ABSTRACT (ARTICLE RESUME)

THE EFFECT OF AC-DI-SOL AND COLLIDON CL AS SUPERDISINTEGRANTS ON PHYSICAL CHARACTERISTICS OF MELOXICAM ORALLY DISINTEGRATING TABLETS

Erni Wulandari

Meloxicam is a class of NSAIDs (Nonsteroidal Anti Inflammatory Drugs) which is classified as BCS (Biopharmaceutical Classification System) class 2, namely drugs that have low solubility and have high permeability. One of the developments of Orally Disintegrating Tablets (ODT) is that there are 2 types of superdisintegrants, namely synthetic superdisintegrants and natural superdisintegrants. The superdisintegrant synthesis used was crospovidone and croscarmellose sodium. To determine the characteristics of good ODT, tablet hardness test, weight uniformity test, tablet time test, disintegration time, wetting and water absorption ratio can be carried out.

The high hardness can reduce the disintegration ability of tablets so that ODT has a hardness requirement under conventional tablets. The three articles show that all formulas meet the requirements for pursuing ODT, namely the disintegration time of less than 60 seconds. The difference in the resume results is due to the difference in the amount of Kollidon CL in each formula, in which the formula for article 1 has a high hardness of 4.45kg/cm2. Fragility is one of the tests to make and increase the level of tablet resistance. The test results in article 1 (0.48 kg/cm2), article 2 (0.66 kg/cm2), and article 3 (0.69 kg/cm2) indicate that the formulation of ODT requirements is within the permissible limits (less than 1%). Disintegration is a parameter of ODT preparations that must be fulfilled, the formulation of all articles shows that the results of ODT disintegration meet the requirements, namely: article 1 (24.5 seconds), article 2 (14.45 seconds), and article 3 (14.52 seconds). The faster the wetting, the better because it can speed up the disintegration time of the tablet.

Keywords: Meloxicam, ODT, Oral Disintegrating Tablet, Superdisintegrant