Myasthenia gravis was rare in this commercial population but high-cost eculizumab claimants were identified. To inform health insurers, we developed methods to forecast and identify high-cost eculizumab claimants and their populations at the commercial payer level.

**Background**

Myasthenia gravis (MG) is a rare disorder of autoimmunity mediated destruction of acetylcholine receptors (AChRs) at the neuromuscular junction that leads to chronic, severe muscular weakness.

**Methods**

Forecasted eculizumab utilization and expenditures were estimated among commercial members aged 18 or older with at least one medical claim with an MG diagnosis code. The 2016 Medicare and Medicaid Reference files were used.

**Forecasted utilization**

- **2016**: 511 members (32%) had at least one eculizumab claim in 2016.
- **2017**: 511 members (32%) had at least one eculizumab claim in 2017.

**Forecasted expenditures**

- **2016**: $1.33 million.
- **2017**: $1.33 million.

**Results**

**Forecasted utilization and expenditures**

- **2016**: 511 members (32%) had at least one eculizumab claim in 2016, with average total utilization of $2,104 per member.
- **2017**: 511 members (32%) had at least one eculizumab claim in 2017, with average total utilization of $2,104 per member.

**Forecasted expenditures**

- **2016**: $1.33 million.
- **2017**: $1.33 million.

**Discussion**

- **Eculizumab** cost in the first year.
- **For plans in 2018 and beyond due to the $704,000 annual Soliris cost in the first year.
- **Without clinical trials in place to manage eculizumab use according to the clinical trial, the PNPW impact could exceed $0.94 per member.
- **Clinical programs such as utilization management combined with other strategies in-ensure appropriate use and bring the cost to $0.94 per member.

**Conclusion**

- **Eculizumab was not approved for MG until October 2017.**
- **Eculizumab use will likely find a higher percentage of members using eculizumab for MG.
- **May have been excluded as other medical diagnoses because we limited the time to query medical claims for MG to one year period matching our eculizumab utilization.

References

1. *Local Institutional Review Board (IRB) approval was obtained for this research*.
2. *No external funding provided for this research*.

C. L. Stomer, S. E. Koval/Walker, S. G. Gunderson, P. P. Gleason

*Prime Therapeutics LLC, Englewood, CO, USA, University of Minnesota, College of Pharmacy, Minneapolis, MN, USA, United States*

**Eculizumab for Myasthenia Gravis: A Comprehensive Integrated Medical and Pharmacy Claims Analysis**

*© Prime Therapeutics LLC. All rights reserved. All brand names are the property of their respective owner.*

**Catherine Starner, 800.858.0273, ext. 5073**

*AMCP, April 2018, Boston, MA, USA*