

Dear Editors,

Thank you very much for the review of our manuscript (18569: Rapid and Quantitative Detection for Hepatitis B Virus). The reviewer's comments were appreciated and were incorporated. The manuscript has been revised based on the comments and suggestions of the two reviewers. We agree with the points made by the reviewers, and believe these modifications will improve the quality of this manuscript and make it much clearer in its presentation to the reader. Compared with the original manuscript, all changes of the revised manuscript have been clearly indicated in red font. In this document, changes in the revised manuscript compared with the original one are presented in detail as follows.

Main changes according to comments

Several corrections pointed out by reviewer 2, such as rolling cycle amplification, have been corrected throughout the revised manuscript.

All of the Figures, especially Figs. 2 and 3, have been revised. In addition, a figure that explains SPR biosensors was added.

Conflict-of-interest statement was added in the revised manuscript.

The language of our revised manuscript has been edited and modified by a professional English language editing company.

Reviewer #1:

This manuscript provides timely review of the most commonly used methods for the detection of HBV. The manuscript is well written, amply supported by the literature data (73 references), and illustrated by easily to

follow figures. Good job. Congratulations!

We thank the Reviewer for his/her positive evaluation of our manuscript.

Reviewer #2:

1).Several corrections are required. Throughout the manuscript the author described the real time PCR as RT-PCR which is very confusing. Reverse transcription-PCR is generally said as RT-PCR, not for the real time PCR. Rolling cycle amplification should be the rolling circle amplification.

The spelling errors have been corrected in the revised manuscript.

2).All of the Figures, especially Figs. 2 and 3, need to be revised. They were so poorly drawn which were not helping to understand the procedures or the principles of the methods. Also, the Figures that explain several techniques related to biosensors are better to be added.

Thank you for the suggestions. All of the figures, especially Figs. 2 and 3, have been revised. In addition, a figure that explains SPR biosensors was added.

We thank all referees for their helpful suggestions, and we hope that our responses have improved our manuscript to their satisfaction.

Yours sincerely

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