Peer Review File

Article Information: https://dx.doi.org/10.21037/jtd-2025-820

Review Comments

Dear authors, your manuscript is a topical current issue in lung cancer surgery treatment. I have to mention some comments:

Comment 1: the mean surgical time in open procedures was about 60min longer than the VATS group: how can the authors explain such results? (maybe surgical difficulties/localization of tumor, etc. were not as homogeneous as described...)

Reply 1: We appreciate the reviewer's insightful query regarding the 60-minute surgical time difference. The longer operative time in open thoracotomy compared to VATS primarily arises from inherent technical differences:(1) Incision management: Open procedures require 25-40 minutes for 15-20cm muscle layer dissection, rib retraction, and layered closure, while VATS needs <10 minutes for 2-3 minimal incisions.

(2) Operational workflow: Open surgery relies on physical traction for exposure (e.g., manual lung retraction), whereas VATS enables precise dissection under magnified visualization.

(3) Hemostasis efficiency: Diffuse oozing bleeding prolongs time in open surgery, while VATS enhances coagulation via endoscopic compression and thermal devices.

(4) Case selection: Post-neoadjuvant challenges (pleural adhesions, hilar fibrosis) increased complexity in converted open cases, objectively prolonging operative time.

Comment 2: in exclusion criteria: why was readmission within 30 days after surgery a complication event to exclude patients from this study?

Reply 2: We sincerely thank the reviewer for raising this important methodological consideration. It is critical to clarify that the exclusion of patients readmitted within 30 days does not diminish the clinical significance of these cases, but rather reflects a necessary scientific delimitation to ensure interpretability of our core findings. This approach was implemented for two primary reasons:

(1) Elimination of Non-Procedure-Related Confounders
Readmissions may result from factors independent of surgical technique (e.g., socioeconomic barriers to care access, exacerbation of pre-existing comorbidities, or medication non-adherence). Including such cases would introduce substantial confounding when comparing VATS versus open thoracotomy outcomes.

(2) Alignment with Standard Perioperative Study Design
Research consensus in surgical oncology supports excluding readmissions unless directly procedure-related, as this ensures the observed outcomes specifically reflect the comparative technical efficacy of the interventions rather than extraneous factors.

Comment 3: tradidional thoracotomy (line 126): what type of incision was it? (posterolateral thoracotomy or lateral muscle-sparing thoracotomy)

Reply 3: We appreciate the reviewer's inquiry regarding thoracotomy approaches. In this study, both posterolateral thoracotomy and lateral muscle-sparing thoracotomy were utilized within the open surgery group. The selection between these approaches was based on:

(1) Operational requirements (e.g., tumor location necessitating extended exposure).
(2) Surgeon's expertise in achieving adequate exposure while minimizing tissue trauma.

Comment 4:postoperative hospital stay was just 1 day longer in the VATS group compared to the open approach and this result should be clearly expressed in discussion and conclusions

Reply 4: We thank the reviewer for their attention to postoperative recovery metrics. Regarding the comment on hospital stay duration, we wish to clarify a critical data presentation nuance:Table 4 explicitly reports:

Median drainage time: Open group prolonged by 1 day 6d vs 5d, P=0.03).

Median hospital stay: Open group prolonged by 3 days (11d vs 8d,P <0.01).

Comment 5: line 284: ...factors affecting "NON" small cell... (the word "non" is missing)

Reply 5: We sincerely thank the reviewer for this meticulous correction. The missing "non" in Line 284 has been restored to ensure accurate terminology.

Changes in the text: The revised sentence now reads: "...factors affecting non-small cell lung cancer"(Page 12, Line 320)

Comment 6: line 288: ...tailored NEOADJUVANT therapy...

Reply 6: We thank the reviewer for this correction. The misspelling "NEOADJUVANT" has been revised to the standard term "neoadjuvant" .

Changes in the text: The updated text now reads:"tailored neoadjuvant therapy"(Page 13, Line 324).

Comment 7: table-5: Cox proportional hazard model for survival time of two groups of patients:

it it not clear weather this table refers to all patients together included in the study or it refers to the two groups separately (open vs VATS)

Reply 7: We appreciate the reviewer's attention to methodological clarity. The Cox proportional hazards model presented in Table 5 was performed for the entire study cohort (N=82), not separately for the open and VATS groups. This unified analysis allows direct comparison of hazard ratios between surgical approaches while controlling for covariates (e.g., age, TNM stage).To eliminate ambiguity, we have revised the table title: Cox proportional hazards model for survival time of the entire cohort (N=82).

Changes in the text: We have revised the table title: Cox proportional hazards model for survival time of the entire cohort (N=82) (Table 5).

Comment 8: table-3: nodes station N1 group and N2 group; these results are similar but p value are different. This has to be clarified

Reply 8: We appreciate the reviewer's astute observation. The apparent discrepancy between similar median values but differing p-values arises from:

(1) Inherent Data Skewness: The nodal data exhibited skewed distributions in both groups , making medians less sensitive to distributional differences.
(2) Small-Sample Effects: Limited sample size (N=82) reduced statistical power, amplifying random variations in quartile positioning.

Comment 9: a long-term survival analysis between open and VATS approach should be interesting in case it could be made

Reply 9: We appreciate this insightful suggestion regarding long-term survival analysis. We confirm that extended follow-up is being prospectively tracked, and these longer-term outcomes will be reported separately in future studies.

In general, it is a well elaborated manuscript.