

Abstract Submission No. : 2326

Diagnostic Accuracy of Rapid Antibody Testing in Hemodialysis Patients

Rommel Bataclan

Department of Medicine, University of the East Ramon Magsaysay Medical Center, Philippines

Objectives: Antibody testing though not a diagnostic tool and surrogate of individual protection, it may be used for seroprevalence and evaluate effectiveness of screening and preventive measures. This study investigates the diagnostic accuracy of a rapid antibody test among hemodialysis patients.

Methods: Blood samples were taken in RT-PCR negative hemodialysis patients without any history of COVID-19 diagnosis and two groups of COVID-19 hemodialysis patients: those who were recently diagnosed (within 1-2 weeks) and those with previous history of COVID-19 infection who recovered. The samples were tested using LUNGENE IgG/IgM Rapid Test Cassette. Those who are recently diagnosed with COVID-19 were tested at the time of recruitment and a month after the diagnosis.

Results: Among those recently diagnosed hemodialysis patients, the IgM test showed 87.5% sensitivity, 98.7% specificity, 92.8% PPV and 97.7% NPV. The IgG test among these patients at about 1-2 weeks time showed 85.3% Sensitivity, 96.1% Specificity, 80% PPV and 96.4% NPV. Including those diagnosed with COVID at least more than a month prior, the IgG test showed 92.1% Sensitivity, 93.7% Specificity, 88.3% PPV and 95% NPV.

Conclusions: The LUNGENE IgG/IgM Rapid Test displayed a high diagnostic accuracy among hemodialysis patients, where its use could be considered in the absence of routine diagnostic serology facilities.