

Dear Editor,

Thank you for the chance to revise our manuscript. Please find our responses to reviewers below.

Reviewer #1:

Scientific Quality: Grade D (Fair)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors: thanks the authors for the submission and the Editor for the invitation to review it.

Thank you for the time to review our manuscript

1. please specify quality of original data.

Thank you for your comment. The authors have now added a METHODS section and adopted RCA to utilize best available literature. This remains a literature and not a systematic review, and overall judgment instead of aggregate scores was used to prioritize articles

2. please add more tables and figures for easier comprehension.

Thank you for your comment. Manuscript is now enriched with one Figure in combination to existing Table

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: The adverse reactions caused by SARS-COV2 vaccination are the focus of global attention. This paper reviews the existing evidence related to the rare adverse event of Secondary liver injury after SARS-COV2 vaccination, and attempts to clarify its potential mechanism through immune mediated pathway, so as to establish the causal relationship with SARS-COV2 vaccine and liver injury. It is of great significance to promote the update of vaccine technology and the prevention and treatment of related adverse reactions.

Thank you for the time to review our manuscript

1. So far, how many cases of liver injury caused by SARS-COV2 vaccination have been reported?

A relevant section and respective references have been highlighted

2.Are there ethnic and regional differences in liver injury after SARS-COV2 vaccination? What is the reason for the different time of liver injury?

A relevant section and respective references have been highlighted as above

3.It is suggested that the relevant mechanisms should be explained with figures.

Thank you for your comment. Manuscript in now enriched with one Figure

4.Do you have any good suggestions for vaccine formulations?

Thank you for your comment. A minor comment has now been added but further discussion falls beyond the scope of this manuscript

5.The sense of article hierarchy is slightly poor

Thank you for your comment. The text has now been majorly re-organized