

## INVESTIGATIONS ABOUT SYNTHESIS AND ANALYSIS IN THE RANGE OF SUBSTANCES WITH POTENTIAL ANTI-INFLAMMATORY ACTIVITY

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**Introduction.** Despite the fact that the inflammation is a seemingly insignificant condition, it can lead to a number of rather significant complications, and in some cases to death. For a long time, people suffered from various inflammations – various traumatic injuries, gum infections, joint inflammations, common inflammations after domestic injuries and the like.

At the same time, doctors of all times tried to find an opportunity to improve the patient's condition, eliminate all the causes and symptoms of inflammation, especially with regard to children. In modern theoretical and clinical medicine, the problem of inflammation remains one of the main ones, and despite the abundance of modern drugs, it still requires expanding the assortment and minimizing side effects along with strengthening the main ones.

So, search of the new compounds for treatment inflammations, new substances with high potency and low toxicity is still actual for modern chemists-synthetics, pharmacologists and pharmacists.

**Aim.** The development of scheme of synthesis in the range of N-pyridyl-4-methyl-2,2-dioxo-1h-2λ<sup>6</sup>,1-benzothiazine-3-carboxamides derivatives, elaboration of methods for their qualification and elaboration of techniques for their assay, aimed to solve tasks of pharmaceutical analysis.

**Materials and methods.** N, N-carbonyldiimidazole, 4-methyl-2,2-dioxo-1H-2 of 6,1-benzothiazine-3-carboxylic acid, dimethylformamide, derivatives of corresponding hetarylalkylamines, methods of physico-chemical analysis: determination of the melting point, elemental; methods of biological analysis; chemical reactions for determination of identity, titrimetric methods for assay.

**Results and discussion.** As it has been stated after biological investigations, the most potent representative in the range of amides of N-pyridyl-4-methyl-2,2-dioxo-1h-2λ<sup>6</sup>,1-benzothiazine-3-carboxamides derivatives is N-(2-Methoxybenzyl)-4-methyl-2,2-dioxo-1H-2/6,1-benzothiazine-3-carboxamide, which has shown the most potent anti-inflammatory type of activity in comparison with the Control.

**Conclusions.** Technique of synthesis for the most potent substance for the mentioned above type of biological activity as well as and methods for its analysis will be tested on experimental samples and, if it is necessary, improved.

## THE ROLE OF ORGANIC SUBSTANCES IN CORRECTION OF SKIN PIGMENTATION

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**Introduction.** The natural desire of humanity to become more perfect gives impetus to the development of many sciences, including cosmetology. However, the experience of today convinces us that urgent issues are best addressed with the effective interaction of different fields of knowledge.

**Aim.** Determination of the role of organic compounds in the correction of skin pigmentation.

**Material and methods.** The information from the open Internet sources and print publications.

**Results and discussion.** The analysis of the causes of pigment dysfunction allows us to identify the main risk factors: ultraviolet radiation, fluctuations in hormonal levels (age, genetic, as a result of disorders of the endocrine system), diseases of the gastrointestinal tract, injuries and improper skin care.