

Dear Editor and Reviewers:

Thank you for your letter and for the reviewers' comments concerning our manuscript entitled "Effect of Roux-en-Y gastric bypass surgery on intestinal *Akkermansia muciniphila*" (ESPS Manuscript NO: 23217). Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have studied comments carefully and have made correction which we hope meet with approval. Revised portion are marked in red in the paper. The main corrections in the paper and the responds to the reviewer's comments are as flowing:

Reviewer #1(Reviewer's code: 00724431): The authors need to be congratulated for their innovative research study on relevant clinical topic. The experimental work has been scheduled and performed according to the current principles of the experimental project. The manuscript itself is concise, written in an elegant style according to all requirements of original contribution. I do not have hesitation in supporting this paper in a prompt publication.

Response: thanks to you for your good comments

Reviewer #2(Reviewer's code: 00037668):

This study investigates possible mechanism whereby RY gastric bypass. The results reported in the study indicate that the RYGB improves insulin responsiveness through mechanisms that resides on increased GLP-1 secretion. The results also indicate that increased production of GLP-1 results in increased expression of *A. muciniphila* as part of the intestinal flora. The modality wehreby *A. muciphila* increases as a results

of RYGB still remains undefined, nor is clear how GLP-1 increases.

Response: Thank you for the comments on the paper. We have revised the manuscript as suggested since we consider that some sentences or descriptions in the Conclusion part are not so accurate based on the results.

We appreciate for Editors/Reviewers' warm work earnestly, and hope that the correction will meet with approval.

Once again, thank you very much for your comments and suggestions.