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Editorial: COVID-19 vaccines are safe and effective in patients with inflammatory bowel disease—but many unanswered questions remain. Authors' reply

We read the editorial regarding our manuscript with great interest.¹ The editorial highlights the salient points of our systematic review and meta-analysis..² In addition to the high seroconversion rate observed in IBD patients after two doses of the SARS-CoV-2 vaccine, the systematic review and meta-analysis did not reveal any significant statistical differences in seroconversion rate amongst the IBD patients on different immunosuppressive therapies. Thus, the IBD patients in the included studies responded robustly to two SARS-CoV-2 vaccine doses regardless of the immunosuppressive regimens they were treated with.² It is important to point out that sources of heterogeneity were also evaluated in the meta-analysis. The study location and the type of SARS-CoV-2 vaccine independently and significantly explained the variance in the results between the included studies.² We agree that the adverse event rate in the IBD patients is likely an overestimate. The majority of the studies included in the review and meta-analysis were retrospective and survey-based and lacked a control cohort for accurate assessment.

It has subsequently been reported that the antibody responses to two-dose SARS-CoV-2 vaccine regimens wane with time, necessitating additional vaccine doses to sustain SARS-CoV-2 immunity.³ Our review and meta-analysis did not include studies published after December 2021 and therefore did not include assessments of seroconversion and breakthrough infections in IBD patients after the initial two vaccine doses. Therefore, we agree that further studies describing the serological response to third and fourth vaccine doses in IBD patients are necessary.

Breakthrough CoV-19 infections could occur despite a robust serological response to the vaccine series due to high-risk behaviour, waning antibody levels, and the emergence of antibody-resistant SARS-CoV-2 variants.⁴ We agree with the editorial authors that further studies in the IBD population assessing the durability of vaccine seroconversion, vaccine safety, and rates of breakthrough infection in the setting of SARS-CoV-2 variants (including Omicron and related subvariants) are needed.

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CONFLICT OF INTEREST

We certify that we have no financial affiliation/interest (eg, employment, stock holdings, consultant arrangements, honoraria in the subject matter, materials or products mentioned in this manuscript).

AUTHOR CONTRIBUTIONS

Abhishek Bhurwal: Conceptualization (equal); writing – original draft (equal); writing – review and editing (equal). **Hemant Mutneja:** Writing – original draft (equal). **Darren N Seril:** Writing – original draft (equal); writing – review and editing (equal).

DATA AVAILABILITY STATEMENT

Not applicable.

LINKED CONTENT

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