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MEETING ABSTRACT

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Protection of intellectual property of drugs – Impact on the dispensing of antidiabetics in Serbia

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Background: Diabetes mellitus type 2 (T2DM) is one of the most common non-communicable diseases and metabolic disorders characterized by chronic hyperglycemia. Drug patenting is the process of obtaining exclusive rights to manufacture and sell a new drug on the market. After the patent expires, other pharmaceutical companies can begin manufacturing that drug. The aim of this study was to investigate whether the intellectual property protection of original drugs has an impact on the consumption of antidiabetic drugs in Serbia, and whether the consumption trend changed after the patent expiration and the emergence of a greater number of parallel antidiabetic drugs.

Methods: The data for our study were taken from publications of the Agency for Medicines and Medical Devices of Serbia (ALIMS) for a period of 15 years (2006–2020). Data on the number of registered antidiabetic drugs and their generics were taken from the “Drugs in circulation” handbook on drugs and their use, which is published every year.

Results: Looking at the total consumption of all antidiabetic drugs for each year of the observed period, we can see that the lowest number of drugs from this group was consumed in 2010 (5,930,496 packages), while the highest consumption was recorded in 2019 when a total of 11,349,247 packages for the treatment of T2DM were consumed. In the observed fifteen-year period, metformin was the most-used antidiabetic drug. The total annual expenditure on antidiabetic drugs shows a rising trend, so that in 2020, over 2 billion Serbian dinar (more than 17 million €) more was spent compared to 2006.

Discussion: After the patent expiration and the emergence of a greater number of generic drugs, the consumption of some antidiabetic drugs has changed in Serbia. A greater number of generics to an antidiabetic drug increases its availability and consumption.

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