

## Peer Review File

Article information: <https://dx.doi.org/10.21037/jtd-24-297>

### Reviewer A

Comment 1: Well written factual paper which is relevant to current day thoracic management for Stage I lung cancer.

Reply 1: Thank you for your positive comment.

Changes in the text: none.

### Reviewer B

Comment 1: A reference is needed for the sentence on lines 9 through 12.

Reply 1: The following reference has been added to this sentence - de Koning HJ, van der Aalst CM, de Jong PA, et al. Reduced Lung-Cancer Mortality with Volume CT Screening in a Randomized Trial. *N Engl J Med.* 2020;382(6):503-513. doi:10.1056/NEJMoa1911793.

Changes in the text: line 28 - ... resulting in a significant reduction in the mortality rate linked to this disease (1).

Comment 2: Please spell out all acronyms, including NELSON.

Reply 2: The NELSON study acronym has been spelled out.

Changes in the text: lines 28-29 - ...the Netherlands–Leuven Longkanker Screenings Onderzoek (NELSON) study....

Comment 3: For lines 21 through 24, I would rewrite this as: "...can offer comparable long-term survival and improved respiratory function preservation compared to lobectomy for patients with tumors smaller than 2cm...In light of these results, limited resection may become the treatment of choice for early stage disease..."

Reply 3: Thank you for your comment. These sentences have been rephrased as required.

Changes in the text: lines 40-43 - ...can offer comparable long-term survival and improved respiratory function preservation compared to lobectomy for patients with tumors smaller than 2 cm (T1a and T1b) (3,4). In light of these results, limited resection may become the treatment of choice for early-stage disease....

Comment 4: In regards to the sentence on lines 27 through 30, this could also be due to

not getting all associated intralobar nodes, by this I mean stations 11/12/13.

Reply 4: Thank you for this statement. The sentence has been rephrased accordingly.

Changes in the text: lines 47-61 - Considering that negative lymph nodal status is always assessed intraoperatively, the risk of recurrence in case of sublobar resection versus lobectomy can be attributed to the inability to obtain an adequate dissection of intraparenchymal lymph node stations (i.e. stations 11-12-13) or a sufficient resection margin free from the tumor.

Comment 5: Recommend revising lines 35 through 37 for grammar

Reply 5: The sentence has been rephrased.

Changes in the text: lines 68-69 - A major limitation of this study is the lack of long-term oncological results; nevertheless, interesting data about perioperative planning and postoperative results were reported.

Comment 6: I'm not sure what is meant by this clause on lines 39 through 40: "in order to orient the choice on the type of lesion centered resection."

Reply 6: I agree that this sentence may appear unclear in its original version, so it has been rephrased.

Changes in the text: lines 70-72 - The authors have emphasized the importance of the use of a 3D-reconstruction software for the identification of the surgical margin based on preoperative CT scan, in order to assist the surgeon in the planning of the most appropriate type of lesion-centered resection.

Comment 7: On line 40, "none" should be "no".

Reply 7: Thank you for your comment.

Changes in the text: line 72 - In this series, no APL....

Comment 8: It is not entirely clear to me how APL differs from sub lobar. This warrants further explanation

Reply 8: Thank you for your comment. The definition of APL has been expanded.

Changes in the text: lines 63-67 - anatomical partial lobectomy (APL), defined as a tumor-centered anatomical resection ranging from single segmentectomy to multiple combined subsegmentectomies or complex segmentectomies, based both on the position of the lesion and the regional vascular anatomy in order to guarantee a safe 2 cm-free resection margin (5).

Comment 9: on line 58, “enlisted” should be “reported”

Reply 9: Thank you for your comment.

Changes in the text: lines 108-109 - Well experienced surgeons also reported....

Comment 10: on line 59, recommend deleting “as major limitations of manual vats”

Reply 10: This part was deleted as required.

Changes in the text: line 110 - ...to achieve adequate tumor-free surgical margins (9).

Comment 11: On line 64, “appreciation” should be “adoption”

Reply 11: Thank you for your comment.

Changes in the text: line 115 - ...major determinants of the adoption....

Comment 12: On line 67 “were burdened by” should be “boasted”

Reply 12: Thank you for your comment.

Changes in the text: lines 118-119 - ...robotic operations were boasted....

Comment 13: On line 70 “subjects operated in” should be “patients getting”

Reply 13: Thank you for your comment.

Changes in the text: line 131 - ...than patients getting VATS (11).