

Development and validation of UV spectrophotometric method for simultaneous estimation of ondansetron and pantoprazole in the tablet dosage form

Priya Prasad

Sharad Pawar College of Pharmacy, India

A precise, accurate, simple and reliable UV SPECTROPHOTOMETRIC method was developed for a recently marketed new combination of PANTOPRAZOLE (PAN) and ONDANSETRON (OND). The objective was to subject this new tablet formulation to Spectrophotometric analysis and arrive at a suitable method for the determination of the drugs therein. The work was confined to the estimation of content of active ingredients only and was carried out using Simultaneous Equation Method. Shimadzu UV/Visible double beam spectrophotometer, model 1700 Pharmaspec with 1 cm quartz cells, was used for Spectrophotometric analysis, using distilled water as solvent. Qualitative and quantitative analysis of the drugs were carried out in which melting point, UV spectra, λ_{max} and Spiking of drugs was found. Simultaneous Equation method was used for the estimation of both the drugs. Standard stock solutions of Pantoprazole and Ondansetron were prepared and study of spectra, selection of scanning range and wavelength was carried out. Lambert Beer Law was studied and also additivity of absorbance and absorptivity for PAN and OND was studied at selected wavelengths. The absorbance maxima of PAN is 294.5 nm and that of OND is 310 nm. The method developed was applied to the marketed formulation. The method was validated in terms of linearity, accuracy, precision, specificity, and ruggedness and was as per ICH guidelines. The developed method for the selected drugs was applied successfully to both OND and PAN. The results were reproducible and can be adapted for routine quality control analysis of these drugs in pharmaceutical combined dosage forms.

Biography

Priya Prasad at present is pursuing her M. Pharm (Quality Assurance) from Sharad Pawar College of Pharmacy, Nagpur, Maharashtra, India. She has completed her B. Pharm at the age of 22 from Nagpur University. She has presented papers in many national and international conferences. She has published 1 paper in international journal. She also has publications in many national souvenirs. She has also won the best research paper award in one of the national conferences.

priya.p2011p@gmail.com

Simultaneous estimation of hydrochlorothiazide and quinapril using UV, IR & HPLC

Rajput Dhananjaysingh, Bhamburdekar Siddhesh, Ajagaonkar Akshada, Ghag Manasi and Vandana Gawande

STES's Sinhgad Institute of Pharmacy, India

Hydrochlorothiazide is Thiazide diuretic most commonly prescribed for Hypertension and mild Heart failure. Hydrochlorothiazide chemically described as 6-chloro-3, 4-dihydro-2H-1, 2, 4-benzothiadiazine-7-sulfonamide 1, 1-dioxide. Quinapril is an angiotensin-converting enzyme inhibitor (ACE inhibitor) used in the treatment of hypertension and congestive heart failure. Proposed work includes development and validation of assay method for simultaneous estimation of Hydrochlorothiazide and Quinapril in bulk drug and oral solid dosage form by UV, HPLC and IR. All the methods were developed and validated for precision, linearity, robustness, accuracy as per ICH guidelines. Results from all methods were statistically compared.

Biography

Presenting authors are currently pursuing M.Pharm in Pharmaceutics in STES's Sinhgad Institute of Pharmacy, Narhe.

dhananjay.dj55@gmail.com