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Simultaneous Determination of Hydrochlorothiazide and Telmisartan by Using Reverse Phase HPLC Technique

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ABSTRACT

A rapid specific reverse-phase HPLC method has been developed for assaying Hydrochlorothiazide and Telmisartan by simultaneous method in pharmaceutical dosage forms. The method involves an isocratic elution of drug in a stationary phase of Phenomenex Prodigy, C18, 150 mm X 4.6 mm, 5 µm column using a mobile phase composition of 0.1 % orthophosphoric acid and methanol in the composition ratio of 70:30 % V/V and with flow rate of 1.0 ml / min at 260nm of detection.The developed method is found to be linear in the range of 4.99 to 99.80 µg/ml for Telmisartan and 2.49 to 49.75 µg/ml for Hydrochlorothiazide respectively.The injection volume is 20µL.The method has been validated for specificity,linearity, range, precision, accuracy, limit of detection, limit of quantification, ruggedness and robustness. The % recovery of Telmisartan and Hydrochlorothiazide was found to be in the range of 99.00 % - 101.00 %. All the validation parameters are within the acceptance range.

Keywords: Reverse-phase HPLC, Isocratic, Hydrochlorothiazide, Telmisartan.