

ABSTRACT

Effect of Primogel as Disintegrant in a Various Concentration to the Physical Properties of Direct Compressible Paracetamol Orally Disintegrating Tablet

Orally Disintegrating Tablets (ODT) are tablet which disintegrate rapidly within a few second when placed upon the tongue and could be swallowed without water. It is made to help patients who may have difficulties swallowing conventional tablet, especially paediatric and geriatric. A research about physical properties of ODT which contain Primogel in a various concentration (2 %, 4 %, 6 %, and also 8 %) was observed. The physical properties observed including hardness, friability, and disintegration time. This ODT contains Active Pharmaceutical Ingredient (API) Paracetamol, Mannitol and Cellulose Microcrystalline (Avicel PH 102) as a diluents, Primogel as a disintegrant, and Magnesium Stearate as a lubricant. It was manufactured using direct compression method. The results of physical properties evaluation was analyzed statistically using 95 % confidence interval with one way Completely Randomized Design (ANOVA) and Honestly Significant Difference Test. The results showed that there was significant difference in physical properties among the formula. The formula contained 2 % Primogel as a disintegrant which resulted an appropriate hardness, friability, and disintegration time as a good Orally Disintegrating Tablet was the optimum formula for this research.

Keywords : Orally Disintegrating Tablet, Paracetamol, Primogel, Disintegration Time, Direct Compression.

