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Response to Bender et al

TO THE EDITOR—We thank the authors for their interesting letter. We would be most interested in knowing the exact brand of rapid antigen detection test (RADT) they utilized, as these tests can vary in both sensitivity and reliability. We would also be interested in seeing their individual-level timing of tests and results; given the wide variety of testing times and frequencies, it is difficult to determine which results are comparable with our daily sampling. However, in general, it would be difficult to compare these results because of the limited prescreening employed in the Bender et al study. One of the most important aspects of our study was a negative polymerase chain reaction (PCR) result in the previous 7 days, ensuring that all people enrolled in our study were newly infected [1]. As it is well known that quantitative reverse transcription PCR (RTqPCR) results can remain positive long after a mildly symptomatic or asymptomatic infection [2], and as we have shown that RADTs will rapidly turn negative after the infectious period has passed, it is possible that some participants in the study described by Bender et al were not newly infected and, therefore, would not be expected to have a positive RADT. Ensuring that participants are early in their infection is essential for accurate estimation of test sensitivity for SARS-CoV-2 infection, and we encourage anyone designing a test validation trial to consider this point carefully.

Notes

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Potential conflicts of interest. C. B. B. is listed as inventor on a pending patent application for the saliva RTqPCR test used in our study. R. L. S. reports no potential conflicts. The authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

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