

Peer Review Report

Review Report on Development of a clinical risk score for detection of COVID-19 in suspected patients during a local outbreak in China: a retrospective cohort study

Original Article, Int J Public Health

Reviewer: Dr Abraham Varghese

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EVALUATION

Q 1 Please summarize the main findings of the study.

The authors developed an internal clinical risk score for the detection of covid-19 cases based on the real data obtained from Jan 27 to Feb 20 (2020) approximately 30 days. They have identified the potential variable using binary logistic regression and used 7 potential variables in their final model with multiple logistic regression. The data has been analyzed properly with its statistical relevance. They argue that the cut-of-risk score is 3.45 which gives 100% sensitivity and 27.1% specificity.

Q 2 Please highlight the limitations and strengths.

Strengths

- 1) The study has been done systematically and presented well based on available real data.
- 2) The presentation of the article is also well structured

scope of improvement

- 1) The data has been collected for only one month (Jan- Feb 2020). If the paper was published during that period, it would be appreciable. I have not convinced of the significance to publish a paper after 2 years with those limited dat There are only 56 covid-19 cases out of 336 in this study. Since more data is available, it is advisable to conduct a study by adding more data to get a reliable result. otherwise, it cannot be used as a general model to handle the pandemic in future
- 2) There is no systematic literature study conducted in the paper even though so many papers are available. Instead, it is mentioned that the quality of other models is poor(line no 45). The authors concentrated only on their data which is available for a short period.
- 3) Please refer to the paper published in 2021, 'Development and validation of the CoV19-OM intensive care unit score: An early ICU identification for laboratory-confirmed SARS-CoV-2 patients from a retrospective cohort study in Oman ([https://www.ijidonline.com/article/S1201-9712\(21\)00381-7/fulltext](https://www.ijidonline.com/article/S1201-9712(21)00381-7/fulltext)). The paper also uses the same idea, and method too, the only difference is the risk score is calculated additionally. This paper is not mentioned in the reference too.
Please compare it with this paper and mention the novelty of your paper.
- 4) A detailed explanation of risk score calculation is needed to include.

Q 3 Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

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PLEASE COMMENT

Q 4 Is the title appropriate, concise, attractive?

yes

Q 5 Are the keywords appropriate?

yes

Q 6 Is the English language of sufficient quality?

yes

Q 7 Is the quality of the figures and tables satisfactory?

Yes.

Q 8 Does the reference list cover the relevant literature adequately and in an unbiased manner?)

need to revisit

QUALITY ASSESSMENT

Q 9 Originality



Q 10 Rigor



Q 11 Significance to the field



Q 12 Interest to a general audience

Q 13 Quality of the writing

Q 14 Overall scientific quality of the study

REVISION LEVEL

Q 15 Please make a recommendation based on your comments:

Major revisions.