## ABSTRACT

## (LITERATURE REVIEW)

## VARIATIONS CO-VARIANT EXCIPIENT ON PHYSICAL CHARACTERISTICS FOR THEOFILLIN TABLETS

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Co-processed is a technique that is carried out by combining two or more additives in order to obtain a new additive with better (superior) properties. In this study, a co-processed excipient was made using the direct compression method.

In the first article entitled "Optimization of Theophylline Tablet Formula Using Co-Processed Excipients Mixed Lactose and Avicel" the results showed the optimum physical properties of the powder are determined in a ratio of 1:1 with a hardness response of  $5.54 \pm 0.042$  kg (meets the criteria), friability  $0.303 \pm 0.015$ % (meets the criteria). In the second article entitled "Optimizing the Concentration of Sago Amylum (Metroxylon rumphii) as Co-Processed in Making Theophylline Tablets". This characterization of the theophylline tablets produced has a hardness of x=6.2 kg (meet the criteria), friability=1.8% (does not meet the criteria). The third article entitled "A Novel Directly Compressible Co-Processed Excipient for Sustained Release Formulation" aims to develop a co-processed excipient from a combination of PolyoxWSR 301 and MethocelK4M with a polymer weight ratio of 1:9 to 9 :1 with roller compaction technique. ratio of 7:3 and 8:2 are the most optimum. With the results of the evaluation of the tablet hardness test at a ratio of 7:3 and 8:2 10 kg/cm2 (does not meet the criteria) while the friability of a ratio of 7:3 and 8:2 0% (meets the criteria).

Keywords : Amylum, Avicel, Co-processed excipient, Lactosa, Tablet, Teophylin