

Dear editor and reviewers,

Thank you very much for reviewing our manuscript entitled “*Clostridium butyricum* alleviates the intestinal low-grade inflammation in TNBS-induced IBS in mice by regulating the functional status of lamina propria dendritic cells”. We found the comments and suggestions very helpful and constructive and we have addressed all reviewers’ and editor’s comments. We thank the Reviewers’ for their valuable comments and suggestions on how to improve the manuscript. The manuscript has been rephrased and corrected accordingly and we hope that these improvements will recommend it for further processing.

Responses to the Reviewers’ comments:

Reviewer #1

General comments The authors conducted an interesting study about effectiveness of *Clostridium butyricum* in the experimental induced irritable bowel syndrome. The data is clearly presented and text is easy to follow. The results are properly described in the context of the published literature. It is interesting that authors notice the functional changes in intestine without morphological changes. The discussion is well organized. In conclusion, this is a very interesting study that provides an insight in the role immune response in the intestine in irritable bowel syndrome and its adjustment after *Clostridium butyricum* therapy. T

Response: Thank you very much for reviewing our manuscript and for providing supportive comments. We are confident that you will find the new version of the manuscript much improved, and consider it for publication in your journal.

Reviewer #2

This is a very important study about irritable bowel syndrome and the role of dendritic cells. Effects of *C. butyricum* on the inflammatory cytokine in BMDCs were examined in figure 5, which is very interesting. The inhibition of the IL-6 production quantified by ELISA upon the addition of *C. butyricum* seems quite slight in Figure 5F. The condition of the stimulation with LPS may be discussed more.

Response: Thank you very much for reviewing our manuscript and for providing supportive comments. As suggested by the reviewer, the condition of the stimulation with LPS was more discussed in the revised version of the manuscript.

“The collected DCs were separately co-cultured with 100 μ l of the *C. butyricum* culture supernatant and 100 μ l (concentration 1×10^8 CFU /ml) of the live bacterial suspension for 4 hours and then stimulated with 0.1 μ g/mL of LPS (Sigma–Aldrich) for 3 hours.”