OMICS Group Conferences
Accelerating Scientific Discovery

2nd International Conference and Exhibition on
Pharmaceutical Regulatory Affairs

November 23-24, 2012 Hyderabad International Convention Centre, India

Coprocessed excipients: A cogent tool for gastroretentive drug delivery

Hardikar Sharwaree Rajan
Seth Govind Raghunath Sable College of Pharmacy, India

To exploit novel combinations of existing excipients with other substances which exhibit multifunctional role in drug delivery systems is the need of an hour. Coprocessed Excipients are combinations of two or more excipients that posses performance advantages that cannot be achieved using a physical admixture of the same combination of excipients. In the present study, the potential of a novel excipient combination to design gastro retentive drug delivery system (GRDF) was investigated according to the criteria suggested by EM2 Expert Committee. It is reported that the floating and swellable tablet system is the most appropriate approach to develop GRDF and should have >15 mm diameter to ensure its gastric retention. Hydroxy propyl methyl cellulose (HPMC) is conventionally being used in design of such dosage forms but possesses a drawback of time dependant erosion and hence the chance of its evacuation from the stomach. Low viscosity grade HPMC was coprocessed with the mucilage isolated from the seeds of *Ocimum basilicum* in 1:1 proportion to overcome this drawback. This new combination of excipients was used to prepare gastro retentive tablet. The gastric retention of the dosage form was confirmed by γ scintigraphy study. There was improved and assured gastric retention of the dosage with immediate buoyancy due to the formation of interpenetrating polymer network (IPN) which was confirmed by FTIR study.

Biography

Sharwaree Rajan Hardikar has completed her M. Pharm from Govt. College of Pharmacy, Karad. She is having 2 years industrial experience and 17 years experience in academics. She has published 15 papers in reputed journals and has filed 04 Indian patents.

sharwareehardikar@gmail.com