



Comments and suggestions on the article “the effects of preoperative anaemia on postoperative complications in patients undergoing thoracic surgery”

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Dear Editor,

I am writing in response to the recently published article entitled “The Effects of Preoperative Anaemia on Postoperative Complications in Patients Undergoing Thoracic Surgery” (1). This study provides important insights into the association between preoperative anaemia and adverse postoperative outcomes in thoracic surgery patients, including increased intraoperative blood loss, prolonged chest drainage duration, higher postoperative transfusion requirements, and extended hospital stays. The authors have contributed valuable evidence to the understanding of anaemia as a perioperative risk factor. However, as a reader, I would like to offer several comments and suggestions that may help strengthen the robustness and interpretability of future research in this area.

First, the study included a total of 104 patients, with only 29 in the anaemia group. The relatively small sample size, particularly in the anaemic subgroup, may reduce the statistical power and limit the stability and reliability of the findings (2). Increasing the sample size in future studies would help to better elucidate the association between preoperative anaemia and postoperative complications and improve the robustness of statistical inference.

Second, although the authors noted that patients in the anaemia group were older—potentially introducing confounding—other important confounding factors were not accounted for. Variables such as diabetes, hypertension, cardiovascular disease, and baseline pulmonary function have all been shown to significantly influence postoperative outcomes in thoracic surgery (3,4). Incorporating and adjusting for these variables in the analysis would allow for a more accurate assessment of the independent effect of preoperative anaemia on postoperative complications.

Furthermore, intraoperative blood loss was included as a key outcome measure; however, the method of its estimation is subject to considerable uncertainty. Previous studies have demonstrated that visual estimation may result in errors as high as 52–85% (5), with a consistent pattern of systematic underestimation in real surgical settings, particularly in patients who require transfusion (6). This measurement bias may compromise the reliability of intraoperative blood loss as a study variable.

Lastly, while the study primarily focused on short-term postoperative outcomes such as chest drainage duration and length of hospital stay, long-term outcomes also warrant attention. These may include recovery trajectory, postoperative quality of life, and long-term complications. Including such outcomes in future analyses would offer a more comprehensive evaluation of the impact of preoperative anaemia on overall patient recovery and prognosis.

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In summary, this study makes an important contribution to understanding the role of preoperative anaemia in thoracic surgical outcomes. Addressing the aforementioned limitations in future research will help strengthen the evidence base and provide more precise guidance for clinical practice. I look forward to seeing further studies building upon this work to enhance perioperative management and improve the prognosis of patients undergoing thoracic surgery.

Footnotes**Author Contributions**

Concept - Y.C., J.W.; Design - Y.C., J.W.; Data Collection or Processing - Y.C.; Analysis or Interpretation - Y.C., J.W.; Literature Search - Y.C.; Writing - Y.C., J.W.

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