

Reviewer #1:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: Nice topic

General comment: We would like to thank the reviewer for the positive comments and appreciate your efforts for reviewing our manuscript.

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: An interesting article suitable for editorial, discussing potential usefulness of artificial intelligence in managing huge ICU data. Some suggestions for further improvements: •

1. Suggest rewording the title. The title is not well understood by readers. What are micro and macro mean? •

Response: Thanks for the suggestion. We've decided to refrain from using micro and macro in the title and keep it in a simple way to avoid misunderstanding. Now the title reads: Data science in the Intensive Care Unit.

2. Also suggest not to use abbreviation in title. ICU should be spelled in full. •

Response: We have changed ICU into its full name in the title.

3. Some definitions were missing in the manuscript, such as macro, micro, data science, etc with examples. •

Response: Thanks for the suggestion. We've decided to refrain from using micro and macro in the manuscript. Instead, we've made these terms more specific in the text, for example, by using terms like "for individual patients and physicians" etc.

4. Despite the benefits, I suggest the authors to include a section focusing and discussing on the issues that may raise with the applications of AI in ICU settings.

Response: Thanks for your comment. In the editorial, we have already discussed the potential pitfalls of AI in the ICU. The paragraph reads: *Such an exciting trend should be viewed with caution. Current AI prediction models to diagnose sepsis are at a major risk of bias when the diagnostic criteria vary. The generalizability of these models is poor due to overfitting and the lack of standardized protocols. Similar conditions occur for mechanical ventilation. AI applied to mechanical ventilation has limited external validation and model calibration, with a substantial risk of bias, significant gaps in reporting, and poor code and data availability.*