

# ANALYSIS OF MARKET SATURATION WITH VETERINARY CHEMICAL-PHARMACEUTICAL DRUGS FOR DOMESTIC ANIMALS AND POULTRY IN UKRAINE

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## ***Abstract***

Currently we expect the consumption reduce of veterinary drugs on the domestic market in connection with the decrease of domestic animals' number in Ukraine. This applies especially to feed antibiotics, which production will be reduced in the short term due to their low profitability. In the period from 2012 to 2014, the consumption of veterinary products for domestic animals does not increase. The situation with partial substitution of domestic products by imports is quite possible, according to experts' opinion.

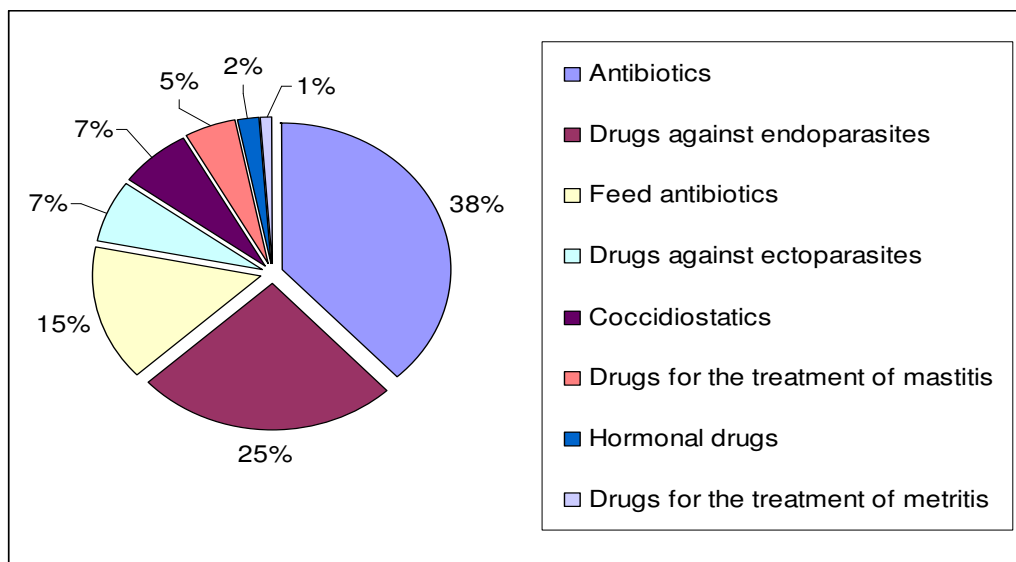
**Keywords:** veterinary chemical-pharmaceutical drugs, market for agricultural products, groups of drugs for animals, import and export of pharmaceutical products.

Currently we expect the consumption reduce of veterinary drugs on the domestic market in connection with the decrease of domestic animals' number in Ukraine. This applies especially to feed antibiotics, which production will be reduced in the short term due to their low profitability.

The first place in production of veterinary drugs of studied group is the Enterprise LLC Brovapharma, followed by LLC Vetsintez, OJSC Biovetpharm, JSC Biopharm. About a half of veterinary chemical-pharmaceutical drugs are antibiotics, they accounted 38% in 2012. Among antibiotics of Ukrainian production drugs based on tylosin (about 20% of the total production of

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antibiotics) and oxytetracycline (about 15%) occupy main part of the market (Fig. 1).



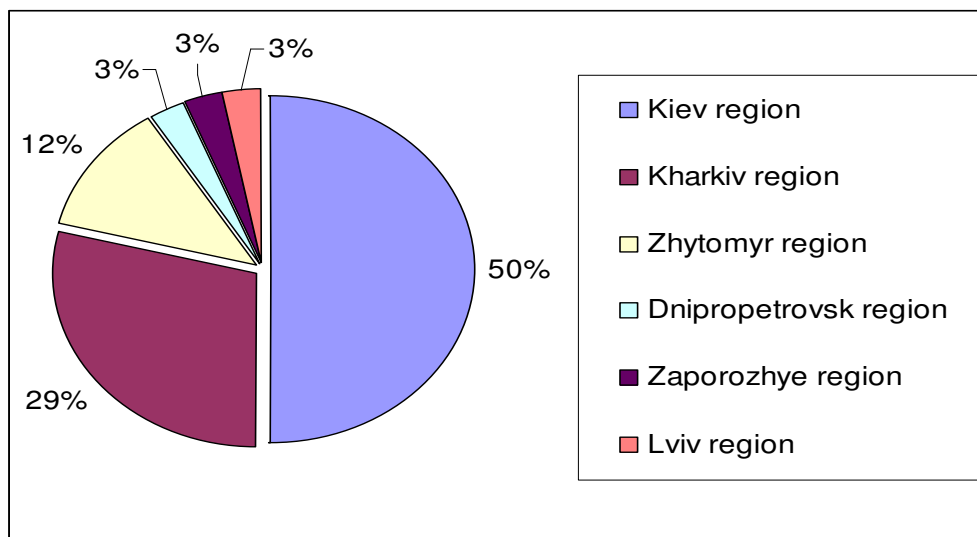
*Fig. 1. The structure of veterinary drugs' production in Ukraine, 2012, %*

Drugs against endoparasites occupy the second place among domestic products in Ukraine. Anthelmintics occupied 25% in 2010. Among anthelmintics of Ukrainian producers drugs based on albendazole and ivermectin occupy main part of the market.

Feed antibiotics take third place in terms of production, in 2009-2011 it occupied 22-23% of the market, then their production began to decrease and in 2012 its amount was 15% of total drugs' production of the studied group. This group is presented by drugs based on chlortetracycline.

Next stage is occupied by drugs against ectoparasites (7-8%), coccidiostatics (5-7%), drugs for treating mastitis (5-6%) and hormones (2%). Drugs for treating mastitis are produced in the smallest amount, only 1% of the total production of veterinary chemical-pharmaceutical drugs for domestic animals.

Almost a half of veterinary drugs' production of Ukraine is concentrated in Kiev region. Manufacturers that represent the region are LLC Brovapharma, Ukrzoovetpromsnab, Ukrvetpromsnab. All kinds of drugs are produced here, but the greatest amount is occupied by drugs against endoparasites (41%) and antibiotics (26-27%) (Fig. 2).



*Fig. 2. The structure of veterinary drugs' production for studied groups based on geography, 2012, %*

Next 20-30% of veterinary drug production is concentrated in Kharkiv region. Many enterprises such as LLC Biopharm, Kharkiv Biofabrika, LLC Product, LLC Vetsintez are located there. There are 30-40% of the total veterinary drug production of studied group accounts for antibiotics in this region. The second largest segment is coccidiostatics (6-9%).

The OJSC Biovetpharm is located in Zhytomyr region and produces feed antibiotics. However, in recent years there has been a decrease in production of these drugs at the enterprise, so from 2009 to 2011, it decreased on more than 30%. Due to low profitability OJSC Biovetfarm intends to stop further production of feed antibiotics.

The share of other regions in total production is low (about 12%). For a number of regions of Ukraine production of veterinary medicines is absent.

Dominant position among 52 importers belongs to 14 producers in 2013, their share in the total value of imports is 80%. The three leaders of the mentioned period are: KRKA (22,8%), Invesa Industrial Veterinaria SA (12,3%), BIOVET (7,8%) (Fig. 3).

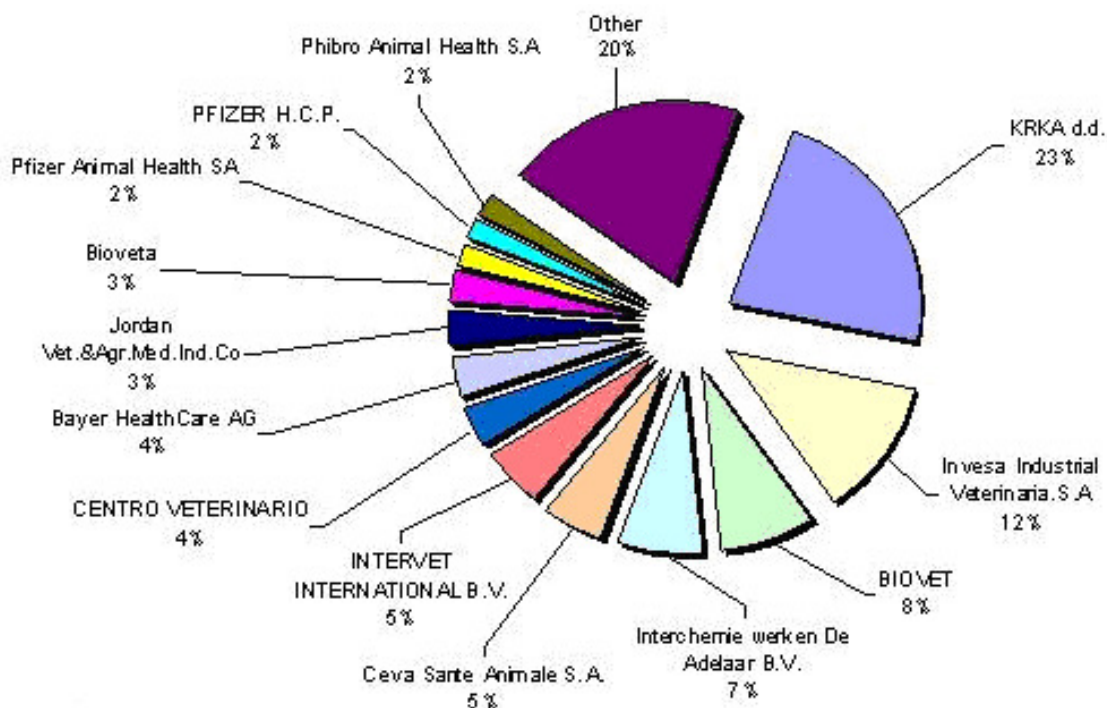


Fig. 3 the structure of imports of veterinary drugs' manufacturing companies, in 2012,%

On the Ukrainian market of imported veterinary drugs, which are used to treat domestic animals and poultry, the following groups of drugs are represented: antibiotics, feed antibiotics, drugs against ectoparasites – insecto-acaricidal drugs; drugs against endoparasites - worming agents; coccidiostatics; drugs for the treatment of mastitis, drugs for the treatment of metritis, hormonal drugs for the sexual sphere regulation.

About half of the total imports of veterinary drugs for farm animals is occupied by antibiotics (2009 - 49%, 2010 - 53.7%, 2012 - 58.8%). The second largest segment is occupied by coccidiostatics. In the 2011 its amount was about 18.59%. In total volume of coccidiostatics' imports the major role is played by drugs based on salinomycin, toltrazuril, semduramicin (Table 1).

The largest volume of imports of veterinary drugs for domestic animals is occupied by Kyiv region, in 2011 - 52.7%. Companies located in Kiev should be separated among others, as its share is 70-80% of imports of Kiev region and 35-40% of imports of whole country.

Table 1

*The part of most popular pharmacotherapeutic groups of veterinary drugs in 2012, %*

Group	Part %
Antibiotics	58.83
Drugs for the treatment of mastitis	3.34
Drugs for the treatment of metritis	3.66
Hormonal drugs	0.97
Coccidiostatics	18.59
Feed antibiotics	2.34
Drugs against ectoparasites	3.53
Drugs against endoparasites	8.73
Total	100.00

The significant import volume also falls on the Dnepropetrovsk region, it is about 25-35% of the imports of the country. It is followed by Zaporozhye, Kharkiv, Lviv, Donetsk region. Quite insignificant share falls on Odessa and

Vinnitsa regions, and for other regions (Volyn, Zhitomir, Lugansk, Poltava, etc.) imports of veterinary drugs for domestic animals and poultry are not implemented.

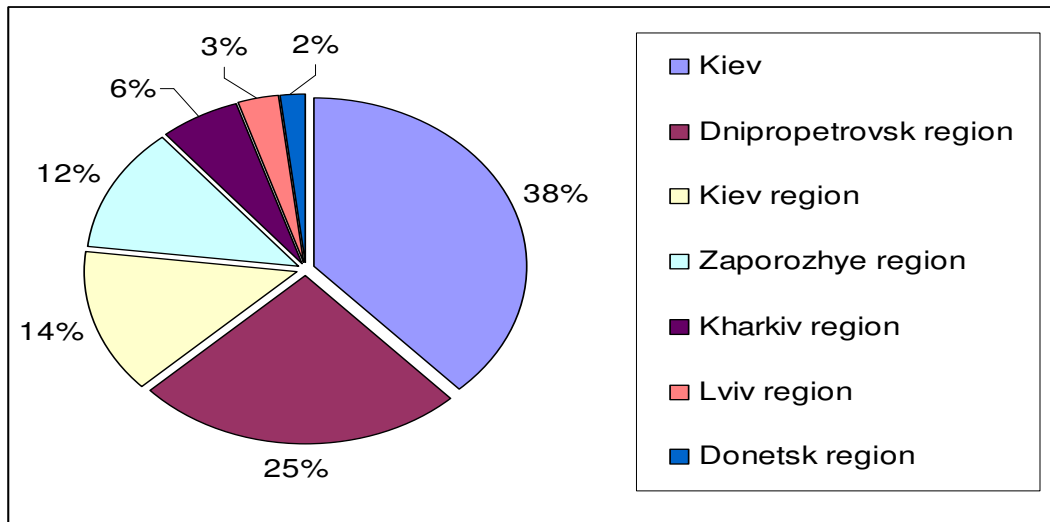


Fig. 4 The structure of veterinary drugs' imports on the geography of deliveries in 2012, %

Three leaders were traditionally headed by OJSC Biovetfarm (35.8%) in the 2012. The share of LLC Brovafarma in 2012 occupies 23.2% of exports. It is followed by LLC Vetsintez, which occupies 19.5% of total exports of veterinary products for domestic animals.

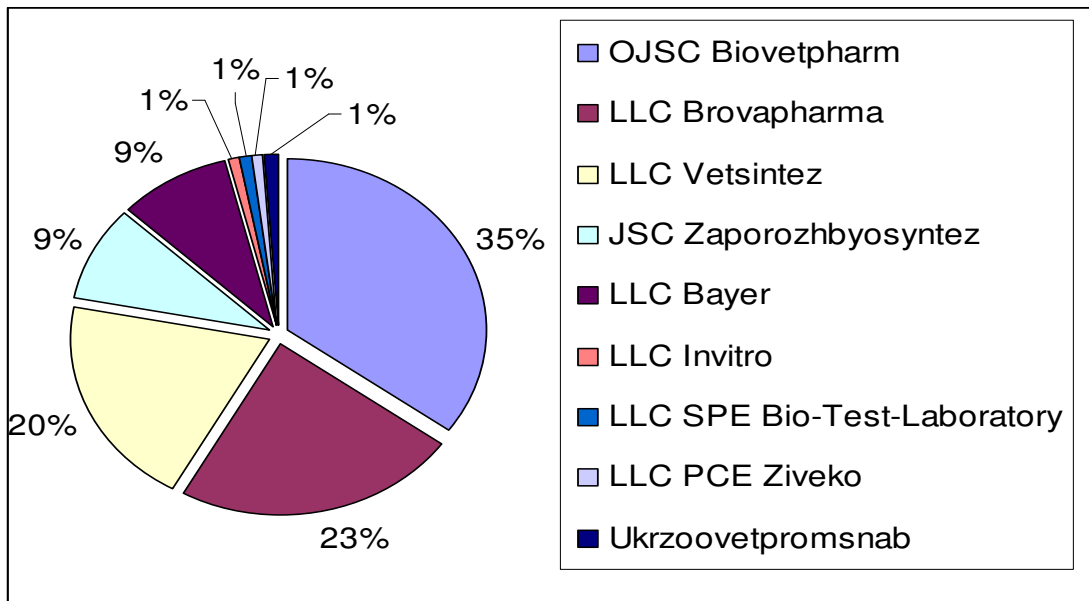


Fig. 5 The structure of veterinary drugs' exports by distributors, in 2012, %

In the 2012 three main directions of export were: Belarus (42.1%), Azerbaijan (26.4%), Uzbekistan (5.8%). Export of veterinary drugs to Russia in 2012 was only 5.8%.

If we talk about main customers of these products in Belarus, these are still zoovetsnabs - Lida zoovetsnab (11.8%) and Gomel zoovetsnab (8%).

Main customers in Azerbaijan were the Public Association of Veterinary Supply (16.3% of total exports) and Riad-Farm LTD (9%) in 2012.

The largest customer in Uzbekistan was PE "Profilaktika", which occupies 2.4% of total exports of veterinary products for the period from 2010 to 2011.

The largest share in the structure of veterinary drugs' exports for domestic animals is occupied by feed antibiotics. In 2011 the share of this group of drugs was more than 80%, 2012 - 68.5%, 2013 - 53.8% of total exports (Table 2).

Table 2

*The share of veterinary drugs in the structure of exports, 2013*

Group	Share,%, 2013
Feed antibiotics	53.8
Drugs against endoparasites	24.5
Coccidiostatics	9.8
Antibiotics	7.8
Drugs against ectoparasites	2.4
Hormonal drugs	1.1
Drugs for the treatment of mastitis	0.4
Drugs for the treatment of metritis	0.3
Total	100.0

If we consider the structure of feed antibiotics' exports by the used active substance, the largest share here takes chlortetracycline, it is about 90% of all exported feed antibiotics. Among the brands with such drugs' content the leading position is occupied by Biovit HB-80 of Biovetfarm LLC (2009 - 87%, 201 - 67% of the total exports of feed antibiotics).

On the second place there is a group of drugs against endoparasites. Drugs based on closantel play the main role in total exports of drugs against endoparasites. In 2009 the share of exported drugs based on closantel was 37.1%, 2010 - 67.5%, 2011 - 70.5%. This group of drugs was introduced by Brontel trademark (LLC Brovafarma).

A significant proportion of anthelmintic drug exports is occupied by drugs based on ivermectin - 20-25%. The leading brand of drugs based on ivermectin is Brovermektin of Brovafarma LLC production.

The forecast and outlook for veterinary drugs in Ukraine.

Currently, in connection with the downsizing of domestic animals' number in Ukraine, the consumption's reduce of veterinary drugs is also expected on the domestic market. It especially concerns feed antibiotics, production of which in the short term plan is going to stop because of their low profitability [1-6].

After Ukraine's accession to the World Trade Organization (WTO), national manufacturers of veterinary drugs have a chance to adapt successfully to new conditions on the market. However, this concerns mainly large companies that plan to increase production due to increase of medicines for export supply. For smaller companies the introduction of international standards of product's quality will require too bigger outlay.

**Summary.** In addition to the real risks of Ukraine's accession to the WTO for small and medium businesses the exacerbation of price competition in the



domestic market due to the import tariffs' reduction, as well as the increase of imported products in the domestic market appear. An increase in competition will be observed as a result of this situation. This fully concerns the manufacturers of veterinary drugs.

Thus, under the existing conditions in the period from 2012 to 2014, the consumption of veterinary products for domestic animals does not increase. The situation with partial substitution of domestic products by imports is quite possible, according to experts' opinion.

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