

## Peer Review File

Article information: <http://dx.doi.org/10.21037/ccts-20-115>.

### Reviewer A

#### Comments to the authors:

1. Comment 1: In the Introduction paragraph, page 3, lines 33-35, the Authors cite the last lung cancer staging system: they should report the appropriate reference.

Reply: 1: A reference has been added

2. Comment 2: At line 39 of the same paragraph and page, the Authors state "... in advanced stage lung cancer the use of VATS is still debated"; in this case appropriate references should be reported.

Reply 2: A reference has been added

3. Comment 3: At line 72 the Authors should add appropriate references.

Reply 3: References are added

4. Comment 4: I would suggest to the Authors to clearly report some statements answering to the question: is there any limitation or contraindication to perform VATS lobectomy in stage IIIA NSCLC?

Reply 4: Thank you for your comment as we have asked ourselves the same questions and could not answer them in clear statements because we think this is not possible by now.

In the authors opinion clear statements on limitations or contraindication can not be given. As stated in the manuscript "In conclusion, the practice of VATS-surgery in stage IIIA lung cancer has to be considered carefully in relation to the patient's situation and to the surgical experience of the operating surgeons. Up to date, utilization of VATS seems to be feasible with at least equivalent outcomes in comparison to open surgery in selected cases and the range of indications could be further extended in the future."

5. Comment 5: A Table which summarizes indications and contraindications according to the different sub-IIIA stages is advised.

Reply 5: As answered above, a clear statement can not be given here. Indications and contraindications must be answered individually In conclusion, the practice of VATS-surgery in stage IIIA lung cancer has to be considered carefully in relation to the patient's situation and to the surgical experience of the operating surgeons.

### Reviewer B

#### Comments to the authors:

1. Comment 1: English language should be deeply reviewed by a mother-tongue expert

Reply 1: A Revision from a mother-tongue expert has been done

2. Comment 2: Introduction: some references should be added

Reply 2: References were added

3. Comment 3: IIIA-N2 disease section, line 63: I would add also a reference by Licht and colleagues (Licht PB, Jørgensen OD, Ladegaard L, Jakobsen E. A national study of nodal upstaging after thoracoscopic versus open lobectomy for clinical stage I lung cancer. *Ann Thorac Surg.* 2013;96(3):943-950.)

Reply 3: The reference was added

4. Comment 4: VATS lobectomy after induction therapy section, line 89: which VATS-group are the authors referring to?

Reply 4: The authors are referring to the VATS-group out of the following publication: Yang CF, Meyerhoff RR, Mayne NR, et al. Long-term survival following open versus thoracoscopic lobectomy after preoperative chemotherapy for non-small cell lung cancer. *Eur J Cardiothorac Surg.* 2016;49(6):1615-1623.

doi:10.1093/ejcts/ezv428. The reference in the text is to be found at the end of the following sentence.

5. Comment 5: T4N0-1 section line 195: apart from plication, diaphragmatic resection and reconstruction with minimally invasive techniques have been described, even if for benign disease (e.g.: Viti A, Bertoglio P, Roviglione G, et al. Endometriosis Involving the Diaphragm: A Patient-Tailored Minimally Invasive Surgical Treatment. *World J Surg.* 2020;44(4):1099-1104.)

Reply 5: The suggested reference has been added.

6. Comment 6: it would be interesting to add a speculative part of possible VATS approach after immunotherapy. As a matter of fact several ongoing trials with immunotherapy in a neoadjuvant setting found a very high rate of conversion due to technical problems.

Reply 6: In the section of VATS lobectomy after induction therapy an outlook on VATS after immunotherapy was added. We thank you for the comment as these patients are introduced to us more and more often as well.

7. Comment 7: IASLC proposed to further divide N2 disease according to its extension in N2a1, N2a2 and N2b (Asamura H, Chansky K, Crowley J, Goldstraw P, Rusch VW, Vansteenkiste JF et al. The International Association for the Study of Lung Cancer Lung Cancer Staging Project: proposals for the revision of the N descriptors in the forthcoming 8th edition of the TNM classification for lung cancer. *J Thorac Oncol* 2015;10: 1675–84.) and this subdivision has been proved to have a significant impact on survival (e.g.: Bertoglio P, Ricciardi S, Ali G, et al. N2 lung cancer is not all the same: an analysis of different prognostic groups. *Interact Cardiovasc Thorac Surg.* 2018;27(5):720-726.). Maybe it could be interesting to discuss possible different implications in the use of a minimally invasive approach.

Reply 7: Further comments on the division of pN2-disease are added in the section IIIA-N2-disease. In our opinion this is a very important topic as well. Thank you for the comment, as we have missed this in the primary manuscript.

### **Reviewer C**

#### **Comments to the authors:**

1. Comment 1: English should be improved.

Reply 1: A Revision from a mother-tongue expert has been done

2. Comment 2: Lines 160-169: the authors introduced a case from their hospital. This part could be shortened properly.

Reply 2: The part was shortened