

## Peer Review File

Article information: <https://dx.doi.org/10.21037/jovs-23-48>

### Reviewer A

This paper is too long to be an original article. Most of the text is devoted to reviews about mediastinal tumors, so it may be good as a review.

**Reply: We understand the concern. However, we believe that the comprehensive nature of our study, which encapsulates a decade of experience from our center, necessitates a detailed presentation. The depth and breadth of our data provide a unique contribution to the field, which we feel would not be adequately captured in a shorter format.**

**As for the suggestion to reformat the paper as a review, we respectfully disagree. While our paper does provide a thorough overview of the pathology, its primary aim is to present original, empirical findings from our long-term data. These findings could provide valuable insights for both clinicians and researchers.**

Although long-term tumor outcomes have been reported. The long-term results of robotic surgery, which is still in its infancy, are valuable.

However, the problem is that the number of cases is small, the surgical indications are unclear, and the long-term results are largely influenced by the Thymoma stage and WHO type, which are not sufficiently described.

**Reply: We understand your concerns about the number of cases, surgical indications, and the influence of Thymoma on our long-term results.**

**Regarding the number of cases, we would like to emphasize that our study includes all mediastinal tumors resected using a RATS approach in our center over a decade, totaling 124 cases. While this number may seem small in comparison to large-scale studies, we believe it is a significant sample size given the scope of our study, which focuses on the experience of a single center.**

**In terms of surgical indications, most unclear mediastinal masses, especially in the anterior mediastinum, are undergoing upfront surgical resection in our center, especially if thymoma is suspected. This approach serves both diagnostic and therapeutic purposes, facilitating a precise pathologic diagnosis while concurrently providing a therapeutic intervention for the patient.**

**Regarding the influence of Thymoma on our results, we understand your concern about the lack of specific tumor stage and WHO type. However, the focus of our paper is not on thymoma, but rather on all mediastinal masses resected using a robotic approach at our center. Therefore, we did not include specific tumor stage information for all different tumors. We believe that our approach provides a more comprehensive overview of our center's experience. Importantly, we would like to note that thymomas accounted for less than a third of all masses resected, further emphasizing the broad range of cases included in our study.**

#### **Reviewer B**

This is an excellent review of the literature and ten-year outcome reports. Given the broad nature of this journal, the overview of the pathology of the mediastinum would enrich the experience for the reader who is not a thoracic surgeon.

**Reply: We greatly appreciate your positive feedback.**

**We believe that our paper already includes a very detailed description of all mediastinal masses, which provides a comprehensive overview of the subject matter. Given the current length of the paper, we feel that adding further details might make the paper overly lengthy and potentially less accessible to readers.**

**We hope that our current approach strikes a balance between providing detailed information and maintaining readability.**

When you talk about reconstructing the pericardium, what size is your criteria as I think most would not reconstruct unless herniation was a possibility?

Does location factor in to your decision?

**Reply: Regarding pericardial reconstruction, we appreciate your inquiry. Our practice aligns with the principle that pericardial reconstruction is not routinely performed, irrespective of the anatomical location. However, we prioritize reconstruction when there exists a risk of heart herniation. This approach ensures patient safety and optimal outcomes. We have incorporated this clarification in the revised manuscript.**

**Changes: Page 7, lines 152-154.**

Chest tube management also includes characteristics of the fluid. Given the broad audience, I would consider commenting on that in your methods section. I realize you talk about chylothorax as a complication, but it adds to the description.

**Reply: We agree that the qualitative attributes of the pleural effusion are instrumental in determining the appropriateness of chest tube removal. Considering your observation, we have incorporated additional content in the Methodology section to address this aspect. We anticipate that this augmentation will enhance the reader's comprehension of the decision-making algorithm pertaining to the optimal timing for chest tube extraction.**

**Changes: Page 7, lines 158-161.**

Not to be political, but I am unsure what gender identity effects the pathology and surgical management of these processes, in light of the way you presented your data. I would consider just using genetic sex as the patient descriptor.

**Reply: We have accordingly implemented the necessary revision.**

**Changes: Page 8, lines 176-177 and page 9, line 180.**

I think a subtle point to add would be to break down the sizes of the mediastinal masses into group ranges. That would highlight that size criteria for robotic resection is inconsequential.

**Reply: We understand your point about the potential value of breaking down tumor sizes into group ranges. However, we believe that our current presentation of the data (page 11, lines 209-212), which includes both the mean and range of tumor sizes, provides a comprehensive view of our findings. The mean gives an overall sense of the typical tumor size, while the range provides information about the smallest and largest sizes observed.**

**Additionally, creating artificial group ranges can be challenging due to the difficulty in establishing appropriate boundaries that accurately represent the data. This approach could potentially introduce bias or misinterpretation. We feel that providing the exact tumor sizes is more precise and less prone to such issues.**

Also, I believe that a little more discussion on your R1 and R2 resections would add to this manuscript.

**Reply: We believe that the current level of discussion in the manuscript is appropriate and**

**maintains the focus and flow of our findings.**

**We would like to take this opportunity to elaborate on this topic here in the response to your comments.**

**R1 resections:**

- **thymoma, requiring postoperative radiation and developing local recurrence**
- **ganglioneuroma**
- **mediastinal metastasis of a non-small cell lung cancer**

**R2 resection:**

- **mesothelial cyst, incomplete resection cervically**

**We hope this addresses your concerns and enhances your understanding of our results.**

I believe that the LOS is long for this group patients. Could you explain why? Most of my patients go home POD 1 and very few are in the hospital for POD 3. I think this echoes since you mentioned that you did one as an outpatient.

**Reply: It's important to note that our data spans a 10-year period. During the initial years of this period, we used an epidural catheter for pain management. This approach, while effective, resulted in a slightly longer hospital stay.**

**We have added a paragraph as well as four figures regarding the detailed progress of our center over ten years. Figure 3 shows the distribution of the length of stay. This figure provides a more detailed view of the data and highlight the variations over the years with similar results as you stated, e.g. during the years 2015, 2017 and 2018. We believe this additional information will help clarify why the average length of stay in our study might be longer than what you have experienced due to the impact of outliers (patients with complications).**

**Moreover, it is essential to recognize the intricacies of our country's healthcare system, which operates on the basis of diagnosis-related groups (DRGs). These DRGs serve as a framework for categorizing patients based on their diagnoses and treatments. Patients with mediastinal masses undergoing specific therapies are generally expected to have an absolute minimum hospital stay of 2-3 days. Deviation from this expectation may lead to penalty fees or reduced reimbursement.**

**Changes: Pages 22-26, lines 505-551.**

I think it would be good mention that you will explain your 1 conversion to open in the discussion or partially discuss in the results.

Also, a statement about the preoperative risk of converting on that case would strengthen the technique.

**Reply: We have accordingly revised the manuscript.**

**We understand your interest in obtaining more details about the postoperative risk in this specific case. However, our study was conducted using data from our anonymized database. Due to the nature of this data and the ethical guidelines we adhere to, it is not possible for us to retrospectively collect more specific information about this individual case.**

I am unsure if having literature review about specific pathologies in both the introduction and discussion makes for an easy read. Possibly move most of that to the discussion.

**Reply: Your observation is accurate, and we have accordingly revised the manuscript by repositioning certain text related. The relocated content is now highlighted in green.**

I think it would be helpful to mention the number of cases that you did during the same time period by either open or VATs, just to give a comparison of your group's paradigm and progression over time.

**Reply: As you rightly pointed out, our study primarily focused on the robotic-assisted approaches for resections of mediastinal masses. However, we acknowledge the importance of providing a comprehensive overview of all available surgical approaches during the same time frame. Unfortunately, data regarding open resection or VATS for resection of mediastinal masses are currently limited, which is a limitation we recognize.**