

In response to: Disease severity and efficacy of homologous vaccination among patients infected with SARS-CoV-2 Delta or Omicron VOCs, compared to unvaccinated using main biomarkers

Dear editor,

An article published in the *Journal of Medical Virology* entitled (Disease severity and efficacy of homologous vaccination among patients infected with SARS-CoV-2 Delta or Omicron VOCs, compared to unvaccinated using main biomarkers)¹ claimed that they have found associations between vaccination efficiency (Pfizer and AstraZeneca) and disease severity in comparison to Delta and Omicron variants of SARS CoV-2. This kind of research is interesting, particularly if the study have identified the variants in their samples. Nonetheless, the article was dependent on the Covid-19 waves that we believe may not reflect accurate identification of the variants (Delta or Omicron). The authors referred to a study that only sequenced one sample of each Omicron and Delta in Sulaymaniyah city² that could not be generalized to the presence of all variants in Kurdistan region, in particular Kalar town (the location of their study), which is about 160 km far from Sulaymaniyah.

We think that there is a major issue in this paper that they should have identified the variants of SARS CoV-2 in their samples using rapid molecular methods or nucleic acid sequences.²⁻¹¹ Alternatively, they should only claim that the vaccination effects were different between the two waves without mentioning the variants since they have not identified the variants in their samples. Furthermore, the authors cited the government website (<https://gov.krd/coronavirus-en/situation-update/>) that the third and fourth waves hit Kurdistan region from mid-2021 to March 2022. Nonetheless, the authors have not mentioned the date of their sampling in material and methods. However, by exploiting spike protein sequencings, we have recently found that a novel delta variants have circulated in the region (GenBank ON394474.1) in addition to the Omicron variants (GenBanks: ON394475.1, ON394476.1, ON394477.1) from the December 2021 to January 2022.

In conclusion, we recommend that the article discussion and abstract might be corrected as a corrigendum modifying their claims about the variants. In other words, the authors should not mistakenly equalize the third and fourth waves to the Delta and Omicron variants, respectively. We can ask, without nucleic acid sequences, how do the authors can confirm that other variants have still not been circulated in the region that might have impacted the efficacies of the vaccinations they have claimed?

AUTHOR CONTRIBUTIONS


Both authors equally contributed to write and review of this manuscript letter.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The sequences are available in NCBI GenBanks: ON394475.1, ON394476.1, ON394477.1, and ON394474.1.

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