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# **Investigation of the Efficacy of Risk Scoring Systems on Prognosis in Patients with STEMI Presenting to The Emergency Department**

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### Dear Editor.

I read with great interest the article titled "investigation of the efficacy of risk scoring systems on prognosis in patients with ST-elevation myocardial infarction (STEMI) presenting to the emergency department," published in volume 23 of the Eurasian Journal of Emergency Medicine in 2024 (1). This study stands out for its evaluation of the effectiveness of various risk scoring systems used in emergency departments for patients with STEMI.

The findings highlight that the Triage in Emergency Departments Early Warning score (TREWS) performs as effectively as other widely used scoring systems (TIMI, ProACS, and C-ACS) in predicting short-term mortality, even demonstrating superior performance in certain instances. Particularly the high area under the curve values for TREWS (0.847 and 0.823 for 24-hour and 28-day mortality, respectively) emphasize its potential utility in clinical emergency medicine.

However, I would like to draw attention to a few points:

**Study design:** The single-center design and relatively small sample size may limit the generalizability of the findings. A larger, multicenter study could help validate these results more robustly (2).

**Long-term outcomes:** While the study focuses on short-term mortality, the evaluation of long-term outcomes (e.g., recurrent cardiac events or quality of life) would provide valuable insights for clinicians making prognostic decisions (3).

**Practicality of TREWS:** Additional discussion on the practical ease of using TREWS compared to other scoring systems in the time-sensitive setting of emergency departments could further highlight its clinical relevance and applicability (4).

This study provides critical insights and valuable guidance for the management of STEMI patients in emergency settings. The robust statistical analysis and methodology lend credibility to the findings. Addressing the points above in future studies may enhance the understanding and application of these risk scoring systems.

# **Footnotes**

**Conflict of Interest:** No conflict of interest was declared by the author.

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