

Dear Editor,

We are very grateful for your feedback on our manuscript. We also thank the reviewers for the sound comments that have helped us markedly improve our study.

Please find below a point-by-point response to all comments.

We hope that this new version will be suitable for publication in your renowned journal. Please do not hesitate to contact me if you need further information regarding this manuscript.

Best wishes,

Yulin Tong

Reviewer reports:

Reviewer 1:

1. HP positivity is also related to the increasing level of PGI. HP positivity is related to PGI levels increased and GC. Serum PGI levels decreased are also the risk factors for GC.

*Response: We have checked the literature and added an explanation in the discussion.*

2. Determining cut-off values with ROC analysis of PGI and PGR for OLGA-stage 1 or OLGA stage 1+2 groups while comparing OLGA-stage 0 without looking at HP positivity will be more impressive in your study.

*Response: We added the cut-off values of PGI and PGR with ROC analysis in our manuscript.*

Reviewer #2:

1. Presenting the table of demographic and clinicopathologic characteristics

*Response: We added a baseline characteristics table of the subjects according to the reviewer's comment.*

2. Combined assessment and categorization of subjects based on PG I, II, I/II ratio, and H. pylori serostatus. Determination of OLGA and OLGIM scores in the above categories. Exclusion of GC subjects from the above analysis

*Response: We adjusted the data analysis based on the reviewer's opinion and excluded GC subjects.*

3. Statistical correlation analysis - ROC curve analysis and determination of sensitivity, specificity, and accuracy of the serologic variables - Conclusion of the efficacy of the above assays as a non-invasive measure of determining gastric atrophic/metaplastic changes based on the above findings

*Response: We added ROC curve analysis to estimate the cutoff value of PGI and PGR. Sensitivity and specificity were also shown in the result. The efficacy of the above assays as a non-invasive measure was added to the conclusion.*

Reviewer #3:

1. The abstract and introduction should be shortened.

*Response: The abstract has been shortened as the comment. Some paragraphs of the introduction have been removed.*

2. 'Nasal endoscopy' is wrongly written. It should be corrected to 'transnasal

gastroscopy’.

*Response: All “nasal endoscopy” has been corrected to “transnasal gastroscopy”.*

3. The authors describe that endoscopic surveillance can reduce the incidence of gastric cancer. However, it means secondary prevention rather than primary prevention.

*Response: Our original expression created ambiguity and it has been correct.*

4. There is no Table about the baseline characteristic of the study population.

*Response: A table of baseline characteristics has been added.*

5. Using a receiver operating characteristic analysis, optimal cutoff values for diagnosis of high-risk OLGA/OLGIM are required to demonstrate the clinical implications of this study. Lastly, the numbers of OLGA and OLGIM group IV are too small to be performed statistically.

*Response: OLGA I and II groups were combined as a medium risk group and OLGA III and IV groups were combined as a high-risk group. ROC curve analysis was conducted based on the grouping above.*

Re-reviewer:

The revised manuscript was well written after point-by-point revision. Two minor issues are required to be corrected. First, the authors classified OLGA I and II groups into medium risk. However, 'low risk' may be appropriate to be described in comparison with high risk group of OLGA III and IV. Second, the point of cutoff values should be indicated in the graphs of Figures 1 and 2.

*Response: We are very grateful for your feedback on our manuscript. We also thank the reviewers for the sound comments that have helped us markedly improve our study. We changed the "medium risk group" into "low risk group" and add the cutoff point in the figures. The modified article were sent to you by email and we upload the file here just in case. Thank you!*