International Journal of ChemTech Research
CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.12 No.04, pp 117-126, 2019

Development and Validation of Stability Indicating RP-HPLC Method for the Simultaneous Estimation of Trifluridine and Tipiracilin Bulk and their Combined Dosage form

Sk.Mastanamma*, K.Nagaraju, Sk. Reehana, V. Radhakrishnaveni

Department of Pharmaceutical Analysis, University College of pharmaceutical science, AcharyaNagarjuna University, Nagarjunanagar, Guntur –522510. Andhra Pradesh (India).

Abstract : The present work describes Development and validation of stability indicating RP-HPLC method for the simultaneous estimation of Trifluridine and Tipiracilin bulk and their combined dosage form. The chromatographic separation was performed on Column :XterraC_{18} (150mm x 4.5mm x 5µ) using Trietylamine buffer: Acetonitrile (40:60) as mobile phase at a flow rate of 1 mL/min and column oven temperature of 30ºC. The detection was carried out using a Diode array detector at 272 nm. Total run time was 10 minutes within which main compounds and their degradation products were separated. The method was validated for accuracy, repeatability, reproducibility, robustness, linearity, limit of detection and quantification were established. The developed method was successfully applied to the simultaneous quantitative analysis of the title drugs in tablet dosage forms.

Keywords : Stability indicating assay, RP-HPLC, Trifluridine and Tipiracilin, Forced degradation studies.

Sk.Mastanamma *et al* /International Journal of ChemTech Research, 2019,12(4): 117-126.

DOI= http://dx.doi.org/10.20902/IJCTR.2019.120416

*****