



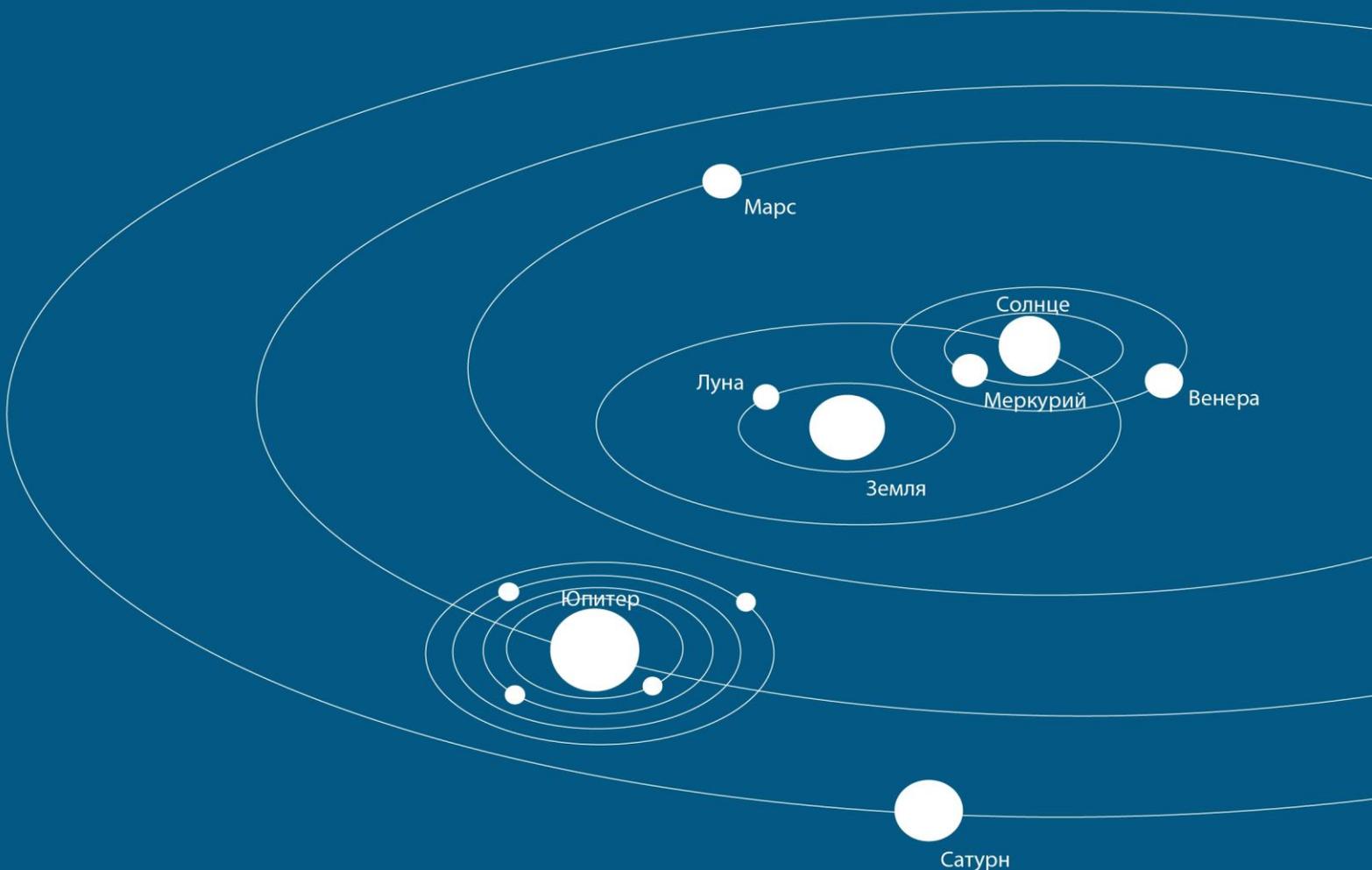
ITPCru

Международная коалиция по готовности к лечению
Восточная Европа и Центральная Азия



ARV PROCUREMENT IN 2014: HISTORY OF DECENTRALIZATION

Results of Monitoring of ARV Procurement and Provision in Russia



May 2015

RESEARCH TEAM AND ACKNOWLEDGMENTS

Grigory Vergus, Sergey Golovin, Yulia Dragunova, Natalia Egorova, Alexey Mikhaylov, Andrey Skvortsov, Tatyana Khan.

Team of the Treatment Preparedness Coalition especially thanks the activists who were monitoring the auctions carried out in the regions in 2014: Nikolay Baranov, Sergey Volkov, Svetlana Prosvirina and Evgeny Prokhoda.

Team of the Treatment Preparedness Coalition especially thanks:

- Natalia Egorova and Dmitry Solovyov for coordinating the collection of data for monitoring;
- Kira Karchavets for statistical data processing;
- Damir Bikmukhametov for the assistance in developing the methodology;
- Denis Godlevsky for consultations on the development of the report concept;
- Target-Oriented Charity Foundation "Candle" for the assistance in arranging technical visits and round tables; St. Petersburg Non-Governmental Foundation of Medical and Social Programmes "Humanitarian Action" for the administrative and technical support, AIDS Healthcare Foundation for the partner support;
- All participants of the movement "Patients in control" for the work done.

RECOMMENDED FORMAT FOR CITING

«Treatment Preparedness Coalition: ARV procurement in 2014: History of decentralization. Results of monitoring of ARV procurement and provision in the Russian Federation». St. Petersburg, 2015. First edition. Current version of the publication is available on the website <http://itpcru.org>. Comments on this report may be sent by e-mail: office@itpcru.org.

DISCLAIMER

This document is intended for assistance to the government authorities of the Russian Federation in its efforts taken for prevention of HIV epidemic. The Treatment Preparedness Coalition shall not be responsible for the use and interpretation of data, conclusions and recommendations set forth in this report by any third parties.

The conclusions and recommendations contained herein reflect the views of the authors of this report, which may not coincide with the views of other interested parties.

Information contained herein is gathered from open sources. The Treatment Preparedness Coalition does not guarantee the absolute accuracy of information provided by third parties and may not share the views of third parties cited in the report.

The document may be updated from time to time. The Treatment Preparedness Coalition reserves the right not to announce publicly of all changes made to the report. The current version of the document is published on the website <http://itpcru.org/>.

References to any international generic or trade names of drugs do not mean that the Treatment Preparedness Coalition gives preference to them or, conversely, does not recommend them.

References to any treatment regimens in the text of this report under any circumstances may not be used as an alternative to consulting with a medical specialist.

CONTENT

RESEARCH TEAM AND ACKNOWLEDGMENTS.....	2
RECOMMENDED FORMAT FOR CITING.....	2
LIST OF MOST FREQUENTLY USED ABBREVIATIONS.....	5
INTRODUCTION.....	6
METHODOLOGY.....	8
ARV PROCUREMENT PROCESS IN RUSSIA.....	10
PRICING IN RUSSIA.....	12
ARV DRUGS IN RUSSIA.....	13
A. registered drugs in Russia.....	13
B. mostly purchased ARV drugs.....	15
C. drugs not included into LEM.....	17
D. non-optimum drugs.....	17
E. combination formulations.....	18
MOST COMMON TREATMENT REGIMENS.....	20
NUMBER OF PATIENTS RECEIVING ART.....	22
PRICES FOR ARV DRUGS IN 2014.....	24
a. difference in prices in constituent entities of the russian federation and growth compared to 2013.....	26
b. prices for original and generic drugs.....	28
c. prices for combination drugs.....	29
d. prices for drugs not included into LEM.....	31
e. competition.....	32
f. manufacturers of ARV drugs.....	35
PRICES FOR ARV DRUGS IN RUSSIA AND IN THE WORLD.....	38
Prices in Russia and BRICS countries.....	40
INTERRUPTIONS IN SUPPLY OF DRUGS AND ACTIONS DURING MONITORING.....	43
CONCLUSIONS AND RECOMMENDATIONS.....	44

LIST OF MOST FREQUENTLY USED ABBREVIATIONS

AIDS – acquired immune deficiency syndrome

ARV drugs, ART – antiretroviral drugs

BRICS - Brazil, Russia, India, China, South Africa

CL – compulsory license

FAS – Federal Antimonopoly Service of the Russian Federation

FL – federal law

HIV – human immunodeficiency virus

II – integrase inhibitors

IMP – initial maximum price

INN – international non-proprietary name

LEM – List of Essential Medicines

Ministry of Health – Ministry of Health of the Russian Federation

NNRTI – non-nucleoside reverse transcriptase inhibitors

NRTI – nucleoside reverse transcriptase inhibitors

NtRTI – nucleotide reverse transcriptase inhibitors

PEA – public electronic auction

PI - protease inhibitors

RF – Russian Federation

TIN – Taxpayer Identification Number

TN – trade name

TRIPS – Agreement on Trade Related Aspects of Intellectual Property Rights

UIS – unified information system

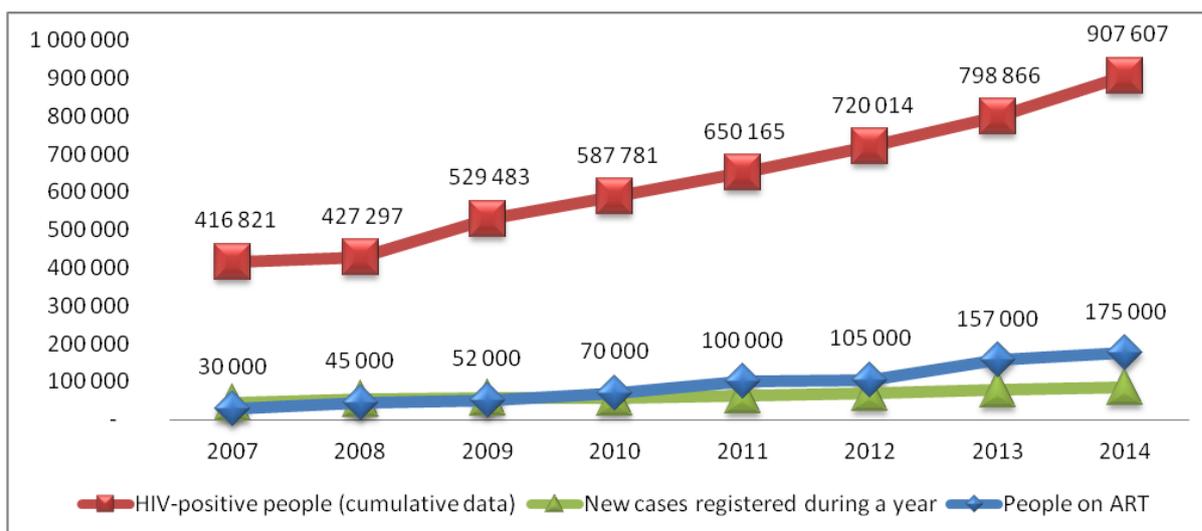
WHO – World Health Organization

INTRODUCTION

According to the Federal AIDS Centre¹, the total number of Russian citizens with HIV infection registered in the Russian Federation as of December 31, 2014 amounted to **907,607 persons**. **723,459** HIV-positive persons were under the follow-up. During the period of epidemic, **177,907** HIV-positive Russian citizens died for various reasons. HIV-related mortality and the number of new cases per annum continue to grow steadily during the last few years.

The number of new HIV cases in 2014 was 85 252, **which is by 9.4% more** than in 2013. Compared to the previous years, the growth rate of the epidemic has slightly slowed down. HIV prevalence in Russia amounted to 494.6 per 100 thousand people. The highest prevalence was registered in the Irkutsk Region (1438.6), the Sverdlovsk Region (1391.1), the Samara Region (1337.7), the Kemerovo Region (1295.1), the Orenburg Region (1068), Leningrad Region (1057) and the Khanty-Mansiysk Autonomous Okrug (1033.7).

Figure 1. Dynamics of HIV-infection in Russia, 2007-2014



According to the latest revision of the World Health Organization (WHO), ARV therapy should be given to all HIV-positive people with the number of cells CD4 > 350 cells/mm³ and ≤ 500 cells/mm³, irrespective of the clinical stage according to WHO classification².

175,000 people received ARV therapy in 2014 (official data). However, the calculations of the Federal AIDS Centre show that the number of people who need the therapy is not less than 350,000³. According to the World Bank⁴, the total number of HIV-positive people in

¹ Reference information "HIV infection in the Russian Federation as of December 31, 2014", Federal Scientific and Methodological Centre for the Prevention and Control of AIDS. Available online: <http://hivruussia.org/files/spravkaHIV2014.pdf>, as of April 28, 2014

² Consolidated guidance on the use of antiretroviral drugs for HIV treatment and prevention. World Health Organization. June of 2013.

³ Medical officers made a statement of the lack of funding for purchase of drugs for HIV-positive patients. Vedomosti, December 1, 2014. <http://www.vedomosti.ru/politics/news/2014/12/01/vrachi-zayavili-o-nehvatke-finansirovaniya-na-lekarstva-dlya>

⁴ HIV/AIDS in Russia and Eurasia. Center for Strategic and International Studies. <http://csis.org/program/hivaids>

Russia will be from 5.4 to 14 million people by 2020. Accordingly, it will result in significant increase in the need for drugs.

HIV-positive patients in the Russian Federation continue to face problems in provision with drugs for HIV treatment: refusal to issue drugs or replacement of drugs due to interruptions in supply, as well as refusal to prescribe ARV therapy due to lack of drugs. These cases were often reported in the mass media, including on federal television channels⁵, and were documented in various reports describing the situation with HIV in Russia.

For the recent years, civil society organizations have prepared a number of analytical papers⁶ describing in detail the problems with provision of HIV-positive patients with essential drugs, as well as measures to be taken to improve the situation. Basic measures recommended by the civil society experts during the past 5 years include as follows:

- systematic work to reduce the prices for drugs, including adoption of the relevant legal acts, negotiations with distributors and manufacturers, as well as issue of compulsory licenses by the Russian government on the production and/or importation of drugs in order to provide more patients with the essential therapy;
- optimization of the procurement planning process and conducting of auctions in order to avoid interruptions in the supply and provision of drugs;
- optimization of ARV therapy and expansion of treatment options for the purpose of harmonization of the standards of care in the Russian Federation with the international standards, including revision of legal documents and change of drug prescription practices.

With the number of new HIV infections and the number of people who need treatment continuously increasing, as well as taking into account limitations of the federal budget provided for ARV procurement⁷, **the above measures are still relevant.**

This report is a continuation of the series of publications regarding the analysis of procurement and provision of drugs for the treatment of HIV-positive patients in Russia⁸. It is intended to present the results of analysis of the situation with the medical provision for HIV in 2014, to describe the problems and suggest their solutions with the participation of all interested parties - the patient community, medical officers, health care administrators, regional and federal authorities, national and international experts.

The team of authors hopes that the analysis of the situation and the developed recommendations will help to improve the situation with the provision of ARV therapy to all who need it.

⁵ Deficit in drugs does not allow stopping the spread of HIV in Russia. NTV. The story is available online: <http://www.youtube.com/watch?v=JaalLtQSViY>

⁶ Previous publications from this series are available on the website: <http://itpcru.org/monitoring/>

⁷ Analysis of the federal budget for the procurement of antiretroviral drugs in 2012-2014.

<http://itpcru.org/2014/03/18/finansirovanie-zakupok-arvt-iz-federalnogo-byudzheta-rossijskoj-federatsii-za-2012-2014-gody/>

⁸ Previous publications from this series are available on the website: <http://itpcru.org/monitoring/>

METHODOLOGY

The aim of this report is to provide empirically based generalizations, conclusions and recommendations regarding ARV procurement. Data for the report was obtained by collecting of facts using the method of combined analysis of documents and the method of content analysis. The legal framework and regulations in the field of procurement in Russia and specific features of their application directly in ARV procurement practices were also examined.

The object of the study is the available information on procurement (orders) under Federal Law dated April 5, 2013 No. 44-FZ "On the Contract System in the Procurement of Goods, Works and Services for State and Municipal Needs" and Federal Law No. 223-FZ dated July 18, 2011 "On Procurement of Goods, Works and Services by Certain Legal Entities".

Data obtained during monitoring of the open (public) part of the website www.zakupki.gov.ru were used as initial information. Collected and analyzed data includes information on auctions as of December 31, 2014, at all stages of the procurement (placement of an order) for the period from January 1, 2014 to December 31, 2014.

The following search queries were used for the search and identification of the required auctions in the procurement register:

- international non-proprietary names (INN) of drugs for HIV treatment in accordance with Decree of the Government of the Russian Federation No. 1438 dated February 27, 2012, as amended on January 03, 2014, and the register grls.rosminzdrav.ru, as well as their word forms;
- taxpayer identification number (TIN) and other details of AIDS centres and infectious disease hospitals that provide services for HIV treatment in constituent entities of the Russian Federation, as well as regional departments of health and other agencies engaged in the procurement;
- the words "antiretroviral drugs", "HIV", "HIV infection", "drugs", "Decree 1438" and their forms.

The above queries allowed to find **3,598 auctions** for the supply of antiretroviral drugs (ARV drugs) conducted in 83 constituent entities of the Russian Federation by various customers, as well as auctions conducted by the Ministry of Health of the Russian Federation for the institutions under the federal jurisdiction. 2,751 auctions with the status "contract card", "fulfilled" or "contract/fulfillment" were selected for the analysis of the basic parameters. Procurements in the Republic of Crimea and Sevastopol were also monitored, but in 2014 no auctions were found in these regions, probably due to the fact that in 2014 procurements in these regions were regulated separately.

The scope of analysis of each auction included its properties and characteristics, in this case, the auction documentation, methods of justification of the initial maximum price (IMP), minutes of consideration of the applications for participation in the auction and rendering the results, information on payments and the object of procurement, information on

fulfillment (termination) of the contract. Basic qualitative and quantitative characteristics were identified for preparation of the array of data for each region. Information obtained was grouped, edited, verified and unified into a single final data array for further formal processing and analysis.

The mathematical and statistical processing program SPSS 17.0 was used for the statistical analysis. The methods included modification of data, descriptive statistics, frequency analysis and contingency tables, correlation analysis and values interrelation. Upon processing, the data array was uploaded in the form of tables to Microsoft Office Excel. Characteristics obtained as a result of the statistical analysis were used for the analysis and assessment of the identified values and considered parameters:

1. Identification of absolute, average and percentage (proportion), minimum and maximum values of the analysed parameters;
2. Classification of the identified qualitative problems;
3. Comparison of values of the analysed parameters, average values and maximum deviations in the current period;
4. Comparative values of the analysed parameters based on the results of the previous monitoring procedures.

The following data was used in the report:

- minimum and maximum price of drugs (range of prices in regions);
- weighted average cost of drugs (total amount of spent funds divided by the total number of purchased drugs);
- proportion of drugs (based on the annual courses and spent funds) in the total procurement volume by INN and trade names (TN);
- time frames for the announcement of auctions (announcement peak);
- percentage of failed and cancelled auctions of the total number of auctions included into the sample;
- correlation between the failure of auctions and the terms of delivery of drugs;
- distributors winning auctions in the constituent entities of the Russian Federation;
- amount of funds for procurement of ARV drugs.

The report "To treat or not to treat. Report based on the results of community research", St. Petersburg, 2012 and the report "Treatment Preparedness Coalition" "ARV procurement in Russia. Results of monitoring of ARV procurement in 2013 under the conditions of decentralization", St. Petersburg, 2014 were used for comparison and assessment of the data obtained. Data on the ceiling prices for essential medicines in regions was taken from the website <http://www.ros-med.info/>.

ARV PROCUREMENT PROCESS IN RUSSIA

Until 2012, the Ministry of Health of the Russian Federation carried out centralized procurement of drugs for treatment of HIV and hepatitis B and C in Russia in accordance with Federal Law (FL) No. 94 "On Placement of Orders for Goods, Works and Services for State and Municipal Needs" dated July 21, 2005, as well as other applicable law of the Russian Federation being in force at that time.

In 2013, the so-called "decentralization" of procurement took place. On December 27, 2012, the Government issued Decree No. 1438 on transfer of powers and funds for the procurement of drugs for treatment of HIV and hepatitis B and C to the constituent entities of the Russian Federation. In 2013, instead of several dozens of auctions for ARV procurement which were conducted by the Ministry of Health of the Russian Federation, several thousands of auctions were announced in 83 constituent entities of the Russian Federation. In 2014, procurement was also carried out by the constituent entities of the Russian Federation.

Since January 1, 2014, Federal Law No. 44-FZ "On the Contract System in the Procurement of Goods, Works and Services for State and Municipal Needs" dated April 05, 2013 was entered into force in the Russian Federation.

Thus, in 2014, ARV procurement in the Russian Federation was carried out in a decentralized manner (in the constituent entities of the Russian Federation) in accordance with the procedures provided for by Federal Law No. 44-FZ, as well as other applicable regulations.

New features of Federal Law No. 44-FZ compared to Federal Law No. 94-FZ:

1. Unlimited access to information on the procedures, procurement plans, results of the contract audit;
2. Mandatory publication of significant actions (justification of the contract price, selection of the procurement procedure, alteration or termination of the contract) of the customer;
3. Institute of public control over the government procurement;
4. Personal responsibility for compliance with the requirements stipulated by the law and achievement of the objectives as a result of fulfillment of the contract;
5. Long-term planning;
6. Anti-dumping measures;
7. New methods of justification of the initial maximum price of the contract;
8. Procedure for alteration and termination of the contract;
9. Audit of the results of fulfillment of contracts;
10. Submission of electronic applications via the unified information system (UIS) and the platform operator;
11. Mandatory publication of time-schedule.

By 2017, a number of regulations and decrees will be adopted to enable this law on the contract system operate in full force.

According to this law, information on all public electronic auctions (PEA) in the form of special documents corresponding to different stages of the auction, including information on contract awards, shall be placed in the public domain on the Internet on specialized platforms. This allows tracking all necessary information online. The documents are available for download to any Internet user without having to register.

PRICING IN RUSSIA

In accordance with Federal Law No. 61-FZ "On Circulation of Medicines" dated April 12, 2010 and Decree of the Government of the Russian Federation dated October 29, 2010 No. 865, the prices for medicines included into the List of Essential Medicines (LEM) shall be subject to state regulation within the territory of the Russian Federation.

Registered ceiling release prices of manufacturers are entered into the state register of prices, which is available on the website grls.rosminzdrav.ru. There is a method for establishing prices for drugs included into LEM, according to which the manufacturer submits its calculations based on the prices in 21 reference countries, including a number of EU countries, Belarus, Kazakhstan, Ukraine, etc.

Table 1. Reference countries for Russia

List of reference countries for determining the sale price for drug products in the List of Essential Medicines in Russia			
1. Country of manufacturing			
2. Belarus	3. Belgium	4. Czech Republic	5. Denmark
6. France	7. Germany	8. Greece	9. Hungary
10. Ireland	11. Italy	12. Kazakhstan	13. Netherlands
14. Poland	15. Portugal	16. Romania	17. Slovakia
18. Spain	19. Swiss	20. Turkey	21. Ukraine
22. Other countries			

Prices for other drugs shall not be subject to state regulation and shall be determined by government agencies independently based on the costs related to procurement, storage, sale of drugs, etc., as well as with due regard to the price quotations of suppliers.

According to the current method, Russian manufacturers shall register the price based on the weighted average release price for the last year (and every year may increase the price with due regard to the projected inflation rate for the current year), and foreign manufacturers shall register the price based on the weighted average import price for the year and the price for the drug in 21 reference countries.

ARV DRUGS IN RUSSIA

A. REGISTERED DRUGS IN RUSSIA

At the end of 2014, at least 60 drugs for HIV treatment, taking into account different dosages, were registered in the Russian Federation. 52 of these drugs (taking into account different dosages) were purchased out of the funds of the federal budget. The list of drugs to be purchased out of the funds of the federal budget within a national program is established by Decree No. 1438. All of them are also included into LEM.

Without regard to dosages of the same INN, 22 ARV drugs were available for the state federal procurement in 2014. Compared to 2012, the number of drugs purchased out of the funds of the federal budget has not changed, but 10 new dosages have appeared.

9 INN which were not included into LEM and could be purchased only out of the funds of other budgets (for comparison, in 2012 there were only 4 such drugs) were also registered in Russia in 2014.

LEM was revised only in 2015, new drugs included tenofovir mostly owing to activities of public organizations

LEM in Russia has not been revised for more than two years, and the number of ARV drugs not included therein, but registered within the territory of the

Russian Federation has increased. More than half of them were registered in the Russian Federation in the period from 2010 to 2013. **The list was revised only in 2015, new drugs included tenofovir mostly owing to activities of public organizations.** However, it should be noted that even as of May of 2015 tenofovir was not available for procurement out of the funds of the federal budget, since, despite the fact that it was included into the draft Decree No. 1438, the new revision of the decree has not been yet approved.

Table 2. List of ARV drugs registered in the Russian Federation that were included into LEM in 2014 and were purchased out of the funds of the federal budget

№	The International non-proprietary name (INN), dosage	Additional information
1	Abacavir/lamivudine tablets 600+300 mg ABC/3TC	
2	Abacavir / zidovudine / lamivudine tablets 300+300+150 mg ABC/AZT/3TC	
3	Abacavir solution 240 ml ABC	Pediatric formulation
4	Abacavir tablets 150 mg ABC	Not purchased in 2014
5	Abacavir tablets 300 mg ABC	
6	Abacavir tablets 600 mg ABC	
7	Atazanavir capsules 150 mg ATV	
8	Atazanavir capsules 200 mg ATV	
9	Atazanavir capsules 300 mg ATV	
10	Darunavir tablets 150 mg DRV	Not purchased in 2014
11	Darunavir tablets 300 mg DRV	Not purchased in 2014
12	Darunavir tablets 400 mg DRV	
13	Darunavir tablets 600 mg DRV	
14	Darunavir tablets 75 mg DRV	Not purchased in 2014
15	Darunavir tablets 800 mg DRV	
16	Didanosine capsules 125 mg DDI	
17	Didanosine capsules 250 mg DDI	
18	Didanosine capsules 400 mg DDI	
19	Didanosine vials 2 g r (2,0) DDI	Pediatric formulation
20	Efavirenz tablets 100 mg EFV	
21	Efavirenz tablets 200 mg EFV	
22	Efavirenz tablets 300 mg EFV	Not purchased in 2014
23	Efavirenz tablets 400 mg EFV	
24	Enfuvirtide lyophilisate 90 mg/ml T20	
25	Etravirine tablets 100 mg ETR	
26	Etravirine tablets 200 mg ETR	Not purchased in 2014
27	Fosamprenavir tablets 700 mg FPV	
28	Fosamprenavir oral suspension 225ml FVP	Pediatric formulation
29	Indinavir capsules 400 mg IDV	
30	Lamivudine / Zidovudine tablets 150+300 mg 3TC/AZT	
31	Lamivudine solution 240 ml 3TC	Pediatric formulation
32	Lamivudine tablets 150 mg 3TC	
33	Lamivudine tablets 300 mg 3TC	
34	Lopinavir / ritonavir oral solution 80+20 mg/ml LPV/r	Pediatric formulation
35	Lopinavir / ritonavir tablets 100+25 mg LPV/r	Pediatric formulation
36	Lopinavir / ritonavir tablets 200+50 mg LPV/r	
37	Nelfinavir powder 144 g NFV	Not purchased in 2014
38	Nelfinavir tablets 250 mg NFV	Not purchased in 2014
39	Nevirapine oral suspension 240 ml NVP	Pediatric formulation
40	Nevirapine tablets 200 mg NVP	
41	Phosphazide tablets 200 mg F-AZT	
42	Phosphazide tablets 400 mg F-AZT	
43	Raltegravir tablets 400 mg RAL	
44	Ritonavir capsules or tablets 100 mg RTV	
45	Saquinavir tablets 500 mg SQV	
46	Stavudine capsules 30 mg d4T	
47	Stavudine capsules 40 mg d4T	
48	Stavudine powder 1 mg/ml – 260 ml d4T	Pediatric formulation
49	Zidovudine capsules 100 mg AZT	Pediatric formulation
50	Zidovudine capsules 200 mg AZT	Pediatric formulation
51	Zidovudine solution for infusion 20 ml AZT	Pediatric formulation
52	Zidovudine tablets 300 mg AZT	

Table 3. List of ARV drugs registered in the Russian Federation that were not included into LEM in 2014

№	The International non-proprietary name (INN), dosage	Additional information
1	Dolutegravir tablets 50 mg DTG	Not purchased in 2014
2	Emtricitabine / rilpivirine / tenofovir tablets 200+25+300 mg FTC/RPV/TDF	
3	Emtricitabine capsules or tablets 200 mg FTC	Not purchased in 2014
4	Maraviroc tablets 150 mg MVC	
5	Maraviroc tablets 350 mg MVC	
6	Rilpivirine tablets 25 mg RPV	
7	Tenofovir tablets 300 mg TDF	12.30.2014 was included in the LEM
8	Tenofovir/emtricitabine tablets 300+200 mg TDF/FTC	
9	Tipranovir capsules 250 mg TPV	
10	Zidovudine/lamivudine/nevirapine 300+150+200 mg	Not purchased in 2014

In 2013, only 5 constituent entities of the Russian Federation purchased ARV drugs not included into LEM. In 2014, the number of such regions increased up to 20:

Arkhangelsk region	Samara region	Magadan region	Khanty-Mansi Autonomous Area	Yamal-Nenets Autonomous Area
Vladimir region	Khabarovsk region	Saint-Petersburg	Mari El	Stavropol region
Krasnoyarsk region	Moscow region	Nizhny Novgorod region	Chelyabinsk region	Tula region
Leningrad region	Sverdlovsk region	Moscow	Pskov region	Saratov region

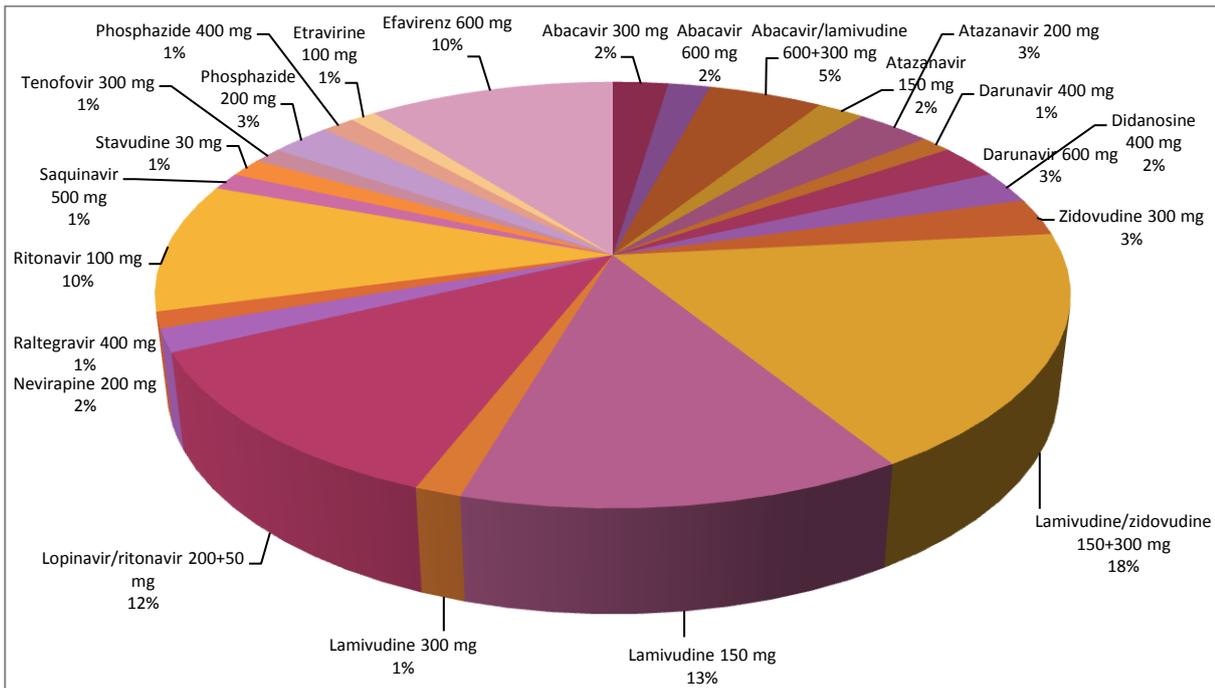
The complete list of all TN registered in the Russian Federation (original and generic drugs) is set forth in Section "Manufacturers of ARV drugs".

B. MOSTLY PURCHASED ARV DRUGS

In 2014, the following drugs were mostly purchased based on the number of annual treatment courses:

Drug	The proportion of annual courses of the drug from the total number
Lamivudine/zidovudine 150+300 mg	17.40%
Lamivudine tablets 150 mg	12.80%
Lopinavir/ritonavir 200+50 mg	11.60%
Efavirenz tablets 600 mg	10.10%
Abacavir/lamivudine 600+300 mg	4.70%

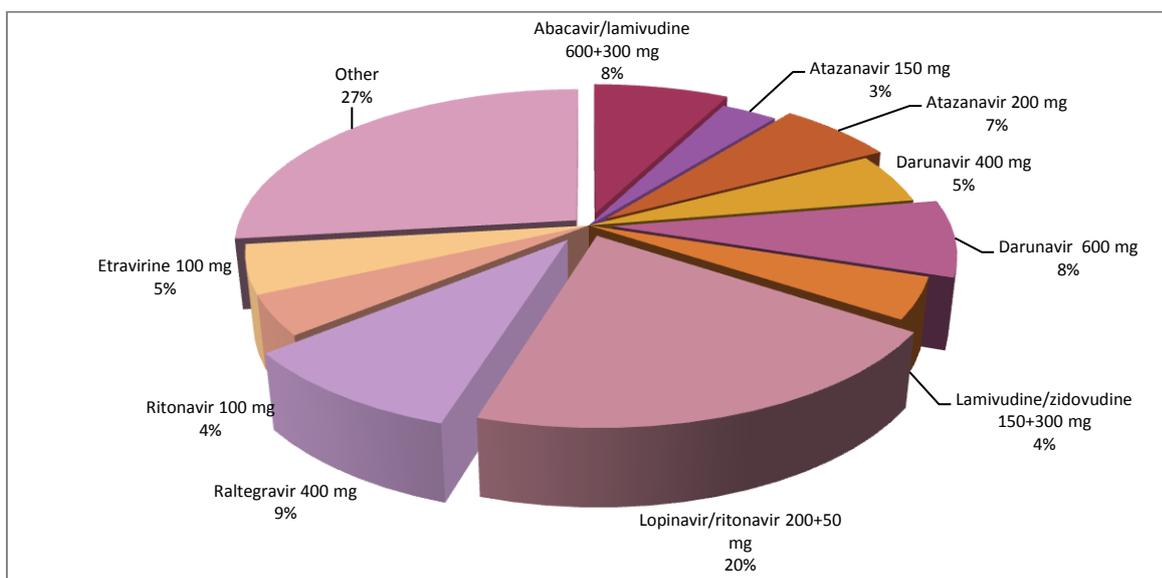
Figure 2. Share of ARV drugs purchased in 2014, based on the annual treatment courses



73.1% of funds spent for ARV procurement in 2014 were used for 10 drugs. The most expensive for the budget were:

- lopinavir/ritonavir 200+50 mg (3,365,581,761.38 rub., 20.5% of the total budget for ARV drugs),
- raltegravir 400 mg (1,530,086,398.22 rub., 9.3%),
- darunavir 600 mg (1,269,800,608.68 rub., 7.7%),
- abacavir/lamivudine 600+300 mg (1,241,948,072.08 rub., 7.6%)
- atazanavir 200 mg (1,070,513,232.15 rub., 6.5%).

Figure 3. Share of ARV drugs in the amount of funds spent, 2014



C. DRUGS NOT INCLUDED INTO LEM

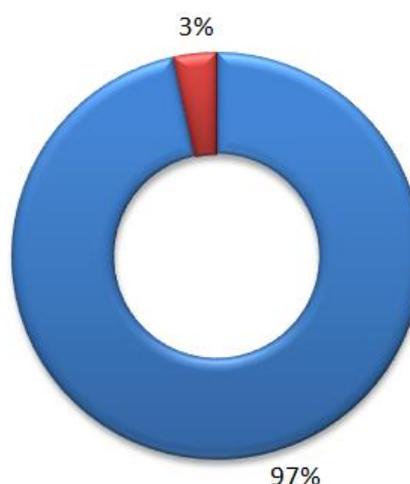
In 2014, 6 ARV drugs (INN) not included into LEM were purchased in Russia.

INN	The amount of the contract, RUB
Emtricitabine+rilpivirine+tenofovir	94,352,793.16
Maraviroc tablets 150 mg	1,747,995.70
Maraviroc tablets 300 mg	7,607,923.38
Rilpivirine tablets 25 mg	110,068,295.89
Tenofovir tablets 300 mg	337,574,735.31
Tenofovir+emtricitabine (300+200) mg	79,633,233.68
Tipranavir capsules 250 mg	32,121,154.74
Total	663,106,131.86

Funds spent for these drugs amounted to about 663 million rubles or approximately 4% of the total funds spent for ARV procurement in 2014.

It should be noted that in comparison with 2013 the volume of procurement of tenofovir – a drug included into the recommended regimen for initiation of HIV treatment according to WHO protocols – has seriously increased. If last year the number of potential patients who could receive tenofovir was 217 persons, in 2014, the number of annual treatment courses purchased was 3,858. **Only about 3.5% of patients in Russia received regimens containing tenofovir⁹.**

■ LEM drugs ■ Non-LEM drugs



D. NON-OPTIMUM DRUGS

Stavudine. According to the latest revision of WHO protocols, "countries should discontinue the use of stavudine in the first-line treatment regimens because of its recognized metabolic toxicity"¹⁰. The quantity of purchased stavudine in 2014 is very likely to have decreased compared to 2013. If in 2013, the potential number of patients who could receive stavudine 30 mg and stavudine 40 mg **in 56 regions** was 4541, then, in 2014, the number of annual treatment courses purchased **in all regions of the Russian Federation** was 5,000. Approximately 4% of patients in Russia received treatment regimens with stavudine in 2014.

Indinavir and nelfinavir. Despite the fact that indinavir and nelfinavir are still included into the list of drugs that may be purchased out of the funds of the federal budget in accordance with Decree No. 1438, as well as into LEM, now both drugs are not recommended for the

⁹ This figure is based on the estimated annual number of treatment courses in Russia in 2014 (see Section "Number of patients receiving ART") and the number of annual courses of tenofovir and tenofovir/emtricitabine.

¹⁰ Consolidated guidance on the use of antiretroviral drugs for HIV treatment and prevention. World Health Organization. June 2013.

use in ARV therapy. Data of the analysis has shown that there are no these drugs in the procurement structure and, consequently, they are not used in HIV treatment in Russia.

E. COMBINATION FORMULATIONS

The latest revision of WHO protocols shows that the recommended regimen of ARV therapy for initiation of treatment includes a combination drug with one tablet once daily¹¹. According to several researches, combination drugs improve the patients' adherence to treatment owing to the ease of administration, as well as minimize the probability of errors when selecting a regimen¹².

Now in Russia there are three drugs registered, which represent a complete regimen - "Eviplera" (emtricitabine/rilpivirine/tenofovir), "Zidolam-N" (lamivudine/zidovudine/nevirapine) and "Trizivir" (abacavir/lamivudine/zidovudine). "Trizivir" is a combination of three drugs of NRTI class which is primarily used for treatment of patients co-infected with TB/HIV. In 2014, "Eviplera" was purchased for 150 patients, "Trizivir" - for 578 patients. According to the results of monitoring, "Zidolam-N" was not purchased in 2014. Three combinations of two NRTIs are also available in Russia: lamivudine/zidovudine, abacavir/lamivudine, tenofovir/emtricitabine.

Market analysis shows that in general the price for fixed-dose combination ARV drugs exceeds the price for the monocomponents. According to data of 2014, under the conditions of limited resources and subject to the interpretation of the antitrust law, **in a number of constituent entities of the Russian Federation separate components were purchased instead of combination drugs.**

The combination lamivudine/zidovudine 150 + 300 mg was mostly split into monocomponents in 2013. In 2014, with the appearance of a generic formulation of abacavir, the combination abacavir/lamivudine 600 + 300 mg was also split into monocomponents.

Splitting of combination drugs was permitted in the auction documentation of the Ministry of Health and some of the regional offices of the Ministry of Health. Thus, in some cases, under the terms and conditions of the auction documentation, it was possible to supply 7 tablets (4 tablets of abacavir 150 mg and 3 tablets of lamivudine 100 mg) instead of one tablet of abacavir/lamivudine 600+300 mg. Theoretically, one of the most common regimens abacavir/lamivudine 600+300 mg + efavirenz 600 mg could be split into 10 tablets instead of two.

The decision on splitting of combination drugs into monocomponents is usually made by regional authorities and/or customers on their own, since there are no unified recommendations on this issue at the legislative level. Despite the fact that splitting of combination drugs into monocomponents are mostly proposed by suppliers, it should be noted that both the procurement law and the law on restriction of competition do not require

¹¹ The same.

¹² Selection of researches is available on the website of Treatment Preparedness Coalition, <http://itpcru.org/2014/01/20/kombinirovannye-preparaty-patsienty-skoree-za/>

from customers to take into account the subjective opportunities of suppliers. First of all, the law is aimed at satisfaction of the needs of customers, including public health institutions, based on doctors' prescriptions made subject to the needs of patients.

Table. 4. Situation with procurement of combination drugs in the regions of the Russian Federation in 2014

Allowed to split a combined drug	Not allowed to split a combined drug
Moscow region	Altay region
Kaluga region	Komi region
Yamal-Nenets autonomous region	Saratov region
Krasnoyarsk region	Bashkortostan region
And others	And others

Information on the price for combination drugs and monocomponents is set forth below in Section "Prices for ARV drugs in procurements of 2014".

MOST COMMON TREATMENT REGIMENS

In general, antiretroviral therapy regimens consist of three drugs - two drugs belonging to the class of nucleoside/nucleotide reverse transcriptase inhibitors (NRTIs) and one drug belonging to the class of non-nucleoside reverse transcriptase inhibitors (NNRTIs), protease inhibitors (PI), integrase inhibitors (II), and CCR5 inhibitors. Usually, two drugs of NRTI class should include lamivudine.

The list of most common NRTI in terms of the volume of purchases, based on the number of patients, is set forth below:

Drug (INN)	Estimated number of patients in 2014	% of the total share NRTIs
Lamivudine/zidovudine 150/300 mg (FDC) ¹³	57,792	32.80%
Lamivudine (150, 300 mg)	47,191	26.80%
Zidovudine (or phosphazide)	21,836	12.40%
Abacavir/lamivudine ¹⁴	15,608	8.90%
Abacavir	13,266	7.50%
Tenofovir	3,858	2.20%
Tenofovir/emtricitabine	568	0.30%

Combination drug tenofovir/emtricitabine and tenofovir were not included into LEM in 2014. The volume of purchases of these drugs was insignificant compared to other drugs of NRTI group. However, they are included into the basic recommended regimen for initiation of treatment in accordance with all Russian and international recommendations.

The most common drugs from the third group (NNRTI, PI, II) in terms of the volume of purchases, based on the number of patients in 2014, were as follows:

Drug (INN)	Estimated number of patients in 2014	% of the share of a third drug
Lopinavir/ritonavir 200+50 mg (IP)	38,551	31.20%
Efavirenz (NNRTI)	34,410	27.80%
Atazanavir (IP)	16,656	13.50%
Darunavir (IP)	12,913	10.40%

In 2012, several patient organizations conducted a study "Simona+", the purpose of which, among other things, was to establish the most common regimens of ARV therapy in the Russian Federation by survey of patients (n = 1408, 23 cities). This study showed that the most commonly prescribed regimens in the Russian Federation were as follows:

- Lamivudine + zidovudine + lopinavir/ritonavir (25.9% of the total number of respondents)

¹³ This amount also includes the combination drug lamivudine/zidovudine which was split into monocomponents in the procurement.

¹⁴ This amount also includes the combination drug abacavir/lamivudine which was split into monocomponents in the procurement.

- Lamivudine + zidovudine + efavirenz (23.3% of the total number of respondents)
- Lamivudine + abacavir + lopinavir/ritonavir (5.8% of the total number of respondents))
- Lamivudine + abacavir + efavirenz (3.9% of the total number of respondents))

These data fully correspond to the data of ARV procurement for 2014. Based on the above data, it may be concluded that the most common regimens in Russia in 2014 were as follows:

- Lamivudine + zidovudine ¹⁵ (as a combination drug or as monocomponents) + lopinavir/ritonavir
- Lamivudine + zidovudine ¹⁶ (as a combination drug or as monocomponents) + efavirenz
- Lamivudine + abacavir (as a combination drug or as monocomponents) + lopinavir/ritonavir
- Lamivudine + abacavir (as a combination drug or as monocomponents) + efavirenz.

Thus, the basic recommended regimen of ARV therapy in accordance with WHO recommendations (lamivudine or emtricitabine in combination with tenofovir and efavirenz in one tablet) is not among the most prescribed regimens of ARV therapy in the Russian Federation nor as a combination drug one tablet once daily, nor as separate drugs.

The basic regimen of ARV therapy recommended by WHO for initiation of treatment is not among 4 most prescribed regimens in Russia

Information on the cost of treatment is available in Section "Cost of first- and second-line treatment regimens".

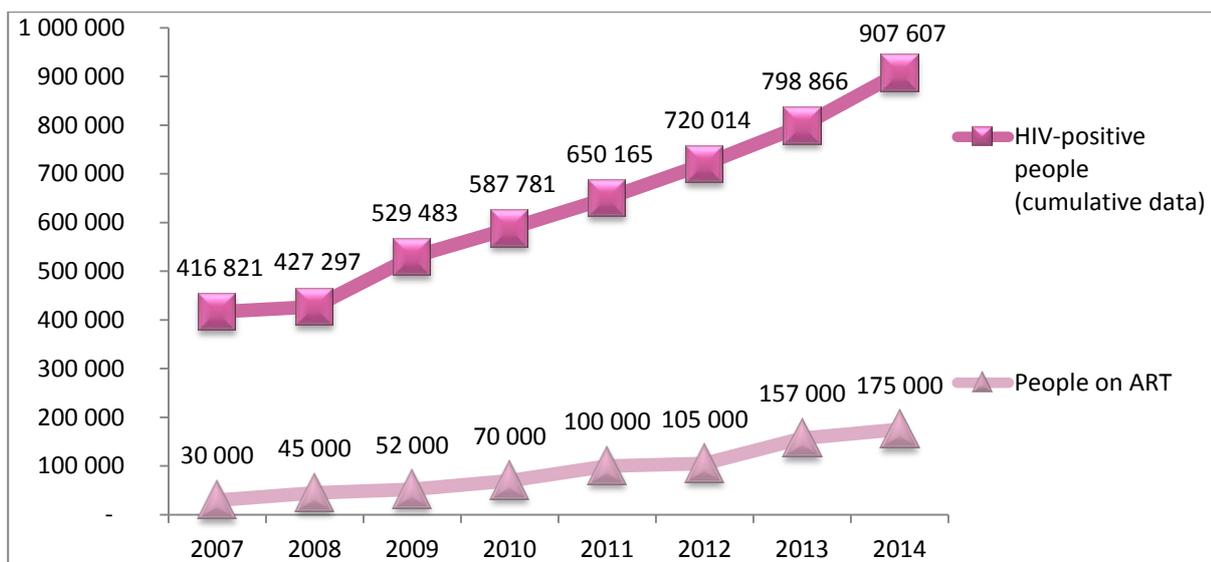
¹⁵ Zidovudine in this list includes phosphazide.

¹⁶ See above.

NUMBER OF PATIENTS RECEIVING ART

According to the official data, the number of people receiving antiretroviral therapy in Russia amounts to about 175,000 persons¹⁷. The figure below shows that **the number of people receiving the therapy has increased with the growth of the cumulative number of people living with HIV, but at much slower rates.**

Figure 4. Number of people receiving treatment, data of the Ministry of Health and the Federal AIDS Centre



The authors of this study made rough calculations of the potential number of patients who could receive therapy, based on the data of ARV procurement for 2014. For this purpose, all ARV drugs were divided into three groups:

- backbone drugs – NRTI
- so called "third drugs" – NNRTI, PI, II
- other drugs – combination drugs "three in one", complete regimen

Ritonavir used only in combination with protease inhibitors (PI) was taken into account separately in the analysis.

Calculation of the number of treatment courses was carried out based on the so-called "optimistic scenario" - by adding half of the simple sum of all annual courses of simple NRTIs plus the sum of all doses of combination drugs with two NRTIs, without regard to the recommended and permissible combinations of drugs.

Drugs representing the third component of ARV therapy (PI, NNRTI, II) were summarized (with due regard to the need for boosting with ritonavir), based on daily doses, in accordance with the recommendations. The sum of drugs in this group was compared with the sum of NRTIs for the purpose of data verification. Drugs of the third group being a complete

¹⁷ Medical officers made a statement of the lack of funding for purchase of drugs for HIV-positive patients. Vedomosti, December 1, 2014. <http://www.vedomosti.ru/politics/news/2014/12/01/vrachi-zayavili-o-nehvatke-finansirovaniya-na-lekarstva-dlya>

treatment regimen (abacavir/lamivudine/zidovudine, tenofovir/emtricitabine/rilpivirine) were added to the sum of NRTI drugs.

According to the calculations, the potential number of patients who could receive complete regimens of ARV therapy **was slightly more than 125,000**. The sums of NRTI drugs and "third drugs" were roughly the same (125,135 and 123,685,000, respectively). It is important to note that this figure does not include purchases announced for 2014 at the end of 2013, the number of patients receiving ARV therapy in the Crimea and Sevastopol, as well as

With a high probability, the official data on ARV therapy coverage include patients who discontinued treatment, were excluded from treatment and died in 2014

children. But even with these adjustments, a discrepancy between the official statistics and the calculated data is 50,000 patients, despite the fact that the sample for analysis included auctions in all 83 constituent entities of the Russian Federation, except for the Crimea and Sevastopol.

Based on the above calculations, it may be concluded that the official data on the therapy coverage with a high probability include all people who have ever

initiated ARV therapy, including patients who discontinued treatment on their own initiative, who were withdrawn from treatment due to poor adherence or shortages of drugs and died in 2014.

PRICES FOR ARV DRUGS IN 2014

Transition to a new procurement system in 2013 resulted in increase in prices for drugs for HIV treatment by an average of 9% (based on the results of analysis of auctions in 56 regions). **Analysis of purchases in 2014 showed that the prices for ARV drugs in 2014 on average remained at the same level (reduction by 0.3% for the entire array of data)¹⁸.**

For procurement in 2014, **the price for 13 drugs was lower than the price in 2013.** The most significant reduction was established for the following drugs:

- Lamivudine 150 mg (58%)
- Nevirapine 200 mg (39%)
- Zidovudine 100 mg (23%)
- Lamivudine/zidovudine 150 + 300 mg (21%)

It is important to note that for all of the above drugs several trade names have been registered, that is, potentially, there is competition among manufacturers.

Drugs with significant increase in prices compared to the level of 2013:

- Lopinavir/ritonavir, 80 + 20 mg, oral solution, 60 ml (40%)
- Atazanavir 300 mg (20%)
- Zidovudine, infusion solution, 20 ml (18%)

It should be noted that more than a half of drugs, which prices have increased by more than 5%, are pediatric formulations that have no analogues.

Full information on the comparison of prices for ARV drugs in 2012, 2013 and 2014 is shown in the table below.

¹⁸ The calculation was made based on the weighted average prices of 2013 and 2014.

Table. 5. Comparison of prices for ARV drugs in the period from 2012 to 2014

INN	Price per unit, 2012, RUB	Average weighted price per unit in purchases in 2013, RUB	The difference in price compared to the year 2012	Average weighted price per unit in purchases in 2014, RUB	The difference in price compared to the year 2013
Abacavir/zidovudine/lamivudine 300+300+150 mg	225,00	201,62	-10%	216,24	7%
Abacavir / lamivudine 600+300 mg	213,00	225,24	6%	230,52	2%
Abacavir solution 240 ml	2 685,00	2 496,25	-7%	2749,02	10%
Abacavir tablets 300 mg	77,00	66,11	-14%	62,46	-6%
Abacavir tablets 600 mg	-	-	-	146,14	-
Atazanavir capsules 150 mg	109,00	105,11	-4%	109,09	4%
Atazanavir capsules 200 mg	144,00	144,23	0%	144,12	0%
Atazanavir capsules 300 mg	-	220,75	-	264,56	20%
Darunavir tablets 400 mg	264,00	280,81	6%	274,08	-2%
Darunavir tablets 600 mg	396,00	406,26	3%	408,65	1%
Darunavir tablets 800 mg	-	-	-	598,87	-
Didanosine capsules 125 mg	57,00	56,05	-2%	57,14	2%
Didanosine capsules 250 mg	66,00	66,68	1%	67,03	1%
Didanosine capsules 400 mg	82,00	80,34	-2%	84,44	5%
Didanosine oral powder 2 g	988,00	985,29	0%	1014,57	3%
Efavirenz tablets 200 mg	13,00	15,92	22%	13,40	-16%
Efavirenz tablets 300 mg	-	13,26	-	-	-
Efavirenz tablets 600 mg	27,00	27,10	0%	26,55	0%
Emtricitabine/Rilpivirine/Tenofovir	-	-	-	1731,88	-
Enfuvirtide lyophilisate 90 mg/ml	1 073,00	1 085,48	1%	1078,38	-1%
Etravirin tablets 100 mg	153,00	156,71	2%	158,03	1%
Fosamprenavir suspension 225 ml	2 840,00	3 129,48	10%	3466,05	11%
Fosamprenavir tablets 700 mg	191,00	190,64	0%	190,78	0%
Lamivudine /zidovudine 150+300 mg	58,00	20,49	-65%	16,09	-21%
Lamivudine solution 240 ml	1 402,00	1 498,66	7%	1684,12	12%
Lamivudine tablets 150 mg	28,00	9,98	-64%	4,21	-58%
Lamivudine tablets 300 mg	-	-	-	11,65	-
Lopinavir/ritonavir 100+25 mg	104,00	105,49	1%	106,58	1%
Lopinavir/ritonavir 200+50 mg	56,00	57,48	3%	59,80	4%
Lopinavir/ritonavir 80+20 mg, 60 ml	1 445,00	1 052,77	-27%	1474,76	40%
Maraviroc tablets 150 mg	-	-	-	224,21	-
Maraviroc tablets 300 mg	-	-	-	203,19	-
Nevirapine suspension 240 ml	606,00	746,95	23%	745,53	0%
Nevirapine tablets 200 mg	20,00	19,92	0%	12,10	-39%
Phosphazide tablets 200 mg	36,00	39,15	9%	38,00	-3%
Phosphazide tablets 400 mg	-	-	-	42,67	-
Raltegravir tablets 400 mg	510,00	531,47	4%	530,02	0%
Rilpivirine tablets 25 mg	-	-	-	943,9	-
Ritonavir capsules 100 mg	55,00	59,44	8%	57,00	-4%
Saquinavir tablets 500 mg	97,00	96,13	-1%	83,70	-13%
Stavudine capsules 30 mg	8,00	30,48	281%	34,66	14%
Stavudine capsules 40 mg	38,00	48,72	28%	49,31	1%
Stavudine powder 260 ml	1 058,00	755,23	-29%	714,95	-5%
Tenofovir tablets 300 mg	-	225,58	-	239,69	6%
Tenofovir/emtricitabine 300+200 mg	-	370,17	-	383,70	4%
Tipranavir capsules 250 mg	-	-	-	379,16	-
Zidovudine capsules 100 mg	8,00	12,15	52%	9,41	-23%
Zidovudine solution for infusion 20 ml	408,00	415,89	2%	492,28	18%
Zidovudine solution 200 ml	832,00	1 013,16	22%	952,53	-6%
Zidovudine tablets 300 mg	8,00	12,7	59%	14,70	16%

A. DIFFERENCE IN PRICES IN CONSTITUENT ENTITIES OF THE RUSSIAN FEDERATION AND GROWTH COMPARED TO 2013

Similarly to the last year, for procurement in 2014, a significant price range for the same drug may be seen in different regions. **The difference between the maximum price and the minimum price is 1.01 - 42 times.**

The difference between the maximum price and the minimum price for the same drug in various regions of Russia reached 42 times

The largest quantity of ARV drugs at the lowest prices was purchased in Moscow (9), St. Petersburg (7), the Sverdlovsk region (6) and the Samara region (5). Murmansk region (9), the Republic of Sakha (Yakutia) (5), the Kamchatka Territory (4), St. Petersburg (5), Chukotka (4), the Republic of Khakassia (3) purchased drugs at the maximum prices. Based on

these data, it is not evident that the price for the drug directly depends on the remoteness of the region or the volume of purchases.

Drugs prices for which differ dozens times in different regions:

42 times	Nevirapine 200 mg	min – Dagestan (0,86 RUB for 1 tablet), max – Chukotka (35,69 RUB for 1 tablet)
24 times	Lamivudine 150 mg	min – Murmansk region (1,39 RUB for 1 tablet) max – Stavropol region (32,73 RUB for 1 tablet)
19 times	Abacavir 300 mg	min - Kabardino-Balkaria (4,66 RUB for 1 tablet) max - Khakassia (88,17 RUB for 1 tablet).
12 times	Zidovudine 100 mg	min – Chuvashia (4,96 RUB for 1 tablet) max – Moscow region (59,60 RUB for 1 tablet)

Figure 5. Minimum and maximum prices for certain drugs in the procurement of 2014, per tablet, rub.

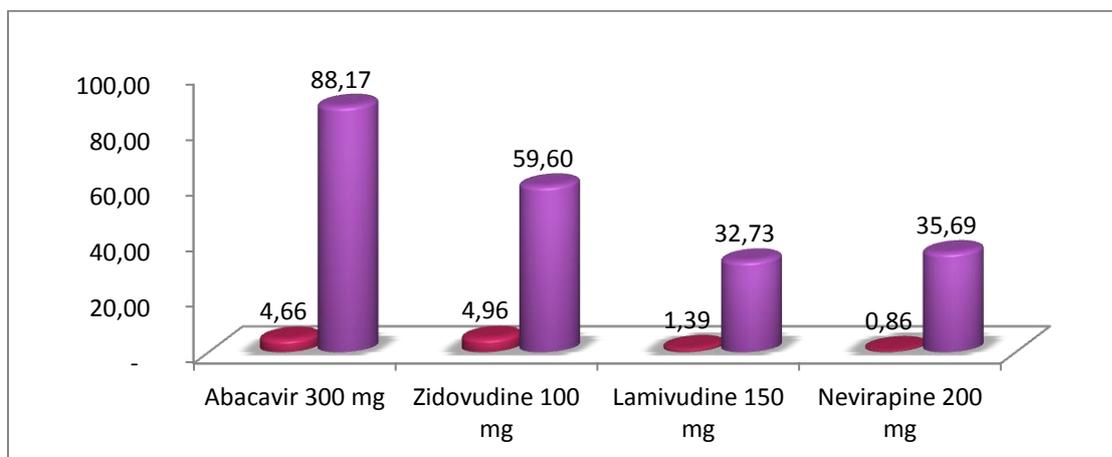


Table 6. Minimum and maximum prices in the procurement of 2014

Drug	Minimum price per unit RUB	Region	Maximum price per unit RUB	Region	The difference (number of times)
Abacavir / lamivudine 600+300 mg	209,25	Saint-Petersburg	314,66	Magadan region	1,5
Abacavir solution 240 ml	2 454,01	Sverdlovsk region	3 375,13	Sakha (Yakutia)	1,38
Abacavir tablets 300 mg	4,66	Kabardino-Balkaria	88,17	Khakassia	18,92
Abacavir tablets 600 mg	74,97	Buryatia	177,14	Kalmykia	2,36
Abacavir/zidovudine/lamivudine 300+300+150 mg	209,44	Moscow	240,41	Adygea	1,15
Atazanavir capsules 150 mg	103,12	Moscow	122,66	Khanty-Mansiysk AO	1,19
Atazanavir capsules 200 mg	136,7	Moscow	172,68	Murmansk region	1,26
Atazanavir capsules 300 mg	264,51	Saint-Petersburg	264,51	Saint-Petersburg	1
Darunavir tablets 400 mg	252,45	Samara region	330,56	Murmansk region	1,31
Darunavir tablets 600 mg	330	Krasnodar region	493,84	Sakha (Yakutia)	1,5
Darunavir tablets 800 mg	504,9	Samara region	694,68	Murmansk region	1,38
Didanosine capsules 125 mg	56,61	Arkhangelsk region	59,77	Chuvashia	1,06
Didanosine capsules 250 mg	65,23	Moscow region	75,39	Murmansk region	1,16
Didanosine capsules 400 mg	80,84	Komi region	98,65	Kamchatka	1,22
Didanosine oral powder 2 g	949,09	Ulyanovsk region	1 097,80	Saint-Petersburg	1,16
Efavirenz tablets 100 mg	4,95	Saratov region	5,03	Ingushetia	1,02
Efavirenz tablets 200 mg	7,66	Irkutsk region	17,11	Adygea	2,23
Efavirenz tablets 600 mg	7,61	Kaliningrad region	41,11	North Ossetia-Alania	5,4
Emtricitabine/Rilpivirine/Tenofovir 200+25+300 mg	1 727,82	Moscow	1 956,74	Saint-Petersburg (Ust-Izhora)	1,13
Enfuvirtide lyophilisate 90 mg/ml	975,27	Arkhangelsk region	1 251,96	Kalmykia	1,28
Etravirin tablets 100 mg	139,63	Samara region	190,43	Sakha (Yakutia)	1,36
Fosamprenavir suspension 225 ml	2 639,78	Moscow	4 807,59	Vladimir region	1,82
Fosamprenavir tablets 700 mg	178,37	Moscow	233,46	Khakassia	1,31
Lamivudine /zidovudine 150+300 mg	9,93	Saint-Petersburg	58,52	Kamchatka	5,89
Lamivudine solution 240 ml	1 234,59	Sverdlovsk region	2 587,14	Sakha (Yakutia)	2,1
Lamivudine tablets 150 mg	1,39	Murmansk region	32,73	Stavropol region	23,55
Lamivudine tablets 300 mg	11,22	Samara region	17,53	Chelyabinsk region	1,56
Lopinavir/ritonavir 100+25 mg	97,15	Dagestan	118,47	Krasnodar region	1,22
Lopinavir/ritonavir 200+50 mg	55,26	Saint-Petersburg	82,4	Kamchatka	1,49
Lopinavir/ritonavir 80+20 mg, oral solution, 60 ml	1 195,17	Altay	1 670,90	Murmansk region	1,4
Maraviroc tablets 150 mg	216,27	Moscow	234,09	Moscow region	1,08
Maraviroc tablets 300 mg	212,04	Saint-Petersburg	471,71	Nizhny Novgorod region	2,22
Nevirapine suspension 240 ml	722,47	Sverdlovsk region	868,56	Murmansk region	1,2
Nevirapine tablets 200 mg	0,86	Dagestan	35,69	Chukotka	41,5
Phosphazide tablets 200 mg	14,4	Tyva	46,44	Kamchatka	3,23
Phosphazide tablets 400 mg	35,79	Mari El	44,48	Sakha (Yakutia)	1,24
Raltegravir tablets 400 mg	505,31	Saint-Petersburg	765,72	Murmansk region	1,52
Rilpivirine tablets 25 mg	911,27	Moscow	1 258,63	Saint-Petersburg	1,38
Ritonavir capsules 100 mg	42,63	Sverdlovsk region	111,87	Chukotka	2,62
Saquinavir tablets 500 mg	18,81	Murmansk region	111,95	Khakassia	5,95
Stavudine capsules 30 mg	9,01	Voronezh region	49,41	Murmansk region	5,48
Stavudine capsules 40 mg	38,89	Pskov region	62,67	Chechnya	1,61
Stavudine powder 1 mg/ml 260 ml	697,51	Sverdlovsk region	795	Ingushetia	1,14
Tenofovir tablets 300 mg	227,94	Moscow	414,68	Stavropol region	1,82
Tenofovir/emtricitabine 300+200 mg	356,1	Saint-Petersburg	471,02	Saint-Petersburg (Ust-Izhora)	1,32
Tipranavir capsules 250 mg	379,09	Samara region	388,61	Vladimir region	1,03
Zidovudine capsules 100 mg	4,96	Chuvashia	59,6	Moscow region (Balashikha)	12,02
Zidovudine solution for infusion 20 ml	250,48	Tatarstan	1 013,18	Chukotka	4,04
Zidovudine solution 200 ml	765,82	Sverdlovsk region	1 997,04	Chukotka	2,61
Zidovudine tablets 300 mg	6,57	Kirov region	19,77	Murmansk region	3,01

B. PRICES FOR ORIGINAL AND GENERIC DRUGS

Federal Law No. 61-FZ "On Circulation of Medicines" does not have provisions regulating the rules for registration of the ceiling release prices for generics included into LEM. In some cases, prices for generic drugs were registered in 2014 at the same level as the original drugs (see Table 7).

Table 7. Ceiling release prices for certain drugs in 2014¹⁹

INN	Trade names	Manufacturer	Number of tablets per pack	Maximum price, RUB, without VAT	Date of last registration of the price
Abacavir 300 mg	Ziagen	ViiV Healthcare – Great Britain	60	4202.90	25.06.2013
	Abacavir-ABC	ООО «Технология лекаpств» – Russia	60	3782.00	19.06.2014
	Olitide	ZAO «Pharmasyntez» – Russia	60	4202.00	17.12.2013
Darunavir 400 mg	Pezista	LTD «Johnson & Johnson» – Russia	60	23921.34	28.02.2014
	Kemeruvir	JSC «Pharmasyntez» – Russia	60	21538.00	01.09.2014
	Darunovir	Hetero Labs Limited – India	60	13555.00	18.08.2014
Lamivudine/zidovudine 150+300 mg	Combivir	ViiV Healthcare – Great Britain	60	2595.00	08.07.2013
	Virocomb	Ranbaxy Laboratories Limited - India	60	2595.00	05.07.2012
	Dizaverox	ZAO «Pharmasyntez» – Russia	60	1500.00	27.06.2014

In some cases, generic drugs were more expensive than the original drugs, which is contrary to the common sense

The ceiling registered release price for the drug is not necessarily the contract price, but there were cases where generic drugs were purchased at the highest possible price exceeding the price for the original drug.

So, in 2014, lamivudine/zidovudine 150+300 mg was represented in the Russian Federation by drugs of three manufacturers:

- "Combivir" of ViiV Healthcare (original drug), the ceiling registered price - 2595 rubles per pack (60 tablets);
- "Virocomb" of Ranbaxy (generic drug), the ceiling registered price - 2595 rubles per pack (60 tablets);
- "Dizaverox" of Pharmasyntez (generic drug), the ceiling registered price - 1500 rubles per pack (60 tablets).

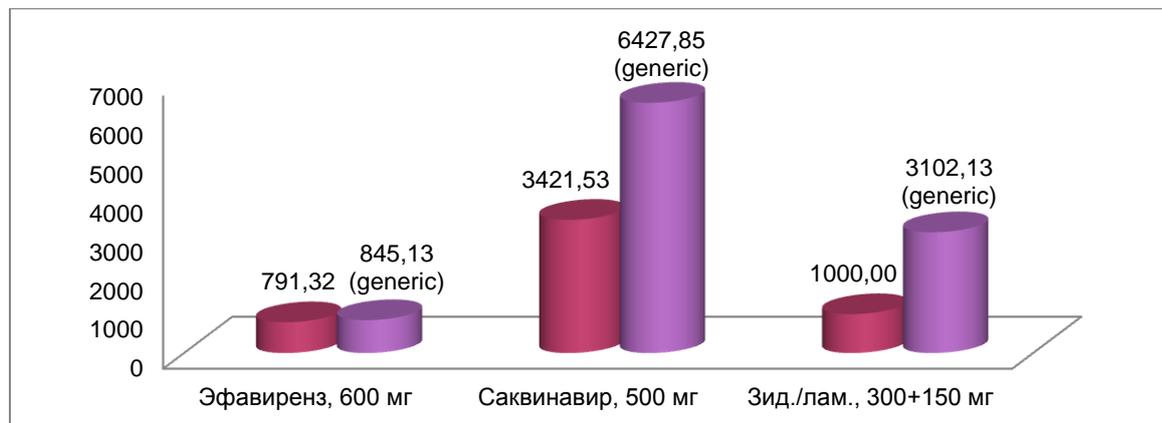
The weighted average price for the drug in the procurement in 2014 amounted to 965.4 rubles per 60 tablets. The minimum price was 595.80 rubles per pack, which is much lower than the registered price, but in the procurement of the Kamchatka Territory the contract price for this drug was 3,511.20 rubles per pack²⁰. Moreover, it was a generic drug of Virocomb.

¹⁹ As of 2014, data from the State Register of Medicines <http://grls.rosminzdrav.ru/>

²⁰ <http://zakupki.gov.ru/epz/contract/contractCard/payment-info-and-target-of-order.html?reestrNumber=0338200008514000040>

The figure below shows that in some cases the prices for generic drugs in 2014 exceeded the prices for the original drugs.

Figure 6. Difference in the prices for original and generic drugs, price per pack, rub.



Purchase of analogues at the prices exceeding the prices for the original drugs is contrary to the common sense, since the most important additional advantage of the presence of generic drugs in the market is the creation of competition and, consequently, reduction in prices.

C. PRICES FOR COMBINATION DRUGS

Based on the results of analysis, it is impossible to make a clear conclusion that the weighted average price for combination drugs exceeds the weighted average price for separate components of the combination drugs.

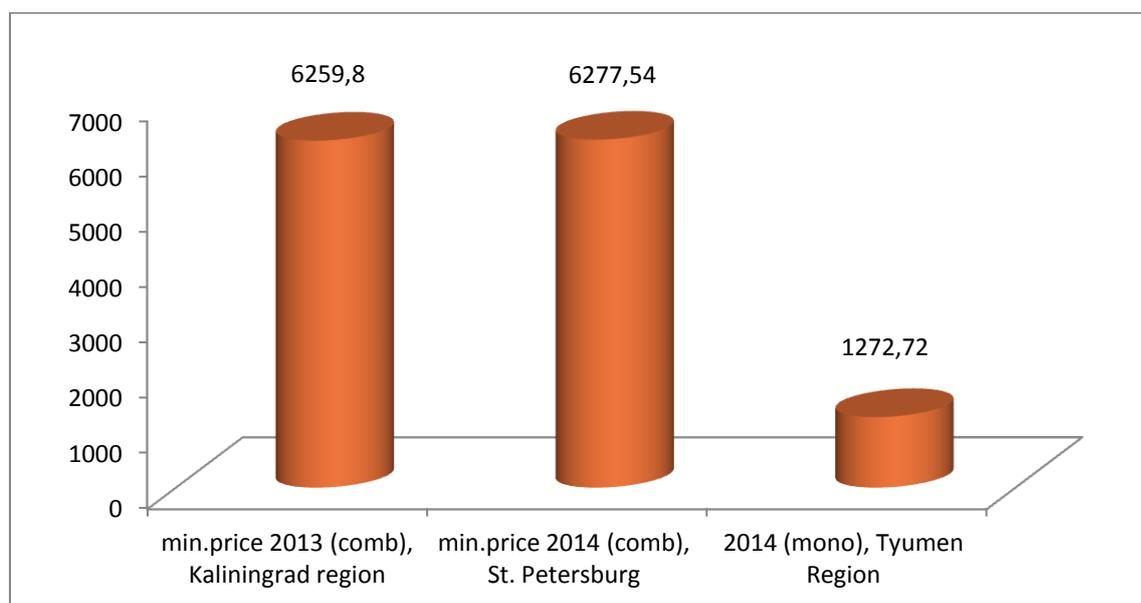
For example, the weighted average price of lamivudine and zidovudine as monocomponents is 13,802.78 rubles per patient per annum, but the weighted average price of the combination drug lamivudine/zidovudine is 11,745.50. However, the weighted average price of abacavir/lamivudine is **84,140.14 rubles per patient per annum, but the weighted average price of monocomponents is 48,663.97 rubles per patient per annum, that is almost twice cheaper.**

Table 8. Prices for combination drugs and monocomponents in Russia in 2014

INN	Weighted average cost of treatment by combination drug for 1 person per year, RUB.	Weighted average cost of treatment by monocomponents for 1 person per year, RUB	Difference, %	The number of registered trade names in RF
Abacavir/zidovudine/lamivudine 300+300+150 mg	157 856,09	59 395,49	166%	1
Abacavir / lamivudine 600+300 mg	84 140,14	48 663,97	73%	1
Lamivudine /zidovudine 150+300 mg	11 745,50	13 802,78	-15%	6
Tenofovir/emtricitabine 300+200 mg *	140 051,41	90 558,04	55%	1
Emtricitabine/Rilpivirine/Tenofovir 200+25+300 mg	632 137,16	435 081,31	45%	1

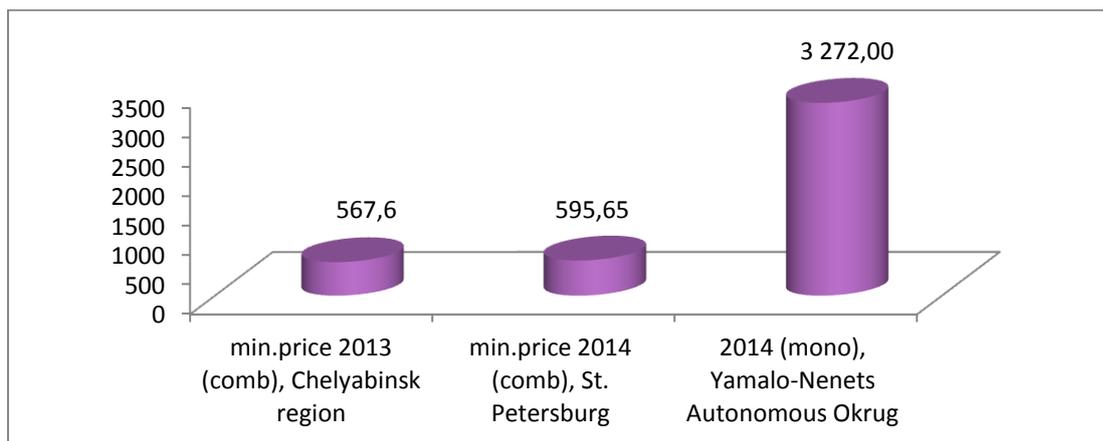
The example below illustrates a situation where purchase of monocomponents instead of the combination drug allows achieving a significant reduction in the price. The minimum price for abacavir/lamivudine in 2014 was found in St. Petersburg (6,277.54 rubles per pack), but in the Tyumen Region this drug was purchased **in the form of monocomponents for 1,272.72 rubles per pack.**

Figure 7. Difference in prices for abacavir/lamivudine 600 + 300 mg (combination drug and monocomponents), per pack, rub.



However, there were paradoxical situations where monocomponents were purchased at a price much higher than the price for the combination drug. For example, lamivudine/zidovudine was purchased in St. Petersburg in 2014 for 595.65 rubles per pack (as for a monthly course) and in the Yamalo-Nenets Autonomous Okrug **monocomponents were purchased at the price of 3,272 rubles for a monthly course** (excess was 5.5 times as compared with the lowest price in 2014).

Figure 8. Difference in prices for lamivudine/zidovudine 150 + 300 mg (combination drug and monocomponents), per pack, rub.



D. PRICES FOR DRUGS NOT INCLUDED INTO LEM

In 2014, the following drugs not included into LEM were purchased: maraviroc 150 and 300 mg, rilpivirine 25 mg, tenofovir 300 mg, tipranavir 250 mg and two combination drugs - tenofovir/emtricitabine 300 + 200 mg and emtricitabine/rilpivirine/tenofovir 200 + 25 + 300 mg.

The weighted average price for tenofovir in 2014 increased by 6% compared to the price in 2013. The weighted average price for tenofovir/emtricitabine 300+200 mg increased by 4% compared to the price in 2013.

The price of the annual course of treatment with tenofovir was 83,198.10-151,358.20 rubles (2,205 – 4,010 USD ²¹), while the weighted average price of the annual course was 87,486.78. The small difference between the minimum and the weighted average price is explained by the fact that nearly 90% of purchases were made either at the minimum price or at a price close to the minimum. The weighted average price of the annual course in the US dollar equivalent decreased from 3,000 to about 2,300 USD due to the strong drop in the ruble exchange rate at the end of 2014.

Figure 9. Prices of the course of treatment with tenofovir in the procurement of the Russian Federation in 2014 and in the world, US dollars, per person per annum



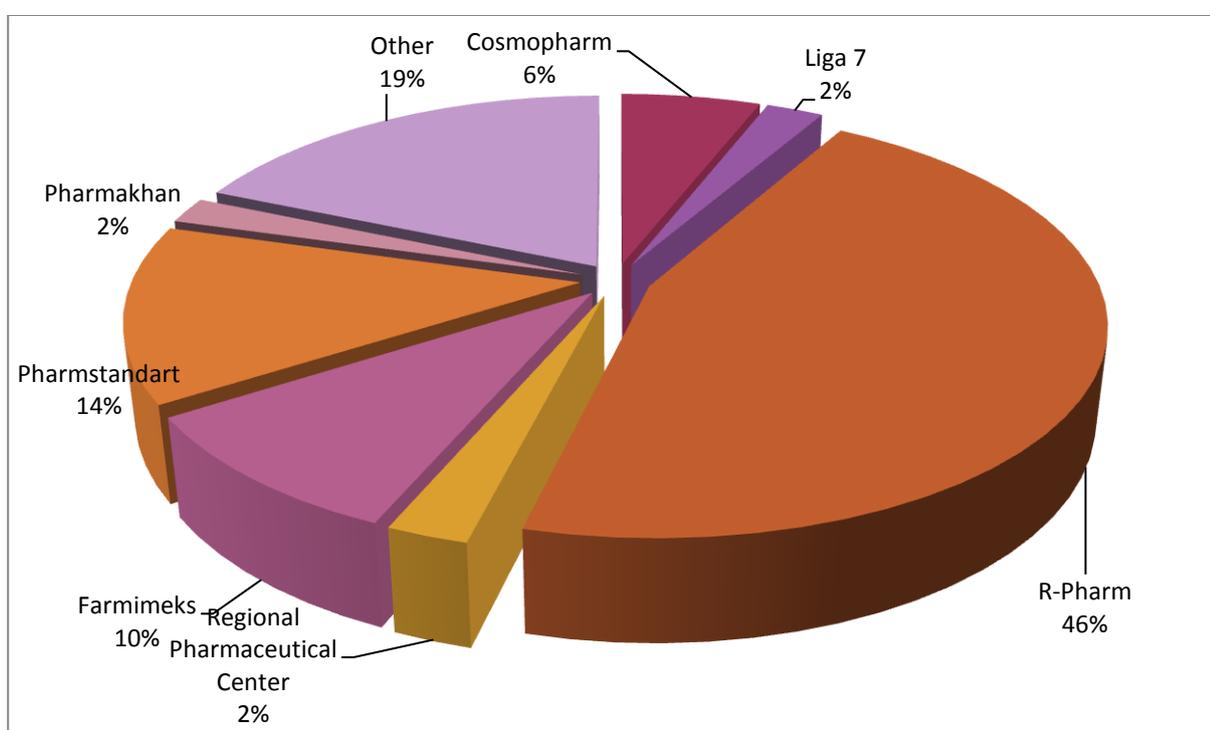
²¹ The average exchange rate of ruble against US dollar for the period from January 1, 2014 to December 31, 2014 was 0.0265 (according to <http://www.oanda.com>).

According to data published in the report of Médecins Sans Frontières (MSF), the price of the minimum course of treatment with tenofovir in the world is 26 USD. If compare this figure with the results of monitoring of procurement of tenofovir in Russia, it may be seen that **tenofovir is purchased in Russia at a price 85-154 times higher.**

E. COMPETITION

As in 2013, the market of ARV drugs was divided between several large distributors (CJSC R-Pharm, OJSC Pharmstandard, OJSC Pharmaceutical Import-Export (OJSC Farmimeks), LLC Cosmopharm, LLC Company "League 7", LLC Regional Pharmaceutical Center), which share accounted for 74.5% of all awarded contracts. In 2014, a total of 139 distributors participated in auctions, and 91 companies became winners.

Figure 10. Share of distributors of the total amount of contracts

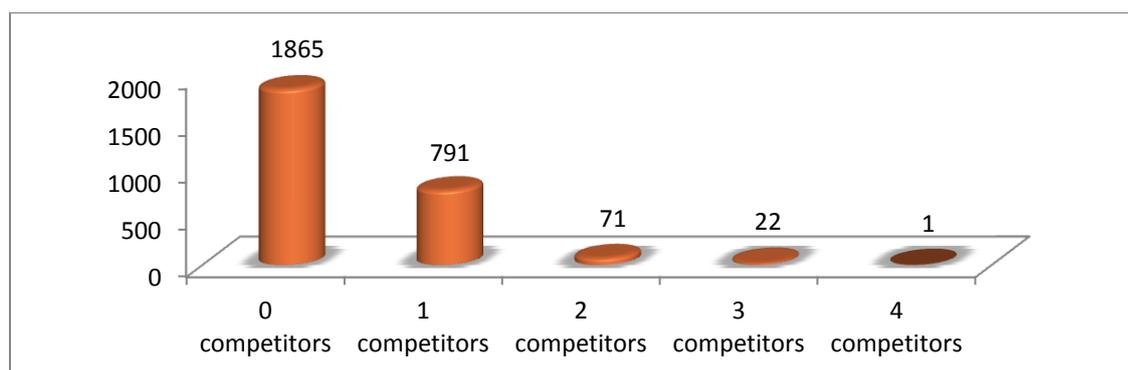


67.8% of auctions²² were conducted without any competition, with participation of the sole distributor. For comparison, in 2013 this figure was around 80%, that is it may be concluded that competition in 2014 increased compared to 2013 owing to appearance of more generics and more players in the market of distributors.

In 2014, in one third of cases (28.8%) two companies took part in the auction, and only 3.4% of auctions had 3 to 5 participants.

²² From 2751 auctions with the status "fulfilled" or "contract/to be fulfilled".

Figure 11. Number of competitors in auctions with the status "fulfilled" or "contract/fulfillment"



In auctions without competition, the difference between the average price at the initial price of the auction and the price per unit under the contract was only 3.9%, while in auctions with competition this figure was 10.6%²³.

Table 9. Difference between the initial price of the auction and the contract price in auctions with and without competition

Drug	Price per unit (at the initial price of the auction), the average value	Price per unit (the contract), the average value	Price drop, %	Note
Lamivudine /zidovudine 150+300 mg	38,89	20,84	-46%	competition
Lamivudine /zidovudine 150+300 mg	30,49	25,47	-16%	without competition
Lamivudine tablets 150 mg	14,60	5,15	-65%	competition
Lamivudine tablets 150 mg	14,41	8,04	-44%	without competition
Lamivudine tablets 300 mg	27,02	13,75	-49%	competition
Lamivudine tablets 300 mg	14,48	14,37	-1%	without competition
Nevirapine tablets 200 mg	20,08	10,87	-46%	competition
Nevirapine tablets 200 mg	21,67	20,17	-7%	without competition
Saquinavir tablets 500 mg	100,78	67,73	-33%	competition
Saquinavir tablets 500 mg	102,29	93,35	-9%	without competition

Several trade names are registered for 17 drugs of 31 registered INN for HIV treatment. Therefore, the competition is potentially possible. According to the results of analysis, in the absence of competition, the prices for most drugs remain at approximately the same level for several years, while in the presence of competition a significant price reduction may be often

In the absence of competition, the prices for drugs remain approximately at the same level for several years, while in the presence of competition the prices are significantly reduced

observed. For example, prices for lopinavir/ritonavir, raltegravir and atazanavir 200 mg for 3 years remained almost unchanged or increased, despite the fact that these drugs rank first, second and fifth by the shares in the budget for ARV drugs (20.5%, 9.3% and 6.5%, respectively). The weighted average price for lamivudine 150 mg in the competitive environment decreased 6.75 times, the weighted average price for lamivudine/zidovudine - 3.6 times. The price for abacavir 300 mg decreased by 18%, though the

generic drug was registered only at the end of 2013.

²³ This section shows the average price over the array of auctions with and without competition obtained by dividing the sum of weighted average prices for each auction by the number of auctions.

As noted above, the drugs presenting the largest share in the budget for antiretroviral therapy included mainly drugs belonging to the class of protease and integrase inhibitors without analogues in the market (lopinavir/ritonavir, raltegravir, atazanavir). Generics of darunavir, which accounts for 7.7% of the total amount of spent funds in 2014, were registered only in the middle of 2014. Accordingly, their sale began only at the end of 2014 and could not result in significant reduction in prices.

Such combination drugs as abacavir/lamivudine and tenofovir/emtricitabine also do not have analogues in the market. NRTI combination of tenofovir/emtricitabine is included into the preferred regimen for initiation of ART therapy according to WHO protocols, but its weighted average price is about 140 thousand rubles per patient per annum, which is approximately 12 times higher than the weighted average price of the combination drug lamivudine/zidovudine which has several analogues.

As noted below in the section comparing the prices for drugs in Russia and in other countries, one of the most effective mechanisms for reducing the price for drugs in the presence of patent protection is issue of compulsory licenses for manufacture and/or importation of drugs protected by patent right, with payment of royalties to the patent holder.

Figure 12. Price for drugs which do not have generics in Russia in 2012, 2013, 2014, per unit, rub.

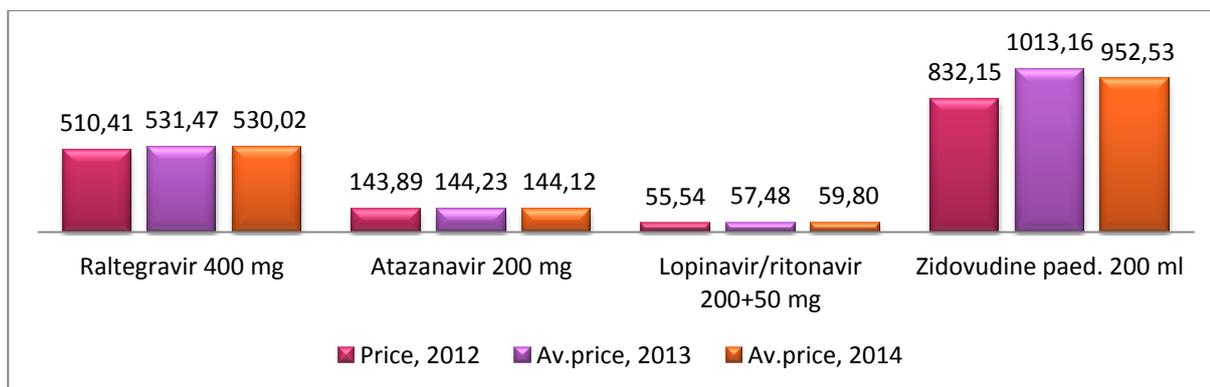


Figure 13. Price for drugs which have generics in Russia in 2012, 2013, 2014, per tablet, rub.



*Lamivudine 150 mg - 7 analogues, abacavir 300 mg - 2 analogues, lamivudine + zidovudine 150 + 300 mg - 5 analogues.

F. MANUFACTURERS OF ARV DRUGS

According to the register grls.rosminzrav.ru, a total of 31 INN drugs for HIV treatment are registered in Russia, without regard to various formulations and dosages (see details in the table below, as of April of 2015).

Manufacturers of ARV drugs may be divided into three segments: large international pharmaceutical companies (AbbVie, BMS, Gilead, Janssen, MSD, Roche, ViiV), Indian companies specializing in production of generic drugs (Aurobindo, Hetero, Ranbaxy), as well Russian firms (including Biocad, Drugs Formulation, Pharmasyntez).

17 ARV drugs do not have analogues in the market, mainly due to patent protection. The vast majority of them are produced by international companies, with the exception of phosphazide, a domestic drug, being an analogue of zidovudine.

Table 10. Trade names of original and generic drugs registered in Russia

№	INN	Trade name	Manufacturer	Registration date in RF	Number of generics
1	Abacavir	Ziagen	ViiV	05.05.2010	2
		Olitid	Pharmasyntez	04.10.2013	
		Abacavir-ABC	Tekhnologia lekarstv	13.01.2014	
2	Atazanavir	Reataz	BMS	26.01.2010	0
3	Abacavir+lamivudine	Kivexa	ViiV	28.05.2007	0
4	Abacavir+lamivudine+zidovudine	Trizivir	ViiV	25.05.2009	0
5	Darunavir	Prezista	Janssen	22.09.2006	2
		Darunavir	Hetero	26.06.2014	
		Kemeruvir	Pharmasyntez	28.05.2014	
6	Didanosine	Videx	BMS	19.01.2006	1
		Didanosine	Aurobindo	24.01.2013	
7	Dolutegravir	Tivikay	ViiV	16.07.2014	0
8	Zidovudine	Retrovir	ViiV	10.09.2008	10
		Zidovirine	Veropharm	25.08.2006	
		Zido H	Hetero	01.09.2006	
		Zidovudine-Ferein	Bryntsalov A	09.06.2009	
		Viro Zed	Ranbaxy	13.08.2009	
		Tomazide	AZT Pharma	28.10.2009	
		Azidotimedine	Biopharma	09.06.2010	
		Zidovudine	Obolenskoe	27.07.2010	
		Zidovudine	Aurobindo	14.02.2011	
		Azitem	Pharmasyntez	11.07.2013	
Zidovudine AZT	Tekhnologia lekarstv	13.03.2014			
9	Indinavir	Crixivan	Merck	09.04.2008	0
10	Lamivudine	Elvit 3TC	ViiV	07.05.2008	7
		Zeffix	GSK	24.06.2010	
		Violam	Ranbaxy	21.09.2011	
		Geptavir-150	Hetero	27.02.2012	
		Lamivudine-3TC	Tekhnologia lekarstv	02.07.2012	
		Lamivudine	Aurobindo	13.02.2013	
		Lamivudine-Vial	Vial	27.02.2014	
11	Lamivudine+zidovudine	Combivir	ViiV	13.11.2009	5
		Virocomb	Ranbaxy	11.11.2011	
		Dizaverox	Pharmasyntez	02.04.2014	
		Zidolam	Hetero	26.06.2014	
		Zilacomb	Biocad	14.08.2014	
	Zidovudin-lamivudine-Vial	Vial	19.12.2014		
12	Lamivudine+zidovudine+nevirapine	Zidolam-H	Hetero	02.07.2012	0
13	Lopinavir-ritonavir	Kaletra	Abbot	18.01.2008	0
14	Maraviroc	Celzenti	ViiV	14.07.2011	0
15	Nevirapine	Viramune	Boehringer	05.11.2009	3
		Nevirapine	Hetero	09.04.2010	
		Nevirapine	Pharmasyntez	21.03.2014	
		Nevirapine-TL	Tekhnologia lekarstv	16.03.2015	
16	Nelfinavir	Virasept	Roche	24.03.2006	1

		Lirasept	Irvin 2	28.11.2011	
17	Raltegravir	Isentress	Merck	29.09.2008	0
18	Rilpivirine	Edurant	J&J	02.07.2012	0
19	Ritonavir	Norvir	Abbot	29.02.2008	3
		Ritonavir-100	Hetero	24.11.2006	
		Rinvir	Irvin 2	28.11.2011	
		Ritonavir	Dialogpharma	11.01.2012	
20	Saquinavir	Inviraza	Roche	09.07.2007	1
		Interfast	Pharmasyntez	18.04.2014	
21	Stavudine	Zerit	BMS	24.03.2009	7
		Stug	Hetero	13.01.2006	
		Actastav	Actavis Group	17.03.2006	
		Vero-stavudine	Veropharm	14.08.2008	
		Stavudine	Obolenskoe	21.07.2010	
		Vudistav	Ranbaxy	11.11.2011	
		Stavudine	Pharmasyntez	07.03.2014	
22	Tenofovir	Viread	Gilead	29.09.2011	3
		Tenofovir	Hetero	30.03.2010	
		Tenofovir	Pharmasyntez	03.04.2014	
		Tenofovir -TL	Tekhnologia lekarstv	23.06.2014	
23	Tenofovir+emtricitabine	Truvada	Gilead	29.09.2011	0
24	Tipranavir	Altivus	Boehringer	03.11.2011	0
25	Fosamprenavir	Telzir	ViiV	30.06.2010	0
26	Phosphazide	Nikavir	AZT Pharma	23.03.2005	0
27	Emtricitabine	Emtricitabine	Biocad	17.06.2014	1
		Emtritab	Pharmasyntez	14.01.2015	
28	Emtricitabine+rilpivirine+tenofovir	Eviplera	Gilead	09.12.2013	0
29	Enfuvertid	Fuseon	Roche	15.12.2009	0
30	Etravirin	Intelens	J&J	17.06.2008	0
31	Efavirenz	Stokrin	Merck	16.12.2005	2
		Efavirenz	Hetero	26.06.2014	
		Regast	Pharmasyntez	31.07.2014	

PRICES FOR ARV DRUGS IN RUSSIA AND IN THE WORLD

HIV treatment includes first-, second- and third-line regimens of ARV therapy, as well as salvage regimens²⁴:

- first-line regimens are prescribed to patients who have not previously received ARV therapy;
- second-line regimens are used when the first-line regimen is proved to be ineffective;
- third-line regimens are prescribed when the second-line regimen is proved to be ineffective;
- salvage regimens – customized regimens that are used when second-line and subsequent regimens are proved to be ineffective.

According to the latest WHO protocols, as well as the national clinical guidelines for the diagnostics and treatment of HIV infection in adults in the Russian Federation, the fixed-dose regimen TDF + 3TC (or FTC) + EFV is recommended as the preferred option for initiation of ART therapy. If the regimen is contraindicated or impossible, AZT + 3TC + EFV, AZT + 3TC + NVP, TDF + 3TC (or FTC) + NVP, etc. are recommend.

For this calculation, we have taken the following first-line treatment regimens:

- TDF/FTC+EFV (TDF+3TC+EFV)
- 3TC/AZT+EFV (3TC+AZT+EFV)
- ABC/3TC+EFV (ABC+3TC+EFV)
- AZT+3TC+NVP
- ABC+3TC+AZT

The figure below shows that the minimum price of the basic recommended regimen for initiation of ARV therapy in accordance with WHO protocols in Russia is approximately 32 times higher than the minimum price in the world. The minimum price of the basic second-line

The minimum price of the basic recommended regimen for initiation of ARV therapy in accordance with WHO protocols in Russia is about 32 times higher than the minimum price in the world, the minimum price of the basic second-line regimen in Russia is 6.5 times higher than the minimum price in the world.

regimen (which is the most common in Russia) in Russia is 6.5 times higher than the minimum price for the same regimen in the world.

The minimum prices of the first-line alternative regimens are more or less comparable. It should be noted that in some regions the price of the same regimens is many times higher than the minimum prices in the world. Prices of all second-line regimens included in the analysis were significantly higher in Russia than the minimum prices of the same regimens in the world.

²⁴ National clinical guidelines for the diagnostics and treatment of HIV infection in adults.
<http://itpcru.org/2014/08/21/natsionalnye-klinicheskie-rekomendatsii-po-diagnostike-i-lecheniyu-vich-infektsii-u-vzroslyh-2/>

Figure 14. Prices of the first-line regimens in Russia and in the world, per person per annum, rub.²⁵.

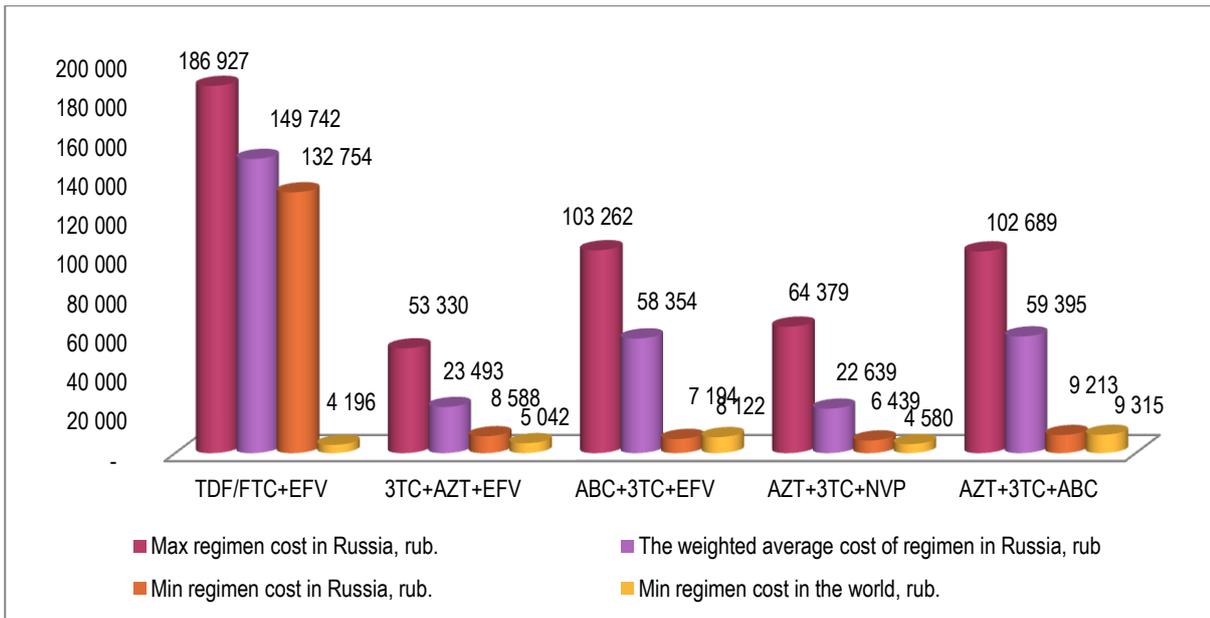
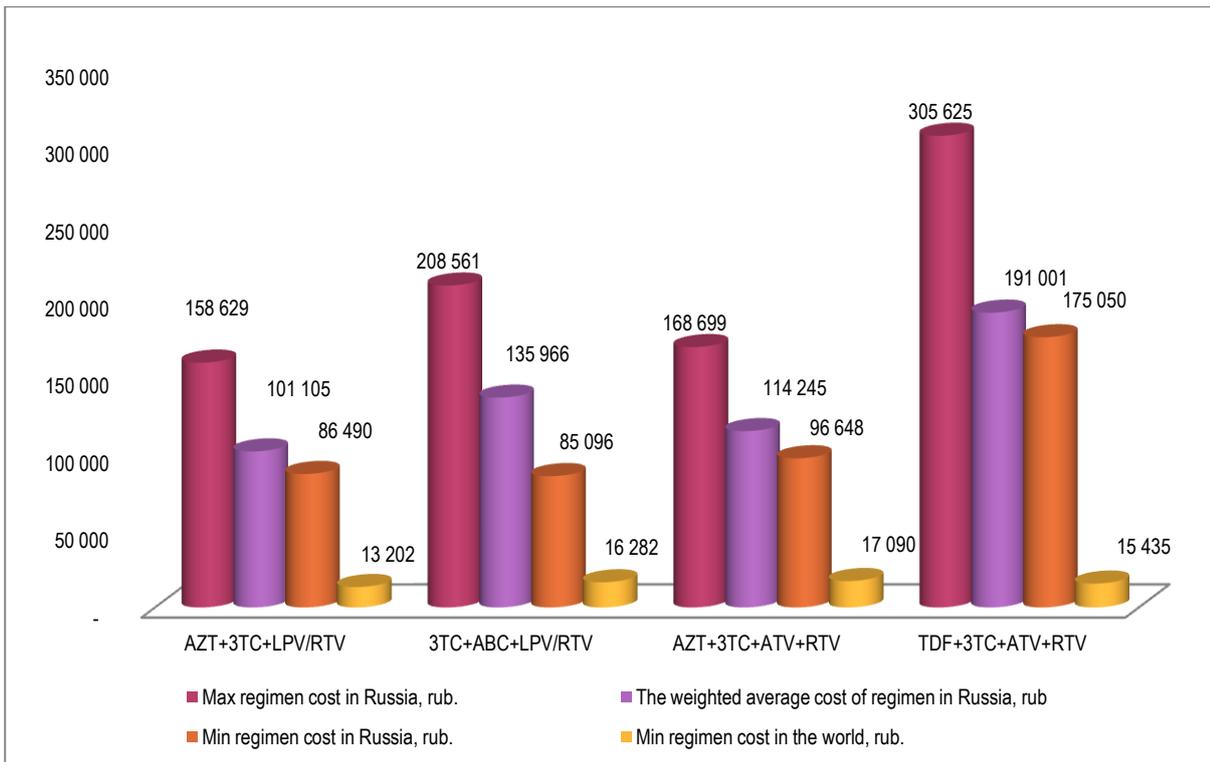


Figure 15. Prices of the second-line regimens in Russia and in the world, per person per annum, rub.²⁶.



²⁵Prices of all auctions with the status "fulfilled" or "contract/fulfillment" (minimum, weighted average, maximum) were used for the calculation, taking into account the prices for monocomponents. Prices in the world - data of Médecins Sans Frontières as of May of 2014 (all drugs except for abacavir) http://www.msfaaccess.org/sites/default/files/MSF_UTW_17th_Edition_4_b.pdf и май 2013 года (абакавир) http://d2pd3b5abq75bb.cloudfront.net/2013/09/11/10/25/44/896/MSF_Access_UTW_16th_Edition_2013.pdf

²⁶Prices of all auctions with the status "fulfilled" or "contract/fulfillment" (minimum, weighted average, maximum) were used for the calculation, taking into account the prices for monocomponents. Prices in the world - data of Médecins Sans Frontières as of May of 2014 http://d2pd3b5abq75bb.cloudfront.net/2013/09/11/10/25/44/896/MSF_Access_UTW_16th_Edition_2013.pdf

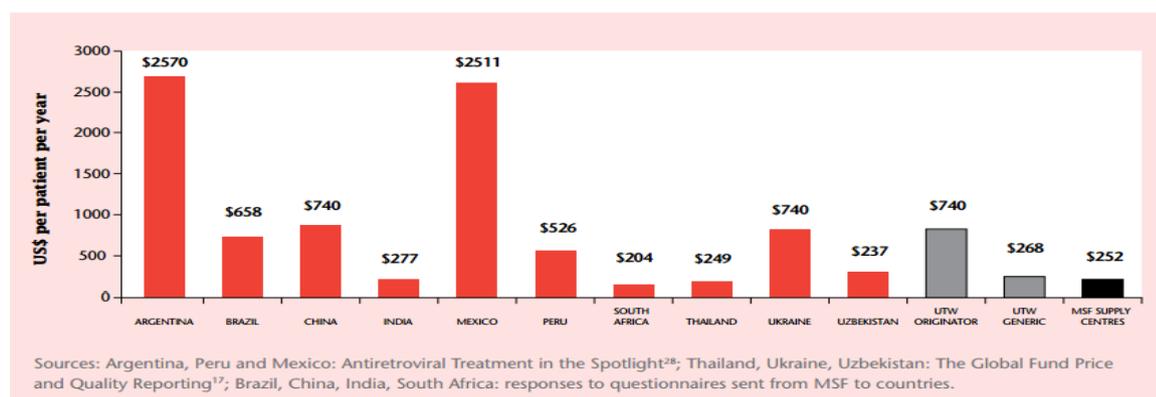
PRICES IN RUSSIA AND BRICS COUNTRIES

Last time, a number of experts of government institutions, including the Federal Antimonopoly Service ²⁷, as well as civil society organizations assert that when establishing and comparing prices for drugs it is required to focus on countries with the level of income per capita similar to the Russian Federation, including BRICS - Brazil, Russia, India, China, South Africa.

The authors of this report conducted a small comparative analysis of prices for ARV drugs in Russia and other BRICS countries, which showed that even within this group **prices in Russia are much higher than prices for similar drugs in BRICS countries.**

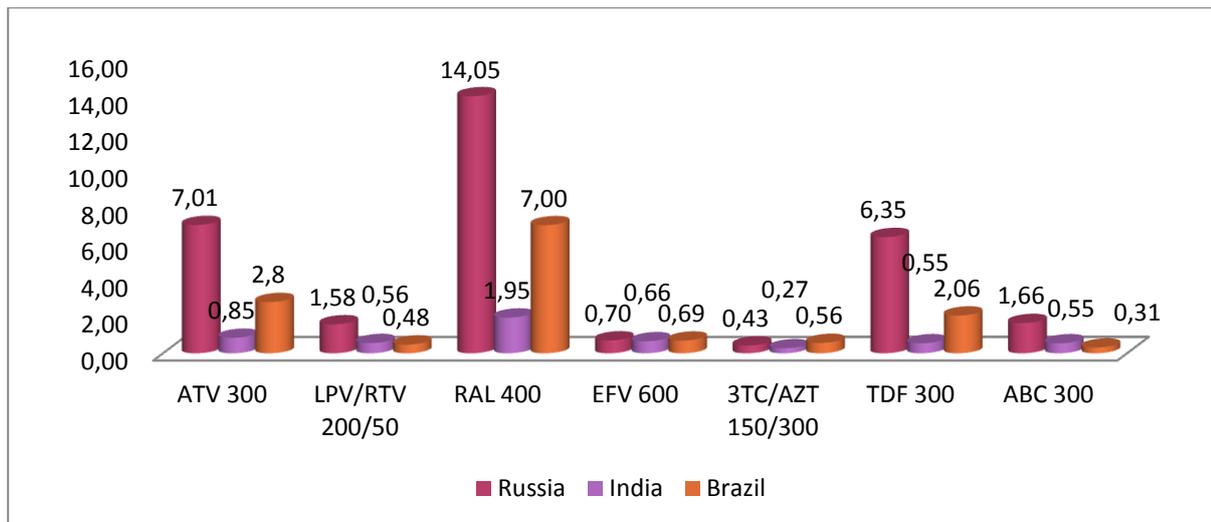
As shown in the figure below, prices in the Russian Federation for basic second-line drugs (lopinavir/ritonavir, atazanavir, raltegravir), as well as basic first-line drugs - tenofovir – are several times (at least 2 times) higher than prices in Brazil and India. Price for first-line drugs (lamivudine/zidovudine, efavirenz) are more or less comparable, mainly due to the presence of generics in the Russian market.

Figure 16. Prices of various first-line regimens in the world, annual course per person, USD²⁸



²⁷ THE RESULTS of assessment of the affordability of drugs on the basis of the analysis of consumer prices and pricing for drugs in the Russian Federation (including by constituent entities of the Russian Federation) and in comparable markets of countries, including members of the CIS, the European Union and the BRICS. The Federal Antimonopoly Service, 2013.

Figure 17. Comparison of prices for certain drugs in Russia, India and Brazil, price per tablet, USD ²⁹



In the past, BRICS countries have repeatedly used various mechanisms to reduce the prices for drugs, including the mechanisms provided for by the flexible provisions of the Agreement on Trade Related Aspects of Intellectual Property Rights - TRIPS. TRIPS flexible provisions are clauses of TRIPS agreement enabling countries to achieve a balance between the intellectual property protection and the priorities of development, including the interests of

One of the most effective mechanisms to reduce the prices for drugs in the presence of patent protection is issue of compulsory licenses for manufacture and/or importation of drugs.

public health. Flexible provisions allow countries to determine the terms and conditions for issue of compulsory licenses and government use, permit parallel import, establish more strict criteria for patentability, permit third parties to submit objections against patents, etc.

Thus, the following mechanisms reducing prices for drugs are successfully used / have been used in BRICS countries:

- tightening of the criteria for patentability (India, South Africa);
- issue of compulsory licenses for ARV drugs (Brazil);
- revocation of patents on ARV drugs, including as a result of objections to granting of patents submitted by various stakeholders, including representatives of the civil society (China, India, Brazil).

So, in 2007, the Brazilian government issued a compulsory license for the non-nucleoside reverse transcriptase inhibitor efavirenz (included in the basic regimen for treatment of HIV-naïve patients in accordance with the recommendations of the World Health Organization, WHO). As a result of issue of this license, the price for the drug has decreased from 1.6 USD per dose to 0.45 USD per dose. It allowed saving more than 100 million US dollars in

²⁹Weighted average government procurement prices in Russia in 2014, government procurement prices in India in 2014 (the average rate of the Indian rupee against the US dollar in 2014 is taken from the website oanda.com), government procurement prices in Brazil in 2012 (the average rate the Brazilian real against the US dollar in 2012 is taken from the website oanda.com) were used for the diagram.

procurement of efavirenz which at that time received about one third of HIV-positive patients. **The application of the flexible provisions of TRIPS allowed the Brazilian government to save for the period from 2001 to 2005 up to 1.2 billion US dollars³⁰.**

³⁰ Experience of Brazil in combating against HIV/AIDS. <http://itpcru.org/2014/12/04/opyt-brazilii-v-borbe-s-epidemiej-vich-spida/>

INTERRUPTIONS IN SUPPLY OF DRUGS AND ACTIONS DURING MONITORING

Cases of refusal to issue drugs to patients or replacement of antiretroviral therapy were established in 2014. Activists of the movement "Patients in Control" received more than 150 complaints from patients from different regions of the Russian Federation

Sources of information:

- personal appeals to the address of the movement " Patients in Control";
- posts of patients on the website pereboi.ru, which was specially designed to collect such information;
- messages in newsletters itpcru@googlegroups.com and pactontrol@googlegroups.com.

Direct campaigns were conducted in Murmansk, Perm and Kaliningrad. In total, in 2014, it was written about 100 appeals and complaints to ministries and regulatory authorities; it was collected more than 40 personal statements of patients from at least 15 cities in Russia. Each case was considered and the relevant measures were taken to resolve the problems related to access to treatment. In some regions, due to lack of actions on the part of local committees and institutions, and lack of initiative representatives of the community of patients, the situation is still unresolved.

CONCLUSIONS AND RECOMMENDATIONS

One of the main problems in provision of HIV-positive patients with drugs in Russia is that the number of people who need treatment considerably exceeds the number of patients who receive the therapy. This is confirmed by the relevant statements of officials, publications in mass media, numerous statements of patients, as well as indirectly by the results of this report.

Based on the results of analysis of ARV procurement, this problem may be solved by sharp decrease in prices for drug in order to increase the therapy coverage. For this purpose, the Government of the Russian Federation and other competent authorities are suggested to take the following measures:

- Develop and adopt a normative document regulating the incremental reduction in prices of drugs, including those for HIV treatment. The document should specify the obligation of generic manufacturers to register prices at the level not less than 30% below the price of the original drug. In addition, each subsequent generic drug must be also registered at a price below the prices of analogues existing in the market.
- Consider the possibility of full or partial centralization of ARV procurement to increase the volume of purchases, which will allow reducing the price in the long run. In addition, it is recommended to analyze the feasibility of direct procurement of drugs from LEM without distributors to minimize their influence on the price change.
- Consider the possibility of issue of compulsory licenses on clinically important ARV drugs that have no analogues in the Russian market and/or that have a significant share in the federal budget for antiretroviral therapy. According to the authors of the report, first of all, attention should be paid to the following drugs: lopinavir/ritonavir, raltegravir, atazanavir and tenofovir/emtricitabine.
- Use other possibilities provided for by the flexible provisions of the TRIPS Agreement, in particular, parallel imports, to reduce prices of drugs for treatment of socially significant diseases.

Based on the results of analysis, it is evident that patients in Russia receive non-optimum HIV treatment regimens according to the recommendations of WHO. In this regard, the Ministry of Health and other competent authorities are suggested to:

- Ensure regular (at least once per annum) review of the list of essential medicines in order to consider the possibility of inclusion of newly registered ARV drugs, as well as exclusion of drugs not recommended for the use in HIV treatment.
- Revise legal acts regulating the process of registration of drugs in the Russian Federation in order to facilitate the entry to market of new drugs, including generics.

Based on the results of analysis, it may be concluded that ARV procurement is still not functioning well in the Russian Federation. There is a significant difference in prices for the

same drugs in different constituent entities of the Russian Federation, different systems are used for justification of the initial maximum price, and auctions are delayed due to agreement of the auction documentation with regulatory authorities. In this regard, the Federal Service for Consumer Rights and Human Welfare Protection (Rospotrebnadzor), the Federal AIDS Centre and other competent authorities are recommended to:

- Maintain a unified register of HIV-positive patients and oblige constituent entities of the Russian Federation maintain similar registries at the regional level containing parameters important for prescription and continuation of treatment, as well as forecasting of the demand for drugs in order to optimize the process of procurement and provision of ARV therapy.
- Provide technical support and training to administrators of AIDS centres and specialists of regional ministries of health in order to improve the planning and procurement under FZ-44 for prevention of interruptions in supply of ARV drugs, with a special emphasis on justification of the initial maximum price and approval of auctions with a single supplier;
- Consult with regulatory authorities for the possibility to conduct more rapidly (on a priority basis) inspections of auctions for ARV procurement with a single supplier in order to avoid interruptions in supply of essential medications;
- Recommend to AIDS centres and regional health committees closer interaction with patient organizations in planning and procurement of ARV drugs.
- Develop an official position and recommendations on procurement of combination forms of ARV drugs in cooperation with the Federal Antimonopoly Service, AIDS centres and regional ministries of health.
- AIDS centre and regional ministries of health are recommended to interact with patient organizations in planning and procurement of ARV drugs to prevent interruptions, as well as in connection with increase in the number of generic drugs in the market to hold consultations for patients regarding replacement of one trade name for another for the same INN.

Appendix 1 Minimum, maximum and average prices for ARV drugs based on the price of the annual course per patient

INN	Treatment regimen	The minimum price per unit, RUB	The minimum cost of treatment for 1 person per year, RUB.	The weighted average cost per unit, RUB	The weighted average cost of treatment, for 1 person per year, RUB	The maximum price per unit, RUB	The maximum cost of treatment for 1 person per year, RUB.
Abacavir/zidovudine/lamivudine 300+300+150 mg	2	209,44	152 891,20	216,24	157 856,09	240,41	175 499,30
Abacavir / lamivudine 600+300 mg	1	209,25	76 376,25	230,52	84 140,14	314,66	114 850,90
Abacavir solution 240 ml	-	2 454,01	-	2 749,02	-	3375,13	-
Abacavir tablets 300 mg	2	4,66	3 401,80	62,46	45 592,71	88,17	64 364,10
Abacavir tablets 600 mg	1	74,97	27 364,05	146,14	53 341,80	177,14	64 656,10
Atazanavir capsules 150 mg	2	103,12	75 277,60	109,09	79 636,03	122,66	89 541,80
Atazanavir capsules 200 mg	2	136,7	99 791,00	144,12	105 204,46	172,68	126 056,40
Atazanavir capsules 300 mg	1	264,51	96 546,15	264,51	96 546,15	264,51	96 546,15
Darunavir tablets 400 mg	2	252,45	184 288,50	274,08	200 080,47	330,56	241 308,80
Darunavir tablets 600 mg	1	330	120 450,00	408,65	149 157,03	493,84	180 251,60
Darunavir tablets 800 mg	1	504,9	184 288,50	598,87	218 586,92	694,68	253 558,20
Didanosine capsules 125 mg	2	56,61	41 325,30	57,14	41 715,75	59,77	43 632,10
Didanosine capsules 250 mg	1	65,23	23 808,95	67,03	24 465,93	75,39	27 517,35
Didanosine capsules 400 mg	1	80,84	29 506,60	84,44	30 819,59	98,65	36 007,25
Didanosine oral powder 2 g	-	949,09	-	1 014,57	-	1087,8	-
Efavirenz tablets 200 mg	3	7,66	8 387,70	13,4	14 672,13	17,11	18 735,45
Efavirenz tablets 600 mg	1	7,61	2 777,65	26,55	9 690,11	41,11	15 005,15
Emtricitabine/Rilpivirine/Tenofovir	1	1 727,82	630 654,30	1 731,88	632 137,16	1956,74	714 210,10
Enfuvirtide lyophilisate 90 mg/ml	2	975,27	711 947,10	1 078,38	787 217,91	1251,96	913 930,80
Etravirin tablets 100 mg	4	139,63	203 859,80	158,03	230 718,88	190,43	278 027,80
Fosamprenavir suspension 225 ml	-	2 639,78	-	3 466,05	-	4807,59	-
Fosamprenavir tablets 700 mg	2	178,37	130 210,10	190,78	139 266,53	233,46	170 425,80
Lamivudine /zidovudine 150+300 mg	2	9,93	7 248,90	16,09	11 745,50	58,52	42 719,60
Lamivudine solution 240 ml	-	1 234,59	-	1 684,12	-	2587,14	-
Lamivudine tablets 150 mg	2	1,39	1 014,70	4,21	3 071,26	32,73	23 892,90
Lamivudine tablets 300 mg	1	11,22	4 095,30	11,65	4 250,80	17,53	6 398,45
Lopinavir/ritonavir 100+25 mg	-	97,15	-	106,58	-	118,47	-
Lopinavir/ritonavir 200+50 mg	4	55,26	80 679,60	59,8	87 302,17	82,4	120 304,00
Lopinavir/ritonavir 80+20 mg, oral solution, 60 ml	-	1 195,17	-	1 474,76	-	1670,9	-
Maraviroc tablets 150 mg	2	216,27	157 877,10	224,21	163 670,01	234,09	170 885,70
Maraviroc tablets 300 mg	1	212,04	77 394,60	203,19	74 165,76	471,71	172 174,15
Nevirapine suspension 240 ml	-	722,47	-	745,53	-	868,56	-
Nevirapine tablets 200 mg	2	0,86	627,8	12,1	8 835,86	35,69	26 053,70
Phosphaside tablets 400 mg	1	35,79	13 063,35	42,67	15 574,14	44,48	16 235,20
Phosphazide tablets 200 mg	3	14,4	15 768,00	38	41 609,35	46,44	50 851,80
Raltegravir tablets 400 mg	2	505,31	368 876,30	530,02	386 915,02	765,72	558 975,60
Rilpivirine tablets 25 mg	1	911,27	332 613,55	943,9	344 523,27	1258,63	459 399,95
Ritonavir capsules 100 mg	1	42,63	15 559,95	57	20 806,48	111,87	40 832,55
Saquinavir tablets 500 mg	2	18,81	13 731,30	83,7	61 102,56	111,95	81 723,50
Stavudine capsules 30 mg	2	9,01	6 577,30	34,66	25 299,96	49,41	36 069,30
Stavudine capsules 40 mg	2	38,89	28 389,70	49,31	35 997,44	62,67	45 749,10
Stavudine powder 260 ml	-	697,51	-	714,95	-	795	-
Tenofovir tablets 300 mg	1	227,94	83 198,10	239,69	87 486,78	414,68	151 358,20
Tenofovir/emtricitabine 300+200 mg	1	356,1	129 976,50	383,7	140 051,41	471,02	171 922,30
Tipranavir capsules 250 mg	2	379,09	276 735,70	379,16	276 787,20	388,61	283 685,30
Zidovudine capsules 100 mg	-	4,96	-	9,41	-	59,60	-
Zidovudine solution for infusion 20 ml	-	250,48	-	492,28	-	1013,18	-
Zidovudine solution 200 ml	-	765,82	-	952,53	-	1997,04	-
Zidovudine tablets 300 mg	2	6,57	4 796,10	14,70	10 731,52	19,77	14 432,10