Gurpreet Kaur, Pharm Anal Acta 3:1
doi: http://dx.doi.org/10.4172/2153-2435.S1.07

OMICS Group Conferences
Accelerating Scientific Discovery

2nd International Conference on
Pharmaceutics & Novel Drug Delivery Systems

20-22 February 2012 San Francisco Airport Marriott Waterfront, USA

TITLE

Colon Delivery of Drugs Employing Natural Polysaccharides

Gurpreet Kaur
Punjabi University, India

Polysaccharides are the polymers of monosaccharides (sugar). They are found in abundance, have wide availability, are inexpensive and are generally regarded as safe (GRAS). Natural polysaccharides are now extensively used for the development of solid dosage forms for delivery of drug to the colon. The rationale for the development of a polysaccharide based delivery system for colon is the presence of large amounts of polysaccharidases in the human colon as the colon is inhabited by a large number and variety of bacteria (mainly Bacteroides and Bifidobacteria)that secrete many enzymes e.g. β-D-glucosidase, β-D-galactosidase, amylase, pectinase, xylanase, β-D-xylosidase, dextranase, etc. These polysaccharidases act upon the polysaccharides and break them into simple saccharides. A large number of polysaccharides such as pectin, chitosan, chondroitin sulphate, inulin, guar gum and locust bean gum have been demonstrated for their potential in demonstrating colon specific delivery. Various approaches utilizing polysaccharides for colon-specific delivery are coating of the drug core with polysaccharides alone or their interpolymer complexes, embedding of the drug in biodegradable polysaccharide matrix or formulation of drug-polysaccharide conjugate.

The present talk will focus on the use of various polysaccharides and their interpolymer complexes, the characterization of these complexes for targeting of drugs to colon.

Biography

Dr. Gurpreet Kaur did her Ph.D. from Department of Pharmaceutical Sciences and Drug Research, Punjabi University, Patiala, Punjab, India. She is presently serving as Associate Professor in the Department of Pharmaceutics, Punjabi University, Patiala. She has 14 years of teaching and research experience. She has published 20 research papers, and has authored two books. She has presented her work. Her main areas of research are colon targeting and bioadhesive drug delivery systems.