RP-HPLC Method for Simultaneous Estimation of Metoprolol and Chlorthalidone in Tablet Dosage Form.

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Abstract

A simple and accurate method to Simultaneous Estimation of Metoprolol and Chlorthalidone in Tablet dosage forms were developed and validated using Reverse Phase High Performance liquid chromatography(RP-HPLC). The RP-HPLC method was achieved on a Hypersil BDS C-18,(250X4.6mm), 5μ in the isocratic mode using Buffer: Methano: ACN (50:25:25,V/V) the mobile phase at a flow rate of 1.0ml/min. inject 20 μl sample and standard the methods were performed at 263 nm; In this method, quantification was achieved with SPD-20AT detection over the concentration range of METO: 12.5 to 37.5 μg/ml and CHLOR: 3.12 to 9.37 μg/ml, with mean recovery of 99.69 = 0.93% and 99.27 = 0.93% , The methods were validated and the results were compared statistically. They were found to be simple accurate, precise and specific. The methods were successfully applied for the determination of Metoprolol and Chlorthalidone in Tablet dosage forms without any interference from common excipient.

Key words: Metoprolol and Chlorthalidone in Tablet, SPD-20AT detector, RP-High Performance Liquid chromatography