Reviewer’s report

Title: Nearly half of Ultrio Plus NAT non-discriminated reactive blood donors were identified as occult HBV infection in south China

Version: 0 Date: 11 Feb 2019

Reviewer: Angelita Silva de Miranda Corrêa

Reviewer's report:

Please include all comments for the authors in this box rather than uploading your report as an attachment. Please only upload as attachments annotated versions of manuscripts, graphs, supporting materials or other aspects of your report which cannot be included in a text format.

Please overwrite this text when adding your comments to the authors.

The manuscript is relevant for public health, since it addresses the issue of transfusion safety, being a current problem and of worldwide interest. However you need some adjustments, listed below:

1. Line 188. Replace "Fig.2" by "Figure 2".

2. Line 250 "In this study, the percent of anti-HBc reactivity among non-discriminated donations (91.1%) was significantly higher than that was found in a random group of donors in a previous study (P<0.001) [18]." Include the percent of anti-HBc reactivity of previous study (of ref. number 18)

3. Line 262 "Multiple studies estimated OBI transmission rate for all components varied between 3% and 48% [19, 20]." The author uses the term "multiple studies" and cites only two references. Add more references or remove "Multiple".

4. Tables
   Tables 1 and 2: The symbol "%" on top of the column "HBV DNA +" ??????.
   Tabela 4. Remove the IU/L from the first column and place on top of the following columns.

5. The author should describe the limitations of this study. It is possibility of underestimating.

6. Which HBV genotype was dominant in China?

7. The author mentions in the text that China has high prevalence of HBV but does not cite values. Include in the text this information. In addition, the author describes that in China the presence of the anti-HBc marker is not a reason for bag discarding. However, Brazil, also considered high country endemicity, the anti-HBc marker is used for the discard of the bag and permanent
refusal of the donor. The author could discuss this issue as well as describe and compare it with other countries of high endemicity.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?
4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

"I declare that I have no conflicting interests"

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal.