Aim. Carry out identification using chemical reactions and quantitative determination of the combined dosage form. Investigate stability during storage and develop quality standards for this dosage form.

Materials and Methods**.** The selection of methods of analysis was based on the results of experimental studies of test formulations, as well as studies of physical-chemical properties of their components, i.e. the active pharmaceutical ingredients and excipients. This covers screening, identification and assay of the active chemical components. Chemical analysis of the drug is done to assess the potency of chemical components with vegetable material in terms of its active principles. The chemical screening or tests may include color reaction test, which help to determine the identity of the drug substance and possible adulteration.

Results and discussions. Our study was based on physicochemical properties sodium hydrogen carbonate and sodium benzoate in combined dosage form, some published data, and preliminary results of stability in the course of time. The study included the selection of QC parameters, their valuation in the accordance with modern requirements for liquid dosage forms for oral administration, and development of QC methods.

Conclusions. Our studies resulted in the development of the optimal methods of QC of the combined dosage form that can be used in the development of a draft of normative documentation of this pharmaceutical composition. This draft documentation includes the following sections: description, identification, pH, microbiological purity, assay, packaging, labeling, storage, shelf life.

DEVELOPMENT OF THE METHODS TO CONTROL THE QUALITY OF NITROFURAL IN THE ALCOHOL SOLUTION

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Introduction. Today in Ukraine there is a reborn of the development of an extemporal medicines. The assortment of drugs of pharmaceutical manufacture is expanding, their composition and chemical analysis is improved. These dosage forms contain substances of various chemical groups, to separate, qualitative and quantitative determination of which requires fast, accessible and reliable methods of analysis. Therefore, intra-pharmacy control is one of the most important factors that determines the quality of drugs manufactured in a pharmacy.

One of the widely used medicinal substances is nitrofural. This synthetic antimicrobial agent of the nitrofuran derivative group violates the formation of acetyl-CoA from pyruvic acid, namely energy metabolism and synthetic processes in the microbial cell. Suppresses growth and reproduction of staphylococci, streptococci, dysentery and E. coli, paratyphoid sticks, gas gangrene pathogens and other gram-positive and gram-negative microorganisms. It is used in such medicinal forms as tablets, ears drops, tablets for preparation a solution for external use, a alcohol solution for external use.

Aim. The purpose of the work is to develop methods for the identification and quantitative determination of nitrofural in medical form "a solution of furacilin 0.066% alcohol".

Materials and methods. Photoelectrocolorimetry «CMC-II», weighing «AXIS» ANG 200 (Poland), reagent's that meet SPhU and measuring vessel class A.

Results and discussion. To identify nitrofural in consisting of a medical form suggested to use a sensitive reaction to a molecule of a nitro group – a reaction with a solution of sodium hydroxide. This reaction became the basis for the development of photocolorimetric method for quantitative determination of nitrofural in medical form. In addition, it is proposed in the solution to qualitatively and quantitatively determine ethanol. To identify the ethyl alcohol, the reaction with a solution of iodine in alkaline medium was used. Alcohol concentration was determined by refractometrically.

Conclusions. Thus, the developed reactions of identification and quantification determination allow the determination of both the active pharmaceutical ingredient of the medicinal product and the solvent.