

Letter to the Editor

Comment on “Predictive Postoperative Inflammatory Response Indicators of Infectious Complications Following Gastrectomy for Gastric Cancer”

Hitoshi Kanno

Department of Health Policy and Management, Nippon Medical School, Tokyo, Japan

To the Editor:

I read with interest the article “Predictive Postoperative Inflammatory Response Indicators of Infectious Complications Following Gastrectomy for Gastric Cancer” by Nishiguchi et al.¹ The study presents an important effort to identify reliable early indicators of postoperative infectious complications (PICs) following gastrectomy. By evaluating inflammatory markers such as C-reactive protein (CRP), white blood cell (WBC) count, and body temperature on postoperative day 3, the authors attempt to establish practical parameters that may aid in the timely diagnosis and improved clinical management of PICs. This research contributes meaningful insights with clear implications for postoperative care in gastric cancer patients.

From a statistical perspective, however, I believe there are several methodological aspects that merit further discussion. The authors conducted univariate analyses on a wide range of variables and subsequently included those showing significance in multivariable analysis. While this approach is commonly accepted in exploratory research, it also introduces the risk of type I error—namely, identifying variables as statistically significant due to random variation rather than true associations. This concern becomes particularly relevant when several p-values are clustered near the conventional threshold of significance (e. g., $p = 0.05$).

To mitigate such risks, statistical corrections for multiple comparisons are often employed. Techniques such as the Bonferroni correction or the false discovery rate (FDR) approach—most notably the Benjamini-Hochberg procedure—are widely recognized tools to improve the robustness of statistical inferences. While it may not be mandatory to apply these adjustments in all exploratory contexts, a brief acknowledgment of the issue of multiplicity would enhance transparency and help readers

better evaluate the validity of the reported findings.

In addition, the determination of cutoff values for inflammatory markers via receiver operating characteristic (ROC) curve analysis is appropriate, yet it is important to recognize the limitations of generalizability. Since these thresholds are derived to optimize performance within the study cohort, their applicability to other clinical settings or diverse patient populations may be limited. The inclusion of a validation cohort in this study is therefore a commendable strength. Future investigations incorporating larger and more diverse multicenter cohorts would further validate and strengthen the utility of these proposed thresholds in broader clinical practice.

Another point of clinical interest lies in the observation that CRP levels were relatively lower in elderly patients who developed PICs. This finding suggests a potential age-related variation in the inflammatory response, specifically the CRP kinetics. Exploring this possibility using interaction terms between age and CRP within a multivariable framework could yield further insight into age-specific risk stratification and improve individualized postoperative monitoring strategies.

In conclusion, this study offers valuable evidence supporting the early detection of postoperative infectious complications using accessible clinical markers. While I have provided several comments from a statistical and methodological standpoint, I would like to commend the authors for their significant contribution to the field. I look forward to future studies that build upon these findings and help translate them into enhanced patient care.

Funding: No funding was obtained.

Conflict of Interest: The author declares no conflict of interest.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process: None.

References

1. Nishiguchi R, Katsube T, Shimakawa T, et al. Predictive postoperative inflammatory response indicators of infectious complications following gastrectomy for gastric cancer. *J Nippon Med Sch.* 2024 Feb;91 (1):37–47.

Correspondence to Hitoshi Kanno, s6023@nms.ac.jp

https://doi.org/10.1272/jnms.JNMS.2026_93-104

Copyright © 2026 The Medical Association of Nippon Medical School. This is an open access article under the CC BY-NC-ND 4.0 license (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).