

Reviewer #1:

**Scientific Quality:** Grade C (Good)

**Language Quality:** Grade B (Minor language polishing)

**Conclusion:** Minor revision

**Specific Comments to Authors:** This study explored the factors influencing GU combined with depression is important for clinical treatment and the improvement of patients' quality of life. The manuscript is well designed and written. The introduction gives a good overview about the topic and the procedures are precisely described. The results were well discussed. Serum IgA, IgM, GAS, and CCK levels were the influencing factors affecting the severity of GU combined with depression; the AUC of immune function (IgA, IgM) and gastrointestinal hormone levels (GAS, CCK) for the prediction of GU with depression severity was 0.958 (95%CI: 0.933–0.976). The tables help the readers to make a more understanding of the study; The statistics are good, properly using SD. The discussion section gave emphasis to the new contribution of the study in its field. I have the following questions and comments: 1: When will the subjects in the study be evaluated for the Hamilton Depression Scale (HAMD)? Does your hospital routinely assess for HAMD in patients with GU? 2. Is it necessary to specify in the inclusion criteria that the patient's data are complete?

**Response** Thank you for your valuable feedback. We have made the following modifications.

1: All patients on the day of admission, Patients were routinely assessed using the Hamilton Depression Scale (HAMD) .

2: (3) The basic information and laboratory indicators of all patients are complete.

Reviewer #2:

**Scientific Quality:** Grade C (Good)

**Language Quality:** Grade B (Minor language polishing)

**Conclusion:** Minor revision

**Specific Comments to Authors:** Recently, psychophysiological factors have been significant in the pathogenesis of gastrointestinal illnesses. However, the impact of psychological factors on disease occurrence and progression in clinical practice is often overlooked, which makes it difficult to treat patients comprehensively. In this study, Yang YH et al. the authors conducted a retrospective analysis of 300 patients with GU combined with depression from January 2021 to June 2022, to analyze two indexes of immune function and gastrointestinal hormones and explored the factors influencing the severity of GU concurrent depression using multivariate logistic regression analysis. They found that the important influencing factors of GU with depression were serum IgA, IgM, GAS, and CCK indices, indicating that immune function indicators (IgA and IgM) combined with gastrointestinal hormone levels (GAS and CCK) have good efficacy and significance in predicting the severity of GU and depression. Very interesting study. And the manuscript is well written. The experiment of the study is designed very well, aims are very clear. Methods are reasonable. Data in tables are very good, and well discussed.

Response: Thank you for your approval of the manuscript, we checked the manuscript again.