4 | 8 | G03 | SEX HORMONES AND MODULATORS OF THE GENITAL SYSTEM | 3.6 | 3.1 |
| 5 | 6 | J01 | ANTIBACTERIALS FOR SYST USE | 3.5 | 3.6 |
| 6 | 4 | N02 | ANALGESICS | 3.4 | 3.8 |
| 7 | 5 | J05 | ANTIVIRALS FOR SYSTEMIC USE | 3.1 | 3.7 |
| 8 | 7 | R05 | COUGH AND COLD PREPARATIONS | 3.0 | 3.4 |
| 9 | 9 | A11 | VITAMINS | 2.8 | 2.9 |
| 10 | 13 | N06 | PSYCHOANALEPTICS | 2.7 | 2.5 |
| Total | | | | 34.4 | 35.6 |

**Conclusion.** On the basis of the results for 2017, the retail market of the Far Eastern Federal District brought in RUB 40.292 bil. (USD 690.537 mil.), which was 5% in terms of roubles and 9% in terms of dollars more than in 2016. In physical terms, the market showed negative growth rates (-10%) and amounted to 223.957 mil. packs. At the end of 2017, the average cost of a pack in the FEFD pharmacies was USD 3.08, (in a year-earlier period - USD 2.56), which was lower than the national average (USD 3.33). The average medicine expenses of the district residents were higher than the national average expenses in Russia (111.69 USD vs. 101.74 USD).