Dear Editors and Reviewers:
Thank you very much for your constructive comments on our study, we think you are spot on and have made the following changes based on your suggestions:

**Comment:** After reviewing this study, I strongly suggest the authors splitting this article into two. Despite the current article shows some novelty to UC pathology and treatment, the novelty of this article is minor. If the authors can split this article into two, the novelty will be greater.

**Reply:** We have deleted the content related to "natural drug prediction" from the original manuscript.

**Comment:** The authors use autophagy as a target for UC treatment. However, the pathological role of autophagy in UC progression is not clear, at least in the introduction of this article. Therefore, the reader cannot understand the rationale of targeting autophagy for UC treatment.

**Reply:** We add to the advances in the study of autophagy and ulcerative colitis by refining the mechanisms involved.

**Comment:** The authors found several autophagy-related genes in UC specimen. However, such genes are upstream or downstream mediators of UC progression is not evaluated in this study. This limitation diminishes the novelty of this study.

**Reply:** We added differential gene data and found that the core targets we obtained all belonged to up-regulated genes, and we included this result in the paper.

Thank you and best regards.
Yours sincerely,
Zhuozhi Gong