

Dear editors and reviewers

Great thanks for your kind consideration and forwarding the reviewers' comments on our manuscript “Modulation of stem cell fate in intestinal homeostasis, injury and repair” (Manuscript NO: 82860)” submitted to *World Journal of Stem Cells*. We appreciate your insightful suggestions and believe that these suggestions have improved the quality of our paper. We hope that the revised version of our manuscript meets your requirements for publication.

The following comprises point-by-point replies to each comment. We made revisions following the editor's and reviewers' advice and the guidelines for the revised manuscript. Thanks again for your great efforts on our manuscript, thank you!

Response to Editor-in-chief:

Comment 1: I have reviewed the Peer-Review Report and the full text of the manuscript, all of which have met the basic publishing requirements of the World Journal of Stem Cells, 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, when revising the manuscript, the author must supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply a new tool, the Reference Citation Analysis (RCA). RCA is an artificial intelligence technology-based open multidisciplinary citation analysis database. In it, upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight articles, which can then be used to further improve an article under preparation/peer-review/revision. Please visit our RCA database for more information at:

<https://www.referencecitationanalysis.com/>.

Reply: Great thanks for your valuable comment and recommendation. We have used the tool for citation analysis and improved the content of the manuscript.

Comment 2: Uniform presentation should be used for figures showing the same or similar contents; for example, “Figure 1 Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ...”. Please provide decomposable Figures (in which all components are movable and editable), organize them into a single PowerPoint file. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is ‘original’, the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2023.

Reply: Great thanks for your comment. We have provided the original figures following your guidance.

Response to Reviewer #1:

Thanks for the valuable suggestions and comments. We revised the manuscript following your advice to improve the quality of this manuscript. There are our replies to each specific comment as following.

Comment: The authors of this paper reviewed the signals and mechanisms that control homeostasis and regeneration of the intestinal epithelium. This being the first line of defense against injuries to the intestine. To this end the intestinal stem cells (ISC) which coordinates the renewal and regeneration of different intestinal cell lines was discussed. The authors analyzed signals that the cells of the stem cell niche elaborate. These signals help maintain homeostasis and control the fate of the stem cells. Endogenous and exogenous factors that modulate the fate of ISC were also discussed. The title and abstract reflect the main subject of the manuscript. The discussion was done using precise English and reader-friendly terms. The article is well constructed with logical flow of ideas. Recent references were cited with about 45% of articles published within the last 5 years. This article can be accepted after minor grammatical and typo corrections.

Reply: Great thanks for your comments and suggestions. We have checked the manuscript and made grammatical and typo corrections.

Response to Reviewer #2:

Thanks for your valuable suggestions and comments. We revised the manuscript following your advice and clarified several issues to improve the quality of this manuscript. Below are our replies to each specific comment.

Comment: The authors state in this review, that they summarize the recent insights into the intrinsic and extrinsic elements involved in the process of intestinal homeostasis, injury and repair, which fine-tune the balance between self-renewal and cell fate specification in intestinal stem cells. Indeed, they provide a comprehensive summary about the current knowledge in this field, and end up with a perspective about currently unsolved questions in the fields, especially with providing an appealing stem cell-based therapeutic approach for intestinal mucosal injury disorders, in the future. The manuscript was well written and should be of wide interests to most researchers or clinicians on stem cells and therapy.

Reply: Great thanks for your comments. We would carefully check the manuscript to ensure all grammatical, syntactical, formatting and other related errors be resolved.

The comments are of great value to our work. We really appreciate your time and the insightful suggestions. Thanks again for your great efforts on our manuscript.

Best regards,

Min Cui