general conclusion. RESULTS: At the time of interim analysis 28 patients were enrolled in this trial. There were 3 drop-outs (1 protocol violation, 2 due to deterioration not related to the surgical treatment). 12 patients were assigned to SI and 13 patients were randomized to WBRT. Follow-up started within 30 days after resection in both groups. There was no local recurrence in the sector group, whereas one patient recurred within 3 months after WBRT locally. A distant progression was noted in 3 patients after WBRT (2 in the sector group and 1 in the SI group), and 3 patients after SI. A correlation of the tumor volume to OS could be shown in all patients (28,6%). 102 patients showed small edema (coefficient <1) and 102 patients showed a significant correlation of the tumor volume to OS. A preliminary regression model indicates equivalent efficacy. With the unexpectedly long average survival of the patient cohort (17 of 25 patients still alive after an average of 11.68 months), further follow-up is mandatory to determine any impact of OS.

**BMET-26. SURVIVAL AFTER SURGICAL RESECTION IN PATIENTS WITH SOLITARY OR MULTIPLE INTRACRANIAL METASTASES: RESULTS OF A SINGLE-CENTER RETROSPECTIVE STUDY**

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OBJECTIVES: Brain metastases represent a significant source of illness and death in cancer patients, affecting 20-40% of all cancer patients and outnumbering primary brain cancers by 10 to 1. With recent improvements in targeted therapies, overall survival of cancer patients has improved, but has also led to an increasing incidence of brain metastases. It is therefore essential for neurosurgeons and oncologists to better understand how to optimally manage intracranial metastases. Several studies have demonstrated the utility of surgical resection in patients presenting with a solitary brain metastasis, and official guidelines published in 2010 recommend resection for solitary lesions. However, whether or not surgery provides benefit for patients with multiple brain metastases has been less definitive. Still, there have been several recent studies that have shown similar survival benefits in patients operated on for multiple metastases compared to those obtained for patients with solitary lesions. In this study, the authors compared overall survival after resection in patients with single and multiple intracranial lesions to better understand whether surgical resection should be recommended regardless of number of lesions. METHODS: The authors retrospectively reviewed the records from a 37-year period at a single institution for patients with brain metastases treated via complete or partial resection of dominant lesions. There were 1700 patients identified. Of these, 297 had multiple surgeries performed and were therefore eliminated from the cohort. The Kaplan-Meier method (stratified by age, sex, primary tumor histology, and number of intracranial lesions prior to surgery) was used to calculate overall survival. A Cox proportional-hazards regression model was also fit to evaluate the influence of tumor and edema volume in addition to other clinical parameters. All patients were assigned to WBRT and 13 patients were randomized to SI therapy. Treatments were compared to the SI-group with 12,2 months (10 of 13 patients still alive) compared to 11,2 months (7 of 12 patients still alive, n.s.). CONCLUSION: Sector irradiation in a method sparing brain tissue achieves local control comparable to WBRT after resection of a singular brain metastasis. Our preliminary results thus indicate equivalent efficacy. With the unexpectedly long average survival of the patient cohort (17 of 25 patients still alive after an average of 11.68 months), further follow-up is mandatory to determine any impact of OS.