May 23, 2013

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 3230-review.doc).

Title: Prediction of a novel pathogenicity island in *Helicobacter pylori* using a genomic bar-coding approach

Authors: Guoqing Wang, Jianting Xu, Guangyu Xu, Yang Zhang, Fan Li, Jian Suo

Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 3230

We have revised the manuscript according to the reviewer's comments (denoted by red font); our point-to-point responses to each are listed below.

1 The format has been revised to match the requirements of WJG.

2 The text and content revisions have been made according to the reviewer's comments.

(1) In the Results part of the Abstract, the authors imply that the PAI combine in a synergy to create a type 4 secretion system. This is not clear, and may not be clearly defined in this work: revision of this statement is suggested.
Answer: We have elaborated our description of the type 4 secretion system and its function.

(2) The authors do not include any functional analysis of their proposed novel PAI. Further work to support the genetic potentials mentioned would greatly enhance this work. Although this may be beyond the remit of the current manuscript, this should at least be mentioned in the conclusions as an important further step
Answer: Thank you for this insightful comment. We have expressed our intent to perform a functional analysis of the novel PAI in our future work.

(3) While the applied technique is interesting and effective, the authors make no attempt to elaborate what are the clinical implications of the presented studies, and how this relates to the virulence potential of Hp.
Answer: Thank you for this insightful comment. In the Discussion section, we have elaborated on the potential clinical implications of the data on PAIs that are obtained from the bar-coding screening method.

(4) The Introduction relies heavily on the importance of VacA and CagA in Hp. virulence, but virtually neglects the virulence potential of Hp. LPS. This is in spite a large volume of data on the LPS and Hp. virulence. After all, it is Hp. LPS, and not cag or vac, that is the ligand for TLR4 receptor of the host. Further, "lipoproteins" are not putative Hp. toxins, as erroneously stated in the Introduction (second sentence). Perhaps the authors meant lipopolysaccharide?

Answer: We apologize for the confusion; we have modified the Introduction section to clarify these important issues.

3 The references and typesetting have been corrected to meet the journal's requirements.

Thank you again for allowing us to share our study's findings by publishing in the *World Journal of Gastroenterology*.

Sincerely,

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