

Peer Review File

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Reviewer A

The study addresses an important research question related to the use of MELD-XI score in predicting the prognosis of patients with acute myocardial infarction after coronary artery stenting. The study design and methodology are appropriate for the research question, and the findings provide valuable insights into the predictive value of MELD-XI score in this population. However, the study has several limitations that should be addressed.

Reply 1: We thanks for your positive feedback.

First, the study is retrospective, and therefore, the results may be subject to selection bias and confounding factors. The study should have accounted for potential confounding variables such as age, gender, comorbidities, and medications that may affect the outcomes. Please include this in the limitations section.

Reply 2: We thanks for your response. We have added these in the discussion. See page 8, line 225-232.

Second, the study only includes patients from a single center, and the results may not be generalizable to other populations. Future studies should include a larger and more diverse population to validate the findings of this study. Please also include this in the limitations.

Reply 3: We have added it as a limitation in the discussion section. See page 8, line 225-232.

Finally, the study did not provide information on the interobserver variability in MELD-XI score calculations. Future studies should evaluate the interobserver agreement of MELD-XI score calculations to ensure its reliability and validity.

Reply 4: We have added this as a limitation in the discussion section. See page 8, line 225-232.

Overall, the study provides valuable insights into the use of MELD-XI score in predicting the prognosis of patients with acute myocardial infarction after coronary artery stenting. This study provides insightful information to the literature and should be accepted after minor revisions.

Reply 5: We thanks for your positive feedback. We have revised the version according to your above suggestion.

Reviewer B

1) First of all, my major concern for this study is the low AUC values of MELD-XI score for the prognosis outcomes. Even the AUCs of MELD-XI score for acute MI and death after

coronary artery stenting are about 0.70, it remains unsatisfactory as a prognosis predictor. Further, the authors should report the sensitivity and specificity of the MELD-XI score for acute MI and death after coronary artery stenting, which should be much lower than the acceptable threshold levels for a good predictor. Considering these, this is not an acceptable, even a failed study on the predictive accuracy of MELD-XI score. The authors need to reconsider the clinical question that is appropriate for the current data, and I suggest to focus on the prognostic role only.

Reply 1: We have revised the title accordingly. See page 1, line 3-4.

2) Second, the title needs to clearly indicate the prognosis outcomes.

Reply 2: We have revised the title accordingly. See page 1, line 3-4.

3) Third, in the abstract, the authors did not indicate the potential clinical significance of this research focus in the background, did not describe the follow up procedures, the prognosis outcomes, and statistical methods for assessing the predictive accuracy in the methods, did not describe the clinical characteristics and incidence rates of prognosis outcomes in the study sample, well as the AUC values of MELD-XI score for different prognosis outcomes in the results, and did not describe the clinical implications of the findings in the conclusion.

Reply 3: We have revised the abstract. However, due to the limitations of the words. We failed to added more contents (no more than 350, now it was 349). Page 2-3, line 42-58.

4) Fourth, the introduction of the main text did not explain why the MELD-XI score is potentially accurate for predicting a variety of prognosis outcomes such as recurrent MI. This is important, but the authors did not provide adequate rationales for this focus. The other potential issue is that the authors did not explain why MELD-XI score alone is adequate for the prediction, not in combination with other known predictors.

Reply 4: We have revised the introduction. See page 3-4, line 75-84.

5) Fifth, in the methodology of the main text, please describe the clinical research design and sample size estimation procedures of this study, as well as follow up procedures and measurements of prognosis outcomes. In statistics, please describe the threshold AUC values for a good prognosis predictor and the calculation of sensitivity and specificity, which are also important accuracy indicators including their threshold values.

Reply 5: We have revised some contents in the methodology and we have revised the title of the present study. See page 4, line 91 and page 5, line 115.

Reviewer C

1. Table 1: How were those data presented in your table? Please define them either inside the table or in table footnote.

Reply: We have added it.

Group	High-MELD-XI score group (n=159)	Low-MELD-XI score group (n=159)	t/ χ^2 value	P value
Age (years)	63.78±4.82	64.02±5.01	0.526	0.599
Gender (male)	80 (50.31%)	86 (54.09%)	0.454	0.501
Body mass index (kg/m ²)	24.58±1.92	24.81±1.85	1.088	0.278
History of smoking	21 (13.21%)	25 (15.72%)	0.407	0.524
History of alcoholism	18 (11.32%)	21 (13.21%)	0.263	0.608
Hypertension	102 (64.15%)	103 (67.92%)	0.505	0.477
Diabetes	43 (27.04%)	35 (22.01%)	1.087	0.297
Hyperlipidemia	134 (84.28%)	131 (82.39%)	0.204	0.652

2. Table 2: Please define them either inside the table or in table footnote.

Group	High-MELD-XI score group (n=159)	Low-MELD-XI score group (n=159)	t value	P value
Left ventricular ejection fraction (%)	51.61±7.66	60.48±5.94	11.534	<0.001
NT-proBNP (ng/L)	82158±461.81	72351±335.16	2.167	0.031

Reply: We have added it.

3. Table 3: Please define them either inside the table or in table footnote.

Table 3 Comparison of prognosis between 2 groups

Group	High-MELD-XI score group (n=159)	Low-MELD-XI score group (n=159)	χ^2 value	P value
Recurrent	17 (10.69%)	6 (3.77%)	5.671	0.017

Reply: We have added it.