

Abstrakt

Charles University in Prague, Faculty of Pharmacy in Hradci Králové

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Name of Degree Paper: Evaluation of Quetiapine using HPLC

In this study was developed a method for separation of quetiapine and its two biologically active metabolites 7-hydroxyquetiapine and norquetiapine. Separation was performed on zirconia reversed-phase column ZirChrom[®]-PBD (150 x 4.6 mm i.d., 5 μm). The retention behaviour of those three analytes was examined at changing strength and pH of acetate buffer and changing levels of organic compound (ACN) in eluent. The separation of the mixture of quetiapine and its two metabolites was performed by gradient elution. Mobile phase was composed of acetate buffer (CH₃COONH₄ 6mM , pH 6.0) and acetonitrile. The flow rate of the mobile phase was 1.0 ml/min and temperature in the column was set at 30 °C. Detection was carried out at a wavelength of 254 nm. The method is supposed to be used for determination of quetiapine, 7-hydroxyquetiapine and norquetiapine in plasma.