COMPARATIVE ESTIMATION OF DIDANOSINE QUANTIFICATION IN CAPSULES BY UV-SPECTROPHOTOMETRY

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Introduction. For the present day, the rapid development of pharmaceutical science leads to the creation of new, in high degree effective pharmacologically and biologically substances on the base of which new medicines are developed that allow achieving the maximum therapeutic effect with minimum side response.

The introduction of such a products into production requires the development of methods of analytical assessment, which allows confirmation the quality of products have made.

From this point of view are very important and interesting researches about improvement of the existed methods of analysis and collaboration of the new ones for such a group of medicinal compounds as antiretroviral drugs. This group is of very high importance because of its specifity of application, which is in treatment of viral infection, including infections caused by such a viruses as virus of hepatite C and human immunodeficiency virus.

One of the modern antiviral drugs is didanosine, which is widely used nowadays in treatment of viral infections either as a separate medicine or in the various combinations with some other antiretrovirals.

For our investigation was chosen didanosine in the composition of capsules.

Materials and methods. For quantification of didanosine in the composition of capsules was applied method of UV-spectrophotometry as simple one and not-complicated in evaluation.

Assay was carried out by two techniques: by the method of standard and using specific absorbance. On the basis of the data have obtained the results of quantification by the method of standards and by the specific absorbance of didanosine in the composition of capsules have been compared by their reproducibility.

Results and discussion. As it has been stated, a relative error of separate determination for assaying didanosine contents in capsules for both techniques by the method of standards and using specific absorbance is ±3%, which does not exceed demands of the State Pharmacopoeia of Ukraine (SPhU) to the quantitative content.

Conclusions. As it has been stated in the result of our researches, the both techniques for quantification of didanosine in the composition of capsules by UV-spectrophotometry methods corresponds to the demands of SPhU; both techniques of quantification are of appropriate pharmacopoeial quality.