

Review of: "Outcomes of PIANO Score for No-Reflow in Patients Undergoing Primary Percutaneous Coronary Intervention: A Retrospective Study"

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Potential competing interests: No potential competing interests to declare.

The manuscript offers a valuable assessment of the PIANO score's effectiveness in predicting the no-reflow phenomenon after primary percutaneous coronary intervention (PCI). While the study contributes important insights, several areas would benefit from further development to enhance clarity, depth, and the applicability of findings. Below are specific suggestions for revision:

1. Study Design and Patient Selection:

The inclusion and exclusion criteria should be elaborated to help understand the generalizability of the results. Details on how patients were assigned to the No-Reflow and No No-Reflow groups based on angiographic findings should also be clearly described.

2. PIANO Score Calculation

A more detailed explanation of how the PIANO score is calculated is necessary. A summary table outlining the components of the score would provide clarity. The rationale behind the weighting of different parameters within the PIANO score should also be discussed.

3. Statistical Analysis

Results presentation could be enhanced by including confidence intervals for key metrics such as sensitivity, specificity, and AUC values to understand the precision of these estimates better. Additionally, a multivariate analysis to adjust for potential confounders affecting the outcomes would strengthen the findings.

4. Comparative Analysis

A comparative analysis with other predictive models for no-reflow could underscore the PIANO score's relative effectiveness. This would provide a robust argument for the utility of the PIANO score over existing models.

5. Long-Term Outcomes

The manuscript should consider including follow-up data on long-term outcomes like mortality, recurrent myocardial infarction, or rehospitalization to assess the prognostic value of the PIANO score over time.

6. Discussion of Biases and Limitations

The discussion should address potential biases inherent to retrospective study designs, such as selection bias and

information bias. Discussing the impact of inter-observer variability in angiographic assessments and its influence on group classification would lend greater credibility to the study results.

7. Ethical Considerations

The manuscript should include a statement confirming adherence to the Helsinki Declaration, affirming that all procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. This would ensure the manuscript meets international ethical standards.

8. Implications for Clinical Practice

The conclusions could be expanded to discuss the practical implications of integrating the PIANO score into routine clinical practice more fully. Details on how this score might change current management strategies for patients undergoing PCI and the barriers to its implementation would be highly valuable.

By addressing these points, the manuscript will not only gain in scientific rigor but also in relevance, making a stronger case for the PIANO score's role in clinical settings. This would significantly enhance the manuscript's contribution to the literature and provide a clearer, more comprehensive understanding of the predictive power and practical use of the PIANO score in managing patients undergoing primary PCI.