Editor's note:
In the era of personalized medicine, a critical appraisal new developments and controversies are essential in order to derived tailored approaches. In addition to its educative aspect, we expect these discussions to help younger researchers to refine their own research strategies.

Controversies on Lung Cancer: Pros and Cons

Rebuttal from Dr. Bezjak and Dr. Giuliani

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Comment on: Nguyen TK, Palma DA. Pros: After stereotactic ablative radiotherapy for a peripheral early-stage non-small cell lung cancer, radiological suspicion of a local recurrence can be sufficient indication to proceed to salvage therapy. Transl Lung Cancer Res 2016;5:647-50.

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In response to Nguyen and Palma's submission arguing that radiological suspicion of a local recurrence can be sufficient indication to proceed to salvage therapy, it is clear that despite efforts from several international groups, distinguishing recurrent tumor from radiation induced lung injury (RILI) using radiological evidence, such as CT or FDG-PET scans, is far from an exact science. The authors correctly point out that clinical practice in presumed medically inoperable stage I lung cancer allows for SBRT treatment without biopsy confirmation, for lesions with radiological features strongly suggesting malignancy. However, they are proposing that this approach could be reasonably extended to salvage therapy following SBRT. We contend that the therapeutic ratio, i.e., risk versus benefit, is substantially different for initial SBRT treatment versus post-SBRT salvage treatment, and thus we maintain that pathological proof of recurrence be obtained wherever reasonable.

We do agree with our colleagues that in the presence of high-risk radiological features, a negative biopsy presents a significant challenge. There is a paucity of data in the literature on the true frequency of this event. In our publication on salvage surgery (1), we had one out of four patients meet all aspects of high radiological suspicion, on CT scan and FDG-PET scan, but have only fibrosis in the resected specimen. It is perhaps reasonable in the context of a multidisciplinary discussion that a patient with a negative biopsy be followed for an additional time period.

Collaborations with thoracic surgeons and the exploration of endobronchial ultrasound (EBUS) or specifically radial probe EBUS as a technique to biopsy post-SBRT masses (2), an alternate method to percutaneous CT guided biopsied, should be explored. This may represent a method to attain tissue using a lower risk technique.

Finally, further efforts to refine high-risk radiological features following lung SBRT will require multi-institutional efforts to collate data to have sufficient power to gain greater certainty in their utility. Novel radiological methods must also be explored such as non-FDG PET scans, perfusion CT techniques and MRI scans.

Until further data are available, cases suspicious of local recurrence following SBRT must be discussed in a multidisciplinary setting.

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None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest

to declare.

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