ABSTRACT

The influence of L-lysine to disolution rate of ketoprofen within solid dispersion of ketoprofen – PVP K-30 – L-lysine

The influence of L-lysine to dissolution rate of ketoprofen in solid dispersion system (ketoprofen – PVP K-30 – L-lysine) was observed in this research.

Solid dispersions of ketoprofen – PVP K-30 – L-Lysine were prepared by solvent method. Dissolution testing were applied to solid dispersions of ketoprofen – PVP K-30 – L-lysine with ratio 5:5:1, 5:5:2, solid dispersion ketoprofen – PVP K-30 with ratio 5:5, physical mixture ketoprofen – PVP K-30, physical mixture ketoprofen – PVP K-30 – L-lysine and ketoprofen.

The solid dispersions of Ketoprofen – PVP K30 – L-lysine prepared in this study were found have higher dissolution rates compared with ketoprofen, solid dispersion ketoprofen – PVP K-30, physical mixture ketoprofen- PVP K-30 and ketoprofen – PVP K-30 – L-lysine. It caused by the wettability and solubility properties of PVP K-30. In addition, due to the interaction between ketoprofen and L-lysine which disperse in PVP K-30. The increasing dissolution rates of solid dispersion ketoprofen – PVP K-30 – L-lysine influenced by addition of L-lysine and the occurrence of solid dispersion from PVP K-30. It was found that solid dispersion of ketoprofen – PVP K-30 – L-lysine (5:5:2) almost equal to ketoprofen – PVP K-30 – L-lysine (5:5:1).

Key words : Ketoprofen, PVP K-30, L-lysine, Solid dispersion and Dissolution rate.

Ditemukan bahwa dispersi padat ketoprofen - PVP K-30 - L-lisin (05:05:02) sama dengan ketoprofen - PVP K-30 - L-lisin (05:05:01).