Peer Review File Article information: https://dx.doi.org/10.21037/shc-23-24

Reviewer A

Comment 1: Please involve a native English speaker during the revisions of your manuscript. There are numerous (too many) language and spelling errors. This will definitely improve the quality of your work.

Reply 1: Thank you for your suggestion.

Changes in the text: All text is revised to native English speaker.

Comment 2: Please consider to add a few figures (CT-images, intraoperative photo's et cetera) to illustrate your text.

Reply 2: Thank you for your suggestion. I add a intraoperative photo. Changes in the text: Figure 1

Introduction

Comment 3: Please explain abbreviations the first time you use them in your manuscript, e.g., NSCLC, TNM.

Reply 3: Thank you for your suggestion. I have completed the list of abbreviations at the beginning of the manuscript Changes in the text: Line 19-21

Comment 4: Please describe the aim of your manuscript.

Reply 4: Thank you for your suggestion. I changed the text. Changes in the text: line 47-48

Comment 5: I presume this manuscript is written as a narrative review? Please explain and report that it is written in accordance to narrative review guidelines.

Reply 5: I made the required changes. Changes in the text: line 49

Preoperative oncological evaluation: Comment 6: Please refer to international guidelines, for example ESTS

Reply 6: Thank you for your suggestion. Changes in the text: lines 69-72

Comment 7: Line 68: patients don't perform biopsies, they are normally performed by interventional radiologists. Please rephrase

Reply 7: Done. Changes in the text: line 74 Chemo-radiotherapy treatment: Comment 8: Line 74-75: incorrect English. Please rephrase.

Reply 8: Done Changes in the text: lines 81-83

Comment 9: Line 75-77: which current guidelines? Please add references.

Reply 9: Thank you for your suggestion. Changes in the text: lines 83-84

Comment 10: Line 93: followed by

Reply 10: Done Changes in the text: line 101

Resection and surgical technique

Comment 11: Line 103: these kind of patients

Reply 11: Done Changes in the text: 125

Comment 12: Line 109: reference is incomplete; Trasl Lung Cancer Res = Transl Lung Cancer Res

Reply 12: Done Changes in the text: reference 11

Comment 13: Line 118: what do you mean by "program"?

Reply 13: collaboration with plastic surgeons can be useful to have a preoperative planning for chest wall resection and preserve the muscles to use for chest wall reconstruction.

Changes in the text: lines 140-142

Reconstruction and surgical technique:

Comment 14: Briefly discuss the expert consensus statement (REF 10) in this paragraph as well, since this is the most recently published paper on this subject.

Reply 14: Thank you for your suggestion. I have discussed the paper also in "Chemo-radiotherapy treatment" section. In revised version, the article is now reference 11. Changes in the text: lines 103-108, 178-181

Comment 15: Line 157-158: does the sternum always need reconstruction? Or in specific cases, if so, which?

Reply 15: Total sternectomy always need a reconstruction. In case of partial sternectomy, rigid prothesis could be unnecessary.

Changes in the text: lines 185-187

Comment 16: Please emphasize the need for reconstruction in case of large retroscapular chest wall defects to prevent intrathoracic dislocation, impingement and disruption of scapulothoracic movements.

 Reply 16: Done

 Changes in the text: lines 179-181

 Conclusion

 Comment 17: Line 201: "Lung cancer with chest wall invasion represents principally a surgical disease". Even in case of mediastinal lymph node and/or distant metastasis? Please rephrase.

 Reply 17: Done

 Changes in the text: line 230

Comment 18: Line 206: "a lot of material", I recon that you mean "many techniques could be used for chest wall reconstruction, including different types of rib plates and meshes"? Reply 18: Done Changes in the text: 235

REVIEWER B

Comment 1: The paper by Mantovani and Jaus is a very interesting piece of work. The manuscript is labelled as a review article and it is a valuable option potentially for a fast revision considering the mention of treatment principles and alternative options to reconstruct the chest wall defect.

The title might contain a prelusion of the paper will be such as "review of, current state..." but the nature of the paper is soon clear when schrolling down. In case the format permits i would add just a few sentences on

the methology (source of papers, type of articles collected or at least searched for, type of the narrative or systematic focus of the review. The paper could benefit from a rapid language revision. thew paper has no figures and tables. This not a limitation but could be an advantage.

Reply 1: Thank you for your suggestions. I specified in the title that it is a narrative review. Also, I have added intraoperative images. English revision was made. Changes in the text: title, figure

REVIEWER C

Comment 1: This apparent review of lung cancer invading chest wall is very difficult to read due to incomplete sentence structure and errors of English language syntax. An English language consultant would be necessary. That aside, some of the content is appropriate including the perspective on chest wall reconstruction. The weakest part of the document is the description of induction chemotherapy, the lack of including the newest paradigm of neoadjuvant chemo+nivolumab (Checkmate 816) for T3N0 or T3N1 NSCLC invading chest wall. This review mentions Pancoast tumors but does not review the pertinent literature that supports neoadjuvant chemo/RT for N0 superior sulcus tumors.

Reply 1: Dear reviewer C, thank you for your suggestions. I have included a paragraph to explain the role of neoadjuvant immunochemotherapy in IB-IIIA lung cancer. I have citied the work published in NEJM in 2022 (reference 12).

Pancoast tumor has particular clinical presentation and treatment, for this reason, it needed a specifically discussion and it is not the aim of this paper.

Changes in the text: lines 109-117