

Evaluation of SARS-CoV-2 Humoral Response Following Vaccination with ChAdOx1 nCoV-19 and/or Sinopharm, BBIBP-CorV: Correspondence

Hinpetch Daungsupawong,¹ Viroj Wiwanitkit²

¹Private Academic Consultant, Phonhong, Lao People's Democratic Republic,

²Medical College, Saveetha Institute of Medical and Technical Sciences Saveetha University India.

Dear Editor, We would like to comment on "Evaluation of SARS-CoV-2 Humoral Response Following Vaccination with ChAdOx1 nCoV-19 (Covishield) and/or Sinopharm, BBIBP-CorV (Vero cell).¹ In this study, 170 medical professionals who had received two doses of the COVID-19 vaccination at Seti Provincial Hospital in western Nepal participated in a cross-sectional analysis. Participants who did not give their agreement to participate or who were on leave at the time of data collection were not included in the study. Antibodies were found using the Mindray SARS-CoV-2 S-RBD IgG test kit; a cut-off value of ≥ 10 AU/ml was deemed positive. There was no discernible difference between the two vaccination groups, according to the results, which showed that more than 90% of individuals had positive antibody titers.

The small sample size of 170 individuals in this study represents a potential methodological flaw. Results from a bigger sample size would be more reliable and broadly applicable. Furthermore, the study only included medical professionals from a single institution, which can restrict how broadly applicable the results are. To gain a deeper understanding of vaccine efficacy across various groups, future research endeavors may endeavor to incorporate a more varied and representative representation of the populace.

Even if the study participants' antibody titers showed good results, it's crucial to take into account any confounding factors that might have existed and were missed during the analysis. Future study should take into account factors that may influence the antibody response to the vaccination, including age, comorbidities, and prior COVID-19 infection. Moreover, it is currently unclear how long vaccination-induced antibody protection lasts, and longer-term surveillance studies are required to evaluate the immune response's

long-term persistence.

Prospective avenues for investigation in this field may encompass longitudinal trials to monitor antibody concentrations and vaccination effectiveness over an extended duration. This would help with decisions about booster dosages and vaccination schedules as well as providing insightful information about the long-term protection that COVID-19 vaccines provide. Additionally, comparative studies of various vaccine kinds and dosage regimens may be able to assist in determining which vaccination choices are best for various groups. Cooperation with other medical centers and geographical areas may also improve the findings' generalizability and support international efforts to stop the COVID-19 pandemic.

CONFLICT OF INTEREST

None

REFERENCES

1. Kamar SB, Pandey H, Shahi R, Puri S, Yadav GK, Amgain K. Evaluation of SARS-CoV-2 Humoral Response Following Vaccination with ChAdOx1 nCoV-19 (Covishield) and/or Sinopharm, BBIBP-CorV (Vero cell). J Nepal Health Res Counc. 2024 Mar 22;21(3):523-529. doi: 10.33314/jnhrc.v21i3.4634.

Correspondence: Hinpetch Daungsupawong, Private Academic Consultant, Phonhong, Lao People's Democratic Republic. Email: hinpetchdaung@gmail.com.