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## **RESEARCH ARTICLE**

# **Antiretroviral Drugs: Analysis of Ukrainian pharmaceutical market and Intellectual Property**

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## **ABSTRACT:**

The aim of this study was to analyze Ukrainian pharmaceutical market and patent protection of antiretroviral drugs in Ukraine and abroad. It has established that in Ukraine most of medicines are foreign antiretroviral drugs under patent protection. Take into account the prevalence of HIV in Ukraine the introduction into clinical practice domestic generic antiretroviral drugs which included in clinical guidelines for the management of HIV and AIDS in adults and adolescents and have obvious economic benefits is prospect and economically reasonable. It has found out that the most negative risks of commercialization antiretroviral drugs which influence on their access for patients with HIV are next risks: high cost of foreign antiretroviral drugs; lack of original domestic antiretroviral drugs; sharp rise in antiretroviral drug prices as a result of switch to second- and third line therapy; patent protection and monopolization of antiretroviral drugs; exclusivity data of clinical trials. It has proved that the use of the flexible mechanisms of the TRIPS Agreement in Ukraine, namely involving the grant of compulsory licenses, the implementation of parallel imports, the tightening of the criteria for patentability is necessary for increase of antiretroviral drugs access for patients with HIV infection.

**KEYWORDS:** Antiretroviral drug, intellectual property, patent, exclusivity data, TRIPS.

## **INTRODUCTION:**

Human immunodeficiency virus (HIV) continues to be a major global public health issue, having claimed more than 35 million lives so far. In 2015, 1.1 (940 000–1.3 million) million people died from HIV-related causes globally. There were approximately 36.7 (34.0–39.8) million people living with HIV at the end of 2015 with 2.1 (1.8–2.4) million people becoming newly infected with HIV in 2015 globally [1].

Ukraine has experienced one of the worst HIV epidemics in Eastern Europe and Central Asia. Of the total country population of 45.5 million, there were estimated 234 thousand people living with HIV by 2014. Of these, a total of 137970 people were registered and alive by end of 2014 (i.e. approximately 58.5% of the estimated HIV burden) with 19273 new people registered during 2014 alone [2].

At the present time there are three groups of antiretroviral drugs that can affect on HIV enzymes—reverse transcriptase and protease, as well as drugs blocking viral entry into human cells [3-4].

Antiretroviral drugs of the first group are nucleoside reverse transcriptase inhibitors. They are “defective” analogues of the naturally occurring nucleosides needed to synthesize the viral DNA and they compete with the natural nucleosides for incorporation into the growing