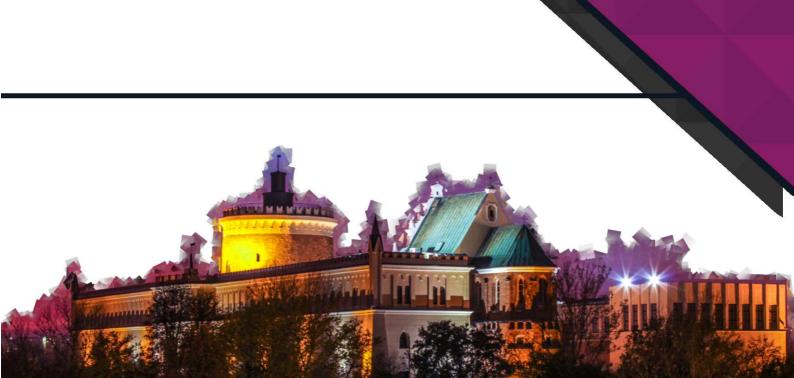




# Book

of Abstracts



## Scientific Paper Competition during the International Conference of Pharmacy Students

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### Poster Session

#### Studies on the development of coloproctological application suppositories

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#### Introduction

One of the problems of medicine is the treatment of long-term current diseases, often accompanied by a number of complications leading to the need for surgical intervention. Such diseases include hemorrhoids - one of the most common coloproctological diseases. The search and development of effective comprehensive products for the treatment of hemorrhoids is an urgent task of medicine and pharmacy. A promising direction is the combination of natural-origin angioprotectors, in particular horse chestnut and Ruscus extracts in combination with shark liver oil.

#### Material and methods

During the development of the composition of suppositories used physico-chemical, rheological and biopharmaceutical research methods. Standardized dry extracts of horse chestnut (aescin content 20%) and Ruscus (ruscogenin content 10%), as well as shark liver oil from Lysi firm, were used in the work. The solubility of dry extracts was studied and the use of propylene glycol: surfactant solvent mixture was justified. Suppositories were prepared on a fat basis; dry extracts were introduced into the suppository base by the type of solution. The effect of a different type of surfactant on the release of biologically active substances from suppositories was studied. The quality of suppositories was evaluated according to the requirements of the State Pharmacopoeia of Ukraine for such indicators: average weight, melting temperature and time of complete deformation. Studies were carried out to investigate the structural-mechanical properties of the suppository mass in order to justify the temperature and speed parameters of the suppositories production.

#### Results

As a result of studying the release of biologically active substances using a modified agar plate technique, the use of PEG-40-stearate as a surfactant was justified.

#### **Conclusions**

A set of studies on the development of suppositories for the treatment of coloproctological diseases was carried out, and the resulting compositions are at the stage of microbiological and pharmacological studies.

#### **Keywords**

Coloproctology, suppositories, shark liver oil, horse chestnut extract, Ruscus extract