

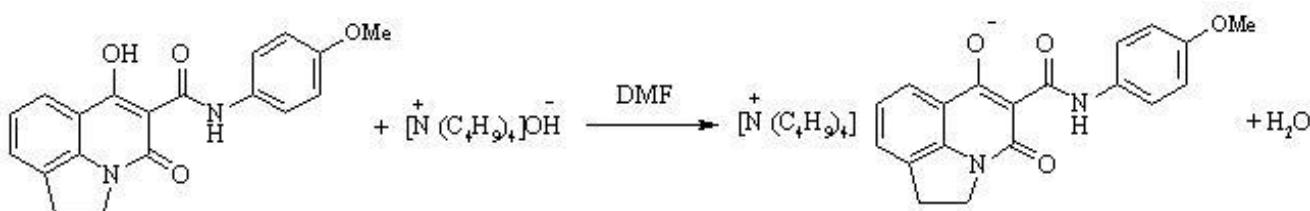
DEVELOPMENT OF THE NON-AQUEOUS ALKALIMETRIK METHOD OF THE QUANTIFICATION OF 6- HYDROXY-4-OXO- 1,2-DIHYDRO-4*H*-PYRROLO[3,2,1-*ij*]QUINOLINE- 5-CARBOXAMIDE

Sukharev O. D., Petrosyan H. A., Berezniakova N. L.
National University of Pharmacy, Kharkiv, Ukraine
natalibereznyakova@gmail.com

Introduction. The pharmacological properties of a series of amides of 6-hydroxy-4-oxo-1,2-di-hydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline-5-carboxylic acid, which have been studied previously, allow us not only to establish certain regularities of relationship between chemical structure and pharmacological activity, but also to find practically non-toxic compounds with a high diuretic effect. Among the obtained substances the highest diuretic activity 6-hydroxy-*N*-(4-methoxyphenyl)-4-oxo-1,2-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline-5-carboxamide has.

Aim. Therefore one of the important objectives of our study was to develop a method for the quantitative determination of the most active compound in accordance with existing modern requirements for the introduction of drugs into medical practice.

Materials and Methods. Based on the chemical properties of the obtained compound we have chosen the method of non-aqueous alkalimetric titration. Titration was carried out in a non-aqueous solvent medium of dimethylformamide (DMF), universal organic solvent.



Results and discussions. As a titrant solution, the tetrabutylammonium hydroxide in 2-propanol was used, the end point is determined potentiometrically. A standardization of titrant solution and assay is performed in the same conditions for exclusion of additional errors.

Conclusions. The results were subjected to quantitative determination of statistical processing. The sample can be called reliable if options included in it are not burdened blunder.