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Authors' reply

"One hand cannot tie up a bundle of wood." This African proverb highlights the need for complementary efforts to achieve important tasks. The comments from Fernando Kemta Lekpa and colleagues on our Article[1] underscore the challenge of COVID-19 diagnosis in symptomatic people testing negative for SARS-CoV-2 by both antigenic rapid diagnostic tests (RDTs) and RT-PCR. The authors suggest integrating clinical and radiographical features into the COVID-19 diagnostic algorithm for low-resource settings. Specifically, they believe chest CT could have an added screening value when there is strong clinical suspicion of COVID-19 but negative RT-PCR or RDT results.

The use of chest CT for COVID-19 diagnosis has been extensively assessed and is reported to have 87% sensitivity and 43% specificity—test characteristics no better than most RT-PCR assays and RDTs.[2] Although chest CT could potentially detect lower respiratory tract disease in symptomatic patients with negative upper respiratory tract testing, it is better used to help classify COVID-19 disease as mild, moderate, or severe. Because of its low specificity, ionising radiation, and limited availability, we do not believe chest CT should be added to COVID-19 screening and diagnostic algorithms in low-resource settings. However, we agree with Lekpa and colleagues that COVID-19 antibody tests have an important place in screening algorithms for people testing negative by RDT and RT-PCR, and we included antibody testing in our algorithm for asymptomatic patients.[1] We also agree that if there is ongoing strong suspicion for COVID-19, clinicians can request up to three RDTs or RT-PCR tests to increase the probability of detecting SARS-CoV-2, especially in patients with low viral load in very early or later phases of the disease. If subsequent tests are negative and strong clinical suspicion for COVID-19 disease remains, we believe these patients should be treated as though they have COVID-19. Treatment should then be adapted to symptom severity based on pulse oximeter readings or chest CT findings, where available. Pulse oximetry is a proxy measure of arterial oxygenation, a prognostic indicator, and recommended for inpatient and remote monitoring of patients with confirmed or possible COVID-19 to identify silent hypoxaemia and limit risk of significant deterioration.[3] We believe pulse oximetry is a more practical risk-stratification tool for confirmed or possible COVID-19 patients, especially in low-resource settings. Those with pulse oximetry levels lower than 92% should be managed as severe COVID-19 disease, per WHO guidelines.[4] Low-cost pulse oximeters could supplement management of patients with negative RDT and RT-PCR results in low-income and middle-income countries, with added prognostic and monitoring value, higher availability, and lower cost than chest CT.

We declare no competing interests.

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1 Boum Y, Fai KN, Nicolay B, et al. Performance and operational feasibility of antigen and antibody rapid diagnostic tests for COVID-19 in symptomatic and asymptomatic patients in Cameroon: a clinical, prospective, diagnostic accuracy study. *Lancet Infect Dis* 2021; published online March 25. https://doi.org/10.1016/S1473-3099(21)00132-8.

2 Khatami F, Saatchi M, Zadeh SST, et al. A meta-analysis of accuracy and sensitivity of chest CT and RT-PCR in COVID-19 diagnosis. *Sci Rep* 2020; **10:** 1–12.

3 Greenhalgh T, Knight M, Inda-Kim M, Fulop NJ, Leach J, Vindrola-Padros C. Remote management of COVID-19 using home pulse oximetry and virtual ward support. *BMJ* 2021; **372:** n677.

4 WHO. COVID-19 clinical management: living guidance. Geneva: World Health Organization; January, 2021.

Bell's palsy and SARS-CoV-2 vaccines—an unfolding story

Following the documentation of a case of Bell's palsy associated with vaccination,[1] we were contacted by patients and colleagues from Canada, Australia, Europe, the UK, and United Arab Emirates. Questions raised were whether mRNA vaccine recipients are at increased risk of developing Bell's palsy, and what to recommend to individuals with a history of Bell's palsy.

In their Comment, Al Ozonoff and colleagues[2] considered key statistical and epidemiological aspects of SARS-CoV-2 vaccine trial safety data regarding the onset of facial paralysis. Here, we offer a different interpretation of their findings and statistical consideration of risks associated with mRNA and non-mRNA SARS-CoV-2 vaccines.

Despite geographical and seasonal variations,[3,4] the generally agreed incidence of Bell's palsy is 15–30 cases each year per 100 000 population. Ozonoff and colleagues[2] rightly state that the predicted 12-month (annual) incidence of Bell's palsy inferred from mRNA vaccine trials is higher than that reported during the 2-month observation period of these studies. They concluded that the observed incidence of Bell's palsy in the mRNA vaccine arms was 3·5 to seven times higher than expected in the general population. However, safety data were collected for participants with a median follow-up of 2 months after the second dose; therefore, the data refer to an overall observation period of approximately 12 weeks from dose one. Given this, and considering Bell's palsy as the possible outcome of individual doses, the observed incidence in the mRNA vaccine trials would be roughly 1·5 to three times higher than in the general population (table).

The numerical imbalance reported with mRNA vaccine trials was not