ANALYSIS OF MEAN DIFFERENCE OF TOTAL S-RBD SARSCoV2 BETWEEN POST CORONAVAC VACCINATION AND COVID-19 SURVIVAL

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ABSTRACT

Reason for writing

Corona virus disease-19 (Covid-19) is a health problem at Indonesia. The cumulative cases of Covid-19 at Indonesia is 4,235,384 cases and the cumulative deaths is 142,999. The case fatality rate (CFR) is about 3.3%. Socialization of health protocols is performed to prevent of the Covid-19 spreading. The health protocols include wearing mask in public area activity, physical and social distancing and washing hands with soap or hand sanitizer regularly. The addition thing to control Covid-19 is Covid-19 vaccination. One of type vaccine is inactivated virus vaccine that use of a form of the virus that has been inactivated. CoronaVac vaccine is a inactivated vaccine that has been used at Indonesia. Both of Covid-19 survival and post CoronaVac Vaccination can produce neutralizer antibody. The aim of this study was to analyse a mean difference of total S-RBD SARSCoV-2 antibody level between post Coronavac vaccination and Covid-19 survival.

Methodology

This study was analytic descriptive research with cross-sectional approach. It was conducted at FK-Unila Lampung and Sariasih hospital at Banten. Population of this study was Covid-19 survival and CoronaVac vaccinated people. Subjects were taken by consecutive sampling. We measured level of total neutralizer antibody by examination of S-RBD SARSCoV-2 antibody. We used Independent-t Test to analyze of a mean difference of total antibody level between post CoronaVac vaccination and Covid-19 Survival.

Result

There was a significant mean difference of S-RBD SARSCoV-2 antibody level between post CoronaVac vaccination and Covid-19 survival (p=0.02). The mean of post CoronaVac Vaccination was 99.8 U/mL whereas the mean of Covid-19 survival was 232.13 U/mL.

Keywords: Covid-19, CoronaVac, Survival, Vaccination.