

confirmed GMFb:actin complexes. Subcellular localization of GMFb only changed with cytochalasin D. In primary embryonic forebrain cultures and RA treated cells, GMFb localized to axons and growth cones. Transfection of wild-type GMFb but not a C-terminal deletion mutant promoted process outgrowth. Phosphorylated GMFb (pGMFb) expression was found in adult brain and low grade gliomas, but not in embryonic brain or glioblastoma. Conclusions: GMFb binds directly to the actin cytoskeleton and is an ADF. GMFb's phosphorylated form is highly expressed in the differentiated nervous system and low grade gliomas. Future studies will determine whether GMFb or pGMFb expression correlates with patient survival. Using the GMFb knockout mouse, the role of GMFb in glioma tumor invasion and signaling will be addressed in vivo.

## CLINICAL POSTER VIEWING

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### CP1

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#### Living with a primary malignant brain tumour: Identifying the elephant in the room

*BM Sabo<sup>1</sup>, S Walling<sup>2</sup>, K Vickers<sup>3</sup>, B Sowinski<sup>3</sup>, E Snelgrove-Clarke<sup>4</sup>*

*Halifax, Nova Scotia: <sup>1</sup>Dalhousie University School of Nursing and Capital District Health Authority (CDHA) Psychosocial Oncology Team, Cancer Care Program; <sup>2</sup>CDHA Faculty of Medicine; <sup>3</sup>CDHA; <sup>4</sup>Dalhousie School of Nursing, IWK Health Science Centre*

From the time of diagnosis of a primary malignant brain tumor (PMBT) and throughout the illness trajectory, the patient and intimate partner face many psychosocial challenges ranging from fear and uncertainty to hope and loss. While many patients diagnosed with cancer may go on to live with cancer as a chronic illness, this may not be said of individuals diagnosed with a PMBT, in particular those diagnosed with a glioma, the most common form of brain tumor. Gliomas are associated with a short disease trajectory and multiple deficits (functional, cognitive and psychiatric). What makes the PMBT experience unique from other cancers is that the intimate partner must not only deal with the diagnosis of cancer in their spouse but the accompanying personality, functional and behavioral changes wrought by the disease. It is also not uncommon for the spouse to grieve the loss of the person they once knew often before physical death occurs. This presentation will provide an overview of: 1) key stressors faced by patients and families; 2) and, strategies to more effectively support psychosocial health and wellbeing for patients and families living with and affected by PMBTs. Highlights will be drawn from an ongoing couples study exploring quality of life within the context of PBMT as well as the authors psychotherapy practice.

### CP2

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#### Primary spinal cord glioblastoma: A systematic review

*K Zhang<sup>\*1</sup>, A Bhatia<sup>\*2</sup>, E Lokl, ET Wong<sup>1</sup>*

*<sup>1</sup>Brain Tumor Center & Neuro-Oncology Unit, Beth Israel Deaconess Medical Center and <sup>2</sup>Massachusetts General Hospital, North Shore Medical Center*

Background: Primary spinal cord glioblastoma (PSCG) accounts for only 1.5% of all spinal cord tumors. The objective of this study was to gain a more in depth understanding of the clinical presentation of PSCG and factors that may affect patient survival. Methods: A systematic literature search was conducted in PubMed, covering the years from 1936 to 2013. Inclusion criteria included primary tumor originating in the spinal cord, with location specified and patient demographics. Results: From 522 citations, 49 met the inclusion criteria and most were in the form of case reports or case series. There were 64 women and 55 men (n=119). Their median age was 20 (range 0.7 to 88) years. The median overall survival (OS) was 10.0 (95%CI 0.6 to 72.0) months for those with age  $\leq$ 59 years compared to 1.9 (95%CI 1.0 to 20.0) months for those with age  $>$ 59 years (P=0.0176). The most commonly affected region was the thoracic spinal cord (n=54) compared to cervical (n=47) and lumbar (n=33). Radiotherapy prolonged patient survival, with median survival of 12.0 (95%CI 1.0-72.0) months versus 5.0 (95%CI 0.6 to 16.6) months, respectively (P<0.0001). Patients with PSCG located in the cervical spinal cord had significantly shorter median overall survival than those with PSCG at other sections of the spinal cord, 8.0 (range 1.0 to 34.0) months versus 11.5 (range 0.6 to 72.0) months, respectively (P=0.0383). Conclusions: Older age and cervical spinal cord location are unfavorable prognostic factors in PSCG. Treatment with radiation therapy is associated with prolonged patient survival.

### CP3

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#### T-Cell primary central nervous system lymphoma: A systematic literature analysis

*H Vo<sup>\*1</sup>, A Bhatia<sup>\*2</sup>, E Lokl, ET Wong<sup>1</sup>*

*<sup>1</sup>Brain Tumor Center & Neuro-Oncology Unit, Beth Israel Deaconess Medical Center and <sup>2</sup>Massachusetts General Hospital, North Shore Medical Center (\*VH and BA equal contributors)*

Background: T-cell PCNSLs comprise less than 4% of all primary central nervous system lymphomas (PCNSLs) and appear to have a worse prognosis than B cell PCNSLs. Objective of this study was to gain a more in depth understanding of clinical presentation of the disease and treatment outcomes that may affect patient survival. Methods: Systematic review of the literature was performed using PubMed database from 1983 to 2013. Inclusion criteria consisted of articles having detailed