

Answering Reviewers

Reviewer #1: This study is very useful. Traditional Chinese medicine has complex components and a very complex mechanism of action in the body, which might be affected by multiple factors. The efficacy of BXXXT is well established, however explaining its mechanism is difficult. In this study, the authors confirm that BXXXT has good therapeutic effects on drug-resistant Hp infection through in vivo and in vitro experiments in mice, which provides an experimental basis for elaborating that BXXXT could treat refractory gastritis caused by drug-resistant bacteria. Comments 1: Are there any specific rates of resistance to clarithromycin, metronidazole and levofloxacin? Please add it to the article. Comments 2: The discussion is too simple to add more articles on the mechanism of similar drugs; Comments 3: A conclusion on the full text needs to be added at the end; Comments 4: The scale for each group needs to be added in Fig. 1E; the comments in Fig. 4 need to add the meaning of *, ** and other representatives; Comments 5: In page 10, line 5, "was " should be" were "; in line 1 of table 5 on page 12, "structure" should be "structure".

Comments 1: Are there any specific rates of resistance to clarithromycin, metronidazole and levofloxacin? Please add it to the article.

Answer: We have added in the Introduction. Separate statistics on the resistance rates of H. pylori to the six commonly used antibiotics revealed that the resistance rates to levofloxacin, clarithromycin and metronidazole were high in the region, respectively 32.81%, 26.02%, 95.67%.

Comments 2: The discussion is too simple to add more articles on the mechanism of similar drugs;

Answer: We have added in Discussion.

Comments 3: A conclusion on the full text needs to be added at the end;

Answer: We have added.

CONCLUSION

BXXXT aqueous extract could demonstrate good therapeutic effects on drug-resistance Hp in vitro and in vivo and its mechanism comes down to the synergistic or additional antibacterial effects of berberine, emodin and luteolin, the main components of the extract; the extract could activate the immune function and enhance bactericidal effects; BXXXT aqueous extract, with main targets of BXXXT aqueous extract related to urease, virulence factors, etc., could reduce the urease and virulence of Hp, weaken its colonization, and reduce its inflammatory damage to the gastric mucosa.

Comments 4: The scale for each group needs to be added in Fig. 1E; the comments in Fig. 4 need to add the meaning of *, ** and other representatives;

Answer: We have added. *, $p < 0.05$; **, $p < 0.01$; ***, $p < 0.001$, ns, $p > 0.05$.

Comments 5: In page 10, line 5, "was " should be" were "; in line 1 of table 5 on page 12, "structure" should be "structure".

Answer: We have revise.

The language problem has been further corrected.

Reviewer #2: Dear author, thank you for sharing your article entitled “Banxia Xiexin Decoction Treating Gastritis Mice with Drug-resistant Helicobacter Pylori and Its mechanism”. Your article is good in grammar and scientific writing rules. The topic is actual and well described.

Answer: Thank you for your commets!

Reviewer #3: I am very excited to read Xiao-hua Li et al.'s manuscript on the study of the therapeutic effect of Banxia Xiexin Decoction on gastritis mice with drug-resistant Helicobacter pylori in vivo and in vitro, and explain its mechanism of action. The paper is well-organized, which gives a detailed overview about the study background and abundant methodologies to verify the authors' hypothesis of the study. Moreover, the description of material studied is accurate, and the aim of the study is fulfilled. The Materials and methods section are described in great detail, leading to well-discussed Results. So, I recommend that the manuscript can be published.

Answer: Thank you for your commets!