

## **ABSTRACT**

*The Regional General Hospital (RSUD) of the Mentawai Islands Regency is located on North Sipora Island, precisely on Jl. Raya Tuapejat KM. 09 North Sipora District, Mentawai Islands Regency, West Sumatra Province. Hospitals must pay attention to how to manage drug supplies as well as possible so that there are no losses due to expired drugs caused by excess stock. There is a large gap between supply and demand, there is no inventory policy so that orders and inventories of medicines are stored in excess.*

*Based on these problems, the design of an inventory policy using the probabilistic continuous review  $(r, Q)$  method of drugs is needed to reduce the number of expired drugs and losses incurred. In this final project, as many as 133 drugs of medical ingredients will be analyzed using the ABC-VED matrix then only category I (AV, AE, AD, BV, CV) will be counted.*

*The classification process using the ABC-VED matrix resulted in as many as six types of medical materials belonging to the AV group, 16 types of medical materials from the AE group and one type of medical material from the AD group. Then the results of calculations using continuous review  $(r, Q)$  with fixed lifetime on the type of medical material category I resulted in 0% percent of expired drugs and Rp. 0 losses and the total cost of the proposed inventory of Rp. 329,835,062.48 or a savings of 27%.*

*Keywords: Drugs, Matrix ABC-VED, Probabilistic Continuous Review  $(r, Q)$  with fixed lifetime*