MICPS2-004-CP

Cost Effectiveness Analysis of Oseltamivir and Favipiravir Antiviral Use in Covid-19 Patients at Dadi Hospital Makassar

Rizqi Nur Azizah, Andi Maulana Kamri *, Putri Septiani Basri

Laboratory of Biopharmacy and Pharmacology, Faculty of Pharmacy, Universitas Muslim Indonesia, Indonesia

*Corresponding author: maulana.lolo@umi.ac.id

ABSTRACT

Cost-effectiveness analysis is a pharmacoeconomic study that is used to evaluate decision-making in selecting cost-effective drugs and their benefits/effectiveness are described in the calculation of the cost-effectiveness/effectiveness ratio. *Average Cost Effectiveness Ratio* (ACER). The purpose of this study is to find out more therapy cost-effective between the use of Favipiravir and Oseltamivir in Covid-19 patients at the Dadi Hospital in Makassar City from September to December 2021. This study used a research cohort design with a retrospective data collection method with the sampling technique purposive *sampling*. The total population of Covid-19 patients at Dadi Hospital reached 88 people and 26 patients were taken as samples in this study. The results of the study showed that 14 patients were using Oseltamivir and 12 patients using Favipiravir. Statistical test results in *Chi-square test* on PCR results showed no significant difference in the effectiveness of Oseltamivir and Favipiravir. While the independent-sample test results of the routine blood laboratory (hematology test) also found no significant difference between the two therapies being compared which indicates there is no difference in effectiveness with the *p-value* <0,005. Parameter *length of stay* (LOS) patients using Oseltamivir were hospitalized for an average of 5.2 days, faster than patients using the antiviral Favipiravir, 7.3 days. This research shows that the use of more cost-effective Oseltamivir antiviral compared to Favipiravir, but there is no significant difference in terms of therapeutic effect

Keywords: ACER, Covid-19, Favipiravir, ICER, Oseltamivir