

Letters to the Editor

Reply to Albulushi et al.—Absence of Pericarditis Recurrence in Riloncept-Treated Patients With COVID-19 and SARS-CoV-2 Vaccination: Results From RHAPSODY Long-term Extension



To the Editor:

We thank Drs. Albulushi, Al-Jabri, and Al-Amri for their interest in our article, and we appreciate the opportunity to provide additional clarity.

The sample size is too small to make conclusions regarding the impact of different vaccine types on pericarditis recurrence rates. Most patients received mRNA vaccines, and only 2 patients received adenovirus-type vaccines. Although the impact of the SARS-CoV-2 vaccine on pericarditis recurrence cannot be assessed, an important point to note is that no pericarditis recurrences were associated temporally with vaccination. Further, sustained riloncept treatment led to a sustained treatment response and reduced the risk of pericarditis recurrence by 98% beyond 18 months of treatment,¹ regardless of vaccination status, whereas premature riloncept treatment cessation led to pericarditis recurrence. No pericarditis recurrences occurred among vaccinated patients who continued riloncept treatment. Among the 16 cases of COVID-19 that occurred in patients in the Riloncept Inhibition of Interleukin-1 Alpha and Beta for Recurrent Pericarditis: A Pivotal Symptomatology and Outcomes Study—Long-Term Extension (RHAPSODY LTE), only one investigator-assessed recurrence occurred, which happened 4.5 months after riloncept treatment cessation, during the peri-COVID period, in a partially vaccinated/unvaccinated patient. Overall, we do not expect that the type of vaccine will influence the clinical outcomes of patients with recurrent pericarditis (RP).

The efficacy and safety of interleukin-1 (IL-1) pathway inhibition as a treatment of severe COVID-19 have not been established. As Dr. Albulushi et al. have stated, multiple cytokines, including IL-1, play an important role in the pathogenesis and disease progression following SARS-CoV-2 infection. A meta-analysis on the use of anakinra in cases of severe COVID-19 has been published recently.² Mohamed Hussein et al. conclude that anakinra, though promising, should be used with caution in severe COVID-19.² An important point to note is that a pericarditis recurrence could add complexity to the management of COVID-19, so even in the absence of a demonstrated benefit of IL-1 pathway inhibition for treating the cytokine storm associated with

COVID-19, continued treatment with IL-1 pathway inhibition to prevent pericarditis recurrence should certainly limit the complexity of COVID-19 case management.

After the last study visit of the RHAPSODY LTE, data collection into the trial database was concluded; thus, no subsequent study data are available for these patients, including data on the long-term sequelae of COVID-19. We appreciate Dr. Albulushi's et al.'s interest in the interplay of RP as an autoinflammatory disease and cytokine signalling associated with COVID-19, and we concur that more data on long COVID are needed. RP is a chronic disease that often lasts for years, and continued collection of long-term follow-up data in registries and other tools could further inform its long-term management.^{3,4}

Antonio Brucato, MD
Antonio.Brucato@unimi.it

Allan L. Klein, MD
Massimo Imazio, MD
John F. Paolini, MD, PhD

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References

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