

## **ABSTRACT**

This thesis introduces a method of quantitative determination of amiodarone and its metabolite desethylamiodarone by high performance liquid chromatography with UV detection using internal standard dronedarone and verification of its use in the analysis of patient samples. The theoretical part describes method of liquid chromatography, amiodarone substance and possibilities of its determination using selected methods. The experimental part of the thesis describes procedures for analysis of amiodarone and desethylamiodarone utilizing high performance liquid chromatography and also includes validation of such method, including the following parameters: LOD, LOQ, linearity, working range, precision and recovery. In the conclusion part, the thesis compares two methods of result evaluation, which were gained from a sample of 41 patients. Reliability of such analytical procedure was verified through validation parameters.