Peer Review File

Article Information: https://dx.doi.org/10.21037/tlcr-22-388

Reviewer A

Good case report, I would recommend the following
- it would be good to quote the wider literature explaining the historical prologue as to why cancer patients were affected with COVID (https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31173-9/fulltext) and quote the current largest global study of coronavirus vaccination in cancer patients (https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(22)00202-9/fulltext)

Response Thank you for your comment. We have modified the text based on your suggestion..

The following text has been added to page 5, lines 11-14.

"Cancer patients infected with COVID-19 have a higher mortality rate than non-cancer patients with COVID-19. Furthermore, the risk of death increases with age, being male, and complications such as cardiovascular disease. (8) Coronavirus vaccination is effective for cancer patients and protects against breakthrough infections. (9)"

- I think the authors should also to list potential limitations. To be more explicit that 9 days (a short time period between vaccination and the syndrome) is not definitive that it was causal, but correlation with high temporal plausibility.

Response: Thank you for your comments. The patient received the vaccine 9 days after the last dose of ICI and developed CRS the day after the vaccine was administered. As noted in the Discussion section, CRS was not due to ICI because the treatment had been continuously administered for more than a year since the start of treatment. Additionally, the patient developed CRS the day after vaccine administration; we suspected a more substantial causality relationship with the vaccine.

Changes in the text: No change in text

- I also think there should be a "recommendation for action" for pharmacovigilence and report of cases to repositories such as these:-
https://www.frontiersin.org/articles/10.3389/fphar.2020.00557/full

Response

Thank you for your comments. As suggested, it has been submitted to the repository from a pharmacovigilance perspective.

Based on your suggestion, we have modified the text on page 6, lines 2-3, as seen below.

"We have reported these adverse events to the repositories for pharmacovigilance purposes. (14)"

Unusual case, but biologically plausible.

Reviewer B

The authors reported a metastatic NSCLC patient receiving ICI therapy experienced cytokine release syndrome after mRNA-1273 vaccination. This manuscript is well-written and organized. The figure clearly summarized all the clinical course of this patient and let reader catch the point easily.
I only had a small question.
Why the physician decided to administrated steroid pulse therapy, and I hope they can state about this decision more in the manuscript.
Although they declared that an English editing was done, I think re-editing is needed still.

Response
Thank you for your comments. Based on your suggestion, we have modified the text as noted below.

The modified text is on page 5, lines 8-11.

"Although it is recommended to treat CRS with tocilizumab (7), this case was treated with the maximum dose of steroids, allowing for rapid administration. In addition, increased IL-6 levels were not immediately known, and the condition was being addressed for the first time."

Overall, this case report is novel and reminds us that vaccination-related cytokine release syndrome would occur in advanced NSCLC patient receiving ICI therapy. They also demonstrated that how to deal with this problem.
I do not have major criticism for this manuscript.

Response: Thank you.