To the kind attention of Jin-Lei Wang Company Editor-in-Chief World Journal of Virology

Re: Ms NO: 76466: Hepatitis B virus infection reactivation in patients under immunosuppressive therapies: pathogenesis, screening, prevention and treatment.

Further to your message dated May, 12nd 2022, I am hereby resubmitting the abovementioned invited review for publication in World Journal of Virology.

As requested, the manuscript has been revised addressing the points raised by the reviewers (see item-by-item response) and have revised the text accordingly. Attached is a tracked copy for your convenience.

The text has been checked and the references are correctly and properly cited.

As requested, the manuscript has been revised and edited by highly qualified native English speaking editors at SNAS

Looking forward to hearing from you,

Yours sincerely,

Dr Anna Maria Spera, MD, PhD Universitary Hospital OO RR San Giovanni di Dio e Ruggi d'Aragona Salerno – Italy

Reply to reviewer 1

- One scheme should be included to conclude the mini-review: Reply: figure 1 has been added to the article, reporting the algorithm of HBVr diagnosis and management in patients eligible for immunosuppressant in nononcological setting.
- 2. Some discussion of HBV in HCC treatment should be also included: Reply: Although interesting and quite frequent, HBV reactivation in HCC treatment is not intended to be treated in the present review because, as reported

at page 2 and 3, this mini review regards HBVr in patients with OBI or chronic B infection and non oncologic diseases elegible for immunosuppressive treatment. HBVr in HCC is going to be treated in an other ongoing revision.

Reply to reviewer 2

1.Up to now, there have been quite a few publications on HBVr resulted from immunosuppressive therapies. Overall, the article has somewhat of a limitation due to lack of comprehensive and intensive review in these clinical settings. Reply: references 5 and 6 have been added to bibliography

2.In the title, "pathogenesis", "screening" are listed, but there are few data described in the text, so the corresponding data could be supplemented. Reply: pathogenesis of HBVr is briefly summarized at pages 2 and 3

Screening is reported in figure 1

3.About some technical terms, please notice its original idea. For example, "occult B infection" (OBI) in the article, should be presented as "occult hepatitis B virus infection" (OBI). In addition, the term "seroconversion" of HBsAg in the text, the term is usually defined as "loss of HBsAg, and development of anti-HBs antibody" in HBsAg positive patient. Conversely, the term of "seroreversion" of HBsAg is usually defined as "re-appearance of HBsAg, and loss anti-HBs antibody" in HBsAg negative patient. Reply: the correct presentation of OBI has been corrected as well as seroconversion/seroreversion where appropriate throughout the text.

4. The completely same paragraphs could be seen in two places in the article, it seems that the first is forgotten to be deleted.

Reply: the paragraph is now reported only where appropriate (page 3)

5. The spelling and grammar mistakes are labelled in the manuscript. Reply: all the mistakes have been corrected.