

ABSTRACT

The Feasibility of Developing Rutin Solid Dispersion with Poloxamer 407 Using Fusion Method *Literature Review*

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Literature review was conducted to see the feasibility of an insoluble drug substances called rutin (quercetin-3-O-rutinoside), poloxamer 407 as carriers matrix, and the use of melting methods in the production of a solid dispersion system. Scoping reviews were carried out using three databases, the feasibility of rutin was assessed by reviewing solid dispersion research articles using analogue materials, this analogue material include flavonoid substances, have similiar biopharmaceutical classification system, and have crystalline properties. Feasibility is reviewed by observing the results of solid dispersion characterization, including thermal properties, crystallinity, morphology and drug release data. The search results identified 605 articles, and obtained 28 articles that met the criteria, from which there were 6 articles that wanted to be read further. The results say that rutin and poloxamer 407 for carrier matrix as well as melting method were successful in producing a solid dispersion that was amorphous in form and increased the percentage of drug release.

Keywords : Rutin, Poloxamer 407, Solid dispersion, Melting method