Name of journal: World Journal of Radiology

Manuscript NO: 76698

Title: Impact of X-radiation in the management of COVID-19 disease

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 05764104

Position: Editorial Board

Academic degree: Doctor, PhD

Professional title: Associate Professor, Senior Scientist

Reviewer’s Country/Territory: Russia

Author’s Country/Territory: India

Manuscript submission date: 2022-03-27

Reviewer chosen by: Dong-Mei Wang

Reviewer accepted review: 2022-05-14 07:28

Reviewer performed review: 2022-05-25 17:27

Review time: 11 Days and 9 Hours

<table>
<thead>
<tr>
<th>Scientific quality</th>
<th></th>
<th>Grade A: Excellent</th>
<th></th>
<th>Grade B: Very good</th>
<th></th>
<th>Grade C: Good</th>
<th></th>
<th>Grade D: Fair</th>
<th></th>
<th>Grade E: Do not publish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language quality</td>
<td></td>
<td>Grade A: Priority publishing</td>
<td></td>
<td>Grade B: Minor language polishing</td>
<td></td>
<td>Grade C: A great deal of language polishing</td>
<td></td>
<td>Grade D: Rejection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td></td>
<td>Accept (High priority)</td>
<td></td>
<td>Accept (General priority)</td>
<td></td>
<td>Minor revision</td>
<td></td>
<td>Major revision</td>
<td></td>
<td>Rejection</td>
</tr>
<tr>
<td>Re-review</td>
<td></td>
<td>Yes</td>
<td></td>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer-review</td>
<td></td>
<td>Peer-Review:</td>
<td></td>
<td>Anonymous</td>
<td></td>
<td>Onymous</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SPECIFIC COMMENTS TO AUTHORS
The manuscript is devoted to the analysis of the role of X-rays in the diagnosis and treatment of COVID-19 and reviews medical imaging methods, such as chest X-ray radiography (CXR) and chest computed tomography (CT), as well as the method of low-dose radiation therapy (LDRT). Today, when the COVID-19 pandemic is still ongoing, such a review has a pronounced relevance and could be of interest to the reader. Moreover, the review is written in good English and has interesting author's solutions, which include table 1 and diagrams in figures 1 and 2. Unfortunately, the manuscript itself has some severe drawbacks (see my major comments below) which do not allow me to recommend its publication in World Journal of Radiology without a major revision of its text and, probably, some additions. Major comments  1. In the Introduction, the authors quite fully describe the COVID-19 disease, but write almost nothing about the subject of the paper, i.e. about X-ray methods. In addition, there is absolutely no information about earlier reviews on this topic, which were written by other researchers. Such reviews already exist. For example, in my opinion, one cannot help but refer to the excellent review by A. Pal et al., published in World Journal of Radiology (A. Pal et al., World J Radiol 2021; 13: 258), or to the special issue “Medical Imaging of COVID-19" (M. Giger, J Med Imaging 2021; 8: 010101). I recommend the authors to give appropriate additions to the Introduction.  2. The authors do not provide any example of an image obtained with CXR and CT. It seems a little strange for a review, where, among other things, imaging methods are considered. I think a few examples of images would be quite appropriate and could make the paper more representative.  3. To my surprise, I did not find the section "Conclusion" in the manuscript. In my opinion, this is a shortcoming, and it should be eliminated.
Standardly, the Conclusion section should first review, analyze and systematize all results the authors obtained and only then, on the basis of these results, formulate the final conclusion and, possibly, announce future research. Minor comments 1. Abstract. In my opinion, the first sentence "... that infect many different animals including humans" is not quite successful. 2. Abstract. The abbreviation "LDRT" must be disclosed. 3. There are no many errors in grammar but they are present. Below are the ones I found. 3.1. Abstract, line 8. “focus” should be “focuses”. 3.2. Page 2, line 2 from the bottom: “is been widely used” should be “are been widely used”. 3.3. Page 6, the last sentence: It can be assumed that there should be a comma after "moderate (8-17)". 3.4. Page 10, line 4 from the bottom: “which is been reliably used” should be “which are been reliably used”.
Name of journal: World Journal of Radiology

Manuscript NO: 76698

Title: Impact of X-radiation in the management of COVID-19 disease

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 05627135

Position: Peer Reviewer

Academic degree: PhD, RN

Professional title: Lecturer

Reviewer’s Country/Territory: Thailand

Author’s Country/Territory: India

Manuscript submission date: 2022-03-27

Reviewer chosen by: Dong-Mei Wang

Reviewer accepted review: 2022-05-29 23:51

Reviewer performed review: 2022-05-30 02:58

Review time: 3 Hours

<table>
<thead>
<tr>
<th>Scientific quality</th>
<th>[ ] Grade A: Excellent</th>
<th>[ ] Grade B: Very good</th>
<th>[ Y] Grade C: Good</th>
<th>[ ] Grade D: Fair</th>
<th>[ ] Grade E: Do not publish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language quality</td>
<td>[ ] Grade A: Priority publishing</td>
<td>[ Y] Grade B: Minor language polishing</td>
<td>[ ] Grade C: A great deal of language polishing</td>
<td>[ ] Grade D: Rejection</td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td>[ ] Accept (High priority)</td>
<td>[ Y] Accept (General priority)</td>
<td>[ ] Minor revision</td>
<td>[ ] Major revision</td>
<td>[ ] Rejection</td>
</tr>
<tr>
<td>Re-review</td>
<td>[ ] Yes</td>
<td>[ Y] No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer-reviewer</td>
<td>Peer-Review: [ Y] Anonymous</td>
<td>[ ] Onymous</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SPECIFIC COMMENTS TO AUTHORS
This is a good study, but I hope the author can add the following: 1. Prognosis of COVID-19 treated with LDRT. 2. Brief guidelines for clinical application of LDRT in the treatment of COVID-19. 3. Inclusion and exclusion criteria for LDRT in the treatment of COVID-19
**Name of journal:** World Journal of Radiology  

**Manuscript NO:** 76698  

**Title:** Impact of X-radiation in the management of COVID-19 disease  

**Provenance and peer review:** Invited Manuscript; Externally peer reviewed  

**Peer-review model:** Single blind  

**Reviewer’s code:** 05462969  

**Position:** Peer Reviewer  

**Academic degree:** MD  

**Professional title:** Assistant Professor, Attending Doctor  

**Reviewer’s Country/Territory:** China  

**Author’s Country/Territory:** India  

**Manuscript submission date:** 2022-03-27  

**Reviewer chosen by:** Dong-Mei Wang  

**Reviewer accepted review:** 2022-05-26 05:47  

**Reviewer performed review:** 2022-06-06 03:04  

**Review time:** 10 Days and 21 Hours  

### Scientific quality  

- [ ] Grade A: Excellent  
- [ ] Grade B: Very good  
- [Y] Grade C: Good  
- [ ] Grade D: Fair  
- [ ] Grade E: Do not publish  

### Language quality  

- [ ] Grade A: Priority publishing  
- [Y] Grade B: Minor language polishing  
- [ ] Grade C: A great deal of language polishing  
- [ ] Grade D: Rejection  

### Conclusion  

- [ ] Accept (High priority)  
- [ ] Accept (General priority)  
- [Y] Minor revision  
- [ ] Major revision  
- [ ] Rejection  

### Re-review  

- [Y] Yes  
- [ ] No  

### Peer-reviewer  

Peer-Reviewer: [Y] Anonymous  

[ ] Onymous
SPECIFIC COMMENTS TO AUTHORS

This is an interesting topic, and I think this is helpful for the medical workers. However, I worried about the ethic concern about the X-ray used for treatment of 2019 COVID-19 disease. Could you highlight the ethics and mechanism concern in your article? After all, radiation could induce inflammation and injury of lung, even tumor in long time. Besides, I think some errors need to be revisited. such as, evaluated as %recovery and less severity??
RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Radiology
Manuscript NO: 76698
Title: Impact of X-radiation in the management of COVID-19 disease
Provenance and peer review: Invited Manuscript; Externally peer reviewed
Peer-review model: Single blind
Reviewer’s code: 05764104
Position: Editorial Board
Academic degree: Doctor, PhD
Professional title: Associate Professor, Senior Scientist
Reviewer’s Country/Territory: Russia
Author’s Country/Territory: India
Manuscript submission date: 2022-03-27
Reviewer chosen by: Ji-Hong Liu
Reviewer accepted review: 2022-06-24 10:47
Reviewer performed review: 2022-06-25 11:33
Review time: 1 Day

<table>
<thead>
<tr>
<th>Scientific quality</th>
<th>[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language quality</td>
<td>[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection</td>
</tr>
<tr>
<td>Conclusion</td>
<td>[ ] Accept (High priority) [ ] Accept (General priority) [Y] Minor revision [ ] Major revision [ ] Rejection</td>
</tr>
<tr>
<td>Peer-reviewer</td>
<td>Peer-Review: [Y] Anonymous [ ] Onymous</td>
</tr>
<tr>
<td>statements</td>
<td>Conflicts-of-Interest: [ ] Yes [Y] No</td>
</tr>
</tbody>
</table>

[8]
SPECIFIC COMMENTS TO AUTHORS
I cannot say that the authors have done a satisfactory job of correcting the disadvantages. I am satisfied with the response of the authors to my first major comment. However, there are questions about the second and third major comments. It is not clear to me why the authors cannot request permission from the respective editors to publish figures with CXR and CT images from other papers, which, in my opinion, would undoubtedly improve the quality of the presentation of the material as a whole. I am also not satisfied with the content and size of Conclusion, which, in my opinion, should be 4-5 times more voluminous.