

## Response to Reviewer comments

Reviewer #1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade A (Priority publishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: Dear Authors The manuscript is well written, has important message, and should be of great interest to the readers. The purpose of this manuscript is to report a critical review of literature about the recent progress in developing animal models for the above-stated two pathogenic viruses, highlighting the utility of these models in studying human diseases. Title is clear and informative; it displays the main objective of the study. The abstract contains focused background with clear objective. However the objective of work is the utility of animal models for SARS-CoV-2 and SARS-CoV-1 and not to all diseases. The following sentence can be update according new data” According to WHO, as of 5th June 2021, 172,247,729 SARS CoV2 cases were confirmed in 223 countries with 3 709 487 confirmed death cases with a case mortality ratio of 2.2% differential transmissibility rate  $R_0$  was 1.5–5.5 (WHO, 2021).” The section “5. Cats” can be more developed, and new references can be add. Table 2 is difficult to read related to the title. Maybe change de content or change the title. The reference list covers the relevant literature adequately and in an unbiased manner.

**Answers:** We thank the reviewer 1 for his encouraging comments. We have updated the number of confirmed COVID-19 positive and death cases worldwide as of 1<sup>st</sup> August 2021. We have also appended more information on SARS-CoV-2 infection in cats and revised the title of Table 2.

Reviewer #2:

Scientific Quality: Grade D (Fair)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Major revision

Specific Comments to Authors: The authors reviewed several kinds of animal models for COVID-19 experiments. This review has value and useful comments are found in this manuscript. However, more detailed description will be favorable. 1. The immunological backgrounds of the mice, such as the Balb/c and C57/B6 may be critical for the appearance of the pathogenesis, symptoms, and results of mice studies. The authors should add and make clear the immunological differences between Balb/c and C57/B6. For example, it may be important whether Th1 or Th2 reaction is dominant. 2. The authors should add the latter paper as the reference: Koo B, et al. J Infect Dis 2020: Transient Lymphopenia and

Interstitial Pneumonia With Endotheliitis in SARS-CoV-2-Infected Macaques 3. Some hypo: For example, Page 6, 103 and 105 may be not used superscript letters.

**Answers:** We thank reviewer 2 for his valuable and suggestive comments. Regarding the immunological background of wiltype strains, we added the following statement and reference. Histological changes were observed to be similar in young BALB/c and C57BL/6J mice, but the acute lung injury scores were reduced in C57BL/6J mice [48]], which may be due to its dominant Th1 response, whereas BALB/c mice express Th2 response dominantly [125], which may be due to its dominant Th1 response, whereas BALB/c mice express Th2 response dominantly {Fukushima et al 2006]]. Fukushima A, Yamaguchi T, Ishida W, Fukata K, Taniguchi T, Liu FT, Ueno H. Genetic background determines susceptibility to experimental immune-mediated blepharoconjunctivitis: comparison of Balb/c and C57BL/6 mice. Exp Eye Res 2006; 82(2):210-8 [PMID: 16102751 DOI: 10.1016/j.exer.2005.06.010]. We have also added Koo B, et al. J Infect Dis 2020 reference. The formatting of the reference number has been checked and corrected.

We have resent the manuscript to Sci Edit for Engishing polishing, and native speakers did the editing. Please see below the English editing certificate for your reference.



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**Manuscript Title**  
*Animal models of SARS-CoV-2 and SARS-CoV-: Pathogenesis and Transmission and therapeutic evaluation*

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(1) Science editor:

5 Issues raised:

- (1) The authors did not provide the approved grant application form(s). Please upload the approved grant application form(s) or funding agency copy of any approval document(s);

**Ans:** We have uploaded the sanctioned approval letter of the grantee.

- (2) The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor;

**Ans:** We have uploaded the original in jpeg format and also prepared the figure in ppt format

- (3) PMID numbers are missing in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references. Please number the references, both in the main text and the reference list, please revise throughout; and

**Ans:** We have revised and formatted all the references as per the journal style.

- (4) If an author of a submission is re-using a figure or figures published elsewhere, or that is copyrighted, the author must provide documentation that the previous publisher or copyright holder has given permission for the figure to be re-published; and correctly indicating the reference source and copyrights. For example, "Figure 1 Histopathological examination by hematoxylin-eosin staining (200 ×). A: Control group; B: Model group; C: Pioglitazone hydrochloride group; D: Chinese herbal medicine group. Citation: Yang JM, Sun Y, Wang M, Zhang XL, Zhang SJ, Gao YS, Chen L, Wu MY, Zhou L, Zhou YM, Wang Y, Zheng FJ, Li YH. Regulatory effect of a Chinese herbal medicine formula on non-alcoholic fatty liver disease. World J Gastroenterol 2019; 25(34): 5105-5119. Copyright ©The Author(s) 2019. Published by Baishideng Publishing Group Inc.

**Ans:** We did not use figures published elsewhere.

[6]". And please cite the reference source in the references list. If the author fails to properly cite the published or copyrighted picture(s) or table(s) as described above, he/she will be subject to withdrawal of the article from BPG publications and may even be held liable. 6 Re-Review: Required. 7 Recommendation: Conditional acceptance.

**Ans:** Yes, all cited references are also mentioned in the list of references.