

Reviewer #1:

**Specific Comments to Authors:** Comments The normal levels of ALT and AST were not written in the abstract, so we can not recognize whether the reported values are normal or high.

Dear reviewer, thank you for your advice, the normal levels of ALT and AST were **5-40U/L and 0-40U/L**, we have written in the abstract.

Were the upper limits of normal were the same in all extracted articles?

Dear reviewer, those articles didn't show the upper limits of normal.

The definition of non-severe and severe COVID was not mentioned.

Thank you for your advice, severe disease was defined according to the American Thoracic Society and Infectious Disease Society of America guidelines for community-acquired pneumonia, and the guidelines for diagnosis and management of COVID-19 released by National Health Commission of China, need of intensive care unit (ICU) admission, mechanical ventilation.

The liver chemistries were measured in only one occasion, but its serial follow up assessment with COVID disease progression was not mentioned.

Most studies only provide one result of liver function.

Reviewer #2:

**Specific Comments to Authors:** The authors did make an attempt the post COVID scenario which is relevant. The paper can be published after making few changes in the manuscript. The authors are advised to check grammar and typos

Dear reviewer, thank you for your advice, we have check grammar and typos.

Reviewer #3:

**Scientific Quality:** Grade E (Do not publish)

**Language Quality:** Grade D (Rejection)

**Conclusion:** Rejection

**Specific Comments to Authors:** When do the articles assess liver function in COVID-19 infection? At the onset or severity of COVID-19? Results may vary depending on the timing of assessment.

Dear reviewer, most studies did not provide the time for liver function tests.

Reviewer #4:

**Specific Comments to Authors:** Generally, you have presented and analyzed a very interesting meta-analysis, very well hypothesis driven.

Here are some specific remarks to improve the whole presentation and the content of your manuscript. You should replace everywhere in your manuscript the abbreviation for the liver biochemical marker: alkaline phosphatase (AKP) with the more suitable abbreviation (ALP).

Thank you for your advance, we have replaced the AKP with ALP.

At page 8. of your manuscript, at the "Data extraction" section, can you provide the relevant literature for the following paragraph: "Severe disease was defined according to the American Thoracic Society and Infectious Disease Society of America guidelines for community-acquired pneumonia, and the guidelines for diagnosis and management of COVID-19 released by National Health Commission of China, need of intensive care unit (ICU) admission, mechanical ventilation." If it is possible, you can select all of your text manuscript in full alignment.

Dear reviewer, thank you for your advance, we show the literature in our article.

16.Metlay J.P., Waterer G.W., Long A.C., Anzueto A., Brozek J., Crothers K. Diagnosis and treatment of Adults with community-acquired pneumonia. An Official Clinical Practice Guideline of the American Thoracic Society and Infectious Diseases Society of America. *Am J Respir Crit Care Med*. 2019;200:e45–e67. [[PMC free article](#)] [[PubMed](#)] [[Google Scholar](#)]

17. National Health Commission of the People's Republic of China Handbook of Prevention and Treatment of the Pneumonia Caused by the Novel Coronavirus (2019-nCoV) (in Chinese) 2020. [http://en.nhc.gov.cn/2020-02/06/c\\_76295.htm](http://en.nhc.gov.cn/2020-02/06/c_76295.htm) Updated: February 6, 2020. Available at.

It would be useful if you could add a table with the 3 categories of the biochemical liver markers that you analyzed and the mean reference values of each one biochemical marker, according the 57 studies included in your meta-analysis.

Thank you, we checked all the articles, they didn't show us the mean reference values of each one biochemical marker.

Moreover, at the Introduction section can you add few data about the relevant studies that you refer to them at this sentence: "In fact, several studies have found liver injury in patients with COVID-19.[9-13]" ?

Thank you for your advance, we add the data in the introduction.

Finally, you have to present more clearly and in bigger size and more clearly and distinctly the figures 1-5, as exactly you have done it in your

supplementary data, in order to improve the presentation and the structure of these results. Congratulations for your work!!!

Thanks, we will upload bigger size figures in revised manuscript.