

**Review Form 3**

Journal Name:	<a href="#">Asian Journal of Medicine and Health</a>
Manuscript Number:	Ms_AJMAH_127050
Title of the Manuscript:	<b>Utility of the PITT Bacteremia Score for Predicting Mortality in CRE Colonized and Infected Patients</b>
Type of the Article	

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**PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p><b>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</b></p>	<p>This manuscript is highly valuable to the scientific community as it addresses a critical issue in healthcare: the growing prevalence of carbapenem-resistant Enterobacteriaceae (CRE) infections, particularly in ICU patients. The study evaluates the predictive utility of the Pitt Bacteremia Score (PBS), a tool that could potentially guide clinical decision-making and improve patient outcomes in resource-limited settings. The findings contribute to the growing body of evidence on the use of scoring systems to predict mortality, which could aid in early identification of high-risk patients and facilitate better resource allocation. The manuscript's focus on an understudied population in India adds an important dimension, highlighting the relevance of this tool in different geographic and healthcare settings. Overall, this research is timely and relevant, offering potential clinical applications in managing CRE infections and improving ICU care strategies.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>This topic is both timely and impactful, with the potential to add meaningful insights to the management of CRE-related infections and colonization.</p>	
<p><b>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</b></p>	<p><b>Suggested Revision</b></p> <p><b>"Background:</b> The Pitt Bacteremia Score (PBS) is used to predict 14-day inpatient mortality in bloodstream infections. This study evaluates whether PBS can also predict mortality in ICU patients colonized or infected with carbapenem-resistant <i>Enterobacteriales</i> (CRE).</p> <p><b>Methods:</b> ICU patients with CRE were selected, and each PBS component was individually assessed. Outcomes were noted after 14 days, and a PBS cutoff score for mortality prediction was analyzed.</p> <p><b>Results:</b> Of 30 patients, 26 (86%) expired and 4 (14%) survived. A PBS cutoff of <math>\geq 4</math> was associated with a significant increase in mortality.</p> <p><b>Conclusions:</b> PBS <math>\geq 4</math> may be a valuable predictor of mortality in CRE-infected and colonized ICU patients."</p>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p>Based on the content provided, here's a scoring breakdown for each section of the manuscript and an overall rating:</p> <p><b>Scoring Breakdown</b></p> <ol style="list-style-type: none"> <li>1. <b>Introduction</b> (8/10): Provides a solid foundation and rationale but could be clearer in stating the study's uniqueness and research questions.</li> <li>2. <b>Objectives</b> (9/10): Clear and relevant to the study goals, though they might be combined with the introduction to streamline the structure.</li> <li>3. <b>Methodology</b> (8/10): Well-defined study design and inclusion/exclusion criteria. More detail on sample size calculation and rationale for using PBS would enhance it.</li> <li>4. <b>Implications</b> (7/10): Relevant points, though these would be better suited to the discussion or conclusion.</li> <li>5. <b>Results</b> (8/10): Comprehensive and detailed, but some data could be summarized, and tables and figures should be better referenced in the text.</li> <li>6. <b>Discussion</b> (8/10): Good comparison with existing literature, though expanding on limitations and practical implications would strengthen it.</li> </ol>	

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	<p>7. <b>Conclusion</b> (8/10): Concise and relevant, but a stronger emphasis on PBS's clinical utility would be beneficial.</p> <p>8. <b>Limitations</b> (7/10): Appropriate limitations are noted, though discussing their impact on the study's findings would improve clarity.</p> <p>The manuscript is generally well-structured and informative, with a clear purpose and logical flow. Minor enhancements in clarity, structure, and depth of analysis, especially in limitations and discussion, would elevate it further.</p>	
<p><b>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</b></p>	<p>This manuscript demonstrates scientific robustness and technical soundness by utilizing a well-established scoring system, the Pitt Bacteremia Score (PBS), to predict mortality in critically ill patients with CRE infections. The methodology is carefully designed, including clear inclusion and exclusion criteria, informed consent procedures, and standardized data collection methods, which enhance the study's validity. Additionally, the study addresses each PBS component's contribution to mortality, providing a granular analysis that strengthens the reliability of its findings. By comparing PBS to other scoring systems like SOFA and contextualizing the results within existing literature, the manuscript effectively supports PBS's utility in predicting high-risk outcomes, reinforcing its relevance and applicability in ICU settings.</p>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p> <p>⋮</p>	<p>To properly assess if the references are sufficient and recent, I would need to see a list of them or have an understanding of the specific topic or context you are referring to. However, in general, when reviewing references, here are some guidelines for determining their sufficiency and recency:</p> <p><b>Sufficiency:</b></p> <ol style="list-style-type: none"> <li>1. Ensure the references comprehensively cover key concepts, theories, and recent advancements related to your research topic.</li> <li>2. Include seminal works as well as recent studies (preferably within the last 5 years) to reflect the current state of the field.</li> <li>3. Ensure a balance of primary research articles, reviews, books, and relevant authoritative sources.</li> </ol> <p><b>Recency:</b></p> <ol style="list-style-type: none"> <li>1. For fast-evolving fields, prioritize articles, studies, and reviews published in the last 3-5 years.</li> <li>2. If you're working in an area like technology, healthcare, or global issues (such as SDGs), it is critical to incorporate the latest literature to stay up-to-date with emerging trends and discoveries.</li> </ol> <p>If you can share the specific references you've included or more details on the topic, I can give a more tailored review and suggest additional, relevant sources.</p>	

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Minor REVISION comments

**Is the language/English quality of the article suitable for scholarly communications?**

The language and English quality of the article is generally clear, but there are areas where improvements can be made to enhance its scholarly communication, including clarity, grammatical accuracy, and formal tone. Below are some suggestions for improvement:

**General Comments:**

1. **Consistency in Terminology:** Some terms are inconsistent (e.g., "Carbapenem-resistant Enterobacteriaceae" vs. "CRE"). It's best to use one consistent term throughout the article.
2. **Punctuation and Grammar:** There are some punctuation errors (e.g., missing spaces after commas, inconsistent use of periods, etc.) that should be corrected for clarity and consistency.

**Suggested Revisions:**

**Introduction:**

- The opening sentence can be clearer by stating the issue more directly:
  - **Before:** "The exorbitant worldwide rise in the rate of multidrug resistant Enterobacteriaceae infections over the past few years is a major public health crisis."
  - **After:** "The global rise in multidrug-resistant Enterobacteriaceae infections in recent years has become a major public health crisis."
- In the phrase "CRE colonization in these patients is associated with increased likelihood of CRE infection," "likelihood" could be changed to "risk" for a more formal tone.
  - **Revised:** "CRE colonization in these patients is associated with an increased risk of CRE infection."
- Avoid sentence fragments like: "Predicting the outcome in these patients may help in more aggressive management. An easily identifiable and measurable predictor may prove to be even more useful."
  - **Revised:** "Predicting outcomes in these patients could facilitate more aggressive management, with easily identifiable and measurable predictors proving especially useful."

**Methodology:**

- "Informed and written consent is taken from all the study participants (or their attendees if the participant is not conscious)..." could be more concise.
  - **Revised:** "Informed written consent is obtained from all participants, or their attendees if the participant is unconscious."
- Be consistent in phrasing and tenses. For instance, "Rectal swabs are collected" could be rephrased to "Rectal swabs were collected" for consistency with past tense usage in the methods section.

**Results:**

- Some phrases could be more precise, for example, in "K. pneumoniae was isolated from 24/30 patients," adding "out of the total 30 patients" would improve clarity.
  - **Revised:** "K. pneumoniae was isolated from 24 out of the 30 patients."
- The sentence "The most appropriate cutoff for the PBS, is as the PBS increased from 3 to 4..."

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	<p>has unnecessary commas.</p> <ul style="list-style-type: none"><li>○ <b>Revised:</b> "The most appropriate cutoff for the PBS was found to be when the score increased from 3 to 4..."</li></ul> <p><b>Discussion:</b></p> <ul style="list-style-type: none"><li>• Phrasing like "Meta-analysis by Johnson et al. (2020) corroborates our study's findings..." could be revised to avoid redundancy.<ul style="list-style-type: none"><li>○ <b>Revised:</b> "A meta-analysis by Johnson et al. (2020) supports our findings, confirming the effectiveness of PBS in predicting mortality across various infection types, including gram-negative bacterial infections."</li></ul></li><li>• When referring to specific studies, ensure clarity in how they are introduced and provide more context:<ul style="list-style-type: none"><li>○ <b>Before:</b> "Vincent et al. (1996) compared PBS with the Sequential Organ Failure Assessment (SOFA) score in septic patients..."</li><li>○ <b>After:</b> "In a comparison of the PBS with the Sequential Organ Failure Assessment (SOFA) score in septic patients, Vincent et al. (1996) highlighted PBS's specificity in assessing bacteremia-related mortality risks, in contrast to SOFA's broader focus on organ dysfunction."</li></ul></li></ul> <p><b>Conclusion:</b></p> <ul style="list-style-type: none"><li>• The conclusion is well-written, but adding a more formal tone could improve its scholarly quality. For example:<ul style="list-style-type: none"><li>○ <b>Before:</b> "Our study contributes to the growing understanding of PBS as a pivotal tool for mortality prediction..."</li><li>○ <b>After:</b> "This study advances the understanding of PBS as a critical tool for mortality prediction..."</li></ul></li></ul> <p><b>Minor Errors to Fix:</b></p> <ul style="list-style-type: none"><li>• "Carbepenem" should be corrected to "Carbapenem" throughout the document.</li><li>• Check for consistency with the term "ICU" (intensive care unit) – ensure it is always spelled out or abbreviated consistently.</li><li>• The phrase "Resulting from Cardiac arrest" could be rephrased to "Caused by cardiac arrest."</li></ul> <p><b>Final Thoughts:</b></p> <p>While the content is relevant and well-organized, enhancing the grammatical flow, reducing redundancy, and maintaining formal scholarly tone would further elevate the quality of the article for publication.</p>	
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**Optional/General** comments

Here are some optional/general comments for the paper that can be provided in a review form:

**1. Relevance and Contribution to the Field:**

- The study addresses a critical issue in the clinical management of patients with carbapenem-resistant Enterobacteriaceae (CRE) infections, particularly in intensive care units (ICUs). By evaluating the predictive value of the Pitt Bacteremia Score (PBS) in this specific context, the paper adds valuable insights to the existing literature on mortality prediction in critically ill patients, especially those with antibiotic-resistant infections. This study's focus on CRE infections is particularly timely given the growing global concern about antimicrobial resistance.

**2. Clarity of Objectives:**

- The objectives of the study are clearly stated and aligned with the research questions. The paper clearly defines the purpose of evaluating the utility of PBS in predicting mortality, as well as examining the contribution of individual components of the score, which are important in the context of ICU patient management.

**3. Study Design and Methodology:**

- The study design (cross-sectional, prospective observational) is appropriate for the research questions. However, the inclusion and exclusion criteria are limited, and the sample size is relatively small, which might affect the generalizability of the findings. It would be beneficial to note any limitations that arise from these aspects more explicitly in the limitations section. Additionally, future studies could benefit from a larger, multicenter design to strengthen the findings.

**4. Strengths:**

- The methodology is well-detailed, and the approach to collecting and analyzing data is robust. The inclusion of multiple variables in the PBS is a strength, as it allows for a nuanced understanding of patient outcomes. The paper's use of well-established, validated tools (like the Pitt Bacteremia Score) adds credibility to the results.

**5. Clarity and Structure:**

- The paper is generally well-structured, with clear sections including the introduction, objectives, methodology, results, and discussion. The use of tables and figures helps illustrate key findings and is helpful for readers. However, there are some minor grammatical and punctuation errors that need to be addressed to ensure clarity and readability, as previously highlighted.

**6. Interpretation of Results:**

- The results are clearly presented, but the discussion could benefit from a deeper exploration of the implications of the findings. For example, while the paper highlights the association between higher PBS scores and increased mortality, it could expand on how these findings might influence clinical decision-making in ICU settings, particularly in resource-limited environments. The paper could also discuss the potential for PBS to guide early intervention strategies, especially in hospitals with limited access to advanced diagnostic tools.

**7. Suggestions for Improvement:**

- **Statistical Analysis:** It would be beneficial to include more detailed statistical analyses to support the conclusions. For example, providing confidence intervals, p-values, and other relevant statistical data could strengthen the validity of the findings.

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	<ul style="list-style-type: none"> <li>• <b>Sample Size:</b> Given the limited sample size, future studies should aim to replicate this research in a larger cohort or across multiple centers to confirm the results and improve generalizability.</li> <li>• <b>Long-term Outcomes:</b> Focusing on short-term mortality is valuable, but including long-term follow-up data could offer a more comprehensive picture of the clinical impact of PBS on CRE infection management.</li> </ul> <p><b>8. Conclusion:</b></p> <ul style="list-style-type: none"> <li>• The conclusion is well-articulated, though it could be strengthened by offering more specific recommendations for future research and clinical practice. Expanding on the potential impact of PBS in clinical guidelines and its application across different healthcare settings (e.g., in developing countries) would enhance the paper's relevance.</li> </ul> <p><b>9. Suggestions for Additional Research:</b></p> <ul style="list-style-type: none"> <li>• A follow-up study that compares the PBS with other risk scores like the APACHE or SOFA scores in CRE-infected patients would provide useful comparative insights.</li> <li>• A multicenter study with a more diverse patient population would help determine whether the findings hold true across different hospital settings and geographical locations.</li> </ul>	
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**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

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