

Format for ANSWERING REVIEWERS

December 6, 2015

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 23305-review.doc).

Title: Mutations in pre-core and basic core promoter of HBV in chronic hepatitis B patients from Shanxi Province

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Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 23305

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

- (1) **lanugage polishing should be corrected.** The manuscript need an editing for language

~~Hepatitis B virus (HBV) infection is endemic all over the world, representing a worldwide health problem.~~ Hepatitis B virus (HBV) infection was a worldwide epidemic and public health problem.

Main laboratory ~~indexes~~ indicators for monitoring changes in illness status and treatment

efficacy include serum immunological ~~indexes~~ **indicators**, liver function and HBV DNA load; however, it is difficult to explain why patients with ~~improved~~ serum immunological ~~indexes~~ **indicators turning negative** have no actual disease remission and why immunology ~~indexes~~ **indicators** are not consistent with biochemistry indexes (liver function) or viral load.

The Kappa values ~~obtained~~ were 0.91 and 0.58 ($P = 0.00$ for both), respectively.

~~For~~ **About** virus strains with inconsistent results, further DNA sequencing is required.

(2) **The abstract should be revised. The conclusion in the abstract is too lang.**

Objective: ~~To investigate the frequency of mutations in the pre-core (pre-C) and basic core promoter (BCP) regions of HBV genome in chronic hepatitis B patients from Shanxi Province, and the association between these mutations and disease related indexes.~~

AIM: ~~To investigate frequency of mutations in pre-C and BCP regions of HBV from Shanxi Province, association between mutations and disease related indexes.~~

Conclusion: ~~In HBeAg negative patients, pre-C mutation rate was 96.2% and there was liver dysfunction, although the distribution of BCP mutations was not significantly associated with HBeAg status. However, BCP mutations may cause failed CTL activation and thereby aggravate liver injury. The finding that the presence of mutations in the pre-C and BCP regions was more common in patients with low HBV DNA content suggests that low levels of HBV DNA do not invariably mean mild liver damage. The presence of mutations in the pre-C and BCP regions in HBeAg negative patients with lower virus replication can also aggravate liver injury, and ignoring this problem may lead to disease progression to liver cancer or cirrhosis. There is good consistency between PCR reverse dot blot hybridization and MAMA PCR for detecting mutations in the pre-C and BCP regions of HBV. However, the consistency between them for detection of mutations in the pre-C region is poorer than that for detection of mutations in the BCP region.~~

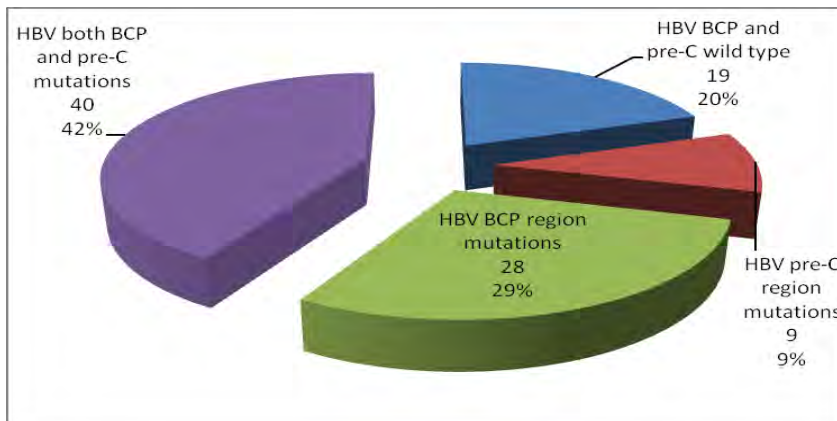
Conclusion: Patients who express HBeAg-negative are more tend to HBV pre-C mutation.

However, these mutations did not cause increased DNA copies, but along with liver function damage.

(3) Tables are good. If the authors can add some figures, it will be better.

Mutations in the BCP and pre-C regions of HBV

Add Figure 1.



3 References and typesetting were corrected

have added PubMed citation numbers and DOI citation to the reference list and list all authors

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

Sincerely yours,

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