Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 27109-Revised manuscript).

Title: Increased $CD4^+CD45RA^-FoxP3^{low}$ cells alter the balance between Treg and Th17 cells in colitis mice

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The manuscript has been improved according to the suggestions of the reviewers:

Response to 00035901

Thank you for your review.

1) The authors used a DSS colitis as a model of ulcerative colitis. Don't use the "UC" in the result session. It is more suitable to use "DSS colitis" instead of "UC" throughout the result session.

- As you noted, It is more suitable to use "DSS colitis" and we have modified it according to your suggestions.

2) To confirm the role of $CD4^+CD45RA^-FoxP3^{low}$ cells in the pathogenesis in DSS colitis, the authors should show the time-course changes of these cells.

- At the first, we are very grateful for getting your comments. In this study, we focused on the difference of the Th17, Treg and its subsets in various tissues of onset DSS colitis, but not the change and tendency of these cells in the progress of colitis. We built the DSS colitis mice successfully by using DSS for 14 days, which was verified by pathology. Based on our results, we verified that increased numbers of $CD4^+CD45RA^-FoxP3^{low}$ cells may cause an imbalance between Treg and Th17 cells that is mainly localized to the LPC rather than secondary lymphoid tissues. Just as your precious opinion, supposed by the same funding, we are further

researching the pathogenesis of Treg, especially $CD4^{+}CD45RA^{-}FoxP3^{low}$ cells, in the onset and progress of UC colitis by breaking down some key functional molecules in the various time checkpoints in the progress of colitis. We will report our new theme in the short run.