

**Reviewer #1:**

This review by Veronese and colleagues tries to summarize current knowledge on prevention of vertical transmission of HBV infection. The authors present a well-structured review with detailed report on existing data on prevention of vertical transmission.

R- We are grateful to the reviewer for this positive comment.

The following revisions are suggested

1) to provide trends and changes in the incidence of HBV infection as a result of vertical transmission after immunoprophylaxis in areas of high HBV endemicity.

R- The paper has been modified accordingly. See page 3 of the revised paper (tracked changes version).

2) Section: Antiviral treatment during pregnancy. The authors should provide data on antiviral treatment in HBeAg negative mothers with HBV-DNA >2000 IU/L.

R - We are grateful to the Reviewer for his/her suggestion. The following sentence has been added to the revised manuscript (page 10 of the tracked changes version): "Despite the different indications provided by the current guidelines, all societies agree to start antiviral treatment when HBV DNA levels are higher than  $2 \times 10^5$  IU/mL, regardless of maternal serological status (HBeAg positive or negative)." See page 10 of the revised paper (tracked changes version).

3) add references in Table 1

R- According to the comment, references have been added.

4) to summarize data presented in the form of key points at the end of the manuscript.

R- We are not completely clear with this suggestion. In line with the Journal indications we decided to keep the last paragraph (Conclusion) as it is without adding bullet points. The message is unchanged.

**Reviewer #2:**

Specific Comments to Authors: The authors described that Prevention of Vertical Transmission of Hepatitis B Virus Infection. Enough papers were collected and evaluated carefully. The conclusions are valuable and guided properly like text book.

R- We are grateful to the reviewer for this positive comment.

**Reviewer #3:**

Specific Comments to Authors: The authors reviewed the risk factors and prevention tactics for HBV mother-to-child transmission (MTCT). The study was valuable.

R- We are grateful to the reviewer for this positive comment.

Whereas, the authors should pay some attention on the following points:

1. There were some spelling mistakes in the manuscript, e.g., “metanalysis” should be meta-analysis.

R- According to the comment the paper has been entirely revised and the spelling mistakes and typos have been corrected.

2. “7 log<sub>10</sub> copies/ml” should be correctly expressed as “10<sup>7</sup> copies/ml”. “200000 IU/mL” should be expressed using the unit of copies/ml. Different kits tended to use different units. It is better to use uniformed units.

R- According to this comment and in line with the current literature we decided to express viral load throughout the manuscript as IU/mL.

3. The strategies of preventing MTCT showed difference amid different guidelines. It is better to compare the popular guidelines in detail and cite some literatures. By the way, selection of the anti-HBV drugs is worth to be discussed.

R - We are grateful to the Reviewer for his/her suggestion. The following sentence has been added to the revised manuscript (page 9 of the tracked changes version): “Treatment guidelines differ mainly with regard to the type of treatment, the threshold viremia level and timing for starting antiviral treatment. Consistency across the different guidelines seems a desirable and achievable target in order to standardise the global approach to mothers with HBV infection and antenatal prevention of vertical transmission.”

4. It is better to add some words on the recent advance in new biomarker detection for assisting MTCT prevention and management, e.g. cccDNA and HBV-RNA.

R - We are grateful to the Reviewer for his/her suggestion. The following sentence has been added to the revised manuscript (page 7 of the tracked changes version): “In recent years there is a growing interest in new biomarkers of HBV infection, such as covalently-closed circular DNA (cccDNA), Hepatitis B core-related antigen (HBcrAg) and circulating HBV RNA. CccDNA is a key factor for the persistence of infection and represents a specific marker of replication<sup>[26]</sup>, and was shown to persist in the liver, serum and peripheral mononuclear cells (PBMC)<sup>[27]</sup>.”

**Reviewer #4:**

Specific Comments to Authors: Thank you for inviting me to review this paper. Vertical transmission of HBV is an important topic. However, the paper needs to be further refined.

R - We agree with the Reviewer, vertical transmission of HBV is an important topic. We think that the manuscript revised according to all the Editorial and Reviewer's comments is now improved and hopefully suitable for publication.