Review 1: "Duration of Viral Infectiousness and Correlation with Symptoms and Diagnostic Testing in Non-hospitalized Adults During Acute SARS-CoV-2 Infection: A Longitudinal Cohort Study"

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**RR:C19 Evidence Scale** rating by reviewer:

- **Reliable.** The main study claims are generally justified by its methods and data. The results and conclusions are likely to be similar to the hypothetical ideal study. There are some minor caveats or limitations, but they would/do not change the major claims of the study. The study provides sufficient strength of evidence on its own that its main claims should be considered actionable, with some room for future revision.

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**Review:**

The authors assessed the infectiousness of the respiratory specimens collected during the course of the disease from symptomatic COVID-19 patients. Viral culture was used as the standard of infectiousness. Another two diagnostic assays, antigen and RT-PCR assays were used to correlate with infectiousness. The manuscript was well written and easy to follow. The objectives were clear and correlated with the methods used. The conclusions were concordant with the results presented. The readers were alerted to the limitations of the study. The outcomes of the study could contribute to the knowledge of SARS-CoV-2 viral kinetics.

I only have two minor comments on the current version of the manuscript. In the alternative angle of views, the results shown in this study were concordant to previous studies. In terms of assay sensitivity, SARS-CoV-2 antigen assays correlated well with viral culture. Regarding the assumption of viral culture and infectiousness made by the authors, the authors shared similar views with the article written by Binnicker, 2021 (Binnicker MJ. Can Testing Predict SARS-CoV2 Infectivity? The Potential for Certain Methods To Be Surrogates for Replication-Competent Virus. J Clin Microbiol. 2021 Oct 19;59(11):e0046921.) due to the lack of a reliable predictor. The manuscript could be more comprehensive by discussing these two issues to further substantiate their results.