

Dear Editor

Thank so much for the reviewers' comments for the manuscript No. 59283 entitled **"Reinfection risk of novel coronavirus (COVID-19): A narrative review of current evidence"**. Let me inform you, we have corrected the manuscript according the reviewers' recommendations as much as possible. The corrections have been highlighted in the text by different color.

Comments from the editorial team:

Reviewer #1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade A (Priority publishing)

Conclusion: Minor revision

Specific Comments to Authors:

There is a rising concern that patients who recover from COVID-19 may be at risk of re-infection. In this review paper, recent findings on the patients who previously recovered from the disease and thereafter re-infected are reported. The authors have adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) checklist. Out of 35 reviews studied, the results of this article show that eight studies described recovered patients with re-infection, one study reported re-infected patients who died, and several studies indicated that re-infection is not probable. The presented review study is suitable with respect to the main objectives. However, the authors should address the following comments in a revised version before further consideration for publication.

- 1- The introduction provides some information on a few past studies on false-negative nasopharyngeal swabs in the diagnosis of SARS-CoV-2 infection. However, the information is not sufficient, and the authors must provide broader details about the reason why the results of swabs are sometimes false-negative, along with a case of such condition. To provide this information, cite <https://doi.org/10.32677/IJCR.2020.v06.i07.010>

Author response #1: Thanks! More information was added in paragraph 4 and line 4.

- 2- In the first paragraph of the introduction, add a citation to this sentence: "Increased liver enzyme and low counts of lymphocytes (lymphocytopenia) along with increased C-reactive protein (CRP) levels are often present in COVID-19 patients".

Author response #1: Thanks! Done.

- 3- Please reframe the conclusion at the end of the manuscript. It should not be a copy of the conclusion in the abstract.

Author response #1: Thanks! Done.

- 4- There are some words stuck together with spaces eliminated. Reread the manuscript and correct these errors. varicella-zoster can remain --- > varicella-zoster can remain nasopharyngeal swab --- > nasopharyngeal swab

Author response #1: Thanks! Done.

4 REVISE THE MANUSCRIPT

4.1 Guidelines and Requirements for Manuscript Revision and the Format for Manuscript Revision: Please visit: <https://www.wjgnet.com/bpg/GerInfo/291>.

4.2 Preparatory work for revising your manuscript: (1) [Original articles](#); (2) [Review articles](#); and (3) [Case report articles](#).

4.3 Editorial office's comments: Authors must revise the manuscript according to the Editorial Office's comments and suggestions, which are listed below:

(1) Science editor:

1 Scientific quality: The manuscript describes a systematic review of the reinfection risk of novel coronavirus. The topic is within the scope of the WJV. (1) Classification: Grade B; (2) Summary of the Peer-Review Report: There is a rising concern that patients who recover from COVID-19 may be at risk of re-infection. In this review paper, recent findings on the patients who previously recovered from the disease and thereafter re-infected are reported. The presented review study is suitable with respect to the main objectives. However, the authors should address the following comments in a revised version before further consideration for publication.

The introduction provides some information on a few past studies on false-negative nasopharyngeal swabs in the diagnosis of SARS-CoV-2 infection. However, the information is not sufficient, and the authors must provide broader details about the reason why the results of swabs are sometimes false-negative, along with a case of such condition. The questions raised by the reviewers should be answered;

Author response #1: Thanks! More information was added in paragraph 4 and line 4.

and (3) Format: There is 1 table and 1 figure. A total of 56 references are cited, including 55 references published in the 2020. There are 2 self-citations.

2 Language evaluation: Classification: Grade A. A language editing certificate issued by Enago was provided.

3 Academic norms and rules: The authors need to provide the Biostatistics Review Certificate, the signed Conflict-of-Interest Disclosure Form and Copyright License Agreement, and the PRISMA Checklist form. No academic misconduct was found in the CrossCheck detection and Bing search.

Author response #1: Thanks! Signed Conflict-of-Interest Disclosure form, Copyright License Agreement and PRISMA Checklist form were added.

4 Supplementary comments: This is an unsolicited manuscript. The topic has not previously been published in the WJV. The corresponding author has not published articles in the BPG. 5 Issues raised:

(1) I found no "Author contribution" section. Please provide the author contributions;

Author response #1: Thanks! The author contributions section was added.

(2) I found 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);

Author response #1: Thanks! This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

(3) I found the authors did not provide the original figures. 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;

Author response #1: Thanks! The original figure document was provided.

(4) I found the authors did not add the PMID and DOI 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 revise throughout;

Author response #1: Thanks! Done.

(5) I found the authors did not write the "article highlight" section. Please write the "article highlights" section at the end of the main text;

Author response #1: Thanks! The highlighted section was added.

(6) the author should number the references in Arabic numerals according to the citation order in the text. The reference numbers will be superscripted in square brackets at the end of the sentence with the citation content or after the cited author's name, with no spaces; and

Author response #1: Thanks! Done.

(7) I have changed the manuscript type "review" to "Systematic Reviews". The authors need to provide the Biostatistics Review Certificate, the signed Conflict-of-Interest Disclosure Form and Copyright License Agreement, and the PRISMA Checklist form.

Author response #1: Thanks! Signed Conflict-of-Interest Disclosure form, Copyright License Agreement and PRISMA Checklist form were added.

6 Re-Review: Required.7 Recommendation: Conditionally accepted.

(2) Editorial office director: I have checked the comments written by the science editor.

(3) Company editor-in-chief: I have reviewed the Peer-Review Report, the full text of the manuscript and the relevant ethics documents, all of which have met the basic publishing requirements, and the manuscript is conditionally accepted with major revisions. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report and the Criteria for Manuscript Revision by Authors. Before final acceptance, authors need to correct the issues raised by the editor to meet the publishing requirements.

4.4 Requirements for figures: Please provide the decomposable Figures, whose parts are all movable and editable, organize them into a PowerPoint file, and submit as "**59283-Figures.ppt**" on the system. The figures should be uploaded to the file destination of "Image File".

Author response #1: Thanks! Done.

4.5 Requirements for tables: Please provide the decomposable Tables, whose parts are all movable and editable, organize them into a Word file, and submit as "**59283-Tables.docx**" on the system. The tables should be uploaded to the file destination of "Table File".

Author response #1: Thanks! Done.

4.6 Requirements for references: Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references. Please revise throughout. NOTE: The PMID is required, and NOT the PMCID; the PMID number can be found at <https://pubmed.ncbi.nlm.nih.gov>. (Please begin with PMID:) The DOI number can be found at <http://www.crossref.org/SimpleTextQuery/>. (Please begin with DOI: 10.**).

Author response #1: Thanks! Done.

4.7 Requirements for article highlights: If your manuscript is an original study (basic study or clinical study), meta-analysis, or systemic review, the "Article Highlights" section should be provided. Detailed writing requirements for "Article Highlights" can be found in the Guidelines and Requirements for Manuscript Revision.

Author response #1: Thanks! Done.

4.8 Language quality: Please resolve all language issues in the manuscript based on the peer review report. Please be sure to have a native-English speaker edit the manuscript for grammar, sentence structure, word usage, spelling, capitalization, punctuation, format, and general readability, so that the manuscript's language will meet our direct publishing needs.

Author response #1: Thanks! Done.

JOURNAL EDITOR-IN-CHIEF (ASSOCIATE EDITOR) COMMENTS TO AUTHORS

The review is very interesting as it raise an important question: Is there reinfection or reactivation of the COVID-19 after cure from the infection. But some comments to be considered. - Where the inclusion criteria of the included papers in this meta-analysis, only exclusion criteria were included. The inclusion criteria are mentioned in the study selection of method section,. "The original papers which were peer-reviewed and published in English and fulfilled the eligibility criteria were included in the final report". - The 1st case report by Aldhaleei et al[10] describe HBV reactivation induced by COVID-19 and so has no relation to our title here so must be deleted from the metaanalysis. Thanks, done. -What the definition of reinfection or reactivation of COVID-19?what is the duration must be calculated to differentiate between reinfection or reactivation? Actually up till now there in no definite definition. for example some studies claim that :neutralizing immunoglobulins against SARS-CoV-2 persist for about 40 days. so in your analysis you must not just mention the abstract of every study but you must tabulate the data of all studies as follow- ist classify the all patients recruited in these studies into 2 groups immunocompromised and non immunocompromised-what is the duration between the 1st and 2nd episodes. because in some studies it was about few days which may means persistence of infection rather than reinfection. Dear editor, thanks for your great and up dated comments; I have to mention that our type of study is a review and it is actually so much dependent to our source articles in which are clearly mentioned that all of these cases are known to be re-infections. 3 studies about reactivation are excluded from the table, as our study design is only to include re-infection cases, not re-activation. We have used their data and gathered them in this study , and by now, all the cases are re-infections. What was the discharge criteria: it was only clinical without PCR as this is the policy of most hospital nowadays. what the criteria of reactivation or reinfection , clinical, radiological or definite PCR without clinical or laboratory diagnosis. -Are there co morbid conditions - is there is risk of exposure after discharge.- is there sequencing or genotyping of the strain to differentiate between reinfection and reactivation.? Dear editor, as we have mentioned above all of these source studies have clearly mentioned that their cases are re-infections and we should use their data directly. - The reference No. (25) ist author is Gousseff. M, not Batisse . DClinical recurrences of COVID-19 symptoms after recovery: Viral relapse, reinfection or inflammatory rebound? Marie Gousseff,k,1,* Pauline Penot,r,1 Laure Gallay,i,1 Dominique Batisse,a,1 Nicolas Benech,b,1 Kevin Bouiller,e,f,1 Rocco Collarino,g,1 Anne Conrad,h,1 Dorsaf Slama,t,1 Cédric Joseph,l,1 Adrien Lemaigen,m,1 François-Xavier Lescure,n,o,1 Bruno Levy,p,1 Matthieu Mahevas,q,1 Bruno Pozzetto,s,1 Nicolas Vignier,u,1 Benjamin Wyplosz,v,1 Dominique Salmon,t,1 Francois Goehringer,j,1,* Elisabeth Botelho-Nevers,c,d,1 and in behalf of the COCOREC study group Thanks, the reference numbers was revised. - The discussion is very defecient you must answer the following questions: Can SARS-CoV-2 re-infect the individuals who recovered from COVID-19? This question is also associated with other questions: whether or not SARS-CoV-2 infection induces protective reaction or neutralized antibody? Will SARS-CoV-2 vaccines work? (b) Why could some recovered patients with COVID-19 be re-tested positive for SARS-CoV-2 RNA? (c) Are some recovered COVID-19 patients with re-testing

positive for SARS-CoV-2 RNA infectious? (d)How should the COVID-19 patients with retest positive for SARS-CoV-2 be managed?-There are some words stuck together with spaces eliminated. Reread the manuscript and correct these errors. varicella-zoster can remain - --> varicella-zoster can remain , 2 reactivation in --- reactivation in. aforementioned --- fore mentioned.-

Author response Thanks for your attention and edition.

(a): about post-infection immunity: It has been discussed in different parts. In results, discussion and also conclusion. We have mentioned that most studies support the idea of post infection immunity. At least a short term immunity.

(b): about the corona virus vaccine: As you know, most vaccines are in trial phase and no certain information exists. And also our study was conducted in August 2020 and that time information about vaccines was really rare. In fact we do not discuss about the vaccine in this study.

(c): about the positive retest results: also this issue is already discussed and we have mentioned several causes of positive retest results and emphasized on the fact that positive retest does not always mean "re-infection".

(d): management of positive retest patients is a challenging and complicated topic and It does not fit in this article. So we do not aim to discuss about this important issue here.