

# Navigating Sepsis: New Prognostic Tools [Letter]

Yalcin Golcuk<sup>1</sup>, Burcu Kaymak Golcuk<sup>2</sup>

<sup>1</sup>Faculty of Medicine, Department of Emergency Medicine, Muğla Sıtkı Koçman University, Muğla, Turkey; <sup>2</sup>Clinical Biochemistry Service, Muğla Training and Research Hospital, Muğla, Turkey

Correspondence: Yalcin Golcuk, Faculty of Medicine, Department of Emergency Medicine, Muğla Sıtkı Koçman University, Muğla, Turkey, Tel +90 252 214 13 23, Fax +90 252 212 35 99, Email dryalcingolcuk@gmail.com; yalcingolcuk@mu.edu.tr

## Dear editor

We read the article “A New Scoring System for Predicting Mortality in Hematological Malignancies with Sepsis: A Derivation and Validation Study” by Li et al with great interest, which endeavors to carve out a new scoring system to aid clinicians in better predicting 28-day mortality among patients with hematological malignancies (HMs) and sepsis.<sup>1</sup> Sepsis, with its impenetrable and multifaceted nature, poses a critical challenge, especially for emergency physicians invoking a complex interplay of immune responses and clinical management.<sup>2</sup>

Given the heightened susceptibility of patients with HMs to sepsis and their concomitantly elevated risk of mortality, the emphasis on developing a refined, disease-specific prognostic scoring system is pivotal. Exploration into enhancing the established Sequential Organ Failure Assessment score by amalgamating indicators, such as prothrombin time and age, has provided a novel perspective that could potentially optimize the precision of predicting outcomes in this specific patient demographic.

Sepsis has ceaselessly presented a perplexing predicament in emergency medicine and intensive care due to its heterogeneous manifestations and the exigency for timely intervention to mitigate organ dysfunction and other consequential adversities. Particularly in the context of an emergency department, where prompt decision-making is paramount, having a reliable, tailored scoring system for this particular cohort could critically influence clinical decision pathways, enabling clinicians to better strategize interventions and potentially ameliorate outcomes.

The study makes a noteworthy contribution; nevertheless, questions about its generalizability and application in diverse clinical settings loom, given the retrospective, single-center nature of the study design. It begets curiosity regarding how this new scoring system might integrate with, or compare to, other emerging predictive technologies and biomarkers in sepsis, especially in different subsets of patients with varying hematologic disorders or treatment modalities.<sup>3,4</sup>

Furthermore, the meticulous implementation and validation of this scoring system in a prospective, multi-center trial would be an instrumental next step, offering a more robust assessment of its efficacy and adaptability across varied clinical environments and practices. Moreover, the practicality and ease of use of this scoring system in a fast-paced emergency setting warrant further exploration to ensure its feasibility and utility in real-time clinical decision-making.

In conclusion, Li et al have illuminated a pathway towards more specialized and precise prognostic tools in managing a particularly vulnerable patient demographic grappling with sepsis and HMs. This valuable stride could potentially enhance our current understanding and management of such complex cases, and further research and discussions in this arena are eagerly anticipated.

## Disclosure

The authors report no conflicts of interest in this communication.

## References

1. Li H, Fan S, Lu D, Zhou J. A new scoring system for predicting mortality in hematological malignancies with sepsis: a derivation and validation study. *Cancer Manag Res*. 2023;15:1073–1083. doi:10.2147/CMAR.S428930
2. Krishnan K, Wassermann TB, Tednes P, Bonderski V, Rech MA. Beyond the bundle: clinical controversies in the management of sepsis in emergency medicine patients. *Am J Emerg Med*. 2022;51:296–303. doi:10.1016/j.ajem.2021.11.003
3. Ling H, Chen M, Dai J, Zhong H, Chen R, Shi F. Evaluation of qSOFA combined with inflammatory mediators for diagnosing sepsis and predicting mortality among emergency department. *Clin Chim Acta*. 2023;544:117352. doi:10.1016/j.cca.2023.117352
4. Schertz AR, Smith SA, Lenoir KM, Thomas KW. Clinical impact of a sepsis alert system plus electronic sepsis navigator using the epic sepsis prediction model in the emergency department. *J Emerg Med*. 2023;64(5):584–595. doi:10.1016/j.jemermed.2023.02.025

Dove Medical Press encourages responsible, free and frank academic debate. The content of the Cancer Management and Research 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Cancer Management and Research 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.

**Cancer Management and Research**

**Dovepress**

**Publish your work in this journal**

Cancer Management and Research is an international, peer-reviewed open access journal focusing on cancer research and the optimal use of preventative and integrated treatment interventions to achieve improved outcomes, enhanced survival and quality of life for the cancer patient. 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/cancer-management-and-research-journal>

<https://doi.org/10.2147/CMAR.S443804>