

Development of floating matrix tablet of losartan potassium

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Floating matrix tablets were prepared by direct compression method employing polypropylene foam powder (Accurel® MP 1000), karaya gum and chitosan. Tablets were characterized by FT-IR, DSC studies and evaluated for floating lag time, duration of buoyancy, friability, hardness, thickness, weight variation, swelling studies, drug content, in vitro drug release studies and in vivo studies. FT-IR and DSC studies showed that there is no interaction between the drug and excipients. The tablets shows zero floating lag time and remained buoyant for more than 12 h achieving the gastric retention properties. All evaluation parameters were within the pharmacopoeial limits. The in vitro drug release for losartan potassium was sustained up to 12 h and release rates were fitted into an empirical equation to compute the diffusion parameter which indicates a super case II- transport mechanism. X-ray photographs confirms presence of tablet in rabbit stomach for more than 12 h. The studies concluded that floating matrix tablets could be used as gastro retentive drug delivery systems in view of its floating in stomach.

Biography

K.Ramesh is a student of JSS College of Pharmacy, JSS University, Mysore, Karnataka, India. He has completed his B Pharm from JSS College of Pharmacy, Mysore during the year 2011. Presently he is pursuing M Pharm in Industrial Pharmacy in JSS College of Pharmacy, Mysore. His current area of interest is in NDDS.

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Analysis of anti neoplastic activity for detoxified monocrotaline analogue through insilico docking studies

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Nature is enriched with lot of medicinal plants but with some toxic effect. Some of the *Crotalaria spp.* are consumed or applied externally against fever, scabies, lung diseases and impetigo while some species induce pulmonary hypertension in laboratory animals. Monocrotaline is one such kind of compound present in *Crotalaria retusa* that has plenty of medicinal values and also has high risk of hepatic necrosis. In the present study *insilico* detoxification through structural modification of monocrotaline is proposed to be a potential drug candidate against many diseases when explored through PASS online. The molecule showed anti neoplastic activity against genes responsible ovarian cancers like BRCA1, MTA2 and testicular germ cell tumor (TGCT) like miRNA-372, SPRY4, BAK1 and KIT-ligand. All the respective proteins retrieved for these genes exhibits hopeful docking results to proceed further for synthesis and invitro studies to analyze the molecule in depth.

Biography

K.Sandeep Solmon has completed his Masters in bioinformatics from University of Madras and did M.Phil in Bioinformatics. He is pursuing Ph.D in Bioinformatics from GITAM University. His thrust area of research is drug designing in which he is working on hyperthermia and insilico detoxification of molecule for cancer treatment using nanotechnology. He has published 3 research papers in reputed journals.

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