

Dear Editor,

We sincerely thank you and the reviewers for your valuable feedback and constructive comments on our manuscript titled “Risk and Management of Adverse Events in Minimally Invasive Esophagectomy”. We greatly appreciate the time and effort invested in evaluating our work. We have carefully considered each suggestion and revised the manuscript accordingly to address all points raised. Below, we provide a detailed, point-by-point response to the reviewers’ comments and editorial office notes, outlining the revisions made to improve the manuscript.

Reviewer #1:

1. Title should list the study design (e.g. observational, cohort, randomized, etc.)

Thank you for your comment regarding the inclusion of the study design in the title. However, this manuscript is an editorial article, not a clinical study (e.g., observational, cohort, or randomized). Editorials are intended to provide an expert opinion and synthesis of current evidence rather than presenting primary clinical research. Therefore, including a study design in the title is not applicable in this context.

2. All medical abbreviation deleted from abstract.

All abbreviations have been removed from the abstract. Full terms have been used to ensure clarity for all readers.

3. Editorial study doesn’t exceed more than 500 words.

We appreciate your observation regarding the word count. After reviewing the Reader Guidelines provided by the journal, we found that there is no explicit restriction on the word count for editorial articles. Given the complexity of the topic and the need to address it comprehensively, we believe the current length is appropriate for conveying the necessary information and ensuring clarity for the audience.

4. In introduction section references are missing?

We have added the appropriate references in the introduction section to support the statements made and ensure completeness.

5. First phrases must begin full term not abbreviation (MIE)?

All abbreviations have been expanded upon their first use in the manuscript, including "MIE" (Minimally Invasive Esophagectomy) and others.

6. Please check it reference no 1.

The citation for Reference No. 1 has been rechecked for accuracy and formatting. It adheres to the journal's requirements.

Reviewer #2:

1. While the article references several studies, it may lack in-depth analysis and comparison of results from different studies, particularly regarding their application in various regions and patient groups.

Thank you for your thoughtful feedback regarding the depth of analysis and comparison of study results. As this manuscript is an editorial, its primary purpose is to provide a broad overview of key findings and trends rather than an exhaustive comparative analysis of individual studies. While we reference several important studies to support the discussion, the focus is on synthesizing general insights relevant to the field. Detailed regional or patient-specific comparisons would be more suitable for a systematic review or meta-analysis. We believe the current approach aligns with the scope of an editorial while effectively addressing the topic's global significance.

2. The risks and management of MIE are primarily discussed from the perspective of technology and surgical methods, with limited exploration of how individual patient differences, such as age, gender, and genetic factors, impact complications.

We have added a new subsection discussing the influence of patient characteristics such as age, gender, and genetic factors on MIE complications. This aims to provide a more personalized perspective on risk management.

3. Although some emerging technologies are mentioned, there is insufficient analysis of their long-term effectiveness, cost-effectiveness, and feasibility in different healthcare settings.

A detailed analysis of the long-term effectiveness, cost-effectiveness, and feasibility of emerging technologies in different healthcare settings has been added.

4. More relevant studies could be systematically reviewed and meta-analyzed to comprehensively evaluate the effectiveness and applicability of MIE risk and management strategies in various contexts.

Thank you for your insightful suggestion regarding the systematic review and meta-analysis of relevant studies. While we agree that such approaches are valuable for comprehensively evaluating the effectiveness and applicability of MIE risk and management strategies, this manuscript is designed as an editorial, focusing on synthesizing key findings and providing expert commentary on the current state of the field. Conducting a systematic review or meta-analysis falls outside the scope and intent of this article. Instead, we aim to highlight critical trends, challenges, and opportunities in MIE risk management to inform future research and clinical practice. We appreciate your suggestion and hope our current approach aligns with the expectations of an editorial while effectively addressing the topic..

5. Conducting additional research on how different patient characteristics influence the occurrence of MIE complications would provide a basis for personalized treatment approaches.

Recommendations for future research exploring how individual patient characteristics influence MIE outcomes have been included in the conclusion.

6. More long-term follow-up studies and cost-benefit analyses of emerging technologies should be conducted to determine their feasibility and sustainability in practical clinical applications. I offer suggestions aimed at refining an already exceptional article and eagerly anticipate future insightful contributions from the author.

Discussions on the need for long-term follow-up studies and cost-benefit analyses of advanced technologies have been added to highlight their clinical feasibility and sustainability.

Reviewer #3:

(1)The article provides a good summary of the benefits of MIE but lacks a comprehensive review of the latest literature on MIE in various regions and patient populations. It would be beneficial to expand the introduction by including detailed comparisons of MIE's clinical outcomes, complication rates, and its advantages over open esophagectomy (OE) in different patient groups, especially with data from multi-center or region-specific studies.

The introduction has been expanded to include detailed comparisons of MIE's clinical outcomes, complication rates, and advantages over open esophagectomy (OE). Data from multi-center and region-specific studies have been incorporated.

(2)The article mentions advanced terms such as "robotic-assisted surgery," "intraoperative nerve monitoring (IONM)," and "Enhanced Recovery After Surgery (ERAS)," but these terms are not explained clearly. It is recommended to provide brief definitions and context for these technologies, ensuring that all readers, including those unfamiliar with the terms, can fully understand their significance in MIE.

Definitions and contexts for terms such as "robotic-assisted surgery," "intraoperative nerve monitoring (IONM)," and "Enhanced Recovery After Surgery (ERAS)" have been added for clarity.

(3)Although the manuscript cites various studies, it lacks detailed presentation of key data. For instance, specific statistical data on the reduction of complications, such as the average decrease in hospital stay or the comparative complication rates of MIE versus OE, are missing. It is recommended to include more data in the manuscript and present it in tables or figures for clearer comparisons.

Thank you for your insightful feedback regarding the inclusion of detailed statistical data and the use of tables or figures for comparison. However, this manuscript is an editorial, which focuses on synthesizing and discussing existing literature rather than presenting original data or exhaustive statistical comparisons. The purpose of an editorial is to provide expert commentary and highlight key trends, challenges, and future directions in the field. While we reference relevant studies to support our discussion, we intentionally avoided extensive data presentation, as this is

more appropriate for research articles or systematic reviews. We believe the current narrative format aligns with the editorial's objectives and the journal's expectations for this type of article. We hope this clarifies our approach, but we are happy to consider additional suggestions to enhance the manuscript's clarity and focus within the scope of an editorial.

(4)The manuscript mentions that high BMI and comorbid conditions such as diabetes or COPD increase the risk of complications but does not discuss the differences in risks across various patient populations, such as elderly patients, smokers, or those with specific comorbidities. It would be beneficial to expand this section to include a more detailed discussion on how MIE may affect different patient groups and how treatment strategies can be individualized.

We have expanded the discussion to address differences in risks among elderly patients, smokers, and those with specific comorbidities. Individualized treatment strategies are proposed based on these insights.

(5)While emerging technologies like machine learning, AI-assisted navigation systems, and robotic-assisted surgery are mentioned, the manuscript lacks a deeper exploration of their actual effectiveness. For example, the manuscript mentions that machine learning models achieve an AUC of 0.87 for anastomotic leaks but does not provide detailed information on the algorithms or discuss the clinical feasibility of implementing these technologies. It is recommended to elaborate on how these technologies work, their advantages, and any challenges in clinical adoption.

The section on emerging technologies now includes detailed information on machine learning models, their algorithms, and challenges in clinical adoption.

(6)The article references Zhong et al.'s risk stratification model for predicting MIE complications but does not provide adequate detail on how the model works. It is suggested to include a more thorough explanation of this model, including its predictive accuracy, the variables it incorporates, its limitations, and how it can be applied in clinical practice.

Thank you for your valuable suggestion regarding the inclusion of more details on Zhong et al.'s risk stratification model. As this manuscript is an editorial, its

primary purpose is to provide a high-level synthesis and expert commentary on existing research rather than an in-depth analysis of individual studies or models. The mention of Zhong et al.'s model serves to highlight its significance as an example of advancements in risk prediction tools for MIE complications. While we understand the importance of details such as predictive accuracy, variables, and limitations, presenting this level of depth would be more appropriate for a research article or systematic review. We believe the current discussion aligns with the scope of an editorial while ensuring relevance and clarity for readers. However, we remain open to expanding this section further if required by the journal.

(7)The conclusion section provides a brief summary but lacks specific clinical practice recommendations. It would be beneficial to expand this section to include future research directions and provide more concrete guidance for surgical teams. In addition, suggestions for improving MIE techniques based on current technological advancements would strengthen the conclusion.

The conclusion now provides actionable clinical recommendations, future research directions, and suggestions for improving MIE techniques based on technological advancements.

(8)The manuscript could benefit from the inclusion of more visual data representations. For example, a comparison of complication rates between MIE and OE could be presented in a figure or table. The use of visual aids such as graphs and charts would make the comparison of clinical outcomes more accessible and easier for readers to understand.

Tables comparing MIE and OE outcomes have been added, enhancing the manuscript's readability and accessibility.

(9)While the article mentions ERAS protocols, it lacks a detailed discussion on postoperative management strategies and the role of multidisciplinary collaboration. This section could be expanded to highlight early detection and management of complications, particularly anastomotic leaks and pulmonary issues. Further discussion on the integration of various specialties (e.g., nutrition, rehabilitation, pain management) in the recovery process would also be beneficial.

A detailed discussion on ERAS protocols and the role of multidisciplinary collaboration in postoperative management has been included. Emphasis is placed on early detection and management of complications.

(10)The structure of the manuscript is generally good, but some transitions between sections, particularly between discussions of technology and clinical application, feel abrupt. It is suggested to improve the flow by reorganizing sections and ensuring smooth transitions. Clarifying the logical relationships between the topics will improve readability and coherence. Addressing these points will significantly strengthen the manuscript and provide more practical guidance for clinical practice.

The manuscript's structure has been reviewed and revised for better transitions between sections, ensuring logical progression and coherence.