

Formulation and Evaluation of Colon-Specific Drug Delivery System of Zaltoprofen

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Abstract : Compression coating is one of the strategies for delivering drug to the colon based on Gastrointestinal PH and transit time concept. The main aim of these formulations to develop rapidly disintegrating Zaltoprofen core tablets compression-coated with a mixture of time-dependent hydrophilic swellable polymer HPMC K 15 and PH responsive soluble polymer Chitosan and Guar gum in different ratios. The effect of the proportion of HPMC, Chitosan and Guar gum in the coat on premature drug release in upper part (Stomach and small intestine) of GIT and the amount of drug release in colon target area was studied. The formulations are carried out by using Direct Compression method. Sodium starch Glycolate used for rapid disintegration. FTIR used for Drug-Polymer Interaction studies. The prepared tablets were evaluated for hardness, thickness, friability, in-vitro disintegration, in-Vitro dissolution and in-vitro kinetic study.

Keywords : zaltoprofen, chitosan, formulation, drug delivery

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