

ravulizumab in the OLE (n=83) showed rapid improvement (least squares mean, 95%CI) in Myasthenia Gravis-Activity of Daily Living (MG-ADL) and Quantitative Myasthenia Gravis (QMG) total scores, which were maintained through 34 weeks (MG-ADL: -1.7, -2.7 to -0.8; QMG: -3.1, -4.2 to -1.9). Improvements achieved by ravulizumab-treated patients (n=78) in the RCP were sustained through 60 weeks (MG-ADL: -4.0, -4.8 to -3.1; QMG: -4.1, -5.4 to -2.9). Ravulizumab was well tolerated; no meningococcal infections were reported. Four deaths unrelated to study treatment occurred. Conclusions: Ravulizumab demonstrated sustained improvements in MG symptoms and was well tolerated for up to 60 weeks in adults with AChR Ab+ gMG.

P.041

Guillain Barre syndrome could be a rare presenting finding of nodal and paranodal autoantibodies in immune-mediated neuropathies (IMN): A clinical utility of Cell based Assay

P Kumar (Vancouver) A Mousavi (Vancouver) E Kihara (Vancouver) T Aziz (Vancouver) H Frykman (Vancouver)*

doi: 10.1017/cjn.2023.145

Background: Guillain Barre Syndrome (GBS) and chronic inflammatory demyelinating polyradiculoneuropathy (CIDP) are the two most common forms of treatable IMNs. Antibodies targeting proteins at paranodal cell-adhesion molecules such as contactin-1 (CNTN1), neurofascin-155 (NF155), contactin-associated protein 1 (CASPR1), and nodal neurofascins-NF140 and NF186, have been discovered in CIDP patients. Methods: Between August 2021 and January 2023, at BC Neuroimmunology laboratory, Vancouver we screened a total of 214 sera of patients for detecting nodal and paranodal antibodies with a fixed CBA. These patient sera were assayed for the presence of NF140, NF155, NF186, CNTN1, plus Caspr1 antibodies. The final diagnosis and response to therapy of positive cases were evaluated by a questionnaire requested from their physicians. Results: 10 cases were positive for nodal/paranodal antibodies by CBA (mean age 52.4 ± 15.4 years). Two cases were NF155 Ab positive CIDP with good response to conventional therapies. Three cases were double positive for NF140 and 186 Abs, three were double positive for CNTN1 and CASPR1 Abs. Interestingly, two cases were triple positive with GBS presentation. Conclusions: We identified a subgroup of nine patients with CIDP nodal and paranodal antibodies. Among them, two cases had triple positive antibodies with GBS presentation and poor response to plasma exchange and IVIg.

P.042

Could Live Cell-Based Assay increase the acetylcholine receptor autoantibodies seropositivity in patients with clinical suspicion of myasthenia gravis?

P Kumar (Vancouver) N Kaur (Vancouver) A Mousavi (Vancouver) E Kihara (Vancouver) T Aziz (Vancouver) A Cruz (Vancouver) J Oger (Vancouver) H Frykman (Vancouver)*

doi: 10.1017/cjn.2023.146

Background: AChR antibodies (Abs) in Myasthenia Gravis (MG) are detected in approximately 50% of ocular and 85% of

generalized MG by the current gold standard radioimmunoprecipitation assay (RIPA). Recently, fixed and lived Cell-Based assays (L-CBA) are developed. We clinically validated our in-house L-CBA in detecting AChR Ab in clinically suspected MG patients. Methods: Between January 2020 and April 2022, we assayed 10167 sera for AChR Ab by RIPA. We also assayed 4349 of AChR Ab seronegative sera of the above suspected MG samples for anti-MuSK Ab by RIPA. Then 1228 sera of double seronegative and/or borderline AChR Ab was assessed by L-CBA for AChR Ab. For clinical validation, we obtained clinical information on 36 seropositive cases for AChR Ab by L-CBA. Results: We found additional eighty-four cases seropositive for AChR Ab by L-CBA. The clinical information was obtained for 36 cases and based on their final diagnosis, twenty had generalized MG, thirteen had ocular MG, 2 not yet diagnosed and 1 case was of not-MG. Conclusions: The L-CBA has demonstrated improved sensitivity and higher diagnostics performance than RIPA. The L-CBA allowed improved clinical diagnosis and increased seropositivity (by 7%) in clinically suspected MG patients who were earlier seronegative/borderline for AChR Ab by RIPA.

P.043

Long-term safety, tolerability, and efficacy of efgartigimod in patients with Generalized Myasthenia Gravis: concluding analyses from ADAPT+

A Genge (Montreal) M Pasnoor (Kansas City) V Bril (Toronto) C Karam (Philadelphia) S Peric (Belgrade) JL De Bleecker (Ghent) H Murai (Tokyo) A Meisel (Berlin) S Beydoun (Los Angeles) T Vu (Tampa) P Ulrichts (Ghent) B Van Hoorick (Ghent) C T'joen (Ghent) K Utsugisawa (Hanamaki) J Verschuuren (Leiden) R Mantegazza (Milan) JF Howard Jr (Chapel Hill) ADAPT Investigator Study Group ()*

doi: 10.1017/cjn.2023.147

Background: Efgartigimod is a human IgG1 antibody Fc-fragment that reduces total and pathogenic IgG autoantibody levels through FcRn blockade. ADAPT was a phase 3 trial evaluating efgartigimod in patients with generalized myasthenia gravis (gMG). Patients who completed ADAPT could enroll in ADAPT+ (open-label extension). Methods: Efgartigimod (10 mg/kg intravenous) was administered in cycles of 4 weekly infusions, with subsequent cycles initiated based on clinical evaluation. ADAPT+ evaluated long-term safety and tolerability of efgartigimod in patients with gMG. Efficacy was assessed utilizing MG-ADL and QMG scores. Results: Of 167 patients from ADAPT, 151 (90%) entered ADAPT+, and 145 received ≥1 cycle as of January 2022. Over 217.55 patient-years of follow-up (mean duration per patient, 548 days), incidence of adverse events did not increase with subsequent cycles. AChR-Ab+ patients with ≥1 year of follow-up across ADAPT/ADAPT+ (n=95) received a median (range) 5.0 (0.4–7.6) cycles per year. All AChR-Ab+ patients (n=111) demonstrated consistent improvements (mean change [SE], week 3 of cycle 1) in MG-ADL (-5.0 [0.33]; up to 14 cycles) and QMG (-4.7 [0.41]; up to 7 cycles) scores during each cycle. Conclusions: These ADAPT+ analyses suggest long-term efgartigimod treatment is well tolerated and efficacious. Additional final data cut analyses will be presented at CNSF 2023.