# **ABSTRACT**

Pharmacy staff in handling drug purchases are often mistaken in purchasing drug stocks. Sometimes the demand for drugs which is ordered is less, in which it makes patients disappointed and if too much drug availability results in losses due to being stored for too long. Therefore, to minimize and overcome this, there should be a system which can predict drug demand in the following month. In this study, a system was made to predict the number of drug requests in the following month using a single exponential smoothing. Parameters or alpha used in forecasting drug stock are alpha = 0.1, alpha = 0.2, alpha = 0.3, alpha = 0.4, alpha = 0.5, alpha = 0.6, alpha = 0.7, alpha = 0.8, and alpha = 0.9. The Single Exponential Smoothing method makes a comparison in determining the alpha value, by searching for the alpha value in a trial / random manner until it finds alpha which has a minimum error. Then the forecasting results which have alpha with the least minimization error value that will be chosen is forecasting for the next period. Drug stock forecasting systems using the single exponential smoothing method can only predict one period in the future. The results obtained from this study are the results of analysis of a single exponential method to obtain stock prediction information.

**Keywords: Single Exponential Smoothing, Stock Prediction, Medicines, Pharmacy**