

## Responses and revisions

March 1, 2021

Dear Editors and Reviewers,

Re: Manuscript No. 63153.

Thank you for your letter and the reviewers' comments concerning our manuscript entitled "The relationship between clinical features and the intestinal microbiota in Chinese patients with ulcerative colitis". We have carefully revised the manuscript accordingly, made point-by-point responses to the issues and uploaded the requested files. Revised parts are highlighted in the manuscript. We appreciate the editors' and reviewers' warm and earnest work. We hope that the current version of the manuscript meets the requirement for publication.

Sincerely,

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Reviewer #1:

1. The methods used are not clear characterized. Line 51 you called it "Gene amplicon sequencing of 16S and 1. ITS rRNA", but in the following steps you describe DNA- extraction, which means, the you decided to sequence RNA- gene or DNA. Please correct and introduce this into the discussion.

Response: Sorry for the inappropriate expression in Line 51, and we have changed it to "Gene amplicon sequencing of 16S rRNA gene and fungal ITS gene". Actually, the DNA had been extracted for gene amplicon sequencing of 16S rRNA gene and fungal ITS gene directly, which was described in detail in the Method part 3. The relevant expression has been revised and highlighted in Abstract and Method part.

2. In general, "Disordered intestinal microbiota" refers to Dysbacteriosis.

Response: Thank you for pointing it, and we have substituted the phrase for Dysbacteriosis across the manuscript.

3. In the latest publication "Fecal Microbiome Alteration May Be a Potential Marker for Gastric Cancer", the gut fungal composition was significantly affected by lifestyle.

Do you collect the information of the lifestyle in this population? If so, please supplement the information.

Response: Thank you for the question. Indeed, the gut fungal composition was significantly affected by lifestyle, but this study did not collect the information of the lifestyle in our population due to practical reasons. We had mainly aimed to compare the differences between the fecal and mucosa samples of the same UC patient, among patients with active UC, UC in remission and non-IBD controls, among patients with different degrees of disease activity or with different disease types, and between biopsy samples collected from inflamed and noninflamed sites. The cohort characteristics are listed in Table S2-4. But we did not compare the lifestyle between groups. We have added this point as a limitation in the final part and cited relevant references, and we may expand research in this area in the future.

Science editor's comments:

(1) The authors did not provide the approved grant application form(s). Please upload the approved grant application form(s) or funding agency copy of any approval document(s);

Response: We have provided the approved grant application forms in the uploaded files. Please check.

(2) The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor;

Response: We have provided the original pictures using PPT in the uploaded files. Please check.

(3) PMID numbers are missing in the reference list. Please provide the PubMed numbers to the reference list and list all authors of the references. Please revise throughout;

Response: We are so sorry for missing the "PMID numbers". We have added this part in the references and revised the format throughout based on the guidelines.

(4) The "Article Highlights" section is missing. Please add the "Article Highlights" section at the end of the main text;

Response: We are so sorry for missing the "Article Highlights". We have added this part at the end of the main text.

(5) Authors should always cite references that are relevant to their study. Please check and remove any references that not relevant to this study.

Response: Thank you for reminding, and we have carefully checked our manuscript and removed any references that not relevant to this study.