ratios than metastases from the breast (p=0.023); post-treatment, a trend of >25% improvement in both cystic and solid components of tumours was seen in lung primaries (p=0.239). Colorectal brain brain metastases demonstrated the best treatment response of the cystic component, significantly higher than breast metastases (p= 0.007), but not lung. Deep tumours not only had lower cystic volumes pre-GKS than superficial tumours (nonsignificantly), but also had significantly lower post-GKS cystic volumes (p=0.041). The results of the study show that factors such as primary tumour location and deep/superficial location of metastasis can be used to predict response of cystic tumours to GKS.

CP7

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Epidemiology of malignant pontine gliomas (MPG) in the paediatric population in Canada: A study of the Canadian paediatric brain tumour consortium (CPBTC)

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CP8

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Treatment of recurrent central nervous system inflammatory myofibroblastic tumor with crizotinib

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Inflammatory myofibroblastic tumors (IMT) are rare entities with a wide range of local aggressiveness, and low metastatic potential. Complete surgical excision is the main treatment for IMTs arising from the central nervous system (CNS). However, local recurrence rates are high, especially in IMT expressing ALK. Approximately 50% of IMTs express ALK, which is likely secondary to chromosome 2p23 rearrangements. Case: A 26 year-old male was initially diagnosed with a left-tentorial IMT following 3 months of headaches, mood changes and lateral vision deficits. After a partial resection of the tumor, progression of the residual disease was observed 2 months later on MRI. He underwent a gross total resection followed by adjuvant radiotherapy (60Gy in 30 fractions). The disease recurred 9 months later at the left-parietal lobe. A third operation was performed, but imaging revealed multi-focal recurrence 6 month post-operatively. As immunohistochemical studies showed strong cytoplasmic staining for ALK, the patient was given a trial of crizotinib, an ALK inhibitor. Two months later, partial response was achieved. The patient remains in partial remission after 7 months of crizotinib. Apart from diarrhea, slight renal failure and blurred vision, crizotinib was well tolerated. Conclusions: This is the first reported case of a CNS ALK-positive IMT responding to crizotinib. The response seen in our patient supports a trial with crizotinib in patients having exhausted conventional treatments for relapsing CNS IMTs. As no consistent ALK translocations are observed in IMT, exome sequencing is being done to identify the specific ALK aberration in this tumor.

CP9

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Quantitative MRI changes post-stereotactic ablative radiotherapy of the spine

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Purpose: To assess early MRI volumetric and signal intensity changes after spine stereotactic body radiotherapy (SBRT) and to correlate these changes to local control (LC). Materiel and methods: T1 and T2-weighted non-contrast MR images of 30 spinal lesions treated with SBRT were analyzed. T1 and T2-based gross tumor volumes (GTV) were contoured on pre-treatment and follow-up MRIs. A MatLab program was developed to analyze T2 signal changes using the spinal cord as reference signal intensity. Volume and T2-signal alterations on first follow-up MRI (3-6 months) were correlated with LC. Local recurrence (LR) was proven pathologically. Results: At a median follow-up of 15.2 months, LC and disease-specific survival were 74% and