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Abdassah M, Wardhana YW, Rusdiana T, Yordan MZA, Anggraini FD, Tedjasaputra MG. Kinetic study on extended release of theophylline caplet with different brands hypromellose matrix. *Bull. Pharm. Res.* 2016;6(1):1-6.

Abstract: The aim of the present investigation was to prepare and evaluate kinetics of extended release formulations of theophylline using Methocel K4M CR Premium/MK and Metolose 90SH-4000SR/M9. All formulated tablets with various concentrations (% 4.0; 4.25; 4.5; 4.75; 5.0) of hypermellose were prepared by wet granulation method and found to be complied with the official requirements. The results showed the zero order kinetics and similarity (f2>50) with the marketed brand product were indicated by the formulations containing MK 4.75% - MK 5.0% and M9 5%. It was concluded that the higher the hypromellose concentration the slower the release of drug.

Key words: Theophylline, Hypromellose, Extended release kinetics, Independent parameters.

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