

Research paper

DEVELOPMENT AND EVALUATION OF GEMIFLOXACIN MESYLATE TASTE MASKED ORALLY DISINTEGRATING TABLETS

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Gemifloxacin is a broad spectrum antibacterial agent active against gram positive and gram negative organism. It is very bitter in taste. In the present work an attempt has been made to develop taste masked orally disintegrating tablet of Gemifloxacin using ion exchange resins (Amberlite IRP 88) as a taste masking agent. Different drug: resin ratios were tried to prepare taste masked complex. FT-IR spectroscopy and differential scanning calorimetry were used to investigate the physical characteristics of the complex. Tablets were prepared by direct compression technique using two super disintegrants viz. croscopollose and sodium starch glycolate. Tablets of all batches were tested for various evaluation parameters. Tablets formulated with 10% Croscopollose (GRT05) showed lowest wetting time (16 sec). The % cumulative release of drug from tablet (GRT05) was found to be more than 99% within 40 mins. It was thus possible to formulate Orally disintegrating tablets of Gemifloxacin using simple and cost effective, Ion Exchange Resin Complexation technique.

Key words: Gemifloxacin Mesylate, Ion Exchange Resin, Drug Resin Complex (DRC), super disintegrant.