

# ABSTRACT

## The Determination of the Biologically Active Substances using Liquid Chromatography XIV

Thesis

Veronika Fišerová

Charles University Prague

Faculty of Pharmacy Hradec Králové

Department of Pharmaceutical Chemistry and Drug Control

A method has been developed for the determination of the aciclovir by UHPLC in a pharmaceutical preparation containing 5 % of aciclovir with regard to the separation of a related substance, guanine. By using the UHPLC method the time of analysis was shortened. A Thermo Scientific 1,7  $\mu\text{m}$  C18 100A, 100  $\times$  3 mm column was used. A mixture of 90% acetonitrile and a buffer with a pH of 5,5 was chosen as the mobile phase and the analysis was performed by gradient elution. The flow rate of the mobile phase was set at 0,5 ml/min and the column temperature was 40 °C. Detection was carried out at a wavelength of 245 nm.

Keywords: UHPLC, aciclovir