spore-forming bacteria of the genus Bacillus were dominated among the detected microflora. Bacteria of Enterobacteriaceae, P. aeruginosa, and S. aureus families were not identified.

Conclusion. Even though all cosmetic creams after opening packages were stored at room temperature, those samples that users took using applicators, had a lower level of microbial contamination. It demonstrates the importance of compliance with hygiene rules when using cosmetic creams.

CREATING VACCINES FOR THE PREVENTION OF HIV

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Introduction. There are approximately 37 million people living with HIV/AIDS in the world. There are approximately 1.8 million new cases of infection every year, including 21.7 million receiving antiretroviral therapy. But the most effective measure, both economically and socially, is vaccination.

Aim. Monitor the dynamics of vaccines for HIV / AIDS prevention.

Materials and methods. Analysis of scientific articles by researched topic.

Results and discussion. Since the 1980s, scientists have been actively working on the development of a vaccine for HIV, but it still does not exist. The HIV vaccine has become a real challenge for scientists because it is quite a challenge. The virus is highly variable, it forms many strains so you cannot find a stable structure. In this regard, a large genetic breakthrough is required to create the vaccine.The results of the first major clinical trial of HIV vaccine were published in 2003. The AIDSVax vaccine contained gp120 glycoproteins, but its efficacy has been demonstrated in clinical studies. The next step was to develop a vector vaccine where the adenovirus served as a "vector". This vaccine was aimed at stimulating cellular immunity. However, this study was discontinued in 2007. In 2009, RV144 studies were conducted using two doses of the vaccine - the "primary" that contained three HIV genes: env, gag, and pol - to stimulate cellular immunity and "additional" - which contained the gp120 protein - aimed at producing neutralizing antibodies. The use of this approach in the study showed a 31% reduction in the risk of infection. Scientists of many countries are working on the creation of the vaccine, and different approaches are being considered. For example, work is underway on the so-called mosaic vaccine, which is made up of proteins from different strains of HIV. As a result of the study, the vaccine elicited an adequate response from the immune system in a large proportion of scientists. Another example is a combination approach (vaccine cocktail) that has led to activation of the immune system and inhibition of virus replication.

Conclusions. Creating a vaccine for HIV prevention is a lengthy and time – consuming, multi-step process that addresses different approaches/ Today, the effectiveness of such drugs is approximately 50%, and for infectious diseases it is very low. The most promising models are at least 70% efficient.