

ABSTRACT

Feasibility Of Developing Rutin Solid Dispersion With Poloxamer 188

Using Fusion And Freeze Drying Method

Literature Review

Ahmad Faiz Ardani

This review aims to assess the feasibility of Rutin as a bioactive component, Poloxamer 188 as matrix, and fusion or freeze drying as methods used in the production of a solid dispersion system. Scoping review was conducted using three database with predetermined search criteria. Because the lack of research directly observing the topic, feasibility of Rutin is assessed through reviewing several researches done on the production of solid dispersion using an analog material. Overall feasibility is assessed by observing the morphology, thermal characteristic, crystallinity, and drug release data. The search identified 536 items corresponding to the keywords used. 61 items passed the selection criteria, and from there three journals for each production method was randomly chosen for further reading. Result suggests acceptable feasibility of Rutin as bioactive component, Poloxamer 188 as matrix, and both fusion and freeze drying as methods to be applied in developing solid dispersion system. Further research are needed to confirm the feasibility of Rutin as a bioactive component, Poloxamer 188 as carrier matrix, and fusion or freeze drying as methods used in the production of a solid dispersion system.

Keywords: Rutin, Poloxamer 188, Solid dispersion, Freeze-drying, Fusion