

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 66355

**Title:** Gut microbiome in acute pancreatitis- A review based on current literature

**Reviewer's code:** 01436649

**Position:** Editorial Board

**Academic degree:** MD, PhD

**Professional title:** Full Professor

**Reviewer's Country/Territory:** Croatia

**Author's Country/Territory:** Singapore

**Manuscript submission date:** 2021-04-12

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-04-14 13:59

**Reviewer performed review:** 2021-04-22 11:19

**Review time:** 7 Days and 21 Hours

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 Grade E: Do not publish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

The presentation of the Gut microbiome in acute pancreatitis: A review of the current literature by Patel and coworkers may be a very interesting review. In my view, however, to be along with the title, gut microbiome in acute pancreatitis deserves to be more presented, and more focused. Namely, a large part of the review did consider the general points of the acute pancreatitis with very little focus on the gut microbiome in acute pancreatitis. Evidently, the gut microbiome in acute pancreatitis should be a large majority (and not minority) of the text. In addition, in referring gut microbiome, some inconsistencies should be resolved. As illustration, see the text: Some studies have not found any significant benefit or adverse effect of probiotics in severe AP, but it is important to note the considerable patient and probiotic regimen heterogeneity in the published clinical trials of probiotics. The PROPATRIA Probiotics in Pancreatitis Trial randomized 296 patients with predicted severe AP to either a multispecies probiotic mixture containing two different Bifidobacterium, three Lactobacillus, and one Lactococcus species or a placebo. The infectious complications in the two groups were similar, but the probiotic group had higher mortality (16% vs 6%) and incidence of bowel ischemia (6% vs 0%) compared with the placebo group. The high load of the probiotic mixture used in the study was thought to have been responsible for the increased mortality[108]. The findings highlight the challenges of supplementing the gut microbiome with beneficial microbial species in the setting of AP. The first sentence (see *italic*) contrasts with the next mentioning of the study with the very negative results (i.e., increased mortality, increased incidence of bowel ischemia). Furthermore, assuming that the results of the mentioned study are relevant – the conclusion (In summary, probiotics help to maintain gut homeostasis but there is not much evidence in support of clinical use of probiotics for the treatment of AP and other diseases, despite the increasing evidence available on the role of the gut microbiome in human health.) is also

inadequate – and requires to be accordingly modified.

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 66355

**Title:** Gut microbiome in acute pancreatitis- A review based on current literature

**Reviewer's code:** 02905103

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Professor

**Reviewer's Country/Territory:** China

**Author's Country/Territory:** Singapore

**Manuscript submission date:** 2021-04-12

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-04-13 06:10

**Reviewer performed review:** 2021-04-24 20:25

**Review time:** 11 Days and 14 Hours

<b>Scientific quality</b>	<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
<b>Language quality</b>	<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
<b>Conclusion</b>	<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
<b>Re-review</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Peer-reviewer statements</b>	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**

This is a review about gut microbiome in acute pancreatitis. Author has elaborated the pathogenesis of AP and the possible way that bacteria may affect or be affected by AP. However, there are some problems author need to clarify. 1. In the third paragraph of "POTENTIAL ROLE OF THE GUT MICROBIOME IN AP" part, the current literature provide clear evidence of the association between gut microbiome and the severity of AP, which maybe more appropriate to conduct a conclusion that the level of microbiome can predict AP severity rather than the change of microbiome can treat AP. 2. In the second paragraph of "CONCLUSION AND FUTURE DIRECTIONS" part, "The importance of restoring gut microbiota homeostasis and stabilizing the gut barrier are challenging therapeutic targets in the prevention of AP progression." is confusing, please rephrase it.

## RE-REVIEW REPORT OF REVISED MANUSCRIPT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 66355

**Title:** Gut microbiome in acute pancreatitis- A review based on current literature

**Reviewer's code:** 01436649

**Position:** Editorial Board

**Academic degree:** MD, PhD

**Professional title:** Full Professor

**Reviewer's Country/Territory:** Croatia

**Author's Country/Territory:** Singapore

**Manuscript submission date:** 2021-04-12

**Reviewer chosen by:** Ya-Juan Ma

**Reviewer accepted review:** 2021-06-07 07:12

**Reviewer performed review:** 2021-06-07 07:17

**Review time:** 1 Hour

<b>Scientific quality</b>	<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
<b>Language quality</b>	<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
<b>Conclusion</b>	<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
<b>Peer-reviewer statements</b>	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

Authors fulfilled the requirements from reviewers.