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FORMULATION AND CHARACTERIZATION OF KETOCONAZOLE BASED FLOATING DRUG DELIVERY SYSTEM

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Abstract

This study aims to develop a gastro-retentive Ketoconazole direct compression technology medication delivery system. Ketoconazole has 56 % bioavailability subsequently, immediately wiped out from blood course and required regular dosing. The ketoconazole stacked microspheres (F1-F9) of EC: HPMC were arranged utilizing different interaction factors like polymer proportion, drug focus, emulsifier fixation and blending speed. During *in vitro* buoyancy testing, the tablet axially and dramatically expanded. The tablet was seen to stay buoyant for 20–24 hours. The final formulation had a floating lag time of no more than 35 sec, and the tablet remained floatable throughout all experiments, releasing about 89.21% of the medication in 24 hours *in vitro*. When compared to formulations having HPMCK 4 M, it was discovered that the tablets containing HPMCK 15 M floated for a longer period of time. Ketoconazole was discovered to release in a way that resembled a synthesis of the zero order release, Hixson-Crowell, and

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