

Dear Editor,

Dear Reviewers,

Thank you for your time to evaluate our invited paper ID: **03967085 "Immunological aspects of COVID-19: what do we know?"**, authors: Tsvetelina Veselinova Velikova, Stanislav Vasilev Kotsev, Daniel Stefanov Georgiev, Hristiana Momchilova Batselova, submitted to the **World Journal of Biological Chemistry**.

We acknowledge that our manuscript may have some issues in conformity with the following comments. We have addressed all the problematic points, and the revisions made are marked with track changes option in the text.

Reviewer 1 - ID 02650654

Conclusion: Minor revision

Scientific Quality: Grade C (Good)

Language Quality: Grade A (Priority publishing)

- Thank you very much for the good overall evaluation of our work.

This is a long review about Covid-19 immunology, where many aspects are still unexplored. You can trace some perspectives for further researches, considering that material for histopathological researches is scanty.

- Thank you for the valuable comment. We have added a couple of sentences about histopathological researches in COVID-19 as future perspectives in conclusion.

You can also consider that other schema/drawings would be useful to make clear the pathophysiological mechanisms.

- Thank you for the note. We agree with the referee that the additional drawings regarding the pathophysiological mechanisms could be useful. However, we prefer

not to create a fourth figure about pathophysiology due to lack of time and the immunological scope of our paper.

Reviewer 2 – 00504167

Conclusion: Accept (General priority)

Scientific Quality: Grade D (Fair)

Language Quality: Grade B (Minor language polishing)

➤ Thank you very much for the good overall evaluation of our work.

Epidemiology paragraph:

- "Not surprisingly, coronaviruses were intensively studied last months."

Coronaviruses have been studied for a long time, not only "last months." Please, rephrase the sentence.

➤ The referee is right to point out that the research on coronaviruses lasted for the years. We meant to denote that the research of SARS-CoV-2 lasted for months since the virus causing the pandemic is relatively new. We have corrected the issue mentioned above.

- "It is reported that CFR of COVID-19 varies widely between countries ranging from 0.2 % in Germany to 7.7 % in Italy [25]."

Comment on this sentence and provide a possible explanation for the differences in CFR among countries.

➤ Thank you for the valuable note. We have explained the possible reasons for the differences in CFR across countries.

- "Moreover, patients who produce anti-S-neutralizing antibodies at the onset of the disease have a higher risk of death. In this context, excessive complement activation may also play a role."

Add a reference and provide a brief explanation for that.

- Thank you for the assertion. We agree with the referee that wrote in this way; it is not clear what is the cause and the mechanism for this observation. We have added a couple of sentences to make it clear.

- ...other studies detected SARS-CoV-S protein-specific memory T memory cells six years after the patients` infection [40]

In the work cited [40], the authors indicate 4 years in the title not 6. Please, check!

- Thank you for the comment. We did not notice that we've cited the number incorrectly. We have corrected this technical mistake.

- The feeling of choking is observed mainly around 9,...?

Explain this sentence and rephrase it.

- We have revised the sentence and add the word "day" before 9. Thank you for the valuable note.

- Studies that included survivors from the 2003 SARS epidemic have recently shown that neutralizing antibodies were found, 17 years after the infection [70].

This statement does not reflect the content of the study cited: ... Among 176 patients who had had severe acute respiratory syndrome (SARS), SARS-specific antibodies were maintained for an average of 2 years....

- Thank you for the note. We have made a technical mistake and corrected the issue. We have changed the references with the correct one.

- It has been reported that many cured patients donate plasma against SARS-CoV-2, with clinical trials for SARS-CoV [74] and MERS-CoV [75].

Unclear sentence. Rephrase it.

- Thank you for the note. We have corrected the issue to improve the clearness of the text.
- Revise English and symbols throughout the text
- Thank you for the valuable note. We have gone through the text and have corrected all the symbols misspelled. Additionally, we have revised the English where needed.

Science editor:

1 Scientific quality: The manuscript is a field of vision of immunological aspects of COVID-19. The topic is in the scope of WJBC. (1) Classification: Grade C and D. (2) Summary of the peer-review report: This is a wide review about Covid-19 immunology. Issues raised by reviewers should be revised. (3) Format: 3 figures. 79 references were cited, including 57 references published in the last three years. No self-citation. 2 Language evaluation: Grade A and B. Language editing certificate was not provided correctly, please provide language certificate by language editing company. 3 Academic norms and rules: The conflict-of-interest disclosure form and Copyright License Agreement were provided. No academic misconduct was found in the Bing search and the similar index is 35% in the CrossCheck search, the repeated sentences should be rephrased. 4 Supplementary comments: (1) Invited manuscript. (2) Without financial support. (3) Corresponding author has published 2 articles in BPG. 5 Issues raised: (1) Please provide the author contributions. (2) 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. (3) Please add "article highlight" section. 6 Re-Review: Not required. 7 Recommendation: Conditional acceptance.

- Thank you very much for the good overall evaluation of our work.
- We have no certificate of language editing company to provide.
- Similar sentences regarding the CrossCkeck report were revised. We have provided the author's contributions.

- We have prepared all the figures using PowerPoint. We have uploaded the original figure documents where the Editor can reprocess all graphs or arrows or text portions.

Editorial Office Director

I have checked the comments written by the science editor. The "article highlight" section is not required. The CrossCheck results showed the similarity to be high. According to our policy, the overall similarity index should be less than 30%, and the single-source similarity should be less than 5%. Please rephrase these repeated sentences.

- Similar sentences regarding the CrossCkeck report were revised.

Company Editor-in-Chief

I have reviewed the Peer-Review Report and the full text of the manuscript, of which have met the basic publishing requirements, and the manuscript is conditionally accepted with major revision. Before final acceptance, the authors need to make sure all text that has been legitimately cited.

- All used data were legitimately cited, and the similar phrases and paragraphs were edited.