

## Answering Reviewers

Dear editor:

At first, we deeply appreciate the approbations and the comments made by the reviewer and we will present a point-by-point response to each comment in the next part.

### **Reviewer's code:** 02998194

Reviewer's report: This is a comprehensive study that fulfils its aim, which is to demonstrate the influence of JPQC on UC. It needs minor revision and language polishing of the introduction and enrichment of the discussion. The results need to be better and more clearly stratified. The results of the abstract are not clearly shown. CytoNCA, IMDM, ClueGO are not clearly explained

Response: We are very grateful for these constructive suggestions. We have enriched the results of abstract section and explained the CytoNCA, IMDM, ClueGO in the method section. Furthermore, the discussion section has been improved, and the language has been polished by the Nature Research Editing Service.

### **Reviewer's code:** 00068625

Reviewer's report: The work is interesting and potentially important in the treatment of ulcerative colitis. The topics are covered very well and thoroughly. The paper is organized in a clear and easy to understand manner, however the Discussion section reiterate some findings already presented whereas one would expect a personal interpretation of the results and some suggestions to move forward. To sum up, the work provides novel information and deserves publishing after minor essential improvements.

Response: We are very grateful for these constructive suggestions. We have supplemented the results of discussion section, and the suggestions to move forward have been discussed in the limitation section.

### **Reviewer's code:** 01587889、03474080、03017551

Response: We are very grateful for the recognition and no revision was made.

**To the editor**

1. This paper has been revised according to peer-reviewers' comments.
2. The similar sentences have been rephrased in this paper.
3. The grant application forms for every grant have been provided.
4. The Audio core tip has been supplemented.
5. The article highlights have been supplemented.
6. We have checked and confirmed that there are no repeated references, PMID and DOI citation were listed for the available references.
7. The decomposable figure of figures and the corresponding text have been supplemented.
8. The supplementary material has been submitted.
9. In the process of revision, we found a clerical error in the abstract section and revised it (123 candidate targets --112 candidate targets).

Thanks very much for the attention and the comments from the editor and the reviewer. And if there are any problems or questions regarding the manuscript, please point out and we will make the revision. We look forward to the reply.

Sincerely yours,

Zhi-Peng Tang