ORALLY DISINTEGRATING FILM: A REVISIT OF ITS TWO DECADES DEVELOPMENT

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Bin, Liew Kai [a] ; Bin Ruslan, Fariz Haiqal [a] ; Helal Uddin A.B.M. [b] ; Sarker, Zaidul Islam [b] ; Janakiraman, Ashok Kumar [c]

[a] Department of Pharmaceutical Technology and Industry, Faculty of Pharmacy, University of Cyberjaya, Selangor, Cyberjaya, 63000, Malaysia

Abstract

For the last two decades, oral drug delivery system was extensively discussed in the pharmaceutical field which includes Orally Disintegrating Film (ODF) due to its advantages over other oral dosage form such as tablet and capsule. ODF can be taken without water and classified as patient friendly dosage form especially for geriatric and pediatric who affected the most with swallowing disorder. ODF manufactured by various methods such as solvent casting method, semi solid casting method, hot melting extrusion, solid dispersion extrusion, rolling method and spraying method. ODF formulated using several chemicals like hydrophilic polymers, plasticizer, saliva stimulating agent, surfactant, sweeteners, API, coloring, and flavoring agents. Validation tests such as thickness test, folding endurance, tensile strength, young modulus, disintegration, and dissolution test performed

to analyze the mechanical properties, disintegration, and dissolution profile of the film. Some challenges will be encountered in the process of formulating ODF such as API insolubility, unpleasant taste of API, stability issue, and dose uniformity. Those challenges can be overcome with great formulations, high standard manufacturing methods and ideal storage management. In general, ODF have great potential in pharmaceutical market and can be a good tool to enhance the therapeutic convenient of patient which then lead to advancement of healthcare system.

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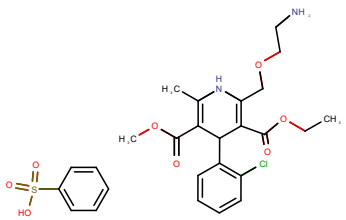

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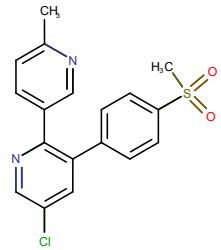

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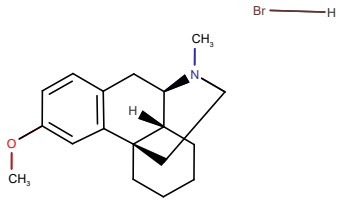

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Corresponding authors

Corresponding author	L.K. Bin
Affiliation	Department of Pharmaceutical Technology and Industry, Faculty of Pharmacy, University of Cyberjaya, Selangor, Cyberjaya, 63000, Malaysia
Email address	liewkaia@yahoo.com

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Corresponding authors