ABSTRACT

EFFECT OF KOLLIDON CL CONCENTRATION IN MANNITOL – KOLLIDON CL – PVP K-30 CO-PROCESSED EXCIPIENT ON PHYSICAL CHARACTERISTICS AND DISSOLUTION OF PARACETAMOL ORALLY DISINTEGRATING TABLET
(Prepared by Direct Compression Method)

Nurul Hudha RR

Orally Disintegrating Tablet is a tablet that can rapidly disintegrated in saliva less than a minute. Direct compression is the preferred method for the preparation of tablets. The shift in tabletting toward direct-compression has forced the excipient industry to search for new excipients. The co-processed excipient is the most widely explored material for the preparation of directly compressible adjuvants. The aim of this research was to determine the effect of varying concentrations of Kollidon CL in mannitol – Kollidon CL – PVP K-30 co-processed excipient on the physical characteristics and dissolution of paracetamol orally disintegrating tablet.

Tablets were evaluated for thickness, hardness, friability, in vitro disintegration time, dissolution, and wetting time. The result showed that higher concentration of Kollidon CL in co-processed excipient will significantly increase the hardness and reduce the friability of the tablets. The increasing concentration of Kollidon CL in co-processed excipient did not significantly effect the tablet thickness, in vitro disintegration time, ED$_{30}$, and wetting time. All of the formula had disintegration time less than one minute.

Keyword: orally disintegrating tablet, direct compression, co-processed excipient, paracetamol, Kollidon CL, physical characteristics, dissolution