

# **Abstract**

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**Study program:** Laboratory diagnostics in healthcare

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**Title of bachelor thesis:** Development of anticoagulation therapy and news about its monitoring

**Background:** The aim of this work is to summarize the basic information about hemostasis and the components that participate in it. These facts are key to understanding the mechanism of action of anticoagulants in anticoagulant therapy. The work deals with an overview of the development of anticoagulant treatment from the beginning to the present day. It deals with the issue of anticoagulant treatment and the possibility of its monitoring by laboratory tests.

**Main findings:** Thromboembolism suffered people more or less since time immemorial. The question of time was the development of anticoagulant therapy and an understanding of the mechanism of action of anticoagulant drugs, which was of great benefit in reducing the incidence and mortality of thromboembolism.

**Conclusions:** The introduction of anticoagulant therapy in medicine has reduced the risk of thromboembolic complications. A great benefit was the discovery of the first anticoagulant drug, unfractionated heparin (UFH), followed by oral warfarin, which is widely used to this day. The use of new oral anticoagulants (NOACs), which have a great future in anticoagulant therapy, is very important.

**Keywords:** hemostasis, anticoagulation therapy, anticoagulant drugs, monitoring therapy