

## Peer Review File

Article information: <http://dx.doi.org/10.21037/apm-21-363>

### **Reviewer 1**

**Comment 1:** My only suggestion would be to consider to pare down some of the discussion on SBRT for extracranial oligometastases. I understand the need to discuss this as back-ground material, and discuss that patients with untreated brain metastases were not eligible for many oligometastases studies. However, body SBRT may be over-emphasized in this paper, particularly since the special issue is focused on oligometastases.

**Reply 1:** We appreciate the reviewers' comments and have edited the manuscript throughout. We removed a paragraph discussing different clinical presentations of oligometastatic disease from the "Oligometastatic disease and brain metastases" subsection (2<sup>nd</sup> paragraph). We removed a sentence referencing the Gomez trial of local consolidative therapy for oligometastatic disease inclusion criteria for brain metastases from the 5<sup>th</sup> paragraph of the same subsection.

### **Reviewer 2**

**Comment 1:** When mentioning about the definition of brain oligometastases, the importance of optimal imaging technique cannot be overemphasized. Volumetric MRI with thin slices is necessary to visualize very small brain metastases.

**Reply 1:** We agree with this comment. We added a sentence regarding MRI and volumetric imaging for brain metastasis detection with a reference to the 6<sup>th</sup> paragraph of the "Oligometastatic Disease and Brain Metastases" subsection.

**Comment 2:** The authors may want to include the brain metastasis nomogram based on RTOG studies (Barnholtz-Sloan et al. Neuro Oncol 2012).

**Reply 2:** We agree about this comment. This nomogram paper is referenced along with the RPA and GPA papers in the last paragraph of the "Oligometastatic Disease and Brain Metastases" subsection.

**Comment 3:** The authors may want to include the recommendations by ASTRO Choosing Wisely Campaign 2014 recommending against routine addition of WBRT to SRS for patient with limited metastases.

**Reply 3:** We added a sentence referencing this ASTRO Choosing Wisely recommendation in the last paragraph of the “What About Local Therapy for More Than a Single Brain Metastasis?” subsection.

**Comment 4:** Dr. Jing Li from MDACC recently presented the results of a randomized phase III trial comparing WBRT and SRS for 4-15 metastases. Though it is only in an abstract form, it is worthwhile to mention this study.

**Reply 4:** We added a paragraph summarizing this ASTRO 2020 conference abstract to the “What About More Than 4 Brain Metastases?” subsection (2<sup>nd</sup> paragraph).

**Comment 5:** The authors may want to include a small section on the emerging area of SRS for limited SCLC brain metastases (Rusthoven et al. JAMA Oncology 2020).

**Reply 5:** We added a paragraph summarizing the results of the FIRE-SCLC cohort study to the “What About Local Therapy for More Than a Single Brain Metastasis?” subsection (10<sup>th</sup> paragraph). We also added a sentence about the upcoming phase III NRG-CC009 trial on SCLC brain metastases at the end of the “What About More Than 4 Brain Metastases?” subsection (3<sup>rd</sup> paragraph).

**Comment 6:** Current NCCN guidelines deem SRS to be an appropriate treatment for small volume brain metastases without a hard cut-off number. The authors may want to include this in the discussion.

**Reply 6:** We added a sentence to the 2<sup>nd</sup> paragraph of the “What About Local Therapy for More Than a Single Brain Metastasis?” subsection emphasizing that the NCCN definition of “limited brain metastasis” in terms of number or volume of lesions has not been strictly defined numerically.