ABSTRACT

FORMULATION AND EVALUATION OF CO-PROCESSED EXCIPIENT WITH PRIMOGEL 4% AND 8% AS DISINTEGRANTS (Preapared with Wet Granulation Method)

Jade Rhea Almira Arif

The manufacture of pharmaceutical preparations need added an excipients except the active substances. The purpose of this research was to determine the effect of differences in the characteristics of co-processed excipients between 4% and 8% primogel as a disintegrant using the wet granulation method. Excipient used : primogel as disintegrant, lactose as filler, and PVP K-30 as binder. In this research, the coprocessed method used was wet granulation. Wet granulation can control the uniformity of low drug concentrations well and control the density or compactibility well even for large drugs and also used when the active substance in the formulation is moisture and heat resistant, and has relatively poor flowability and compressibility. The evaluation results are then statistically processed using the SPSS application with the independent t-test method. The results evaluation has accepted both F1 and F2 are: flow rate, angle of repose, carr index, hausner ratio, moisture content and particle size distribution. Conclusion of this research is primogel as disintegrant with concentration 4% & 8%, lactose as filler and PVP K-30 as binder formulated into granules made with co-processed excipient using wet granulation method. The physical results evaluation was accepted include: flow rate, angle of repose, bulk density, tapped density, carr index, hausner ratio, moisture content and particle size distribution. Then, the data were statistically tested using SPSS and showed that the 4% and 8% primogel made using the wet granulation method had no significant difference in characteristics as a disintegrant to the characteristics of the co-processed excipient.

Keyword : Co-processed excipient, Primogel, Wet granulation.