Research Paper

ANALYTICAL METHOD DEVELOPMENTFOR THE SIMULTANEOUS DETERMINATION OF CHLORTHALIDONE AND METOPROLOL SUCCINATE

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To obtain effective separation of the eluted drugs, the HPLC settings were optimized in this study. Initially, various compositions of mobile phase were used in this approach. Peak metrics (TP, TF), run time, and Rs were used to choose the mobile phase.ACN and 0.1 percent TEA (pH 4.5 regulated using 1 percent OPA) in 90:10 percent v/v flowing at 1mL/min. The optimal detection wavelength was reported to be 224nm, and gave a greater detection of drug samples. This method was validated on the report of precision, accuracy, specificity, linearity. In all the cases the method was stable with acceptance criteria followed by ICH guidelines. Mobile phase used in this method was very commonly available and it is sufficient for the quantification analysis of CLT and MPS either in single dosage or in combination form. These drugs were separated in less than 6.4 min with low tailing factor and good resolution without any interference of excipients.

Keywords: Chlorthalidone, Metoprolol Succinate, High Performance Liquid Chromatography, Method Development.

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