

Dear the editors of “*World journal of Gastrointestinal Pharmacology and Therapeutics*” and the reviewers,

We thank the editors and the reviewers for his/her thorough review of our manuscript. We have revised our manuscript according to your reviewer’s suggestions. Following is a point-by-point response to the comments.

To reviewer 02533618

1. More detailed information regarding the mechanism of action, possible toxic effects and the adverse drug reactions that have been observed should be indicated.

We added them in the revised manuscript.

2. Please indicate the doses that the patients received and if the doses alter between the groups please evaluate the results according to that.

We mentioned the dose in methods. We did not alter the doses of the antimicrobial drugs between the two groups.

3. If exists, please indicate the strains of the *H. pylori* and discuss the effectiveness of the treatment according to these subgroups.

Unfortunately, we did not investigate the strains of *H.pylori*.

To reviewer 03009708

1. Better abstract is necessary. Some typos were observed.

Thank you for your suggestion. We revised the abstract.

2. Reference style is not according to the journal format.

We revised the reference style according to the journal format.

3. Introduction should be shorten

According to your comment, we rewrote it shorter.

To reviewer 00183433

1. Description of vonoprazan, its priorities to proton pump inhibitors, and the mechanism of its inhibitory action on H.pylori must be included in the manuscript. Furthermore, it is not clear whether authors used vonoprazan alone or in combination with antibiotics and bismuth.

We used vonoprazan in combination with antibiotics. We revised the manuscript.

2. Methods must be described in more details, clear and precise.

Thank you for your suggestion. We touched up them.

3. The number of patients in each group tested by different diagnostic methods must be mentioned.

We showed them in the body.

4. Authors mentioned that vonoprazan eradicates H.pylori. They should explain how. How did they confirm eradication of H.pylori infection. They mentioned that eradication was confirmed by UBT. It is noteworthy that results of several studies have indicated that proton pump inhibitors exert inhibitory effect on H.pylori urease activity but do not kill the bacterium. Accordingly, authors must consider the likelihood of inhibitory effect of vonoprazan on H.pylori urease activity and false negative results of UBT and specially be careful when mentioning eradication. The aim of study is confusing. According to what has been mentioned at the end of

introduction, the aim of study is to show that vonoprazan alone could eradicate H.pylori infection which is not clear.

Thank you for your suggestion. We compared the success rate by switching PPI to vonoprazan. We used vonoprazan in combination with antibiotics. We confirmed the results of eradication therapy at 2 months after treatment to exclude false negative result of UBT

To reviewer 00035741

1. Were there any patients enrolled in this study who were checked drug resistances against antimicrobials? Eradication rates should be shown according to status of drug susceptibilities.

We did not check antimicrobials resistance. Sorry.

2. Adverse events should be demonstrated with a Table.

There was a possibility to estimate adverse effect insufficiently because we evaluated adverse events by basic medical interview. However, we showed adverse events in the manuscript.

3. In the first-line therapy, eradication rate of vonoprazan group is superior to that of other PPI group. But in second-line therapy almost the same in the eradication rate in spite of the stronger anti-acid effect of vonoprazan. Authors should discuss about it.

Thank you for your suggestion. We also thought it important and interesting. We discussed the discrepancy in the manuscript.

To reviewer 00011429

1. Vonoprazan is a new drug which probably many readers are not familiar. What

is the exact mechanisms and why they are superior to PPIs for acid inhibitory effect.

We added the exact mechanism in discussion.

2. The major problem with conventional triple regimens are increasing antibiotic resistance. How vonoprazan overcome this resistance?

In fact, we did not know whether vonoprazan overcome the resistance because we did not examine the bacterial resistance of *Helicobacter pylori* to antimicrobial agents. Simply, the acid inhibitory effect of vonoprazan might lead the high activity of CAM.

3. We do not have any detailed information in Vonoprazon group? Which antibiotics did they receive?

We added detailed information in methods.

4. There are a huge difference between the numbers of the patients between two groups which can affect statistical comparisions.

We should investigate the success rate by using propensity matching score. In this case, we could not. Sorry.