PEER-REVIEW REPORT

Name of journal: *World Journal of Hepatology*

Manuscript NO: 80434

Title: Liver test abnormalities in asymptomatic and mild COVID-19 patients and their association with viral shedding time

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

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Reviewer's code: 02888255

Position: Peer Reviewer

Academic degree: FCCP, MBBS, MD

Professional title: Chief Doctor

Reviewer's Country/Territory: United Arab Emirates

Author's Country/Territory: China

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Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-10-01 13:23

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Review time: 1 Day and 1 Hour

Scientific quality	[　] Grade A: Excellent　[　] Grade B: Very good　[Y] Grade C: Good [　] Grade D: Fair　[　] Grade E: Do not publish
Language quality	[　] Grade A: Priority publishing　[　] Grade B: Minor language polishing [Y] Grade C: A great deal of language polishing　[　] Grade D: Rejection
Conclusion	[　] Accept (High priority)　[　] Accept (General priority) [　] Minor revision　[Y] Major revision　[　] Rejection
Re-review	[Y] Yes　[　] No

Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

The authors have performed an observational study on the impact of mild and asymptomatic SARS-CoV-2 infection on the liver function tests and its correlation to the outcomes and viral replication. I have few observations which may help authors to improve the content of the manuscript. 1. Introduction: "In addition to respiratory symptoms and fever, 14-69% of patients with COVID-19 have abnormal liver function tests, mainly manifested by transient elevations of alanine aminotransferase (ALT) and aspartate aminotransferase (AST)" A review article on the same topic observed that the most common liver function abnormalities are hypoalbuminemia and followed by elevation of gamma-glutamyl transferase. [doi: 10.4254/wjh.v13.i5.522] Please correct this discrepancy. 2. Measures: "Liver diseases included chronic hepatitis B and alcoholic/nonalcoholic fatty liver disease (NAFLD)." This statement is incomplete. Please rephrase this statement. 3. Results: A total of 130 (19.7%) had underlying diseases, of whom 57 (8.6%) had liver diseases. 45 (6.8%) had NAFLD, 11 (1.7%) had hepatitis B, and 1 (0.2%) had both. The number of patients with elevations in ALT, AST and TBIL was 53 (8.0%), 61 (9.2%), and 4 (0.6%), respectively, with a majority of mild liver test abnormalities. How many of these patients were preexisting liver test abnormalities? Was the elevation in the patients with preexisting abnormalities was 3X from the base line or 3X from ULN?   4. A multivariate logistic regression model for key factors indicated that liver test abnormalities were only associated with a history of liver disease (OR 8.004, 95% CI 4.319-14.835, P<0.001). A multivariate logistic regression model for all factors showed that liver test abnormalities were significantly associated with the age of 30-49 years (compared with age 14-30 years, OR 1.970, 95% CI 1.073-3.618,

P=0.029), male sex (OR 1.728, 95% CI 1.005-2.971, P=0.048), and a history of liver disease (OR 8.265, 95% CI 4.315-15.831, P<0.001). How two different set of factors were significantly associated with liver test abnormalities in multivariate analysis? 5. Two types of multivariate linear regression were performed, with key factors and all factors. What are 'key factors' and 'all factors'?   6. What was the criteria used for viral shedding time? Positivity of RT-PCR and CT value in RT-PCR 7. It was mentioned that all cases of Omicron BA2.2 were recruited in the study. How the variation was identified, through genotyping or any other method ? 8. Discussion: One possible reason for this was that our participants were all asymptomatic carriers or mild cases, among whom abnormal liver test results were more rare. Change more rare to uncommon.

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SPECIFIC COMMENTS TO AUTHORS

1. Considering changing the title of the study to be more reflective of the research's goal. 2. Shortening the results section in the study abstract and highlighting only the most important findings of the current study. 3. The introduction to the study, as well as the paper material and methods section, are written in a distinct style, and the references on which it is based are recent. 4. Examine the progress of the results in the paper again to avoid any incoming errors that could jeopardize the research's credibility. 5. Adding a paragraph indicating the possibility of re-verifying the study's results if any party wishes to confirm the results' credibility. 6. To avoid future reader confusion, avoid using subheadings in the results section. 7. Separate the conclusion from the discussion section and expand the discussion section. 8. Please reformulate the study's conclusion. 9. Replacing reference number 22 with a more recent reference from 2020 and beyond. 10. Check the plagiarism and self-citation percentages of references to ensure they are within the accepted journal policy.