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Dear Editor,

Thank you for your efforts on our manuscript entitled “**Different distributions of Cajal interstitial cells and Platelet-derived growth factor receptor- α positive cells in colonic SIP syncytium in mouse**” (NO-41677). As your suggestion, we will resubmit the manuscript to the World Journal of Gastroenterology. We appreciate it so much for your kindly treatment of our manuscript and critical comments. We have modified our manuscript according to the reviewers’ comments and had the manuscript corrected by a professional English language reviewer in English (Details will be seen in the manuscript.). Now our answers to the comments of the reviewers are as follows:

FOR PEER-REVIEW REPORT 1

Name of journal: World Journal of Gastroenterology

Manuscript NO: 41677

Title: Different distributions of ICCs and PDGFR α + cells in colonic SIP syncytium in mouse

Reviewer's code: 01436006

Reviewer's country: China

Dear reviewer:

These are your advice for our manuscript: 1. The discussion paragraphs should be written more clearly.

2. There are some grammar mistakes in the manuscript. The authors should check carefully.

Thank you very much for your kind suggestion. Based on your advice, we have checked the discussion section again and found some unclear expressions and some grammatical errors. So, first of all, we revised some unclear statements and contents; Second, we have carefully checked and corrected some grammatical mistakes. **Detailed revisions are available in the manuscript.** Finally, I sincerely thanks again for your comments and suggestions on our manuscript.

With best regards,

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FOR PEER-REVIEW REPORT 2

Name of journal: World Journal of Gastroenterology

Manuscript NO: 41677

Title: Different distributions of ICCs and PDGFR α ⁺ cells in colonic SIP syncytium in mouse

Reviewer's code: 02441009

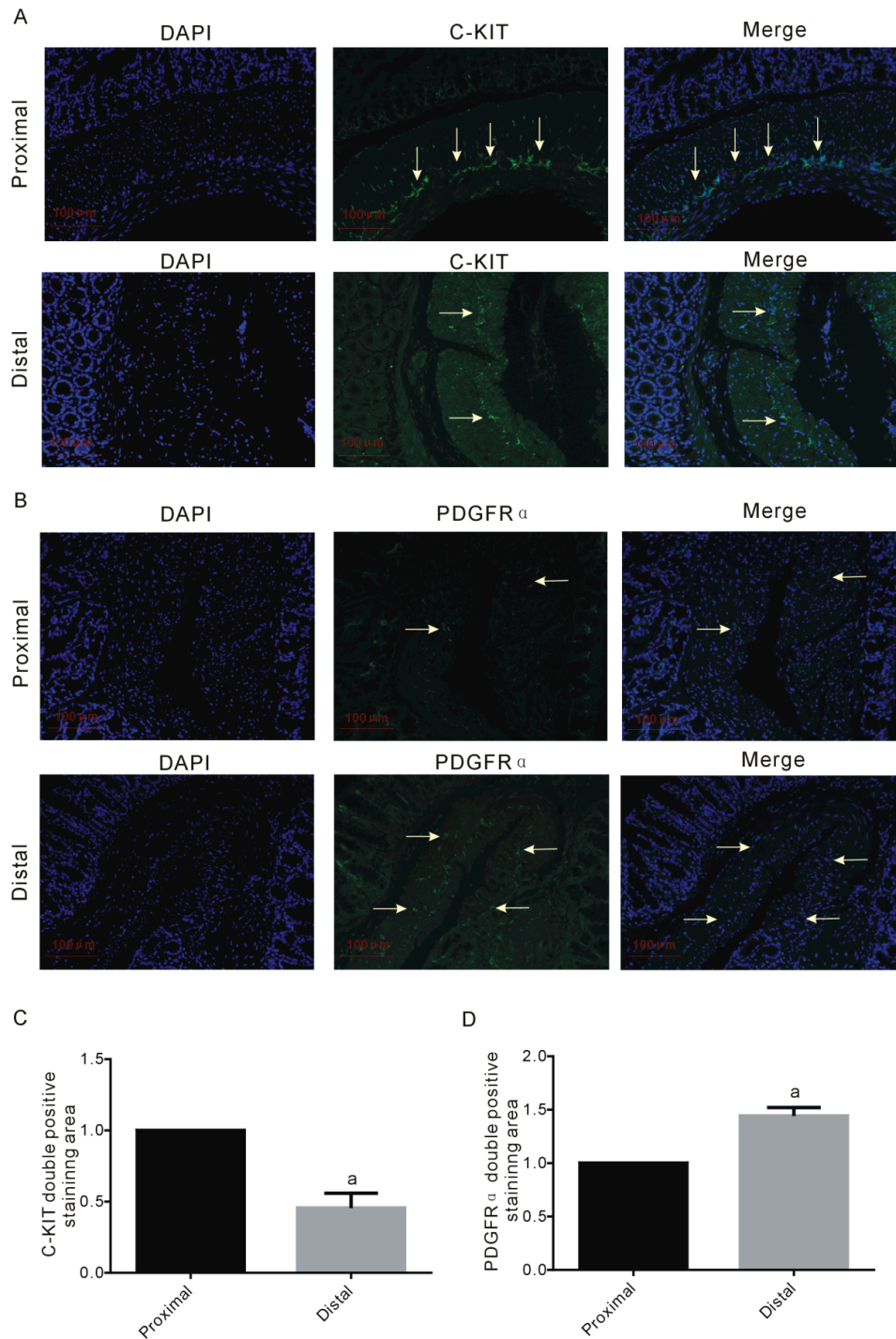
Reviewer's country: Germany

Dear reviewer:

These are your advice for our manuscript: First, the authors should state much clearer what the clinical problem is elucidated in this study. Second, the authors need to provide also histological studies, which display the differences found in the physiological studies also by morphology.

Thank you very much for your kind suggestions. According to your advice, we have combined this discovery that differences in the distribution of two kinds of interstitial cells (ICC and PDGFR α ⁺ cells) at both ends of colon with clinical problems such as inflammatory bowel disease (IBD) and irritable bowel syndrome (IBS), which all result in colonic transit motor obstruction. And this discovery provides an important strategy and direction for studying the pathogenesis and follow-up treatment of IBD and IBS. However, since this paper is aimed at the physiological distribution of the proximal and distal colon of normal model animals, there is no excessive emphasis on the information related to colonic transit disordered diseases. Detailed revisions are available in the manuscript.

Secondly, according to your suggestion, we also supplemented the histological evidence for the differential distribution of the two kinds of mesenchymal cells (ICC and PDGFR α ⁺ cells). The results are as follows:



The figure of supplementary material: Whole mount immunostaining of C-KIT and PDGFR α in colonic smooth muscle tissue. (A and B) Immunofluorescence staining revealed different expression levels of C-KIT and PDGFR α between proximal and distal smooth muscle layer of colons (Bar = 100 μ m). (C and D) For the quantification of C-KIT and PDGFR α expression

in the double-positive staining area of proximal and distal smooth muscle layers (^ap <0.05, n = 6).

We found that histological evidence was consistent with electrophysiological results, i.e. the proximal colon had more ICC, while the distal colon had more PDGFR cells. Moreover, histological results also provide the strongest evidence for our findings. Thirdly, we have carefully modified our manuscript according to your comments and had the manuscript corrected by a professional English language reviewer in English (Details will be seen in the manuscript.). Finally, I sincerely thanks again for your comments and suggestions on our manuscript.

With best regards,

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