Dear reviewer.

Thank you for your comments and suggestions about our manuscript. We will send you to revised manuscript.

We provide response to the following:

Reviewer #1: The authors revealed made the system-review and revealed some clinical and pathological features of PD-1 inhibitor-related SC. The manuscript caught up with the PD-1 era. It's very meaningful, but there are several issues needs to be solved with minor revise:

- 1.It was not clear how the drugs such as MMF used? What's the dosage?

  Thank you for your pointing out. As you described, we added drugs' dosage in Table 3.
- 2. How do the authors classify the response? Did it have a criterion? Line 201-208, Page 9.

As you pointed out, we have changed the sentence "Corticosteroids were the main treatment for PD inhibitor-related SC (83.8%, 26/31). Only 3 patients whose the levels of liver and biliary enzymes were improved to normal level with steroid therapy, so that the response rate to corticosteroids was 11.5% (3/26). Eight patients with PD-1 inhibitor-related SC had poor response, no improvement of liver and biliary enzymes, to steroid therapy. In 15 patients who received steroid therapy, the levels of liver and biliary enzymes were improved, although normalization of enzyme activities was not achieved (i.e. only a moderate response occurred)."in result.

- 3. I did not see immunological parameters in Table 1 other than IgG4, such as IgG. Thank you for your suggestion. We added IgG, IgA, IgM, and antinuclear antibody in Table 1
- 4. Is there any suggestions proposed for future research to help establish diagnostic criteria? Please add them in the discussion part.

Line 297-303, Page 12-13.

As you pointed out, we changed the sentence "To establish the diagnostic criteria for PD-1 inhibitor-related SC, more cases, for which clinical data including hepatobiliary enzymes, immunological marker, image findings, and pathological evaluation were presented clearly, need to be evaluated. Although CD8+ T cell infiltration is one of the pathological features of PD-1 inhibitor-related SC, it is not enough to exclude different diseases that cause sclerosing cholangitis. We will have to find more specific features of PD-1 inhibitor-related SC." in conclusion.

We believe the revised manuscript has been improved satisfactory and hope it will be accepted for publishing in World Journal of Gastroenterology.

Sincerely,

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