

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 63962

Title: Insight into molecular mechanisms underlying hepatic dysfunction in severe COVID-19 patients using systems biology

Reviewer's code: 05432496

Position: Peer Reviewer

Academic degree: PhD

Professional title: Research Fellow

Reviewer's Country/Territory: Brazil

Author's Country/Territory: United Arab Emirates

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Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-02-07 00:41

Reviewer performed review: 2021-02-07 23:23

Review time: 22 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

Using a previously published dataset, the authors investigated the transcriptome of liver samples from severe COVID-19 and non-COVID patients. Using in silico techniques, they compared the profile of genes expressed by COVID-19 patients with the genetic signatures of other liver diseases. To test the finding they investigated the expression of some of those genes in blood samples of healthy, severe COVID-19 patients with and without liver dysfunction using qRT-PCR. The study possesses some limitations as the low number of samples investigated, in both parts (liver samples and blood samples), and the lack of some protein analyses. Nevertheless, the manuscript is very clear and objective, with interesting data for the investigation of hepatic dysfunction in COVID-19 patients and their molecular mechanisms.