Marketing research of the national antiarrhythmic drugs market

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A – research concept and design; B – collection and/or assembly of data; C – data analysis and interpretation; D – writing the article; E – critical revision of the article; F – final approval of the article

The purpose – marketing research of the national antiarrhythmic drugs market.

Materials and methods. The State Register of Medicinal Products of Ukraine and Compendium-2019 were used as the research materials. Methods of system, marketing, statistical and content analysis.

Results. The analysis of the range of antiarrhythmic drugs was conducted according to such criteria as composition, release form and originality. It showed the heterogeneity of this segment of Ukrainian pharmaceutical market. Thus, solid and liquid dosage forms, both original and generic could be found in the market. The analysis of the company structure of the studied market segment allowed to establish, that domestic pharmaceutical companies supply only 48 % of drugs (13 dosage forms) for this market segment, while foreign pharmaceutical companies prevail (52 %). In this connection, the development of new medicinal products of the specified activity and the mastering of their production on the territory of Ukraine is relevant. The calculated tension coefficient showed that the highest competition is observed among manufacturers of analog preparations containing amiodarone hydrochloride (Kvi = 0.93). Also, the specific weight of each of the manufacturers of antiarrhythmic drugs was calculated and it was established, that (LLC) Pharmaceutical Company Zdorovye has the largest share (dij = 0.1481).

Conclusions. Conducted marketing studies of the range of the national antiarrhythmic drugs market showed the heterogeneity of this segment in terms of dosage forms and originality of drugs. The analysis of the company structure has established a high level of competition among the leading foreign pharmaceutical companies, whose share is 52 %. The coefficient of tension and the share of the segment, of each manufacturers of antiarrhythmic drugs, was calculated.

Marketingovе дослідження національного ринку антиаритмічних лікарських засобів

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Мета роботи – маркетингове дослідження національного ринку антиаритмічних лікарських засобів.

Матеріали та методи. Матеріалами дослідження стали Державний реєстр лікарських засобів України, Компендіум-2019. Виконали системний, маркетинговий, статистичний і контент-аналіз.

Результати. Виконали аналіз асортименту антиаритмічних лікарських засобів за складом, формою випуску та оригінальністю, який показав гетерогеність цього сегмента фармацевтичного ринку України: в наявності є тверді та рідкі лікарські форми, оригінальні й генерики. Аналіз фірмової структури сегмента ринку, який виявив, дає змогу встановити, що вітчизняні фармацевтичні фірми постачають лише 48 % лікарських препаратів (13 лікарських форм), витримуючи при цьому високий рівень конкуренції з провідними за кордоном фармацевтичними компаніями (52 %). У зв'язку з цим актуально є розроблення нових лікарських препаратів названої дії та освоєння їх виробництва на території України. Розрахований коефіцієнт напруженості показав, що найвищу конкуренцію спостерігали серед виробників препаратів-аналогів, котрі містять аміодарон гідрохлорид (Kvi = 0,93). Також розрахували питому вагу вагу, яку займає кожна фірма-виробник антиаритмічних препаратів. Встановили, що найбільша питома вага у ТОВ «Фармацевтична компанія «Здоров’я» (dij = 0,1481).

Висновки. Маркетингові дослідження асортименту національного ринку антиаритмічних лікарських засобів показали гетерогеність цього сегмента за лікарськими формами та оригінальністю. Аналіз фірмової структури встановив високий рівень конкуренції серед провідних за кордоном фармацевтичних компаній, питома вага яких становить 52 %. Розрахували коефіцієнт напруженості та частку сегмента, яку займає кожна з фірм-виробників антиаритмічних препаратів.

Ключові слова: лікарські засоби, фармацевтичний ринок, фірми-виробники, конкуренція.

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Key words: pharmaceutical preparations, pharmaceutical market, drug industry, competition.

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Маркетинговое исследование национального рынка антиаритмических лекарственных средств

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Цель работы – маркетинговое исследование национального рынка антиаритмических лекарственных средств.

Материалы и методы. Материалы исследования – Государственный реестр лекарственных средств Украины, Компендиум-2019. Применили методы системного, маркетингового, статистического и контент-анализа.

Результаты. Проведен анализ ассортимента антиаритмических лекарственных средств по составу, форме выпуска и оригинальности, который показал гетерогенность указанного сегмента фармацевтического рынка Украины: в наличии есть твердые и жидкые лекарственные формы, оригинальные и генерики. Анализ фирменной структуры изучаемого сегмента позволил установить, что отечественные фармацевтические фирмы поставляют лишь 48 % лекарственных препаратов (13 лекарственных форм), выдерживая при этом высокий уровень конкуренции с ведущими зарубежными фармацевтическими компаниями (52 %).

Выводы. Маркетинговые исследования ассортимента национального рынка антиаритмических лекарственных средств показали гетерогенность указанного сегмента по лекарственным формам и оригинальности лекарственных препаратов. Анализ фирменной структуры установил высокий уровень конкуренции среди ведущих зарубежных фармацевтических компаний, удельный вес которых составляет 52 %. Рассчитан коэффициент напряжённости и часть сегмента, которую занимает каждая из фирм-производителей антиаритмических препаратов.

Ключевые слова: лекарственные средства, фармацевтический рынок, фармацевтическая промышленность, конкуренция.

Актуальные вопросы фармацевтической и медицинской науки и практики. – 2019. – Т. 12, № 2(30). – С. 186–189

Marcythestandstherorhythmoffhathoectionsthataredifferentinnatureandorigin.Thatcanleadtoanumberofseriousscalationsandevendeath.Applicationofantiarrhythmicdrugsincinicalpracticeispredeterminedbynecessitytopreventnewandtodeclineoriginalunfavorablearrhythmiasandarrhythmiasthatarebadlycarriedbypatients[3,5].

The purpose
Marketing research of the national antiarrhythmic drugs market.

Materials and methods
The research materials are the State Register of Medicinal Products of Ukraine and Compendium-2019. Also methods of system, marketing, statistical and content analysis [1,2].

Results
On the territory of Ukraine, 27 drug names of the specified action are registered. It has been established, that this market segment consists of 13 (48 %) original drugs and 14 (52 %) generics, which are monodrugs.

The assortment of medicines of the studied group presents various dosage forms. Solid dosage forms have the advantage – 70 %: tablets (67 % of the total amount of medicines) and capsules (3 %). Liquid dosage forms are represented by injectable solutions and make up 30 % of the national market for antiarrhythmic drugs (Fig. 1).

The analysis of the firm structure of the studied market segment showed, that only 48 % of the drugs of the studied group are produced in Ukraine and 52 % are produced abroad (from 7 countries from 9 pharmaceutical companies). The share of the manufacturers of the antiarrhythmic drugs are shown in Table 1.

From Table 1 it can be seen, that the leader among the national drug manufacturers of the mentioned activity, is LLC Pharmaceutical Company Zdorovye. This company has 30 % of these medicines for the treatment of arrhythmias. The lea der among foreign manufacturers is Pro.Med.CS Prague as, Czech Republic (11 %). It should be noted, that Germany is on the second place among importing countries. In the studied segment LLC Pharmaceutical Company Zdorovye has the largest share (dij = 0.1481).

At the next stage, the competitiveness of companies providing the studied group of drugs to the national pharmaceutical market was analyzed. To determine the level of competition between manufacturers of drugs-analogues, the coefficient of tension Kvı was studied [4].

Arrhythmia is a disorder of cardiac activity, deviations in the rhythm of heart contractions that are different in nature and origin. That can lead to a number of serious complications and even death. Application of antiarrhythmic drugs in clinical practice is predefined by necessity to prevent new and to decline original unfavorable arrhythmias and arrhythmias that are badly carried by patients [3,5].

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![Fig. 1. Diagram of the specific weight of dosage forms of the studied group.](image-url)
At the same time, the studied drugs were grouped by active substances into 8 groups according to the classification of ATC (Table 2).

After analyzing the data in the table, we can conclude that the greatest competition was observed among companies that produce analogues of amiodarone hydrochloride ($K_{vi} = 0.93$). The LLC Pharmaceutical Company Zdorovye takes part in competition among the national pharmaceutical companies (4 dosage forms). Also, there is significantly high competition among companies that produce analogues of propafenone hydrochloride ($K_{vi} = 0.75$). The manufacturers of analogues of flecainide acetate ($K_{vi} = 0.66$) are inferior to them in competition.

A number of drugs: procainamide hydrochloride, lidocaine hydrochloride, mexiletine hydrochloride, dronedarone hydrochloride, etatsizine have no analogues in the pharmaceutical market of Ukraine, which indicates a lack of competition ($K_{vi} = 0$).

### Conclusions

1. Conducted marketing studies of the national market range of antiarrhythmic drugs showed the heterogeneity of this segment among the dosage forms.
2. Analysis of the company structure has established a high level of competition among the leading foreign pharmaceutical companies, the share of which is 52%.
3. The coefficient of tension among manufacturers of drugs-analogues and the share of the segment, which occupied each of the manufacturers of antiarrhythmic drugs was calculated.

### Conflicts of interest: authors have no conflict of interest to declare.

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