

Design and development of orodispersible tablet of Montelukast sodium for pediatric use

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Present work deals with development of Orodispersible tablet of montelukast sodium for pediatric use. Various directly compressible excipient and co-processed excipient Parateck® ODT has been exploited. Oral dispersible tablet were prepared by directly compressible method. A simplex lattice design was used to investigate the joint influence of three formulation variable amount of Parateck® ODT, Mannitol(DC) and MCC PH102 on disintegration time and amount of drug release at 5 min (Q5min). Tablets were evaluated for precompression and post compression parameters. Various evaluation tests for orodispersible tablet were performed. Multiple regression analysis and counter plot were drawn to check the effect of various factors. The disintegrating time of all the formulations was found in the range 7-15 seconds. More than 90% of drug release was found from all simplex lattice design formulation. It was observed that 95mg of Parateck® ODT (A1) shows disintegration time 7 sec and released 99.8% of drug within 5min. The study showed that the orodispersible tablet containing Parateck® ODT tablet has potential use as orodispersible tablet for pediatric patient.

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