

Analyzing the Efficacy and Safety of Efgartigimod Alfa in Home Infusion Patients

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Background

Efgartigimod alfa (Vyvgart®) is a novel therapy approved for patients with generalized myasthenia gravis (gMG) and a positive test for the acetylcholine receptor (AChR) antibody.¹ Myasthenia gravis (MG) is an autoimmune disorder affecting the neuromuscular junction, often beginning with ocular muscle dysfunction and weakness.² When symptoms affect skeletal muscles other than the eye, the diagnosis becomes generalized myasthenia gravis (gMG). About 85% of patients with gMG have developed IgG autoantibodies, most directed at the AChR.³ Efgartigimod alfa, dosed 10 mg/kg once weekly for 4 weeks⁴, aims to lessen the effect of these autoantibodies.

Existing treatments for MG such as pyridostigmine, steroids, and non-steroidal immunosuppressants, have well documented adverse effects. Efgartigimod alfa, with its specific mechanism of action and efficacy data, could become a cornerstone of MG treatment.

Purpose

This study aims to collect and analyze data on efgartigimod-alfa usage to evaluate its safety and efficacy in home infusion patients.

Methods

This retrospective study included patients who were initiated on efgartigimod alfa between January 2022 through October 2022. Data collection includes dosing information, efficacy, and tolerability. Patient symptoms, as reflected in the Myasthenia Gravis Activities of Daily Living (MG-ADL) and a fatigue scoring scale, will be assessed. MG-ADL score can range from zero (normal) to 24 (most severe). Fatigue score can range from 1 (normal) to 20 (very fatigued.)

Research involves the collection of existing data only. These sources are not publicly available, and the information will be recorded by the investigator to ensure that the subjects cannot be identified. The project is IRB exempt.

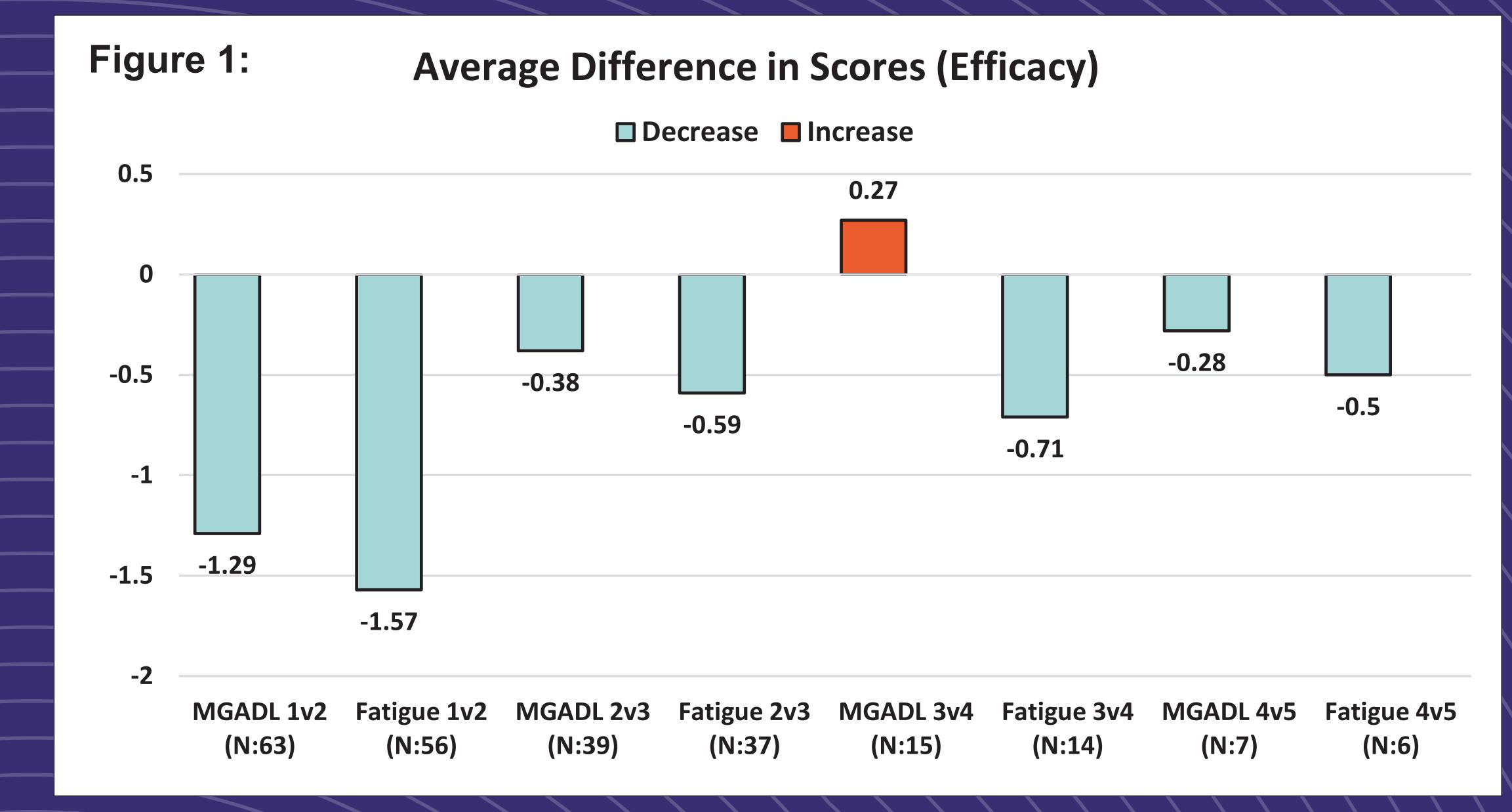
Results

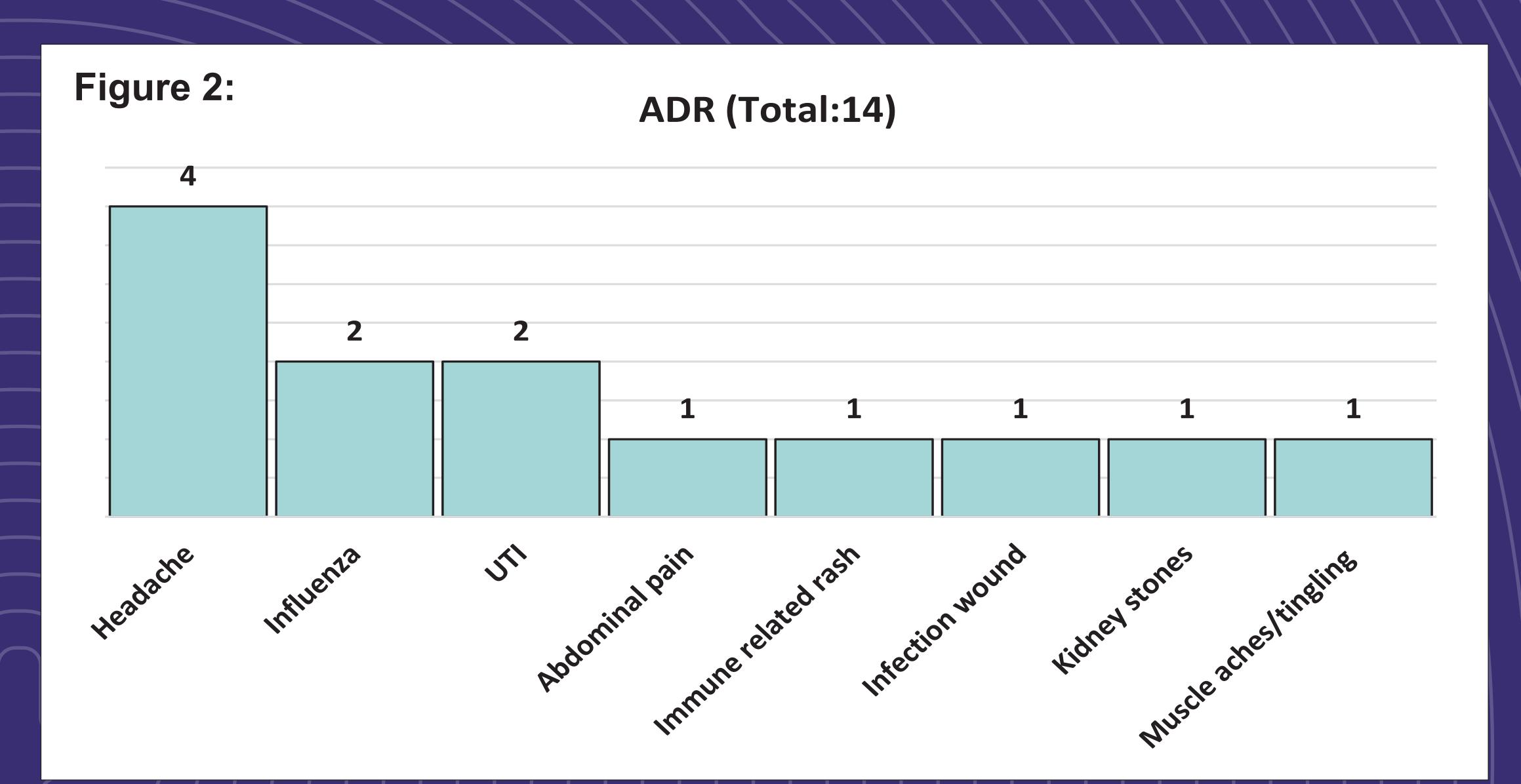
Seventy-seven total patients receiving an average of 2.5 cycles of efgartigimod alfa were included. Mean differences and the range between cycles were analyzed and depicted through Figure 1.

Between cycle 1 and 2, there was a 1.29 (-8 to 10) average reduction in MG-ADL score and a 1.57 (-10 to 9) average reduction in fatigue score. This progressed to an average reduction of 0.38 (-11 to 6) and 0.59 (-12 to 6) for each respective score between cycles 2 and 3, a 0.57 (-2 to 7) average increase in MG-ADL score and 0.71 (-5 to 6) reduction in fatigue score between cycles 3 and 4, and a 0.28 (-5 to 3) and 0.5 (-2 to 0) reduction for each respective score between cycles 4 and 5. Ten patients (13.0%) were hospitalized due to an MG exacerbation.

Seen in Figure 2, twelve patients (12/77 15.5%) reported a total of 14 different adverse events with headache as the most common (4/14 28.6 %).

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Discussion

Efgartigimod alfa had a positive impact on patients' MG symptoms evidenced by the decrease in MGADL and fatigue scores. Data is limited by the timing of symptom scoring relative to dosing schedule, and reporting of data by patients and caregivers. Future research should be conducted to compare this medication to first line treatments for MG.

Conclusion

Efgartigimod alfa showed a general improvement in both MGADL and fatigue scores among patients. The medication was well tolerated, as only 12 patients noted a side effect in which the most common was headache and none were serious or life threatening.

References

¹ Vyvgart (efgartigimod-alfa) package insert. Boston, MA: Argenx BV; 2021

² Myasthenia Gravis. In: DynaMed [online database]. EBSCO Information Services (accessed 2022 Sep. 19)

³ Howard JF Jr, Bril V, Vu T, Karam C, Peric S, Margania T, Murai H, Bilinska M, Shakarishvili R, Smilowski M, Guglietta A, Ulrichts P, Vangeneugden T, Utsugisawa K, Verschuuren J, Mantegazza R. Safety, efficacy, and tolerability of efgartigimod in patients with generalised myasthenia gravis (ADAPT): a multicentre, randomised, placebo-controlled, phase 3 trial. Lancet Neurol. 2021 Jul;20(7):526-536

⁴ Efgartigimod-alfa [monograph]. In: Lexicomp Online [online database]. Hudson, OH: Lexi-Comp (accessed 2022 Sep 16).

Disclosures

Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation: Mark Knightly; Maria Giannakos; Kiersten Clark: Nothing to disclose.