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Co-processed Excipients: A Revisit of Its Development in the Past Two Decades; A Review
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Abstract

A pharmaceutical excipient is a substance acts as a carrier incorporates active pharmaceutical ingredients. Excipient selection focuses on desirable characteristics of excipients. Limitations of using excipients which affect the characteristics of the granules and tablets. Co-processed excipients are produced by integrating one excipient into the other excipient at particle level. Such combination of two or more pharmacopeial or non-pharmacopeial excipients does not involve chemical reaction and only involve physical properties changes which is not possible by simple physical mixing. The introduced multicomponent-based excipients for formulation to obtain better features and tabletting properties. The objectives of this revisit to discuss the development of co-processed excipients in the past two decades. This review summarizes the advantages of co-processed excipient, the manufacturing process, compilation of co-processed excipients in the literature, limitations, evaluation methods and future development of co-processed excipient. Co-processed excipients will undoubtedly attract attention from academia and pharmaceutical industry as more newer combinations of excipients and newer ways of co-processing become available. Besides, rather using numerous excipients in formulation, it allows for the development and usage of single multifunctional excipients. © 2022 Wolters Kluwer Medknow Publications. All rights reserved.

Author Keywords

Co-processed; Excipients; Tablets

Index Keywords

diluent, disintegrating agent, excipient, filler, gliding agent, glue, lubricating agent; angle of repose, body weight variation, breaking strength, content uniformity, dilution, drug granulation, drug solubility, evaporation, Hausner ratio, hot melt extrusion, human, manufacturing, milling, Review, roller compaction, roller drying, solvent effect, spray drying, tablet breaking force, tablet compression, tablet disintegration, tablet friability, tablet hardness, tablet thickness, weight uniformity, wet granulation

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