Author Reply

A: Respected Editor in Chief and Science Editor, we have now revised our manuscript integrating all your comments and suggestions.

(1) Science editor:

I find it a well-structured interesting study. Nevertheless, there are a number points that may deserve some revisions. The authors can consider summarizing more clinical studies on the treatment of covid-19 patients with rifampicin.

A: Up to now, there are no clinical studies available on the treatment of Covid-19 patients with rifampicin. However, we have added this remark in the "RIFAMPICIN IN CLINICAL PRACTICE IN COVID-19 DISEASE" section L220-221 and added a recently published in silico study (PMID: 33970450) in the relevant "IN SILICO STUDIES INDICATE RIFAMPICIN'S POSSIBLE EFFECTIVENESS" section L174-176.

Can the author summarize the mechanism diagram and clinical research cases of rifampicin's COVID-19 treatment ?

A: We have now added Table 1 to summarize the possible mechanisms of rifampicin's action against SARS-CoV-2 as a COVID-19 treatment and Table 2 to summarize the studies indicating rifampicin's possible effectiveness against COVID-19 disease.

Is rifampicin serious in liver function impairment and allergic reaction in patients with covid-19?

A: The caution needed in liver function impairment was already discussed in the "DRUG MONITORING AND INTERACTIONS" section. Furthermore, we have now cited the specific plan, published in the World Journal of Gastroenterology (PMID: 33362383) regarding medications in the treatment of Covid-19 L186-189.

L201-208 have been added in the "DRUG MONITORING AND INTERACTIONS" section depicting possible rifampicin allergic reactions.

It is unacceptable to have more than 3 references from the same journal. 13 Carlucci PM, Ahuja T, Petrilli C, Rajagopalan H, Jones S, Rahimian J. Zinc sulfate in combination with a zinc ionophore may improve outcomes in hospitalized COVID-19 patients. J Med Microbiol 2020; 69: 1228-1234 [PMID: 32930657] 43 Pokhrel R, Chapagain P, Siltberg-Liberles J. Potential RNA-dependent RNA polymerase inhibitors as prospective therapeutics against SARS-CoV-2. J Med Microbiol 2020; 69: 864-873 [PMID: 32469301] 53 Pokhrel R, Chapagain P, Siltberg-Liberles J. Potential RNA-dependent RNA polymerase inhibitors as prospective therapeutics against SARS-CoV-2. J Med Microbiol 2020; 69: 864-873 [PMID: 32469301]

A: #43 and #53 were duplicate references. Thank you for noticing. #53 was removed.

Language Quality: Grade B (Minor language polishing)
Scientific Quality: Grade C (Good)

(2) Company editor-in-chief:

I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Virology, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Before final acceptance, the author(s) must add a table/figure to the manuscript.

A: We have now added Table 1 to summarize the possible mechanisms of rifampicin's action against SARS-CoV-2 as a COVID-19 treatment and Table 2 to summarize the studies indicating rifampicin's possible effectiveness against COVID-19 disease.

Reviewer #1:
Scientific Quality: Grade B (Very good)
Language Quality: Grade B (Minor language polishing)
Conclusion: Minor revision
Specific Comments to Authors: The paper is written in a professional style, and it was a pleasure to read it. Very interesting! However, it would be much better if the authors can provide some Figures or tables for this paper so that the reader can easily catch the concept.

A: We have now added Table 1 to summarize the possible mechanisms of rifampicin's action against SARS-CoV-2 as a COVID-19 treatment and Table 2 to summarize the studies indicating rifampicin's possible effectiveness against COVID-19 disease.