

Peer Review File

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Reviewer #1

I congratulate the authors for writing this extremely punctual and very clear manuscript. I have no corrections to propose.

We thank the reviewer for the favorable comment.

Reviewer #2

Strengths:

This article provides a comprehensive review of the data behind mediastinal staging of NSCLC via multiple techniques, including EBUS-TBNA, mediastinoscopy and EUS-FNA. The authors did a thorough literature review and the table comparing the different methods of staging is laid out clearly and nicely. The systematic description of the authors' recommendations for staging and potential treatment for various stages of NSCLC is well-organized as well.

Weaknesses:

There are many grammatical errors throughout, especially with sentence structure and word choices, that make the article difficult to read.

Comment 1:--Examples of word choices:

Line 37 – “TBNA has a high level of sensibility”

Line 42-43 – “EBUS has progressively replaced conventional “blind “TBNA as test for invasive mediastinal staging, increasing its procedure performance characteristics.”

- It is unclear what is meant by “sensibility” of TBNA or “procedure performance characteristics.” Do the authors mean the diagnostic performance improved? There are several other word choices and sentences at other points of the paper that have similar issues.

Comment 2:--An example of sentence structure:

Line 94 – “ROSE is considered an important adjunct technique to mediastinal staging of NSCLC using EBUS-TBNA ROSE provides better sampling and a control on the cellularity of the specimen useful, for example, in highly necrotic lymph nodes.”

- It seems like there may be punctuation that is missing from the sentence which makes it difficult to understand. There are other sentences in the paper with similar issues as well.

Response to Comment 1 and 2. The manuscript has been revised by a native English speaker, as suggested.

Comment 3: The authors report that they have significant experience in EBUS with doing ~70 EBUS a year and quote an article that >80% diagnostic sensitivity can be achieved after doing 37-44 EBUS procedures. That is a concerning statistic to us, as the authors rightly pointed out, that safety and diagnostic accuracy improve with operator skill. We believe the number of EBUS required to understand the nuances and become skilled is likely higher than 70/year. For example, in an evaluation of the EBUS-TBNA learning curve of two IP fellows (Stather, Chest 2011), they found that technical skill in EBUS was achieved after 143 cases for one fellow and 75 cases for the other fellow.

[https://journal.chestnet.org/article/S0012-3692\(16\)54233-0/fulltext](https://journal.chestnet.org/article/S0012-3692(16)54233-0/fulltext)

Response: We agree with the reviewer's comment. There are several articles concerning the EBUS-TBNA learning curve in the literature. However, we believe that the performance of more than 70 procedures in a year is enough to achieve a good sensitivity after the completion of the learning curve.

Comment 4: In line 185, the authors state that "in this clinical scenario CT and PET due to the presence of associated inflammatory processes have high false positive rates" and the clinical scenario is referring to clinical stage IIIA NSCLC. However what "associated inflammatory processes" are the authors referring to? There may be granulomatous diseases that can cause false positive CT/PET scans but they are not associated with clinical stage IIIA NSCLC so that was unclear.

Response: The sentence (page 12, lines 7-9) has been modified, as suggested.

Comment 5: One of the conclusions in the paper seemed to be contradictory to what the authors stated earlier in the paper. In line 214, they report that "diagnostic yield of EBUS-TBNA is considered equal to videomediastinoscopy" and in line 191, they state "EBUS-TBNA and videomediastinoscopy have the same sensitivity and NPV." However in the beginning of the paper when the authors are reporting data supporting endoscopic mediastinal staging, they state that videomediastinoscopy has a sensitivity of 68-81% while EBUS-TBNA has a sensitivity of 81-88%. They also report that videomediastinoscopy has a NPV of 59-90% and EBUS-TBNA has a NPV of 78-91%. While there is overlap in the range of NPV for both EBUS and mediastinoscopy, the range of diagnostic sensitivity they report for EBUS vs MED is not similar, so their conclusion about equal diagnostic sensitivity between EBUS and videomediastinoscopy is not supported by their statements earlier in the paper.

Response: The conclusion (page 13, lines 23-26) has been modified, as required.