N-MOmentum (NCT02200770) open-label period (OLP) vs azathioprine and other immunosuppressants (AZA/IST) and vs PBO. Methods: Two historical comparator groups (HCGs), AZA/IST (N=132) and PBO (N=106), derived from published NMOSD studies, were used to compare efficacy of INEB (N=208) over the OLP. Hazard ratios (HR) for INEB vs HCGs were estimated using Cox proportional hazards (PH) regression. Time to NMOSD attack was analysed using parametric and flexible survival (spline) models. Results: Time to NMOSD attack for N-MOmentum PBO compared to PBO was HR 1.15;(95% CI:0.67–1.91; *P*=0.58). The HRs for time to NMOSD attack for INEB vs AZA/IST and PBO groups were 0.29(95% CI:0.17, 0.42; *P*<0.001) and 0.15 (95% CI:0.10, 0.21; *P*<0.001). At 4 years, estimated attack-free survival was 77% (95% CI:71, 83) for INEB, 36% (95% CI:27, 46) for AZA/IST, and 12% (95% CI:7, 20) for PBO. Conclusions: INEB was associated with a statistically significant reduction in risk of an NMOSD attack and provided a long-term attack-free probability over the OLP compared to the relative short-term benefit observed with AZA/IST.

P.010

Safety and efficacy of inebilizumab in AQP4+ NMOSD participants with history of immunosuppression treatment prior to N-MOmentum study

F Paul (Berlin) R Marignier (Lyon) JW Lindsey (Houston) H Kim (Goyang) D She (Thousand Oaks) D Cimbora (Thousand Oaks) K Patterson (Thousand Oaks) B Cree (San Francisco)*

doi: 10.1017/cjn.2024.118

Background: The long-term outcomes of inebilizumab in participants from the N-MOmentum trial with a history of immunosuppressant therapy as compared to those without was evaluated. Methods: N-MOmentum (NCT02200770) was a 28-week randomized phase 2/3 trial of inebilizumab vs placebo, with an optional Open-Label Period (OLP) (>2 years). In this post hoc analysis, $AQP4^+$ participants who received inebilizumab (through the OLP) were grouped by no history of immunosuppression therapy beyond treatment of acute NMOSD attacks (naïve), or prior azathioprine (AZA) and/or mycophenolate mofetil (MMF) therapy. Results: Among participants who received inebilizumab during the study, 94 received prior AZA/MMF and 103 were immunosuppressant naïve. Annualized relapse rate (95%CI) for participants with prior AZA/MMF was 0.11 (0.07, 0.17), compared to 0.08 (0.05, 0.14) for naïve. The hospitalization rate (annualized rate [95% CI]) for prior AZA/MMF was 0.15 (0.08, 0.27), and 0.12 (0.06, 0.22) for naïve. Participants with ≥1 study drug-related-treatment-emergent-adverse-event (TEAE) was 30.9% (29/94) in prior AZA/MMF and 46.6% (48/103) of naïve. Most adverse events were infection-related for both groups; 72.3% (68/94) for prior AZA/MMF and 77.7% (80/94) for naïve. Conclusions: This post hoc analysis evaluating long-term outcomes of inebilizumab in $AQP4^+$ NMOSD participants treated with prior AZA/MMF therapy demonstrated a similar efficacy and safety profile as participants without prior immunosuppressant therapy.

P.011

Efficacy and safety of ravulizumab in adults with AQP4+ NMOSD: interim analysis from the ongoing phase 3 CHAMPION-NMOSD trial

*SJ Pittock (Rochester) M Barnett (Sydney) JL Bennett (Aurora) A Berthele (Munich) J de Sèze (Strasbourg) M Levy (Boston) I Nakashima (Sendai) C Oreja-Guevara (Madrid) J Palace (Oxford) F Paul (Berlin) C Pozzilli (Rome) Y Mashhoon (Boston) K Allen (Boston) B Parks (Boston) H Kim (Goyang) G Vorobeychik (Burnaby)**

doi: 10.1017/cjn.2024.119

Background: CHAMPION-NMOSD (NCT04201262) is an ongoing global, open-label, phase 3 study evaluating ravulizumab in AQP4+ NMOSD. Methods: Adult patients received an intravenous, weight-based loading dose of ravulizumab on day 1 and a maintenance dose on day 15 and every 8 weeks thereafter. Following a primary treatment period (PTP; up to 2.5 years), patients could enter a long-term extension (LTE). Results: 58 patients completed the PTP; 56/2 entered/completed the LTE. As of June 16, 2023, median (range) follow-up was 138.4 (11.0-183.1) weeks for ravulizumab (n=58), with 153.9 patient-years. Across the PTP and LTE, no patients had an adjudicated on-trial relapse during ravulizumab treatment. 91.4% (53/58 patients) had stable or improved Hauser Ambulation Index score. 91.4% (53/58 patients) had no clinically important worsening in Expanded Disability Status Scale score. The incidence of treatment-emergent adverse events (TEAEs) and serious adverse events was 94.8% and 25.9%, respectively. Most TEAEs were mild to moderate in severity and unrelated to ravulizumab. TEAEs leading to withdrawal from ravulizumab occurred in 1 patient. Conclusions: Ravulizumab demonstrated long-term clinical benefit in the prevention of relapses in AQP4+ NMOSD with a safety profile consistent with prior analyses.

P.012

A global, long-term, prospective, observational registry of patients with AQP4+ NMOSD treated with complement component 5 inhibitor therapies eculizumab or ravulizumab

*S Fam (Boston) L Przybyl (Boston) T Azad (Boston) JN Stankowski (Boston) K Moy (Boston) D Rotstein (Toronto)**

doi: 10.1017/cjn.2024.120

Background: The complement component 5 inhibitor therapies (C5ITs) eculizumab and ravulizumab have been approved or submitted for regulatory approval in several regions for AQP4+ NMOSD. Methods: This global, long-term, prospective, multicenter, observational registry will enroll adult patients with AQP4+ NMOSD being treated with eculizumab or ravulizumab and who have received ≥1 dose of eculizumab or ravulizumab within 4 or 12 weeks prior to enrollment, respectively. Inclusion criteria include available historical data on C5IT dosing since initiation and the number and types of relapses from 1 year prior to C5IT initiation

through enrollment. The primary outcome is annualized relapse rate. Safety outcomes will include serious adverse events, meningococcal infections, and pregnancy, breastfeeding, and neonatal outcomes. Data will be collected prospectively for up to 5 years. Approximately 130 patients will be enrolled, with a maximum of around 200 patients in up to 10 countries globally. Results: N/A Conclusions: This registry will collect data to characterize the long-term effectiveness and safety of the C5ITs eculizumab and ravulizumab in patients with AQP4+ NMOSD to provide evidence on the real-world impact of C5ITs in this patient population.

P.013

Accuracy of clinical assessments with virtual care in outpatient neurological setting

J Pellegrino (Woodbridge) L Lee (Toronto)*

doi: 10.1017/cjn.2024.121

Background: Virtual neurological assessments were increasingly used and an important viable option during the COVID-19 pandemic. However, the accuracy of such assessments is unknown. Methods: Clinical records were reviewed in a predominant multiple sclerosis outpatient clinic at an academic teaching hospital from March 23rd 2020 to March 23rd 2021 during the COVID-19 pandemic. Patients assessed during this period were analyzed with an initial virtual assessment compared to subsequent in person evaluations. Results: 1036 patients were included. 27.8% (n=288) of consultations were video and 72.2% (n=748) telephone. A total of 13.8% (n=143) of virtual consultations revealed clinical disparities, specifically 13.5% (n=39) video and 13.9% (n=104) telephone consultations. Of all the 1036 cases, 2.32% (n=24) patients stated they were stable but significant changes were seen on the exam, changing the clinical impression. 11.5% (n=119) stated they were deteriorating virtually but not confirmed when examined in person, with an alternative explanation found. Conclusions: Virtual assessments were accurate in over 85% of the outpatient neurological cases during the pandemic. However, it should be noted that the in person neurological exam led to a change in clinical opinion in 13.8% of assessments. 2.32% patients described clinical stability, but different clinical management plans resulted when significant exam findings were identified.

P.014

Intravenous immunoglobulin use for central nervous system disorders in British Columbia: implementation of a provincial screening program

K Beadon (Vancouver) C Uy (Vancouver) H Cross (Vancouver) C Hrazdil (Vancouver) J Percy (Vancouver) N Jiwa (Vancouver) D Schrader (Vancouver) A Beauchamp (Vancouver) K Rosinski (Vancouver) R Carruthers (Vancouver) A Traboulsee (Vancouver) A Shih (Vancouver) D Morrison (Vancouver) KM Chapman (Vancouver)*

doi: 10.1017/cjn.2024.122

Background: Intravenous Immunoglobulin (IVIg) use for Central Nervous System (CNS) conditions has increased over the last decade. In many CNS disorders, robust evidence for IVIg efficacy is still lacking. Building on the success of the British Columbia (BC) Neuromuscular IVIg utilization initiative, Guidelines for IVIg use in CNS conditions were developed. A provincial screening program was launched in 2023. Methods: For CNS IVIg, requests, diagnosis, dosing, consultation letters and treatment questionnaires were reviewed. Patient management was compared to provincial guidelines. A letter was sent to the ordering physician with the results of the review and treatment recommendations when management differed significantly from guidelines. Review of the first year's cases was conducted. Results: Over the first 11 months of the program, 79 IVIg renewal requests were reviewed. The most common diagnoses were antibody mediated autoimmune encephalitis, severe drug resistant non-surgical epilepsy and Susac's syndrome. Recommendations included dose reduction, discontinuation of IVIg, or initiation of alternative therapies for many of the requests. Conclusions: IVIg may be effective in the management of some CNS inflammatory conditions. A physician-led utilization program in BC with targeted education to ordering physicians promotes best practice. Review of year one data will inform a quality improvement cycle to optimize the guidelines.

NEURO-ONCOLOGY

P.015

Spontaneous regression of acoustic schwannomas: a predictive model

CD Hounjet (Vancouver) J Kam (Vancouver) B Westerberg (Vancouver) R Akagami (Vancouver)*

doi: 10.1017/cjn.2024.123

Background: Vestibular schwannomas are the most common tumour of the CPA with an annual incidence of 17.4/1 million. Approximately 5-10% of these tumours demonstrate spontaneous regression without intervention while under observation. Previous research studies have assessed patient factors and imaging characteristics through chart review to attempt to identify predictive factors of spontaneous regression. There have not been any studies where patient questionnaires are used to assess patient lifestyle factors or characteristics which may predict spontaneous regression. Methods: Using a clinical database of acoustic schwannomas treated by one team at our institution, we have identified approximately 40 patients, of a database of 900 patients, who have demonstrated significant spontaneous regression (>5mm in size reduction in one dimension) or complete resolution of their acoustic schwannoma. Clinical, radiological, and lifestyle factors are reviewed though clinical records and patient questionnaire. Regression analysis is performed. Results: Using patients who have tumors with significant spontaneous regression, we attempt to create a model that predicts regression of these tumours. Conclusions: In conclusion, this is the first study to consider patient lifestyle factors obtained through patient survey in addition to clinical and radiographic factors to attempt to create a predictive model of spontaneous regression of acoustic schwannoma.