Reviewer's report

Title: The short-term outcomes of pulmonary metastasectomy or stereotactic body radiation therapy for pulmonary metastasis from epithelial tumors

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Reviewer: Kanhua Yin

Reviewer's report:

Dr. Kanzaki and colleagues performed a single-center retrospective study comparing the clinical outcomes and survival of pulmonary metastasectomy (PM) and SBRT in treating patients with pulmonary metastases. Patients who had primary lung cancer were excluded. A total of 100 consecutive patients were enrolled analyzed, with 76 received PM, 22 received SBRT, and the other two received SBRT following PM. The authors found that the 3-year local control rates were similar between PM and SBRT groups. However, the SBRT group was associated with inferior 3-year progressive-free survival and 3-year overall survival.

As mentioned in the methods section, PM is the treatment of choice in the authors' routine practice, while SBRT is considered as an alternative or salvage approach. The indication differences led to the different baseline characteristics between the two groups. Therefore, a simple comparing the outcomes between two procedures became not that meaningful. A more convincing approach would be using propensity-score matching. However, the relatively small sample size, especially that there were only 22 pure SBRT patients, made it not possible.

Comments and suggestions:

1. Please perform formal statistical analysis to compare the other baseline characteristics between the two groups.

2. Please provide more details on the follow-up. What was the proportion of lost to follow-up? What were the reasons for censoring?

3. As the median follow-up time was only 29 months, it is a little stretch to name the study as "mid-term outcomes." Please rewording.

4. The authors shall clearly define the local control rate

5. The discussion section is redundant. It should be more concise.

6. The different indication patient selection issues should be mentioned in the limitation section.

7. Figure 2 clearly showed that SBRT was associated with inferior survival. The insignificant statistical differences were most likely due to the small sample size (i.e., small power).
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