

Synthesis Characterisation and Evaluation of Co-Processed Wax Matrix Excipient for Controlled Release Tablets Formulation

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Abstract : The work focuses on the development of a directly compressible controlled release co-processed excipient using melt granulation technique. Erodible wax matrix systems are fabricated in which three different types of waxes are co processed separately with Maize starch in different ratios by melt granulation. The resultant free flowing powder is characterized by FTIR, NMR, Mass spectrophotometer and gel permeation chromatography. Also, controlled release tablets of Aripiprazole were formulated and dissolution profile was compared with that of the target product profile given in Zysis patent (Patent no. 20100004262) for Aripiprazole once a week formulation.

Keywords : co-processing, hot melt extrusion, direct compression, maize starch, stearic acid, aripiprazole

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