

EMR Combined with CRB-65 Superior to CURB-65 in Predicting Mortality in Patients with Community-Acquired Pneumonia [Letter]

Achmad Jaelani Rusdi, Lilik Afifah

Medical Record and Health Information Department, ITSK RS DR Soepraoen Malang, Kota Malang, Jawa Timur, Indonesia

Correspondence: Achmad Jaelani Rusdi, ITSK RS DR Soepraoen Malang, Kota Malang, Jawa Timur, Indonesia, Email achmadjaelani@itsk-soepraoen.ac.id

Dear editor

The recent article entitled “EMR Combined with CRB-65 Superior to CURB-65 in Predicting Mortality in Patients with Community-Acquired Pneumonia” explores the role of eosinophil-to-monocyte ratio (EMR) and eosinophil-to-lymphocyte ratio (ELR) in predicting disease severity and mortality among patients with community-acquired pneumonia (CAP). The study’s strength lies in its comprehensive evaluation, involving 454 patients with a balanced representation of severe CAP (SCAP)¹ and non-SCAP cases. The use of laboratory examinations on day one after admission, along with propensity score matching (PSM) to balance potential confounding factors, adds rigor to the methodology. Identifying EMR and ELR as significantly lower in SCAP patients provides valuable insights into potential biomarkers for assessing disease severity.² However, some aspects warrant critical consideration. The absence of a healthy control group poses a challenge in validating the findings against a baseline standard. Moreover, the study’s duration, spanning from November 18, 2020, to November 21, 2021, might not sufficiently encompass seasonal fluctuations or emerging factors relevant to CAP. While the study adeptly employs binary logistic regression and Cox proportional hazards regression models to identify risk factors and predictors, a more thorough examination of the inherent limitations and potential biases associated with these analytical approaches would markedly enrich the depth and rigor of the study’s analysis. Such an endeavor would significantly contribute to a more profound comprehension and wider applicability of its findings in the field of community-acquired pneumonia research. The conclusion “EMR combined with CRB-65 demonstrated superior predictive capabilities for mortality in CAP patients compared to CURB-65” holds significant weight. However, the absence of a discussion surrounding potential underlying mechanisms behind this superiority could further enrich the interpretation and practical implications of the findings, thus enhancing the overall impact and relevance of the study. Overall, the study significantly advances our understanding of EMR and ELR as potential predictors in CAP, while CURB-65 and CRB-65 are applied owing to the advantages of being concise and easy-to-use.³ Addressing noted limitations and providing a more nuanced analysis of mechanisms behind observed superiority would enhance the impact and relevance of these findings.

Disclosure

The authors report no conflicts of interest in this communication.

References

1. Sun Y, Wang H, Gu M, Zhang X, Han X, Liu X. EMR Combined with CRB-65 Superior to CURB-65 in predicting mortality in patients with community-acquired pneumonia. *Infect Drug Resist.* 2024;17:463–473. doi:10.2147/IDR.S443045 PMID: 38348233; PMCID: PMC10859671.
2. Mandell LA, Wunderink RG, Anzueto A, et al. Infectious diseases society of America/American Thoracic Society consensus guidelines on the management of community-acquired pneumonia in adults. *Clin Infect Dis.* 2007;44(Suppl 2):S27–72. doi:10.1086/511159
3. Kulahcioglu S, Tokgoz HC, Akbal OY, et al. Eosinophil-to-monocyte ratio as a candidate for a novel prognostic marker in acute pulmonary embolism: is it a consumptive mechanism? *Anatol J Cardiol.* 2022;26(9):717–724. doi:10.5152/AnatolJCardiol.2022.1780

Dove Medical Press encourages responsible, free and frank academic debate. The content of the Infection and Drug Resistance 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Infection and Drug Resistance editors. While all reasonable steps have been taken to confirm the content of each letter, Dove Medical Press accepts no liability in respect of the content of any letter, nor is it responsible for the content and accuracy of any letter to the editor.

Infection and Drug Resistance

Dovepress

Publish your work in this journal

Infection and Drug Resistance is an international, peer-reviewed open-access journal that focuses on the optimal treatment of infection (bacterial, fungal and viral) and the development and institution of preventive strategies to minimize the development and spread of resistance. The journal is specifically concerned with the epidemiology of antibiotic resistance and the mechanisms of resistance development and diffusion in both hospitals and the community. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <https://www.dovepress.com/infection-and-drug-resistance-journal>

<https://doi.org/10.2147/IDR.S468737>