## Correspondence on 'COVID-19 vaccine efficacy in a rapidly changing landscape'

Rujittika Mungmunpuntipantip o, <sup>1</sup> Viroj Wiwanitkit<sup>2</sup>

<sup>1</sup>Private Academic Consultant, Bangkok, Thailand <sup>2</sup>Department of Community Medicine, D Y Patil Medical College, Kolhapur, Maharashtra, India

**Correspondence to** Dr Rujittika Mungmunpuntipantip, Private Academic Consultant, Bangkok, Thailand; rujittika@gmail.com

Accepted 20 July 2022



▶ http://dx.doi.org/10. 1136/jim-2022-002520



© American Federation for Medical Research 2022. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Mungmunpuntipantip R, Wiwanitkit V. J Investig Med 2022;70:1442. Dear Editor,

We would like to comment on the publication 'COVID-19 vaccine efficacy in a rapidly changing landscape'.<sup>1</sup> A very small number of persons will still exhibit symptoms, require hospitalization, or pass away from COVID-19, according to Baer and Tran's prediction.<sup>1</sup> Therefore, it is critical to identify and thoroughly characterize the impact of a specific mutation for the pathogenesis of SAR-CoV-2. As the pandemic spreads, we should keep up our efforts to sequence and monitor SARS-CoV-2 evolution and modify vaccine plans as necessary.<sup>1</sup>

Due to the dangerous nature of COVID-19 and the vast spectrum of clinical symptoms it causes, immunization is crucial for efficient illness management. The vaccine's effectiveness is influenced by a number of variables. Since an asymptomatic COVID-19 may commonly have a puzzling effect, the data that are now available may be incomplete.<sup>2</sup> However, it must consider the possibility of asymptomatic COVID-19 in the populations being studied. Asymptomatic infections may become symptomatic during the observation period, changing the prognosis. The history of infection, which is a key factor in predicting the clinical course of the immunological response to infection and immunization, cannot be used to rule out COVID-19 silent infections.

Finally, it should be noted that the type of vaccination used and the manner of delivery

both affect the vaccine's effectiveness. There are many different vaccination types available today, and the methods of delivery vary, depending on the country. Many nations still use the inactivated COVID-19 vaccine, which is no longer efficacious, and heterologous mixing immunization. Low vaccine efficacy could be caused by an additional method of delivery, and this could be connected to the problem with the newly discovered COVID-19 variation.

**Contributors** RM: 50% ideas, writing, analysis and final approval for submission. VW: 50% ideas, supervision and final approval for submission.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Not commissioned; internally peer reviewed.

## ORCID iD

Rujittika Mungmunpuntipantip http://orcid.org/0000-0003-0078-7897

## REFERENCES

- Baer SL, Tran S. COVID-19 vaccine efficacy in a rapidly changing landscape. J Investig Med 2022;70:1327–8.
- 2 Joob B, Wiwanitkit V. Letter to the editor: coronavirus disease 2019 (COVID-19), infectivity, and the incubation period. J Prev Med Public Health 2020;53:70.