

World Drug Delivery Summit

August 17-19, 2015 Houston, USA

Simultaneous estimation of Olmesartan Medoxomil and Indapamide in tablet dosage form by spectroscopic method

Rucha A Patel¹, Hasumati A Raj¹, Meera V Lad¹ and Richa A Dayaramani²

¹Shree Dhanvantry Pharmacy College, India

²Tolani Institute of Pharmacy, India

Olmesartan medoxomil and indapamide combination is used in cardiac disease condition like hypertension. Sustain release tablet formulation comprising olmesartan, medoxomil and indapamide. Patent for formulation is patented in china by Ministry of cardiovascular disease institute and patent for treatment for hypertension is patented in Japan. Olmesartan medoxomil was approved in USFDA on April, 2002 at New York and indapamide was approved in Liplha pharmaceutical institute on July 1998. Extensive literature survey related spectroscopy, high performance liquid chromatography, high performance thin layer chromatography, Reverse phase high performance liquid chromatography DAD method for estimation of Olmesartan medoxomil and Indapamide. Here thirteen analytical methods available for olmesartan medoxomil and twenty six analytical methods available for olmesartan medoxomil and its combination. And four analytical methods available for Indapamide, and nine analytical methods available for indapamide and its combination, seven analytical methods available for stability study for olmesartan, three analytical methods available for stability study for indapamide with other combination and no analytical method found for indapamide alone and for combination of olmesartan medoxomil and Indapamide, which indicates the need for analytical method development for Olmesartan medoxomil and Indapamide. Here attempt was made to develop and validate a sensitive, reproducible and specific spectroscopy method for Olmesartan medoxomil and Indapamide combination.

ruchajigar6114@gmail.com

Development and characterization of *in situ* gel system for nasal delivery of Levodopa

Reenu Yadav¹, Abhay Asthana², SK Yadav¹, Akshat Sharma³ and Prabhat jain⁴

¹IES College of Pharmacy, India

²MMCP, India

³LNCP, India

The objective of the present study was to develop a thermo sensitive *in situ* gel system based on chitosan (CS) and poly vinyl alcohol (PVA) for nasal delivery of Levodopa. The hydrogel was prepared by mixing the chitosan and poly vinyl alcohol. The concentration of the components was optimized during formulation development. The prepared hydrogel was characterized for gelation temperature, gelation time, viscosity changes, degree of swelling, *in vitro* release and *in vivo* activity. The prepared hydrogel was liquid at room temperature while underwent thermal transition from solution below or at room temperature to non-flowing hydrogel when incubated at 37°C within 12-15 minutes with increased viscosity. The *in vitro* release of levodopa from gel network was observed, the release of levodopa through gel network decreases upon increasing the chitosan concentration from 1 to 5%. Furthermore, the formulation when evaluated for their *in vivo* activity results indicates that the proposed thermo sensitive *in situ* gelling system has substantial potential as nasal delivery system for levodopa.

yadavreenu@gmail.com

Notes: