

Peer Review File

Article information: <https://dx.doi.org/10.21037/jtd-21-1825>.

Reviewer A

Comment 1: Thank you for the opportunity to review the article entitled “A Guide for Managing Patients with Stage I NSCLC: Deciding between Lobectomy, Segmentectomy, Wedge, SBRT and Ablation – Part 3: Systematic Review of Evidence Regarding Surgery in Compromised Patients or Specific Tumors “. The aim of this study is to make comprehensive summary of evidence regarding resection extent in compromised patients and favorable tumors with attention to aspects of applicability, uncertainty and effect modifiers provides a foundation for a framework for individualized decision-making.

The study of treatment for elderly non-small cell lung cancer is important. We pay tribute to the wonderful research. I would like to be the research to be useful for future.

However, I have some opinions.

The standard procedures for early-stage lung cancer are lobectomy and mediastinal lymph node dissection. This review compared lobectomy and sublobar resection well, but does not discuss mediastinal lymph node dissection. Do you think mediastinal lymph node dissection is necessary for the elderly? Please comment on mediastinal lymph node dissection.

Recently, Japan reported the results of a large-scale study of lobectomy and sublobar resection in elderly lung cancer. Why not add this paper to this review?

Mimae et al. *Ann Surg Oncol*. 2021;28:7219-7227.

Is mediastinal node dissection required – please comment, esp in the elderly

Reply 1: We spent a lot of time thinking about the point you raised. What type of intraoperative node assessment is indicated is somewhat tangential to our study. The factors influencing this question (primarily risk of missed N+ and morbidity/mortality of node assessment) apply regardless of the type of surgical intervention chosen. Addressing how much intraoperative node evaluation is optimal in an evidence-based manner would require an extensive investigation and additional part of the paper (summarizing the RCTs showing no morbidity/mortality difference of node dissection vs sampling, studies defining the risk of N+ in various patient types and tumor types, and defining the impact of inaccurate stage assessment - perhaps a part 5 paper). Adding a brief statement based simply on opinion is counter to our approach of being as evidence-based as possible. We have considered adding a generic statement taken from other reviews of this topic, but it seems this doesn't fit either: it would apply equally and thus not factor into how to choose between lobectomy, segmentectomy and wedge, and a generic statement wouldn't fit the individualization of decision-making we are trying to address.

Nevertheless, we recognize the desire of the reviewer (and likely readers) for guidance regarding details such as the degree of intraoperative node assessment to undertake. Of course, there are many similar issues we have not addressed (is EBUS needed prior to SBRT or ablation? Is PET required? Should intraoperative frozen section of nodes be done and should it impact the resection extent? etc.). We tried to find a place in the 4 papers to speak to such questions – perhaps only as a section pointing out issues we are not able to address. However, it is already apparent that we are not addressing them. Furthermore, the project is designed to enhance clinician's decision-making. We are explicitly not providing a proscriptive recommendation of exactly what to do. Additional issues regarding management of details of the treatment

interventions (lobectomy, sublobar resection, SBRT ablation) require knowledge and judgement beyond what we are able to address.

Thus, after struggling considerably how to address the reviewer's point, we have ended up not finding a way that fits into the scope of our project.

Comment 2: Why not include Mimae et al. *Ann Surg Oncol*. 2021;28:7219-7227. –

Reply 2: This paper did not meet the inclusion criteria (sample size),

Reviewer B:

Comment: I thank you for giving me the opportunity to review the manuscript entitled “A Guide for Managing Patients with Stage I NSCLC: Deciding between Lobectomy, Segmentectomy, Wedge, SBRT and Ablation – Part 3: Systematic Review of Evidence Regarding Surgery in Compromised Patients or Specific Tumors” by Bade BC et al. The authors reviewed many articles regarding surgical treatment for early-stage non-small cell lung cancer in compromised patients and specific tumors, and the manuscript consists of 3 sections; surgical treatment for older patients, for patients with major comorbidities, and ground glass tumors.

The manuscript is very well written; clear, precise, and easy to understand. The topic addressed is interesting. I believe the paper will be of interest to the readership of the journal and would recommend it for acceptance.

Reply: no edits requested

Reviewer C

While I have no additional suggestion to be modified regarding the Results, only two minor points are suggested.

Comment 1: The Conclusion of Abstract might be modified to reflect the Conclusion of main text (Line 564-569). – We tried this out but ended up not making the change. These sentences reiterate what is in the results of the abstract – seems too redundant. Furthermore, we don't want to offer a prescriptive conclusion. It is important for clinicians to individualize. Therefore, we think it is better to emphasize the development of a framework that allows individualized management.

Comment 2: The authors used colors in Figure 2 and 4. Use of colors in Figure 1 and 3 also might be helpful for readers.

Reply 2: Figures 1 and 3 are taken from other papers, in which only a black and white version was provided.

Reviewer D:

Comment: Great work. I enjoyed reading the paper.

Reply: no edits requested

Reviewer E:

Comment: This manuscript is well summarized about the benefit of surgical and non-surgical intervention for stage 1 NSCLC. It is very difficult for surgeons to decide optimal intervention for stage 1 NSCLC particular in compromised patients, and this article can promote optimal decision making for surgeons.

I hope this article to be published earlier.

I think this article needs no revision.

Reply: no edits requested