Test Accuracy Group. Rapid, point-of-care antigen and molecular-based tests for diagnosis of SARS-CoV-2 infection. Cochrane Database Syst Rev **2021**; 3:CD013705.
6. He X, Lau EHY, Wu P, et al. Author correction: temporal dynamics in viral shedding and transmissibility of COVID-19. Nat Med **2020**; 26:1491–3.
7. Jones TC, Biele G, Muhlemann B, et al. Estimating infectiousness throughout SARS-CoV-2 infection course. Science **2021**; 373:eabi5273.
8. Bender JK, Brandl M, Hohle M, Buchholz U, Zeitlmann N. Analysis of asymptomatic and presymptomatic transmission in SARS-CoV-2 outbreak, Germany, 2020. Emerg Infect Dis **2021**; 27:1159–63.
9. Arons MM, Hatfield KM, Reddy SC, et al; Public Health–Seattle and King County and CDC COVID-19 Investigation Team. Presymptomatic SARS-CoV-2 infections and transmission in a skilled nursing facility. N Engl J Med **2020**; 382:2081–90.
10. Federal Government of Germany. Video conference between the Federal Chancellor and the Heads of Government of the Länder on 10 August 2021. https://www.bundesregierung.de/resource/blob/656632/1950174/93e22e944e165b106f56406b3de0dfa9/2021-08-10-mpk-beschluss-corona-en-data.pdf?download=1. Accessed 27 October 2021.

Received 7 September 2021; editorial decision 8 October 2021; accepted 13 October 2021

[a]J. K. B. and E. D. M. contributed equally to this work.

Correspondence: Jennifer K. Bender, Robert Koch Institute, Burgstrasse 37, 38855 Wernigerode, Germany (benderj@rki.de).

The Journal of Infectious Diseases® 2021;224:1987–9

https://doi.org/10.1093/infdis/jiab528

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

Financial support. This work was supported by the National Heart, Lung, and Blood Institute at the National Institutes of Health (grant number 3U54HL143541-02S2) through the RADx-Tech program.

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.

Rebecca L. Smith,[1,2,3] and Christopher B. Brooke[1,4]

[1]Carl R. Woese Institute for Genomic Biology, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA, [2]Department of Pathobiology, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA, [3]Carle Illinois College of Medicine, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA, and [4]Department of Microbiology, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA

References

1. Smith RL, Gibson LL, Martinez PP, et al. Longitudinal assessment of diagnostic test performance over the course of acute SARS-CoV-2 infection. J Infect Dis **2021**; 224:976–82.
2. Kissler SM, Fauver JR, Mack C, et al. Viral dynamics of acute SARS-CoV-2 infection and applications to diagnostic and public health strategies. PLoS Biol **2021**; 19:e3001333.

Received 7 October 2021; editorial decision 8 October 2021; accepted 11 October 2021

Correspondence: C. Brooke, PhD, 390 Burrill Hall, Urbana, IL 61801 (cbrooke@illinois.edu).

The Journal of Infectious Diseases® 2021;224:1989

https://doi.org/10.1093/infdis/jiab530