



New RP HPLC Method For The Estimation of Topotecan In Pharmaceutical Dosage Form

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ABSTRACT

The present paper describes a simple isocratic RP-HPLC method for the estimation of Topotecan in tablet dosage form. Best resolution was obtained with column Zodiac C18 column (250 mm x 4.6 mm, 5 μ) at 263nm with retention time of 4.49min. The mobile phase used was Methanol: Acetonitrile: Water 78:17:5 (v/v/v) with flow rate of 1.0 ml min⁻¹. The method for estimation of Topotecan in tablet dosage form was found to be linear, accurate, precise, sensitive and selective. The linearity range was from 10 μ g mL⁻¹ to 40 μ g mL⁻¹. Method was found to be highly sensitive as LOD and LOQ were found to 0.5 μ g mL⁻¹ and 0.15 μ g mL⁻¹. The repeatability and reproducibility were within the range i.e. less than 2%. The accuracy of the method between 98.48 to 101.32%. The percentage of assay was calculated for market formulation was 98.93%.

Keywords: Topotecan, HPLC, Linearity, validation.
