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11. *Костенко С. Б., Ньорба-Бобиков М. М.* 72
АНАЛИЗ АНОМАЛИЙ ФОРМИРОВАНИЯ ТРЕТЬИХ МОЛЯРОВ
В ЗАВИСИМОСТИ ОТ ВОЗРАСТНЫХ ФАКТОРОВ
12. *Процюк В. В., Васильчишин Я. М., Васюк В. Л.* 75
ВИКОРИСТАННЯ АЛОТРАНСПЛАНТАТИВ ІЗ КІСТКОВОГО
БАНКУ ДЛЯ ЗАМІЩЕННЯ КІСТКОВИХ ДЕФЕКТІВ ПРИ
РЕВІЗІЇ ШТУЧНОГО КУЛЬШОВОГО СУГЛОБА
13. *Рябуха М. Ю., Волкова Ю. В., Лантухова Н. Д.* 88
ВПЛИВ ЗБАЛАНСОВАНИХ ТА НЕЗБАЛАНСОВАНИХ
РОЗЧИНІВ ІНФУЗІЙНОЇ ТЕРАПІЇ НА ПОКАЗНИКИ
ГЕМОДИНАМІКИ
14. *Соколов В. Н., Рожковская Г. М., Цвиговский В. М., Дорофеева Т. К., Ковалева А. А., Соколов Д. В.* 90
ЛУЧЕВАЯ ДИАГНОСТИКА ПОРАЖЕНИЙ НАДПОЧЕЧНИКОВ
15. *Фера М. О., Криванич В. М., Фера О. В., Криванич А. В.* 94
ОСОБЛИВОСТІ ФОРМУВАННЯ ЗАХВОРЮВАНOSTІ
ГІНГІВІТОМ НАСЕЛЕННЯ МІСТА УЖГОРОД ТА
УЖГОРОДСЬКОГО РАЙОНУ ВІКОМ 45-60 РОКІВ ПІД
ВПЛИВОМ ФАКТОРІВ ДОВКІЛЛЯ

PHARMACEUTICAL SCIENCES

16. *Shmatenko O., Solomenniy A., Pidlisnyy O.* 101
BASIC DIRECTIONS OF DEVELOPMENT OF THE
PHARMACEUTICAL COMPOSITION FOR TREATMENT OF THE
RAS
- ✓ 17. *Voskoboinikova H., Dovzhuk V., Kononova L., Rogov E.* 104
PHARMACOECONOMIC, REGULATORY BASICS AND
ANALYSIS OF DEVELOPMENT OF THE PHARMACEUTICAL
MARKET SECTOR IN GERMANY
18. *Альхуссейн В. В., Гузенко Н. В.* 109
РОЗРОБКА СПРЕЮ НА ОСНОВІ ЛІПОФІЛЬНОГО ЕКСТРАКТУ
ІЗ КОРИ ТОПОЛІ ТРЕМТЯЧОЇ
19. *Лаба І. С., Азаренко Ю. М.* 115
ВИВЧЕННЯ СЕГМЕНТУ АНТИГЕМОРАГІЧНИХ
СТОМАТОЛОГІЧНИХ ЗАСОБІВ, ЗАРЕЄСТРОВАНІХ НА
РИНКУ УКРАЇНИ

CHEMICAL SCIENCES

20. *Krikunova V. Yu., Omelyan O. M., Sakhno T. V., Shyian N. I., Saenko O. V.* 118
SYNCHRONOUS LUMINESCENT SPECTROSCOPY METHOD IN
DETERMINING POLYCYCLIC AROMATIC HYDROCARBONS IN
TECHNOGENEOUS SOIL

UDC: 378:615: 658.8

**PHARMACOECONOMIC, REGULATORY BASICS
AND ANALYSIS OF DEVELOPMENT OF THE PHARMACEUTICAL
MARKET SECTOR IN GERMANY**

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Health insurance is compulsory in Germany. The vast majority of the German population (90%) receives coverage from state health insurance (SHI). The other 10% is covered by private insurance or special schemes. The basket of goods and services covered by SHI is determined at the state level by law, in terms of general principles, and by the Federal Joint Committee (Gemeinsamer Bundesausschuss - G-BA) through decisions on individual goods or services to be removed or included. in the cart). Private health insurers typically cover a more or less similar basket, although they are allowed to increase or limit benefits.

Germany's Fifth Social Code Book Used for Legal Basis of German State Insurance (Sozialgesetzbuch (SGB) Fünftes Buch (V) the fifth book.

Basket of reimbursed pharmaceuticals is defined by the legislative withdrawal of several categories of goods, including OTC drugs, treatment of minor ailments, and lifestyle drugs. Patients are usually required to pay for pharmaceutical costs with

a 10% coinsurance rate (minimum 5 euros and maximum 10 euros' prescription). When goods are included in reference price clusters, subject to a unique maximum amount of compensation, patients must pay any difference between the market price and the maximum amount of compensation.

Pricing and reimbursement policies are based on the following principles: prescription drugs are reimbursed by health insurance unless they are included in the G-BA negative list); manufacturers are free to set their prices; medicines may be grouped into therapies considered to be therapeutically equivalent and subject to maximum compensation. Since 2007, health insurance funds have been using tenders and contracts to obtain lower prices, mainly but not only generic drugs. Prices for innovative drugs are mostly consistent [2–5].

The pharmaceutical market reform law (Arzneimittel marktneuordnungsgesetz (AMNOG)), which came into force in January 2011, adheres to the principle of free market entry pricing, but imposes a systematic and formal evaluation of the "additional therapeutic effect" of new drug price discussions to the therapeutic value of the medicinal substance within twelve months after market entry [7].

As Germany is a European Union country, 41 trade regional agreements on a free trade area have been concluded. This contributes to the well-established logistics and constant import and export of pharmaceutical products, which is further reflected in increased revenue and competitiveness among other countries.

Global demand for high-quality medicines is steadily increasing as the world population grows, health standards are improved, and economies in the least developed countries are booming. Global drug spending reached \$ 1.2 trillion in 2018, and by 2023 it is estimated to exceed \$ 1.5 trillion [1].

This sector is largely driven by innovation, which is best evidenced by the large number of recently approved medicinal products in Europe. Since 2016, as of June 2019, more than 300 drug applications have been authorized by the European Medicines Agency. As of February 2019, over 100 000 medicines have been registered in Germany.

The pharmaceutical sector in Germany provides a wide range of high quality products and services to meet growing international demand. In 2018, world exports of pharmaceutical products amounted to € 497.543 billion, including Germany – € 81.789 billion, which is the leading position among other countries and accounts for 16.3% of world exports of these products.

Global pharmaceutical imports amount to € 526.406 billion, among which Germany ranks second – € 48.707 billion, second only to the United States and accounting for 9% of total imports.

In the period 2014-2019, export figures for German pharmaceutical companies recorded an annual increase of 4%. German pharmaceutical products are especially in demand in the US and European countries. However, emerging markets, such as Asia and Latin America, are also registering increased demand.

The German pharmaceutical sector is dominated by small and medium-sized enterprises. Major pharmaceutical companies (including Bayer, BASF, Boehringer Ingelheim and Merck) and numerous small and medium-sized enterprises enjoy a good international reputation in all relevant pharmaceutical markets. This varies from prescription to over-the-counter (OTC) drugs, from original drugs to generics, from small molecules to biopharmaceuticals. The most influential European pharmaceutical companies in terms of sales are three German companies – Bayer AG, Boehringer Ingelheim, Merck KGaA.

Germany's retail market recorded revenue growth of 6% in 2019. About € 3.2 billion of packaging (+ 1%) is worth € 38 billion (at the sale price of a pharmaceutical company, including vaccines and test diagnostics). The largest increase in income was observed in May, July, September and December (from + 8% to + 12%). In terms of sales, the market increased markedly in April, May, July and September, with growth rates ranging from + 3% to + 6%.

In 2019, the prescription-only market increased 7% in terms of revenue and 1% in sales. This corresponds to a market volume of € 33 billion or 752 million packages. The retail market for prescription drugs achieved the highest growth in

sales in May, July and September (+ 11% to + 13%). In December, sales of drugs also increased significantly. In June, a decrease of 2% was recorded.

In 2019, 867 million over-the-counter (OTC) packs were released from pharmacies and mail orders, representing year-over-year levels. Revenue increased by about 2% to € 5.2 billion.

One third of total turnover is in the top ten best groups of medicines (€ 12.7 billion), with sales increasing by a total of 10% in 2019. In the top ten categories of high-income drugs in the retail market, antiviral vaccines increased the most (by 37%). Other categories with dual growth include anti-cancer package (protein kinase inhibitors + 17%; monoclonal antibodies + 23%; cytostatic hormone antagonists + 17%; direct factor Xa inhibitors + 16%).

Overall, the German pharmaceutical market in 2019 led to a good 6% revenue growth, totaling € 38.2 billion. The lion's share belongs to prescription drugs (86%), with revenue increasing by 7%. Over-the-counter drugs have led to an increase of only 2%. New, patented drugs led to an increase of 17%. The volume of sales of drugs whose patent expired, decreased by 14%. Revenue from generics and biosimilars sales increased by 11%. According to the results of the analysis, it is found that the retail segment of the German pharmaceutical market is constantly growing, due to the introduction of new biosimilar to the original products with high sales.

REFERENCE:

1. Essential Medicines and Health Product Information Portal. WHO/ URL: <https://apps.who.int/medicinedocs/en/m/abstract/Js18676en/>
2. Medicinal Products Act (Arzneimittelgesetz – AMG) URL: http://www.gesetze-im-internet.de/englisch_amg/index.html
3. Medical products / European commission. URL: https://ec.europa.eu/health/documents/eudralex_en
4. Pharmnet Bound.Arzneimittel-Informationssystem. URL: <https://www.pharmnet-bund.de/dynamic/de/arzneimittel-informationssystem/index.html>

5. European medicines agency (EMA). URL: https://www.ema.europa.eu/en/medicines?search_api_views_fulltext
6. Gesetz über den Verkehr mit Arzneimitteln (Arzneimittelgesetz - AMG) Inhaltsübersicht. URL: http://www.gesetze-im-internet.de/amg_1976/_38.html
7. Arzneimittelmarktneuordnungsgesetz (AMNOG) URL: <https://www.bundesgesundheitsministerium.de/service/begriffe-von-a-z/a/arzneimittelmarktneuordnungsgesetz-amnog.html>