during a migraine attack. **Methods:** RELIEF (NCT04152083; parallel-group, double-blind, placebo-controlled) randomized adults with migraine (4-15d/mo in 3mo prior to screening) to eptinezumab 100mg or placebo, administered IV within 1-6h of qualifying migraine onset. Co-primary efficacy endpoints were time to headache pain freedom and time to absence of most bothersome symptom (MBS). **Results:** Eptinezumab (n=238) compared with placebo (n=242) achieved significantly faster headache pain freedom (median 4h vs 9h; hazard ratio=1.54, P=0.0006) and absence of MBS (2h vs 3h; 1.75, P<0.0001). At 2h, 23.5% and 12.0% (P=0.0009) of eptinezumab-treated and placebo patients, respectively, reported headache pain freedom, and 55.5% and 35.8% (P<0.0001) reported absence of MBS. Significantly fewer eptinezumab-treated patients used rescue medication within 24h (31.5% vs 59.9%; P<0.0001). Treatment-emergent adverse events occurred in 10.9% eptinezumab-treated and 10.3% placebo patients; no serious adverse events occurred. **Conclusions:** Infusion of the preventive migraine treatment, eptinezumab, during a migraine resulted in rapid and sustained freedom from headache pain and MBS vs placebo, starting 2h post-infusion, decreasing need for acute medication within 24h post-infusion. No notable safety findings were identified.

P.028

Surgical Treatment for Idiopathic Intracranial Hypertension – Strategy for the Better Management

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Background: Idiopathic intracranial hypertension (IIH) is a condition of increased intracranial pressure in the absence of a space-occupying lesion. The goal of this study is to investigate which factors may influence outcomes in order to improve surgical strategy. We hypothesized diabetes, hypertension, smoking, and obesity influence patients prognosis. **Methods:** This retrospective chart review included patients diagnosed with IIH who underwent surgical intervention. All patients receiving surgery between 2008 and 2018 were included, and divided into 2 cohorts. Cohort 1 representing favorable course and cohort 2 representing unfavorable course. Favorable course was defined as requiring single surgery for management. Unfavorable course required multiple surgical revisions. **Results:** Overall, 35/48 (73%) comprised the favorable group. Thirteen patients (27%) comprised the unfavorable group. Of the unfavorable group, 54% had LP shunts, with the remaining receiving VP shunts. There was no association between type of shunt and outcome. Common issues the unfavorable group encountered were persisting symptoms, infections, obstruction of shunt and replacement of shunt. Smoking and frequent follow-up were associated with unfavorable course. Gender, BMI, age, comorbidities and shunt type were not associated with outcome. **Conclusions:** We found smoking and patient follow-up had a significant association with unfavorable outcome. Other factors had no association with patient outcome.

P.029

Oral Daily Atogepant for the Preventive Treatment of Migraine Increases Responder Rates for Reduction in Mean Monthly Migraine Days

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Background: The goal of the study was to assess responder rates at various times after initiating atogepant treatment. **Methods:** A 12-week phase 3 trial evaluated the safety, efficacy, and tolerability of atogepant for preventive treatment of migraine (ADVANCE; NCT03777059) in adult participants with a ≥1-year history of migraine, experiencing 4-14 migraine days/month. Participants were randomized to atogepant 10, 30, or 60mg, or placebo once daily. These analyses evaluated ≥25%, ≥50%, ≥75%, and 100% reductions in mean monthly migraine days (MMDs) across 12 weeks and each 4-week interval. Adverse events (AEs) in ≥5% of participants are reported. **Results:** The efficacy analysis population included 873 participants: placebo: n=214; atogepant: 10mg: n=214; 30mg: n=223; 60mg: n=222. Atogepant-treated participants were more likely to experience a ≥50% reduction in the 3-month mean MMDs (56-61% vs 29% with placebo; P<0.0001). The proportions of participants experiencing ≥25%, ≥50%, ≥75%, and 100% reductions in mean MMDs significantly increased during each 4-week interval (≥50% reduction: 48-71% vs 27-47% with placebo). The most common AEs for atogepant were constipation (6.9-7.7%) and nausea (4.4-6.1%). **Conclusions:** Once-daily atogepant 10, 30, and 60mg significantly increased responder rates at all thresholds with approximately 60% achieving a ≥50% reduction in mean MMDs at 12 weeks.

P.030

Long-term Safety and Tolerability of Atogepant 60 mg Following Once-Daily Dosing Over 1 Year for the Preventive Treatment of Migraine

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Background: The goal of the study was to assess the safety and tolerability of atogepant, an oral, calcitonin gene-related peptide receptor antagonist in development for migraine preventive treatment, once daily over 1 year. **Methods:** Multicenter, open-label trial (NCT03700320). Adults with migraine were randomized 5:2 to atogepant or oral standard-of-care (SOC) migraine prevention. **Results:** 744 randomized participants (n=546 atogepant), 739 safety population participants (n=543 atogepant). Adverse events (AEs) were reported by 67.0% of atogepant participants; 18.0% had AEs

considered related to atogepant. AEs reported by ≥5% of atogepant-treated participants were upper respiratory tract infection (10.3%), constipation (7.2%), nausea (6.3%), and urinary tract infection (5.2%). 4.4% of atogepant participants reported serious AEs that included various, common medical conditions; no event occurred in ≥1 participant and none were atogepant-related. Two deaths were reported in atogepant-treated participants (homicide victim; toxic shock syndrome); both were considered not treatment-related. 5.7% of atogepant participants discontinued due to AEs. Alanine aminotransferase/aspartate aminotransferase levels ≥3X upper limit of normal were reported for 2.4% of atogepant participants (n=13/531) and 3.2% of SOC participants (n=6/190). No cases of potential Hy's Law were reported. **Conclusions:** Once-daily use of atogepant for preventive treatment of migraine over 1 year was safe and well-tolerated with no safety concerns identified.

P.031

A Rare Canadian Case of Cervical Pyomyosistis Presenting as Occipital Neuralgia

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Background: Pyomyositis is an infectious disease usually encountered in tropical regions. It typically occurs in immunocompromised hosts and most commonly affects lower limb muscles. Our patient was a healthy Canadian with an atypical presentation of cervical pyomyositis. **Methods:** We report a case of a healthy 22-year old woman presenting to the emergency department with unprovoked severe bilateral cervico-occipital pain and nuchal rigidity. She remained afebrile. Review of the literature was conducted to search for similar presentations. **Results:** A Computed Tomography scan of the head and neck demonstrated the presence of a ring enhancing lesion in the semispinalis capitis muscle extending from the occiput to the C4 level. The abscess was surgically drained and cultures grew staphylococcus aureus. The patient rapidly improved on intravenous antibiotics. Literature review revealed this to be the first Canadian case of cervical pyomyositis. **Conclusions:** Cervical pyomyositis can be complicated by local destruction of the vertebrae, septic shock, endocarditis, septic emboli, brain abscess or rhabdomyolysis. Early diagnosis and source control is necessary to reduce the risk of morbidity. Therefore, it is important to consider this rare disease in the differential diagnosis of cervicalgia even in healthy immunocompetent patients.

P.032

Long-term safety and tolerability of eptinezumab in patients with chronic migraine: A 2-year, open-label, phase 3 trial

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Background: Eptinezumab is approved in the US for the preventive treatment of migraine and was well tolerated in double-blind, placebo-controlled studies in patients with episodic and chronic migraine (CM). The PREVAIL study evaluated the long-term safety, immunogenicity, and impact on patient-reported outcomes of repeat doses of eptinezumab in patients with CM. **Methods:** PREVAIL was an open-label, phase 3 trial comprising two 48-week treatment phases. Adults with CM received eptinezumab 300 mg by 30-minute IV every 12 weeks for ≤8 doses, with patients followed up to week 104. **Results:** 128 adults (mean age, 41.5y) with CM were treated. Over 2 years, the most frequently reported treatment-emergent adverse events were nasopharyngitis (14.1%), upper respiratory tract infection (7.8%), sinusitis (7.8%), influenza (6.3%), bronchitis (5.5%), and migraine (5.5%). Study-drug discontinuation due to adverse events was 6.3%. Anti-eptinezumab antibody incidence peaked at week 24 and declined despite continued dosing, to nondetectable levels at week 104. Patient-reported outcomes were improved at first assessment (week 4) and generally sustained through week 104. **Conclusions:** In adults with CM, eptinezumab 300 mg demonstrated a favorable safety profile, limited long-term immunogenicity, early and sustained reductions in migraine-related burden, and improvements in health-related quality of life over 2 years.

P.033

Eptinezumab reduced acute medication use in patients with chronic migraine and medication-overuse headache: subgroup analysis of Promise-2

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Background: Eptinezumab is a preventive migraine treatment approved in the US. We evaluated the impact of eptinezumab on acute headache medication (AHM) use in patients diagnosed with chronic migraine (CM) and medication-overuse headache (MOH) in PROMISE-2. **Methods:** PROMISE-2 randomized patients with CM to eptinezumab 100mg, 300mg, or placebo for 2 intravenous doses administered every 12 weeks. Trained investigators diagnosed MOH at screening using 3-month medication history and ICHD-3b criteria. Endpoints included days/month of any AHM use (days of ≥1 medication class), total AHM use (summed days for each medication class), and triptan use over Weeks 1-12 and 13-24. AHM classes included triptan, ergot, opioid, simple analgesic, and combination analgesic. **Results:** Of 1072 PROMISE-2 patients, 431 (40.2%) were diagnosed with MOH (100mg, n=139; 300mg, n=147; placebo, n=145). During the 28-day baseline period, mean days of any AHM was ~16.4, total AHM was ~20.4, and triptan was ~8.9 across treatment arms. Over Weeks 1-12, mean days/month of any AHM was 8.8 (100mg), 9.9 (300mg), and 11.8 (placebo); total AHM was 10.8, 12.2, and 14.8; triptan was 4.3, 4.4, and 6.4. Similar or lower rates were observed over Weeks 13-24. **Conclusions:** In patients diagnosed with both CM and MOH, eptinezumab treatment reduced AHM use.