

Abstract

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Title of diploma thesis: Optimization of the HPLC method for determination of propranolol in liquid oral formulations

The purpose of thesis is the optimization and subsequent validation of HPLC method for determination of propranolol - hydrochloride in liquid oral formulations. A medicinal product containing propranolol – hydrochloride is used in the therapy of infantile haemangiomas as extemporaneous prepared solution. For method optimization were chosen Kinetex[®] C₁₈ column (150x4,6 mm, size of particles 5 μm) and isocratic elution of mobile phase containing phosphate buffer (c=17,7 mM) and acetonitrile in 30:70 ratio, with pH adjusted to 2,2. Flow rate was set at 1,2 ml/min. According to results of the validation, was found that this developed method for the analysis of the product is suitable, and provides accurate and precise results.

Keywords: propranolol hydrochloride, HPLC, optimization, Sodium benzoate, liquid oral formulations