

patient consultations and follow-up visits. Video-visits save patients and caregivers travel time, parking costs, and time away from work. They also allow an acceptable history and neurological exam, participation by many family members, easy sharing of MRI scans and laboratory data, and discussions unencumbered by face masks and shields. These advantages to video-visits remain significant even as the pandemic recedes.

INNV-40. REAL WORLD INTEGRATION OF THE NEUROLOGIC ASSESSMENT IN NEURO-ONCOLOGY (NANO) SCALE IN CLINICAL PRACTICE IN PATIENTS WITH IDH-WT GBM

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BACKGROUND: The neurologic assessment in neuro-oncology (NANO) scale was developed as a standardized metric to objectively measure neurologic function in patients with brain tumors and complement radiographic assessment in defining overall outcome. The scale has been incorporated in clinical trials. Early data is suggestive of feasibility and that NANO contributes to overall outcome assessment. However, real-world use of the NANO scale to drive clinical-decision making and the predictive value of the NANO scale to determine overall survival remains unclear in IDH-wt GBM. **METHODS:** We report on an ongoing study using the NANO scale to evaluate neurologic function in patients with IDH-wt GBM, seen at Dana-Farber Cancer Institute (DFCI). Patient demographics, tumor histology and molecular status, treatment history and progression dates are being captured. NANO score, as collected by a built-in scale in our institutional electronic medical record (EMR), functional status (Karnofsky performance status) and corticosteroid dose are collected at prespecified time points (prior to start of therapy, and during each subsequent MRI visit). Changes in the NANO score will be correlated to overall survival. Statistical analyses including descriptive data analysis and generalized linear models will be performed using R (version 3.4.3). **RESULTS:** Since June 2020, 50 patients have been enrolled in this study, including 42 (84%) with ≥2 follow up visits. Study accrual was initially impacted by the COVID-19 pandemic, but adaptation to a virtual platform for NANO allowed for improved recruitment and follow up of patients. Study results will be available for discussion at the 2021 SNO conference. **CONCLUSIONS:** Evaluation of neurologic function by NANO is feasible in a virtual framework in a prospective study in patients with GBM, aided by integration of the scale in our institutional EMR. NANO is able to objectively track neurologic function throughout disease course in IDH-wt GBM.

INNV-41. MY STORI – A SYMPTOM TRACKING AND REPORTING INSTRUMENT MOBILE APPLICATION FOR BRAIN TUMOR PATIENTS

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INTRODUCTION: Managing symptom burden is an integral part of brain tumor patient care, but tools to facilitate tracking symptoms and self-management for this population are lacking. Reporting is often limited to self-report as part of clinical follow-up care, or episodic between visits if symptoms are severe. While general-purpose and cancer-specific mobile applications that track medical symptoms are becoming more prevalent, they may not cover the entire range of symptoms experienced by patients with brain tumors or allow tracking of self-management strategies. **METHODS:** We developed an iOS operating system mobile application using Apple's UIKit, Foundation, WebKit, and Core Graphics frameworks. Core Data and iCloud were used to implement local and cloud-based data storage for personal use. Findings from our Outcomes Surveys informed selection of core symptoms to track. A multidisciplinary team of neuro-oncology scientists, providers, and communication specialists developed self-care content from evidence-based sources. **RESULTS:** We developed MY STORI, a free mobile application to capture the experiences of brain tumor patients. Patients and their family members can track daily symptoms and their impact on function and record any actions that were taken to mitigate them. Evidence-based self-care information on how to recognize, manage, and report symptoms is provided. Graphical summaries of how these symptoms evolve over time, and how they are impacted by clinical appointments, treatment, and self-care activities can be displayed and compiled into reports that can be shared with their care team, family, or health care record. **CON-**

CLUSIONS: Mobile applications have the potential to promote self-care, facilitate symptom management, and enable intuitive, frequent, and convenient reporting of clinically relevant data to the health-care team. The My STORI application is an innovation in patient care guided by evidence-based research and can be used to track symptom management, promote self-care, and enhance communication to improve clinical care and research.

INNV-42. ACTIVE VS RECEPTIVE MUSIC LISTENING THERAPY IN BREAST CANCER PATIENTS USING ARMCAN

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Secondary brain tumors and neurocognitive damage from radiation or chemotherapy are often the commonest neuro-oncological problems in cancer. Breast cancer is the most commonly diagnosed cancer in women, with approximately 2 million women diagnosed in 2018.1 The 10-year survival rate for women diagnosed with breast cancer is 78% (World Cancer Research Fund, 2018). Although the 10-year survival rate is high, women who undergo chemotherapy can experience neurocognitive impairment resulting in significant effects of their cognitive functioning.2 Chemo related dysfunction is known as “chemobrain” or “chemofog.” Chemobrain can result in difficulty with attention, daily activities of living, and memory. This impacts people's livelihoods and affects their general well-being. Current research on the topic of chemobrain in breast cancer survivors is minimal. However, this study aims to reduce the post-chemotherapy outcomes of chemobrain through the use of interactive versus receptive music. “Brain Fog” or chemobrain is the basis of significant neurological morbidities in the breast cancer population. It causes difficulty in people being able to even carry out activities of daily living. We have developed a prototype “ARMCAN—a music software application to help breast cancer patients with “brain fog.” We are conducting a pilot feasibility study to beta test this interactive application which will promote executive function recovery in breast cancer patients with chemobrain.

INNV-43. MORE THAN WHAT MEETS THE EYE: ETMR AN UNDER RECOGNISED ATYPICAL BRAINSTEM PRIMARY. A RARE BRAIN TUMOR CONSORTIUM (RBTC) STUDY

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10% of all pediatric brain tumors arise in the brainstem. Amongst these gliomas are the most common while other entities are rare and infrequently described in the literature. In this study we investigated the prevalence of non-gliomatous tumors in the brainstem. Amongst the 1323 embryonal tumours received at the RBTC, we identified 17 cases of ETMRs (17/165) that presented as brainstem primaries. Previously grouped within CNS-PNETs, ETMR, is a new WHO diagnostic entity, characterized by *C19MC* alterations. ETMR is a disease of infancy, the clinical spectrum of which is poorly understood. ETMRs arise at multiple CNS locations including cerebrum being most common (60%), followed by cerebellum (18%) and midline structures (6%); notably 10% were brainstem primaries, mimicking DIPG radiologically. All patients presented with a short history of progressive neurological symptoms, with most common signs and symptoms of cranial neuropathies, long tract signs and gait disturbance. Median age at diagnosis was 27 months (range 16-75months) with a male to female ratio of 0.9:1. Predominantly localized (M0-94%, M2-3 -6%) majority of patients underwent upfront biopsy or partial resection (15/17:88%), while complete tumor resection was achieved in 2 cases. All patients received heterogenous combination of chemotherapy with and without radiotherapy. Majority of patients progressed rapidly with median time to progression of 4 months and overall survival of < 13 months. The only long-term surviving patient had complete resection dose intensified chemotherapy and radiation (OS 202months). Primary ETMRs in the brainstem are under recognised entities and carry a dismal prognosis. Although rapidly progressive, prompt recogni-