Dear editors and reviewers,

Thank you very much for your comments and suggestions.

Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have studied comments carefully and have made correction which we hope meet with approval. The main corrections in the paper and the responds to the reviewer's comments are as flowing:

Reviewer #1:

Specific Comments to Authors: Then paper is very well written, but English language and punctuation is not adequate at many places especially in discussion part. Kindly do a through proof reading.

Response: According to reviewer' issues, I have sent the revised manuscript to a professional language editing company for further polishing and obtained a new language certificate.

Reviewer #2:

Specific Comments to Authors: I believe that the manuscript is very well written and has many interesting results. Below I would like to present a short list of modifications, the introduction of which will additionally improve the quality of the article: - Why was this article classified as "review"? In my opinion, it should be categorized as an original article – this is because both experimental research and in silico research have been carried out. - In "Abstract" and "Conclusions" please change "H. Pylori" to "H. pylori" - Section "2.2.2. H. pylori culture": a) "cagA+" -> CagA+ b) Please add information about the concentration of blood used to prepare agar plates c) Please add more information about "Brucella agar" and "culture box" (company, and so on) - "along with 399, 499, and 1908" -> along with 399, 499, and 1908 - "Heat-clearing drugs include Scutellaria, Coptis chnensis, and Rhubarb" -> please add a reference - "Mild medicines are Pinelliae, Evodia rutaecarpa and Clove" -> please add a reference - "In the study, based the high frequency ..." -> In the study, based on the high frequency ... - "Chen et al. revealed that baicalin and baicalein both ... vacA gene" -> Chen et al. revealed that baicalin and baicalein both ... vacA gene (the name of the gene should be written using italics) - "... exert bacteriolytic effects against H. pylori" -> ... exert bacteriolytic effects against H. pylori ("against" should be written without using italics)

Response:

- a) I have changed "H. Pylori" to "H. pylori" In "Abstract" and "Conclusions".
- b) I have changed "cagA⁺" to "CagA⁺" in "2.2.2. H. pylori culture".
- c) More information about "Brucella agar" and " culture box " has been added. The H. pylori Sydney strain (SS1, a CagA+ and VacA+ strain) was inoculated on 10% sheep blood-containing Brucella agar (HOPEBIO, QingDao, China) plates and placed in a

culture box (ZheJiang, China) with the following settings: 37°C, 5% O₂, 10% CO₂, and 85% N₂. Similarly, I have changed "along with 399, 499, and 1908" to "along with 399, 499, and 1908". "Heat-clearing drugs include Scutellaria, Coptis chnensis, and Rhubarb" and "Mild medicines are Pinelliae, Evodia rutaecarpa and Clove" -> add a reference, National Pharmacopoeia Commission, Pharmacopoeia of the People's Republic of China, ChinaMedical Science and Technology Press, 2015 edition, 2010.

d) The names of genes have been written using italics. Other incorrect formatting has been corrected during manuscript proofreading.

Best regards,

Yu Zhang