Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 69158

Title: Reciprocal interactions between gut microbiota and autophagy

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 03796332

Position: Editorial Board

Academic degree: PhD

Professional title: Professor

Reviewer’s Country/Territory: China

Author’s Country/Territory: France

Manuscript submission date: 2021-06-18

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-07-12 01:39

Reviewer performed review: 2021-07-23 02:55

Review time: 11 Days and 1 Hour

<table>
<thead>
<tr>
<th>Scientific quality</th>
<th>[ ] Grade A: Excellent</th>
<th>[ ] Grade B: Very good</th>
<th>[ ] Grade C: Good</th>
<th>[ ] Grade D: Fair</th>
<th>[ ] Grade E: Do not publish</th>
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<tbody>
<tr>
<td>Language quality</td>
<td>[ ] Grade A: Priority publishing</td>
<td>[ ] Grade B: Minor language polishing</td>
<td>[ ] Grade C: A great deal of language polishing</td>
<td>[ ] Grade D: Rejection</td>
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<td>Conclusion</td>
<td>[ ] Accept (High priority)</td>
<td>[ ] Accept (General priority)</td>
<td>[ ] Minor revision</td>
<td>[ ] Major revision</td>
<td>[ ] Rejection</td>
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<tr>
<td>Re-review</td>
<td>[ ] Yes</td>
<td>[ ] No</td>
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<td>Peer-reviewer</td>
<td>Peer-Review: [ ] Anonymous</td>
<td>[ ] Onymous</td>
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SPECIFIC COMMENTS TO AUTHORS
The article presented the correlationship between the autophagge and gut microbiota. The topic is very interesting. The article was well organized and good in presentation.
Name of journal: World Journal of Gastroenterology

Manuscript NO: 69158

Title: Reciprocal interactions between gut microbiota and autophagy

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 05444197

Position: Peer Reviewer

Academic degree: PhD

Professional title: Professor

Reviewer’s Country/Territory: China

Author’s Country/Territory: France

Manuscript submission date: 2021-06-18

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-07-09 08:18

Reviewer performed review: 2021-07-31 07:53

Review time: 21 Days and 23 Hours

Scientific quality

| Grade A: Excellent | Grade B: Very good | Grade C: Good | Grade D: Fair | Grade E: Do not publish |

Language quality

| Grade A: Priority publishing | Grade B: Minor language polishing | Grade C: A great deal of language polishing | Grade D: Rejection |

Conclusion

| Accept (High priority) | Accept (General priority) |
| Minor revision | Major revision | Rejection |

Re-review

| Yes | No |

Peer-reviewer

Peer-Review: Anonymous
SPECIFIC COMMENTS TO AUTHORS

The manuscript is interesting and provides us up-to-date and comprehensive information on reciprocal interactions of autophagy with the gut microbiota. I would like to suggest some improvements in the manuscript.

1. The introduction section must be improved. This section is too poor. I think that the introduction could be improved by a better link between paragraphs.

2. In the systemic effects of the gut microbiota on host autophagy part, the authors discuss the effects of gut microbiota on the autophagy of nervous tissues, liver, muscle tissues in health and disease conditions, but there is no clear understanding regarding this unique relation. Please insert a table to summarize the studies discussed in this section.

3. In the shaping of the gut microbiota by autophagy part (lines 291-438). These sections are fundamental for the manuscript, but the three sections including “Mucus layer maintenance”, “Secretion of antimicrobial compounds in the gut lumen” and “Modulation of inflammation” only delineate the interactions of autophagy with the gut. Therefore, these sections should be extended and include more studies regarding this unique relation between autophagy and gut microbiota.

4. Figure 1 is too poor and lacks some clear pathways of the interplay between gut microbiota and autophagy. The figure must be improved.

5. There is no clear idea and should add some discussions on the current challenges and an outlook toward the future interventions.