

Reviewer #1: In their work, Lin et al. presented an analysis of the influence of CYP2C19 and IL-1B (-511) gene polymorphisms on the eradication of *Helicobacter pylori* by the use of hybrid therapy based on rabeprazole. They included a relatively low number of patients infected with *H. pylori* and observed an eradication rate of 92.94%. They found no significant influence of the analyzed gene polymorphisms, which are expected to determine the rate of hepatic metabolism of rabeprazole and the level of gastric acid secretion, respectively, in the eradication of *Helicobacter pylori* by the use of hybrid therapy based on rabeprazole. In my opinion this work could be suitable to be accepted for publication in World Journal of Gastroenterology after address some minor considerations:

1) Authors must specify that they analyzed the interleukin 1-beta (IL-1B) -511 gene polymorphism. That is, IL-1 is a family or group of cytokines and IL-1B is one of its members.

We had added the sentence in the 4th paragraph of Introduction:

The interleukin (IL)-1 family of cytokines comprises 11 members, including 7 pro-inflammatory agonists (IL-1 α , IL-1 β , IL-18, IL-33, IL-36 α , IL-36 β , IL-36 γ) and 4 defined or putative antagonists (IL-1R antagonist (IL-1Ra), IL-36Ra, IL-37, and IL-38) exerting anti-inflammatory activities^[16].

2) In Abstract, where it says “cytochrome P450 2C”, it should say “cytochrome P450 2C19”.

We had revised the word.

3) In introduction, authors could comment how the level of acid secretion can affect *H. pylori* eradication.

We had added the sentence in the 3rd paragraph of Introduction:

The PM genotype will result in higher intragastric pH level and higher effectiveness in *H. pylori* eradication because the low pH level of the stomach may affect the stabilization of acid-labile antibiotics, such as clarithromycin^[12].

4) Results (subheading: Factors associated with eradication of *H. pylori*): authors should not consider the T allele of IL-1B -511 polymorphism as mutation. It should be used the term allele or genotype when refer to the combination of two alleles.

We had revised the word.

5) Table 2: it should show CYP2C19 as heading in the respective column.

We had added the word in the column.

Reviewer #2: The aim of this study was to investigate the impacts of CYP2C19 and IL-1 β polymorphisms on the efficacy of hybrid therapy for *H. pylori* infection. My specific comments are as follows:

Comment 1. P5, Introduction, line 12: Please mention the major findings of previous studies investigating the impact of IL-1 β genetic polymorphism on the eradication rates of other anti-*H. pylori* therapies (e.g., J Gastroenterol Hepatol 2009;24:1725-32; Am J Gastroenterol. 2003;98:2403-8). In

addition, please point out that this study is the pilot work investigating the impact of IL-1 β genetic polymorphism on the eradication rate of hybrid therapy

We had added the sentence in the 4th paragraph of Introduction:

One study reported that CYP2C19 genotype-dependent differences in eradication rates of one-week triple therapy were only observed in patients with the IL-1 β -511 C/C type^[19].

We had added the sentence in the 5th paragraph of Introduction:

This study is the pilot work investigating the impact of IL-1 β -511 polymorphism on the eradication rate of hybrid therapy.

Comment 2. P6, Methods, line 12: The exclusion criteria included “use of concomitant medication”.

Were patients receiving medication for hypertension, diabetes or coronary artery disease also excluded from this study?

We had revised the word from medication to antibiotics.

Comment 3. P19, Results, Table 2: Table 2 was too complicated and should be revised. The authors can delete the second column and second row. In addition, please also analyze the impact of IL-1 β genetic polymorphism on the eradication rate of patients with EM genotype and the impact of IL-1 β genetic polymorphism on the eradication rate of patients with non-EM genotype in the table.

The impact of IL-1 β genetic polymorphism on the eradication rate of patients with EM genotype and the impact of IL-1 β genetic polymorphism on the eradication rate of patients with non-EM genotype had been showed in the table. We had added the word CYP2C19 as heading in the respective column.

Comment 4. P10, Results: How about the impacts of antibiotic resistances on the eradication efficacy of hybrid therapy in this study?

The impacts of antibiotic resistances on the eradication efficacy of hybrid therapy had been discussed in the 3rd paragraph of Results.

Comment 5. P13, Discussion: Please discuss the limitations of the study in the Discussion section. In my opinion, the number of cases in this study was relatively small to identify some minor factors predicting eradication failure.

We had added the sentence in the 3rd paragraph of Discussion:

The limitation of our study was the number of patients may be too small to identify the significant factors predicting eradication failure.

Reviewer #3: This manuscript reports the results of studies on the impact of cytochrome P4502C and IL-1 . polymorphism on the efficacy of Hp eradication by using rabeprazole-based therapy. The results obtained with 88 patients revealed that the P4502C and IL-1 polymorphism is not affect significantly the rate of Hp eradication by rabeprazole-based hybrid therapy. Hence, the conclusion is

that CYP2C19 and IL-1b polymorphism do no impact significantly the outcome of rabeprazole-based therapy. The study is well presented, clearly written, and should be interest to the readership.