

COVID-19 vaccine immune response and plasma cell dyscrasia

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Dear Editor,

We would like to share ideas on the publication ‘COVID-19 vaccine immune response in patients with plasma cell dyscrasia: a systematic review’.¹ The purpose of this systematic review was to assess the immunological response to COVID-19 vaccinations in plasma cell dyscrasia patients and provide insights to improve clinical management. The review adhered to PRISMA principles and included nine papers (seven prospective and two retrospective studies) among 59 found *via* internet database searches. Seroconversion post-vaccination was the primary outcome in all nine investigations, which included 1429 individuals. Patients with plasma cell diseases exhibited a lower rate of seroconversion than healthy vaccinated individuals, with the overall percentage of seroconversion ranging from 23% to 95.5%. Patients on active therapy who received anti-CD38 therapy showed decreased seroconversion rates ranging from 6.5% to 100%.

This study’s weakness is that it depended on existing literature, and the results are based on the findings of the included studies. The variability in study design, patient groups, and medication regimens may create bias and restrict the generalizability of the findings. Furthermore, the review only looked at seroconversion rates and ignored other components of the immune response, such as cellular immunity. More research is required to have a better understanding of the immunological response to COVID-19 vaccinations in patients with plasma cell dyscrasia. These variables may affect immunization rates and COVID-19 results, which may change the vaccine’s efficacy as scientifically proven. The outcomes of the immunization may

have been affected by previous asymptomatic COVID-19 infections. The response may also be influenced by genetic make-up.² Determining the vaccine’s long-term utility in preventing COVID-19 in people may be difficult because the investigation lacked a clear follow-up time. Potential confounding factors that might have influenced the results but were not examined in this study include comorbidities, socioeconomic status, and accessibility to healthcare.

Declarations

Ethics approval and consent to participate

The Ethics Committee of the authors’ settings waived the need for ethics approval and the need to obtain consent for the collection, analysis and publication of the retrospectively obtained and anonymized data for this non-interventional study.

Consent for publication

Not applicable.

Author contributions

Amnuay Kleebayoon: Conceptualization; Validation; Visualization; Writing – original draft; Writing – review & editing.

Viroj Wiwanitkit: Conceptualization; Supervision.

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Competing interests

The authors declare that there is no conflict of interest.

Availability of data and materials

There is no new data generated.

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