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Reviewer A:

In the article entitled “Factors influencing the length of stay after mediastinal tumor resection in the setting of an ERAS-TUBELESS protocol”, the authors aimed to identify the risk factors (patients’ and procedure associated factors) that were associated with an increased LOS (> 3 days) after mediastinal tumor resection in the setting of an Enhanced Recovery After Surgery (ERAS)-TUBELESS protocol. As a result, the main drivers of LOS were procedure-related factors. Anesthesia with spontaneous ventilation was associated with early discharge (LOS ≤1 day) and thus promoted thoracic day surgery. As a whole, it is an interesting and important topic, and it was well designed and organized. However, I have several concerns.

1. A length of stay after VATS tumor resection (LOS) greater than 3 days was considered an increased LOS. Why 3 days was considered as the cut off for the prolonged postoperative LOS? The LOS was defined as the number of nights after the operation in the hospital. LOS was dichotomized by performing a median split.

Response: Thank you very much for the comments on our work and all suggestions for improvement. There were some reasons to define 3 days as the cut off for prolonged LOS. Firstly, the common definition of prolonged LOS was greater than the 75th percentile in studies using NSQIP and other large data sets. But this research was in a setting of an Enhanced Recovery After Surgery (ERAS)-TUBELESS protocol. So, we defined shorter period (median) as prolonged LOS. Secondly, no research has reported the optimal cut-off point about length of stay after mediastinal tumor resection. LOS < 3days represented the standard target for discharge in our center.

2. Although the data involved in this study were collected retrospectively, it still necessitates a statement of ethics approval.

Response: Thank you for your suggestion. All data involved in this study were collected retrospectively and didn’t disclose identity information. Although I thought it was not required the statement of ethics approval. I would apply for ethics approval.

3. L139: postoperative SII (the systemic immune-inflammation index). The SII was calculated by using the following formula: $SII = \text{platelet count} \times \text{neutrophil count} / \text{lymphocyte count}$. Please provide some reference for the SII.

Response: Thank you very much for the suggestions. We have provide more reference for the SII in line 240, please kindly check.

4. L146-147: Variables with a P-value of <0.05 in the univariable analysis were selected as independent variables in a multivariable logistic regression analysis. Actually, some important variables which are commonly thought to be associated with the prolonged postoperative LOS, such as advanced age, Anesthesia option,

should also be selected as independent variables even though they were not statistically significant in the univariable analysis. The authors themselves discussed some reasons in L185-L194.

Response: Thank you for your suggestion. I cannot agree more. We didn't include these variables to multivariable analysis because of the small sample size. Actually, we tried to include anesthesia option and ASA status, but the results had not significant change.

5. One limitation -- were you able to account for the fact that some patients were operated by the same surgeons group (making their observations not independent). You could account for the clustering of patients among physicians by using hierarchical models or general estimating equations -- that would be the most methodologically rigorous approach.

Response: Thank you for your suggestion for improvement. I agree it was a limitation. I also thought hierarchical models or general estimating equations would be the most methodologically rigorous approach. But the sample size was small, it hard to keep reliable.

6. The language of your manuscript needs to be further polished by a native English speaker or some companies that provide the manuscript services.

Response: Thank you very much for the comments on our work and all suggestions for improvement. We have carefully improved and modified language.