

Point by point response

Na Ma, Company Editor-in-Chief, Editorial Office  
Baishideng Publishing Group Inc  
7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA

Dated: April 2, 2020

Re: [Revision; Artificial intelligence and computer simulation models in critical illness, manuscript no: 53934](#)

Dear Editor,

We want to thank the editorial office and the reviewers for the time and consideration given to our manuscript. In the following page we address the comments provided by the reviewers for revision of the submitted manuscript.

Please note that the revised manuscript has been submitted with changes included as “track changes”, supplementary file for the figure has been submitted as well in .ppt format so that it can be edited.

All authors have contributed significantly for the revision of the manuscript and approve the final version.

Sincerely,

Amos Lal, MBBS (Corresponding Author)  
Division of Pulmonary and Critical Care Medicine  
Mayo Clinic, Rochester MN, USA  
Lal.Amos@mayo.edu; manavamos@gmail.com  
<https://orcid.org/0000-0002-0021-2033>

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**REVIEWER 1 (03093768):**

Artificial intelligence (AI) as a novel tool to advance the field of medicine has rapidly become a subject of great interest and intense debate. The complexity of some AI algorithms, their lack of transparency and a widespread lack of prospective validation may serve to dishearten physicians. Awareness, multi-tasking, flexibility and communication skills are human capabilities that no AI has achieved or seem likely to achieve anytime soon. This manuscript introduces some principles of artificial intelligence with a large scale of words. More about the application of artificial intelligence in critical illness treatment and the obstacles currently facing could be introduced.

[Response: We thank the reviewer for encouraging comments. The recommended part has been added to the revised manuscript.](#)

**REVIEWER 2 (04340896):**

The Authors should better explain the overlap between their description of Machine and Deep learning.

[Response: we have added the supporting text in the revised manuscript.](#)

Most if not all of the tasks the Authors associate with DL can be performed with non-deep techniques, such as SMOTE for data augmentation and disease detection and classification with "classical" supervised learning algorithms. Maybe these sections could be edited and reworded for the sake of clarity separating tasks for which ML is used and ML approaches in terms of algorithm families.

[Response: We thank the reviewer for this astute observation and comment. However, we feel that this level of details like SMOTE is deeper and far more technical than needed for intended readers of this article who are clinicians.](#)

Furthermore, SVM (support Vector machine) ensemble methods should be mentioned in ML. Especially the latter are widely used and often outperform even DL. When discussing DAGs, Bayesian Networks should be mentioned and included in the discussion.

[Response: we have added the supporting text in the revised manuscript.](#)

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## COMMENTS FROM THE EDITOR:

Please check and confirm that there are no repeated references! [Done](#)

Please verify that the references are cited by Roman numerals in brackets and superscripted in the text and that the numbering order is correct. [Done](#)

There should be no space between the bracket and the preceding word or the following punctuation. [Done](#)

When references in the text and tables are cited with author name(s), it is necessary to manually verify that the name(s) is consistent with the first author's surname in the corresponding reference list. [Done](#)

Please provide the decomposable figure of Figures, whose parts are movable and editable. So you can put the original pictures in PPT and submit it in the system. Please provide the decomposable figure of all the figures, whose parts are all movable and editable, organize them into a PowerPoint file, and submit as “Manuscript No. - image files.ppt” on the system. Make sure that the layers in the PPT file are fully editable. For figures, use distinct colors with comparable visibility and consider colorblind individuals by avoiding the use of red and green for contrast. [Done](#)

Please read these four important guidelines carefully and modify your figure(s) accordingly:

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Third, please prepare and arrange the figures using PowerPoint to ensure that all graphs or text portions can be reprocessed by the editor. [Done](#)

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Fourth, in consideration of color-blind readers, please avoid using red and green for contrast in vector graphics or images. Done (Red colored boxes changed to Blue)