ANSWERING REVIEWERS

November 7, 2012

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 815-review.doc).

Title: Increased expression of tyrosine phosphatase SHP-2(PTPN11) in Helicobacter pylori-infected gastric cancer

Author: Jing Jiang, Mei-Shan Jin, Fei Kong, Yin-Ping Wang, Zhifang Jia, Donghui Cao, Hong-Xi Ma, Jian Suo, Xueyuan Cao

Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 815

The manuscript has been improved according to the suggestions of reviewers:
1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer
This manuscript, "Increased expression of tyrosine phosphatase SHP-2(PTPN11) in Helicobacter pylori-infected gastric cancer", by Jiang et al showed that SHP-2 expression was higher in cancer specimen compared with normal specimen. However, no association was found between SHP-2 and other clinical parameters. The paper was well written and the results are interesting. I have the following comments.

(1).Some statistical methods are not appropriate. The authors used the Wilcoxon rank sum test to compare the SHP-2 level between cancer and normal samples (Table 1). However, these samples were paired since each pair of cancer and normal sample was collected from the same patient. Thus a paired test should be used to account for the possible correlations.

We agree this comment. As difference values of SHP-2 Hscore were not the normal distributed, the

Wilcoxon matched-pairs signed-rank test (not Wilcoxon signed-rank test for two independent samples)

was used when comparing cancer and normal samples. The statistical methods part has been revised.

(Page 6, line 18-22, Page7, line 1-7)

2. It was stated in the text that multivariate analysis was used to examine the association between SHP-2 and disease-specific survival. Please describe how this was done in the section of "Statistical analysis". What confounders were controlled in the multivariate analysis? For Figure 2, the legends such as "HSCORE<=100-censored" do not make sense. The ticks on the Kaplan-Meier curves basically represent the time points where events occur. So only three labels should be provided for the three HSCORE groups. Also, please explain why four HSCORE groups were used in all tables, but 3 groups were used for the log-rank test.

We agree this comment. More detail the description about multivariate analysis has been added in to

new revision article (Table 4 and Figure 2). The ticks on the Kaplan-Meier curves have been revised to 4 groups used for the log-rank test. Please see the Figure 2.

We agree this comment.

Among 305 subjects, 83 patients were examined by paired of cancer and normal samples, and 100 cases were received *H.pylori* infection testing, randomly.

There are no differences of SHP-2 levels, age, sex, differentiation, lymph-vascular invasion, TNM staging and survival time between subgroups and total subjects. Thus, it was considered that these subjects of subgroups can on represent of all 305 patients in this study. We also added the description in Results part.(Page 8，line13-15)

We agree this comment. We have tried to do the log-transformation for SHP-2 expression level, however, the distribution of SHP-2 expression was still not normal distribution. Thus, non-parametric statistical hypothesis test was used in this study.

Minor comments
   The extra left parenthesis has been deleted.
   The extra dot has been deleted.
   We agree this comment. HSCOREs were re-divided as 4 groups: 0, 1-99,100-200,201-300.

   Please see the table1-table 4.

  These errors were corrected.

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology.*

Sincerely yours,

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