Available online on 15.07.2019 at http://jddtonline.info

Journal of Drug Delivery and Therapeutics

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Development and Validation of Analytical Method for Simultaneous Estimation of Diclofenac Sodium and Serratiopeptidase in Bulk and Tablet Dosage Form

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ABSTRACT

Second order derivative spectroscopy method was developed and validated for the simultaneous estimation of Diclofenac sodium (DFS) and Serratiopeptidase (SPD) in bulk and tablet dosage form. Accurate and Précised UV Spectrophotometric method with good sensitivity has been developed for simultaneous estimation of DFS and SPD. The method employs Second order derivative based on the measurement of absorbance of DFS at ZCP 264.20 nm and SPD at ZCP 295.20 nm. The calibration curve was linear in a concentration range of 5-30 µg/ml for DFS and 25-150 µg/ml for SPD. The developed method was validated as per ICH guideline, for its accuracy, precision, LOD, LOQ and the results were found to be satisfactory, thus the method is specific, rapid and simple with good sensitivity for estimation of DFS and SPD in marketed dosage form.

Keywords: Diclofenac sodium, Serratiopeptidase, Second order derivative method, Validation

Article Info: Received 14 May 2019; Review Completed 25 June 2019; Accepted 30 June 2019; Available online 15 July 2019

Cite this article as:

Parmar K, Patel P, Parate P, Patel J, Development and Validation of Analytical Method for Simultaneous Estimation of Diclofenac Sodium and Serratiopeptidase in Bulk and Tablet Dosage Form, Journal of Drug Delivery and Therapeutics. 2019; 9(4):395-405 **http://dx.doi.org/10.22270/jddt.v9i4.3076**

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