

This thesis is focused on the analysis of ropinirole and its impurities related to the synthesis process using mass spectrometry. The theoretical introduction summarizes method of mass spectrometry. The experimental part is devoted to interpretation of mass spectra of samples measured both without fragmentation and using the CID fragmentation. Measurements were performed on a triple quadrupole with electrospray ionization. Properties of samples with respect to the quantification using SRM mode are also summarized in the paper. The main contribution of this work is clarification of the fragmentation of ropinirole and its impurities, which may serve for further studies of these substances.