## **Abstract**

Prothrombin test is the most frequently required test of hemostatic imbalances and it is also used to monitor anticoagulation treatment by coumarin preparations, e.g. warfarin. It is a basic routinely used group coagulation test that describes the so called outer conversion method of prothrombin to thrombin. Owing to the highly frequent usage of this examination, a vast number of reagent producers appears in the market related to this testing. Reagents of individual producers vary in quality, stability, sensitivity and price.

In this work I compare results of prothrombin test measured by reagents of 3 different producers (Diagon, Diagnostica Stago and Grifols) and my goal is to establish if the gained results are comparable. I used the prothrombin test with randomly chosen healthy persons and with patients of Faculty Hospital Hradec Králové. I tested each sample simultaneously with reagents of the 3 producers mentioned above. When I statistically analysed the results, I found that values measured by reagents of all 3 producers correlate quite well and are comparable to one another. Consequently, all reagents can be used without problems in clinical laboratories.