In Estonia, warfarin is widely prescribed by general practitioners to prevent and treat thromboembolic diseases. To date, there has been no systematic analysis of the potential risk of warfarin interactions with other drugs in the outpatient population. Objective: The aim of the study was to analyze the incidence of potential interactions in prescription schemes in Estonia in a cohort of outpatients receiving warfarin treatment. Methods: The retrospective study population included 203,646 outpatients aged 50 years or older of whom 7,175 received warfarin therapy. Patients who had used at least one prescription drug for a minimum period of 7 days concomitantly with warfarin were analyzed. Potential drug interactions were analyzed using Epocrates online, Stockley's Drug Interactions and domestic drug interaction databases. Results: The average number of drugs used concomitantly with warfarin was 4.8 (SD=1.9) (males: 4.7 SD=2.0, females: 4.9 SD=2.0). No potential interactions in treatment regimens were found in 38% of patients, one potential interaction was observed in 29% and two or more potential interactions were observed in 33% of patients. The mean number of all potential interactions was 1.2 per patient and about the same in men and women. Potential interactions were associated with the number of drugs. Warfarin-related interactions were detected in 57% of patients, and the number of interactions related to warfarin per patient varied from 1 to 5. Most frequent were use of warfarin with NSAIDs (14%), followed by simvastatin (9%) and amiodarone (7%). Conclusion: This study shows that 57% of outpatients in Estonia receiving warfarin have drugs potentially interacting with warfarin in their treatment schemes. Most interactions (14%) with warfarin are associated with the prescription of NSAIDs.

Keywords
Warfarin, Drug Interactions,
Outpatients, Estonia.