

**Manuscript NO. 79927**

**Title: Liver injury in COVID-19 : clinical features, potential mechanisms, risk factors, and clinical treatments**

**Author name: Shuwu Zhao\*, Yiming Li, Yilin Li, Chen Su<sup>#</sup>**

Dear editor,

Sincerely thanks for your work and the comments from three reviewers. The constructive suggestions provide us reference and guidance to improve the paper quality. From general to detail, we have revised the manuscript including content, supplement, terms correction, and writing enhancement. We supply a point to point reply to the reviewers' questions. Hope our edited paper can meet your journal's standard to publish. Thank you again.

Best wishes,

Chen Su

**Comments of reviewer 1**

|                   |                |   |                            |
|-------------------|----------------|---|----------------------------|
| Scientific        | Quality: Grade | C | (Good)                     |
| Language          | Quality: Grade | B | (Minor language polishing) |
| Conclusion: Minor |                |   | revision                   |

*Specific Comments to Authors: In this review, the author collected a large number of relevant literature related to liver injury caused by COVID-19, summarized and sorted out the clinical features, potential mechanisms, prone populations and treatment of liver damage with COVID-19, indicating that the authors had a comprehensive understanding of the relevant issues.*

*Relevant comments and suggestions:*

*(1) The content of the review appears to be literature stacked, lacking of summary, and no clear guiding opinions and conclusions on the basic characteristics of liver injury caused by COVID-19 and the problems requiring attention are put forward, which limits the application value and significance of the paper.*

**Reply:**

Thank you for reminding us this important point. We have made a great editing on our paper, including reorganized the content, which could emphasize the main points and conclusions.

As the complexity of liver injury caused by COVID-19, there is a big variation from these relative studies. We summarized the clinical features, mechanism and treatment, however, there is no clear difference of liver injury caused by COVID-19 compare to regular liver damage. As far as we know, there is no evidence based research showed how to deal with liver damage caused COVID-19 specifically. We would like to keep focusing in this field, and updated what is new finds in liver injury caused COVID-19.

*(2) The definition of "PRONE POPULATION" shuould be discussed. The predisposition of the relevant population described in the literature is not based on epidemiological and evidence-based evidence, and the term "PRONE POPULATION" in this review seems to be inappropriate.*

**Reply:**

Thank you so much for bring this crucial point to us. As COVID-19 is susceptible to overall people, we would like to change our title to : **Liver injury in COVID-19 : clinical features, potential mechanisms, risk factors, and clinical treatments**

**Comments of reviewer 2**

*Scientific Quality: Grade C (Good)*

*Language Quality: Grade B (Minor language polishing)*

*Conclusion: Accept (General priority)*

*Specific Comments to Authors: Abstract format should be rewrite.*

**Reply:**

Thank you very much for your comments. We have rewritten our Abstract and made a good editing on our paper content. Moreover, the writing is substantially improved with the help of native speaker.

**Comments of reviewer 3**

*Scientific Quality: Grade B (Very good)*

*Language Quality: Grade B (Minor language polishing)*

*Conclusion: Minor revision*

*Specific Comments to Authors: In the present review manuscript, the authors summarized the clinical features, mechanisms and treatment for liver damage in COVID-19. Liver injury in COVID-19 is a matter of debate and is expanding field of research because of the complexity of mechanisms involved. The manuscript is very well written, the subject is exposed concisely with updated bibliography. Minor language polishing is required.*

**Reply:**

Thank you very much for your highly recognition to our work. We have made a great editing on our paper to make our literature more readable. Moreover, the writing is substantially improved with the help of native speaker.