

# **ABSTRACT**

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Title of thesis: **Evaluation of miconazole and metronidazole in the preparation using HPLC**

The subject of this work is the development and validation of a method for the simultaneous analysis of metronidazole and miconazole in the preparation using high performance liquid chromatography (HPLC). A sample of the Klion D-100 drug (vaginal tablets) containing 100 mg of metronidazole and 100 mg of miconazole-nitrate was analyzed. Klion D-100 is used in the therapy of genital trichomoniasis and candidiasis in females. As a stationary phase for the HPLC analysis a MERCK-LiChrosper 60 RP- select B 5  $\mu\text{m}$ , 4x 125 mm sorbent was used. A mixture of methanole and potassium carbonate buffer solution in ratios 80: 20 a 20: 80 (v/v) was selected as a mobile phase with the use of gradient elution. The flow-rate was set to 1 ml/min. The sample was injected in 10  $\mu\text{l}$  batches with the temperature set to 25 °C. The detection of samples was undertaken with the wavelength fixed at 235 nm. The developed method was validated using the following criteria: linearity, precision, accuracy and selectivity.