Reviewer’s report

Title: Hepatitis B virus: Molecular genotypes and HBeAg serological status among Brazilian patients.

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Reviewer: Chi-Ju Chen

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Summary:
Tonetto et al. present a paper on HBV genotypes and HBeAg serological status among 139 people from southeast Brazil. Viral load, ALT level and liver fibrosis stage were compared among different genotypes and HBeAg status.

Major comments:

1. In the Background section, authors should review more published studies regarding HBV genotypes in Brazil.

2. HBeAg-positive often means more active HBV replication in a patient. Among 70 HBV DNA positive samples, only 17 were HBeAg-positive while 53 were HBeAg-negative. How is this explained?

3. Table 3 was not referred in the text. The content of Table 3 should be better described in the text. Is presence of HBeAg a significant factor in liver fibrogenesis?

4. Upon randomly checking, wrongly cited references were found. For example, in Discussion, reference 19 and 28 are wrongly cited. Typos were also found. All the citation must be checked out. Reference 29 (Kao et al.) is a study from Taiwan not Japan.

Minor comments:

1. In the Methods, primer positions in the HBV genome should be mentioned in “HBV DNA detection”. PCR amplification of a 417-bp fragment, which was used for sequence, should be better described.

2. In the Results, numbers of patients were wrong in the text. For examples: One hundred and seven (84.2%) of them were Caucasian descendents should be 117. 96 (70%) of patients were HBeAg negative should be 97 (70%).

3. In Table 2, “HBeAg+ve or –ve” and “ALT<1.3 LSN” should be explained. Criteria for inactive carrier/chronic hepatitis should be clearly defined (HBsAg+, HBV DNA+ or -, ALT level). Range of HBV-DNA should be indicated.

4. In the fifth paragraph of the Discussion, “In other studies, considerable
differences ...varing from 52.5% to 63.3%”, the meaning is not clear. Authors also comment on the reason for 70% HBeAg-negative was due to the long infection. What is the base on this comment?

5. The fibrosis stage was significantly greater among HBeAg negative patents infected by genotype A. The authors commented that this is due to 18.3% of African descendents among their genotype A infected patients. This should be further elaborated.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.