

Dear Editors and reviewers:

Thank you for your precious comments and advice. Those comments are valuable and helpful for revising and improving our paper. We have read comments carefully and revised our paper accordingly. Revised portions are marked in red in the paper. The main corrections in the paper and the responses to the reviewer's comments are as follows:

Reviewer #1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: The title reflects the main subject of the manuscript. The abstract summarizes and reflects the work described in the manuscript. The key words reflect the focus of the manuscript. The manuscript meets the requirements of use of SI units. The manuscript cites appropriately the latest, important and authoritative references. The manuscript met the requirements of ethics. Inflammatory bowel disease (IBD) is an autoimmune chronic recurrent disease whose pathogenesis is not fully understood. Genetic factors and changes in the composition of the gut microbiota are the most significant factors, which can disrupt the intestinal barrier and cause abnormal immune responses. This manuscript (literature review) reports the alteration of the gut microbiota and metabolites in patients with IBD and discusses potential therapeutic strategies based on correcting the composition of the gut microbiota. The article describes positive and negative aspects of the use of pre-/probiotics, transplantation of fecal microbiota and methods of influencing the intestinal barrier. All of the above points were discussed in detail by the authors in the presented review. The manuscript can be accepted for publication.

Response: Thank you for your summary and comments. To improve the language quality, we have carefully revised the language issue again. The

paper has also been carefully revised by a professional language editing service.

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: Dear Editor, Thanks to the authors for this review. The authors discussed the progress and prospects of studies on IBD treatment targeting the intestinal microecological system, including disordered gut microbiota in the manuscript. Probiotics, prebiotics, and synbiotics are used as alternative or complementary therapy for IBD, but the results of clinical trials are inconsistent. The manuscript adequately describes the background, present status and significance of the study. Also, the manuscript cites appropriately the latest and, important references.

Response: We really appreciate your efforts in reviewing our manuscript. To improve the language quality, we have carefully revised the language issue again. The paper has also been carefully revised by a professional language editing service.

Reviewer #3:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors:

1. The author elaborated the progress and prospects about intestinal microecology-based treatment for inflammatory bowel disease. The English was well and the contents were comprehensive.

Response: We appreciate the reviewer's positive evaluation of our work. We have revised the manuscript accordingly. Our point-by-point responses are detailed below.

2. Although, does the probiotics treatment has some disadvantages?

Response: We are grateful for the suggestion. We have searched for literatures about the disadvantages of probiotics use and found some really important research evidence. We added a new paragraph to discuss these disadvantages especially systematic infection in the section **PROBIOTICS, PREBIOTICS, AND SYNBIOTICS** (page 5).

3. Such as the increase of part probiotics could induce the decrease of other probiotics, and if this case was good for health?

Response: This is really a good idea and will be a concern in future studies related to probiotic therapy. According to our literature research, there have not been studies illustrating interaction among different probiotics and no relevant adverse events have been reported. We mentioned this in the last paragraph of section **PROBIOTICS, PREBIOTICS, AND SYNBIOTICS** (page 6), when we discussed the shortcomings of existing research and the direction of future research.

Science editor:

The manuscript has been peer-reviewed, and it' s ready for the first decision.

Language Quality: Grade B (Minor language polishing)

Scientific Quality: Grade C (Good)

Response: To improve the language quality, we have carefully revised the language issue again. The paper has also been carefully revised by a professional language editing service.

Company editor-in-chief:

I recommend the manuscript to be published in the World Journal of Clinical Cases. 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/>.

Response: We are pleased to know that our work was recommended to be published in World Journal of Clinical Cases. Thank you for the suggestion to supplement and improve the latest cutting-edge research results. We have used this useful tool RCA to follow up the latest research progress. Two related new researches are added to our review. One about the use of oral sodium butyrate in pediatric population (page 7, reference 37), and the other about FMT in IBD patients with recurrent *Clostridium difficile* infection (page 8, reference 48).

In addition, we changed the funding information in the title page (supported by the CAMS Innovation Fund for Medical Sciences, Grant No. 2022-I2M-1-003).

We hope that the revised manuscript is accepted for publication in World Journal of Clinical Cases.

Your sincerely,
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