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Design and optimization of sustained release matrix tablets of Lamivudine

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The present work was aimed to formulate and evaluate Lamivudine sustained release tablets. Lamivudine, one of the dideoxycytidine (ddC) analogue NRTIs, is the first nucleoside analogue approved to treat acquired immune deficiency syndrome (AIDS) and has been shown to benefit various categories of patients. The successful treatment of HIV infection depends on the maintenance of effective drug concentration level in the body for which a constant and uniform supply of drug is desired. Sustained release dosage forms of matrix tablets of Lamivudine were prepared by wet granulation technique method using hydrophilic polymers of Eudragit grades of RSPO and RLPO alone and in combination with the inclusion of hydrophobic Ethyl cellulose. All the formulations have shown conformity with standards with respect to tablet strength, weight and content uniformity. Among all the formulations, F6 was successfully proved to sustain the drug release for more than 12 h and thus concluded as the optimized formulation.

Biography

Leela Rani G studied B.Pharm. from Bapatla College of Pharmacy, Bapatla and M.Pharm. in Pharmaceutical technology in Sri Venkateswara College of Pharmacy,Etcherla. She done project work in the department of Research & Development in Aurobindo Pharma Pvt Ltd, Hyderabad. She worked for Lydia College of Pharmacy as an Assistant Professor in the Department of Pharmaceutics. Leela handled two mini projects in drug delivery systems, as a part of guiding BPharm graduates.

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