

ABSTRACT

ANALYTICAL EVALUATION OF ACTIVE SUBSTANCES BY LIQUID CHROMATOGRAPHY VI.

Diploma Thesis

Kristýna Kuželová

Charles University in Prague, Faculty of Pharmacy in Hradec Kralove,
Department of Pharmaceutical Chemistry and Drug Control,
Heyrovského 1203, Hradec Králové

The method for determination of the piroxicam in rabbit plasma using solid phase microextraction (SPME) and high performance liquid chromatography (HPLC) with UV detection was optimized. Fiber coated with PDMS/DVB was used for microextraction. Isoxicam was chosen as an internal standard. The sample of plasma was adjusted to pH 2,5. Microextraction was composed of 20 minutes sorption and 20 minutes desorption into 200 μ l of methanol. Column with reversed phase C18 was used for separation. A solution of water and acetonitrile (60:40 v/v) was used as the mobile phase. Its pH was adjusted to 2,5 using formic acid. The flow rate was 1 ml/min and temperature on the column was set at 40°C. The detection was carried out at 333 nm. Linearity and selectivity of the method were verified. Detection and quantification limits for piroxicam were also determined.