Abstract

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Title of Thesis: The Development and Validation of HPLC Methods for Determination of Ketoprofen in Pharmaceutical Preparations

The already developed method for determination of ketoprofen in the pharmaceutical preparation "PRONTOFLEX" – a 10% skin spray has been validated. The precision expressed as relative standard deviation was 1.43 %. The accuracy expressed as recovery was 101.52 %. The correlation coefficient R was more than 0.999.

The method for determination of ketoprofen in the pharmaceutical preparation "Ketonal" – a 5% cream has been further developed. The already developed method has been validated. The chromatographic separation was performed on a SUPELCO Discovery C18 column (150 mm x 4.6 mm, 5 μm). The mobile phase consisted of a mixture of acetonitrile, water and a phosphate buffer pH 3.5 (39:59:2, v/v/v). At a mobile phase flow rate of 1.5 ml/min, injection volume of 5 μl and UV detection at a wavelength of 233 nm, the total time of analysis was less than 10 minutes. Ethylparaben was used as an internal standard. The precision expressed as relative standard deviation was 0.64 %. The accuracy expressed as recovery was 98.10 %. The correlation coefficient R was more than 0.998.