

Population Analysis of SABR/SRS for the Treatment of Metastatic Cancer in a Jurisdiction of 15 million People

Jason R Pantarotto^{1,2}, Eric Gutierrez¹, Brian Liszewski^{1,3}, Julie Kraus¹, Timothy P Hanna^{1,4}

1. Radiation Treatment Program, Ontario Health (Cancer Care Ontario) 2. U Ottawa, Dept Radiology, Radiation Oncology & Medical Physics

3. U Toronto, Dept of Radiation Oncology 4. Queens Cancer Research Institute, Division of Cancer Care & Epidemiology

1 INTRODUCTION AND PURPOSE

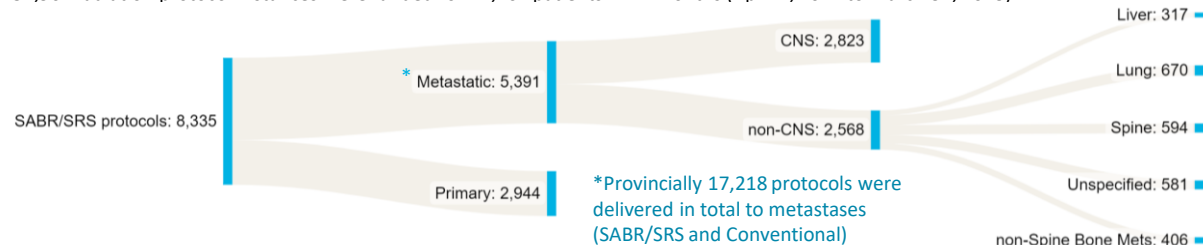
- Stereotactic Ablative Radiotherapy (SABR) or Stereotactic Radiosurgery (SRS) for oligometastatic cancer or oligoprogression of metastatic cancer is supported by an expanding body of evidence
- The degree of uptake of these techniques, supplanting traditional and potentially less resource-intensive techniques in this patient population, would be of interest to clinicians and administrators alike
- **This study sought to use hospital funding data as a means of assessing trends in ablative radiotherapy use in patients with metastases**

2 METHODS

- A review of provincial data for Ontario was performed to quantify the use of SABR/SRS to metastases either in the brain or elsewhere in the body
- Data was from an activity-based hospital funding model, responsible for ALL radiation treatment remuneration at all 17 facilities across the province
- Funding is triggered when a patient is treated as per 1 or more of the ~270 provincial radiation protocols, defined as a “protocol instance”
- Protocols were developed by clinicians across Ontario according to a consensus-based iterative process, considering provincial, national and international guidelines and/or evidence-based practice.
- Pre-requisite information for remuneration included (but was not limited to): patient demographics, identification of whether a primary tumor or metastasis(es) was treated, protocol, radiation technique, dose/fractionation, and encounter dates
- The submitted data has been validated by each of the 17 radiation programs given that this was Year 1 of a new funding model

3 RESULTS

52,964 radiation protocol instances were funded for 44,101 patients in 12 months (April 1, 2022 to March 31, 2023).



4 CONCLUSION

- Nearly 1/3 of ALL radiation treatments to metastases in Ontario are delivered using a SABR/SRS technique, roughly split equally between SRS (intra-cranial) vs SABR (extra-cranial) treatment
- There is wide regional variation across Ontario in the use of SABR/SRS in patients with metastatic disease. Reasons for this variation require further investigation