Dr Lian-Sheng Ma, Yun-XiaoJian Wu

Thank you for allowing me to submit a revised draft of my manuscript titled "**Autoimmune liver diseases and SARS-CoV-2**" to the *World Journal of Gastroenterology*.

We appreciate the time and effort you and the reviewers have dedicated to providing valuable feedback on the manuscript. We are grateful to the reviewers for their insightful comments on our paper. We have been able to incorporate changes to reflect most of the suggestions provided by the reviewers.

Here is a point-by-point response to the reviewers' comments and concerns.

Comments from Reviewer 1: Dear Authors, The manuscript "Autoimmune liver diseases and SARS-CoV-2" is concise, clear, comprehensive and interesting for readers of the WJG. It describes a very current topic in an adequate way and fulfils all the requirements to be published. Congratulations. I have only one suggestion. In the AILDs following SARS-CoV-2 vaccines section, there is a web address (https://ourworldindata.org/covid-vaccinations), which I think should be in the bibliography. Best regards,

**Response**: Thank you for pointing this out. We added the web address in the bibliography (reference 42)

Comments from Reviewer 2: In the present, many case reports of autoimmune diseases following SARS CoV-2 vaccine, especially autoimmune hepatitis, have aroused great concern in the medical community. The reviews about the correlation between SARS CoV-2 vaccine, liver dysfuction, and autoimmune diseases have been published. This paper summarized the effects of autoimmune liver disease and SARS CoV-2 infection on the course and clinical outcome of both diseases; Secondly, the clinical features of autoimmune liver disease caused by SARS CoV-2 infection reported recently were summarized, and the possible mechanism of immune mediated liver damage caused by SARS CoV-2 infection was expounded. Finally, the demographic characteristics, clinical characteristics, therapeutic effects and prognosis of autoimmune liver disease induced by SARS CoV-2 vaccine were comprehensively summarized. The abstract reflects the work described in the manuscript. The manuscript is concisely and coherently organized and presented, and the references cited in this paper are novel. It is a suggestion: If the potential mechanism of autoimmune liver diseases induced by SARS-CoV-2 infection and vaccination might be demonstrated by schematic diagram

**Response:** Thank you for pointing this out. We added a figure (Figure 1) which describes the potential mechanisms of autoimmune liver diseases induced by SARS-CoV-2 infection.

Based on your comments, we performed the minor language polishing as requested.

We look forward to hearing from you regarding our submission and responding to any further questions and comments you may have. Please note that we performed a

Sincerely, Alba Rocco

Naples, 06/01/2023