Peer Review File

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<mark>Reviewer A</mark>

I do think this sleeve lobectomy of a stage III squamous cell downstaged to stage I with neoadjuvant chemo-immune therapy case report is of value as it adds to the experience with the surgical aspects of this evolving frequent multi-modality approach.

I do have a few minor revision comments. Line 54 just says 'the cycles of...'; this should be three as stated in the case presentation. Line 60 and figure 1 state an MPR; the case presentation in lines 173-176 describes the down-staging but with just general comments of 'small amount' and 'most of the tumor cells...' and not the specific pathology criteria of a MPR with **Reply:** We have modified our text as advised and replace "the" with "three" (see Page 2, line 52) And the present the present of the present o

52).And we have reconfirmed the patient's pathological results once again, it shows only 1% remnant nonkeratinizing squamous cell carcinoma and that most of the tumor cells were necrotic and disappeared. (see Page 6, line 168)

Finally, several comments on table 1. It is a nice review to include in the manuscript for readers. However, there are several inaccuracies. 'Ipilimum' is ipilimumab. In CheckMate-816 the nivoipi arm was closed with outcomes from this trial are only relative to chemo-nivo vs chemo alone. In the AEGEAN trial (Heymach NEJM 2023), the radiation use was only post-operative radiation therapy when 'if indicated and according to local guidance' and was not a randomization factor nor part of the outcomes data reporting in either treatment arm. The regimen listing under Keynote-671 was very clear of the comparative arms, whereas in CheckMate-816, NEOSTAR, NADIM II, and AEGEAN regimens were just a listing and not as clear as the Keynote-671 of the comparative treatment arms used. **Reply:** We have modified our table as advised.(see Table 1)

<mark>Reviewer B</mark>

The case report contains many grammatical errors and requires correction in sentence structures. The abstract needs to be written accurately, stating the number of neoadjuvant cycles and the treatment the patient received. It was very confusing when chemotherapy was mentioned and the patient received both neoadjuvant and adjuvant therapy but this was only teased out later in the main report.

There were also words that are not commonly used globally such as atomisation ??

Overall, the article feels like 2 separate sections. A section on the case which does not reveal any novelty in comparison to the research studies that have been published or are ongoing. And the expert opinions in the subsequent section highlighting important questions which may or may not be related to the case itself. Overall, these two should be in congruent where the questions highlighted should also be discussed in the main case report and highlighted as well to show what the authors did with this case and what the experts thought about their move. Whether they agree with it and what is the general consensus these days. Right now, both sections seem truncated and not connected to each other.

Reply: We have modified our text as advised. We state the number of neoadjuvant cycles and the treatment the patient received (see Page 2, line 52). And we have revised the discussion section of the article to include a discussion on the modified bronchial anastomosis technique and added opinions from experts about this case (see Page 9 line 269-285, Page 11-12 line 357-361, Page 12 line 376-381, Page 13 line 396-399, Page 13 line 414-418).

<mark>Reviewer C</mark>

Please describe more on the "four-part" bronchial anastomosis technique.

Since this manuscript is a case report, the discussion and introduction are lengthy, so please clean it up.

The Expert Comment is normally added additionally to the Case Report. These Experts did not address the content of this manuscript. The authors should digest them and add to the discussion. Carefully study the format required for the case report and rewrite it.

Reply: We have modified our text as advised. We describe more on the modified bronchial anastomosis technique, and added opinions from experts about this case (see Page 9 line 269-285, Page 11-12 line 357-361, Page 12 line 376-381, Page 13 line 396-399, Page 13 line 414-418). And we have cleaned the discussion and introduction up.

<mark>Reviewer D</mark>

Interesting case report about uniportal sleeve lobectomy after neoadjuvant immunotherapy. **Reply:** Thank you for your hard work.

Reviewer E

In total the authors are demonstrating a case of a single-port video-assisted thoracoscopic sleeve lobectomy after neoadjuvant immunochemotherapy.

I have some remarks:

1. The authors are writing in the abstract and in the manuscript that neoadjuvant immunochemotherapy "does not significantly increase the difficulty of surgical operation or reduce safety". They are presenting a case report, how can there conclusion be significantly? It is not compared to something else and one case is not speaking for every patient.

Reply: Thank you for your advice. It is inappropriate to draw this conclusions. We have made revisions to the conclusion of the text.(see Page 3 line 62-69, Page 10 line 296-303).

2. The same for the word "safe", in there case it might have been "safe", but every thoracic surgeon who is operating patients after neoadjuvant immunochemotherapy knows that some patients do not have any or less tissue changes but some patients have a lot of fibrosis around the arteries and in the mediastinum and the preparation of this tissue is very difficult and not really "safe".

Reply: Thank you for your advice. It's true that hilar and mediastinal lymph node fibrosis and thoracic adhesions after neoadjuvant therapy may affect operation. We have also considered this issue and modified our text as advised.(see Page 8 line 246-250)

3. As the patient had a N2 lymph node involvement, the authors should please clarify how many lymph nodes and which stations were resected.

Reply: Thank you for your advice. We have modified our text as advised and clarify how many lymph nodes and which stations were resected. (see Page 6 line 171-172)

4. Did the patient received an aditive radiotherapy?**Reply:** The patient didn't receive an aditive radiotherapy.

5. As this is a surgical case report, the authors should describe there perioperative procedure. Did the patient have an antibioses? How was the healing of the anastomosis? How many bronchoscopies were performed to control the healing of the anasomosis?

Reply: The patient had an antibioses 30 minutes before surgery and surgery time exceeding 3 hours. And we just performed one bronchoscopies to confirm the anastomosis was well healed at the 1-month follow-up visit.(see Page 6 line 165-167,Page 6 line 179-181)

6. When was the patient discharged?

Reply: The patient discharged after one week after surgery.(see Page 6 line 166-167)

7. In total, the authors are discussing very long the efficacy of additional immunotherapy in the neoadjuvant setting. As the goal of the authors was to demonstrate that a sleeve lobectomy after immunochemotherapy is possible it would be more interesting if they could discuss the technical feasibility. The authors are citing Forde et al. who demonstrated that lung resections after immunotherapy might be technical more demanding and that there are more conversions to thoracotomy. This should be discussed.

Reply: We have modified our text as advised. We describe more on the modified bronchial anastomosis technique about this case (see Page 9 line 269-285).

8. Why did the patient had 3 additive cycles of combined immunochemotherapy after surgery? I do not find any study where this protocol is documented.

Reply: It's true that there were not any study where this protocol is document. However, we hope to reduce the risk of recurrence through it. After discussions with multidisciplinary experts in our hospital, we decided to use 3 cycles of neoadjuvant immunotherapy before surgery. Then

continue 3 cycles of adjuvant immunotherapy, and then switch to Pembrolizumab monotherapy for 1 year.