3rd International Conference on "Recent Advancement in Pharmaceutical Research and Drug Delivery"

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Solid Dispersions in Drug Delivery

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Abstract

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Solid dispersions, dispersion of drug molecules in another inert matrix/matrices (might be polymeric or non-polymeric), are promising drug delivery systems to orally administer BCS class 2 drugs with greater solubility, dissolution rate and bioavailability; and to administer BCS class 1 drugs with reduced burst effect (Controlled release) depending on the nature of the matrix in which the drug molecules are dispersed. The present talk is likely to include the introduction of solid dispersions (types, composition etc.), their preparation (conventional methods, solvent methods, SCF technique, spray-drying, electrospinning etc.) and characterization methods (XRD, DSC, SEM, FTIR, Pharmacokinetics etc.), and the possible outcomes (solubility & dissolution rate enhancement, sustained-release effect etc.) for which they are used in drug delivery. The presentation might encompass couple of studies (as examples) to elaborate the above-mentioned two intents (for BCS class 2 and 1, respectively).

Keyword: solid dispersions, dissolution, sustained-release, burst effect, BCS, spray-drying, SCF technique, solvent-evaporation