EFGARTIGIMOD TREATMENT IN A IN A IMMUNE CHECKPOINT INHIBITOR-ASSOCIATED MYASTHENIA GRAVIS: A CASE REPORT

E Paradela, M Rodríguez, A Romero, MD Alvarado

Hospital Pharmacy. Juan Ramon Jimenez University Hospital. Ronda Norte Avenue, n/n. 21005 Huelva, Spain.

WHAT WAS DONE?



This case report describes the use of **efgartigimod**, a high economic impact drug indicated in adult patients with generalized myasthenia gravis (GMG) who are **ab-positive against AChR**, not controlled with pyridostigmine, corticosteroids and at least two conventional immunosuppressive therapies.



WHY WAS IT DONE?

To treat a 72-year-old patient admitted to the ICU who developed GMG as an adverse effect to his first cycle of **pembrolizumab**, an immune checkpoint inhibitor (ICI) drug.

HOW WAS IT DONE?

In June 2024, the patient was diagnosed with a **melanoma recurrence** and started an adjuvant treatment with **pembrolizumab**. 18 days after his first cycle, the patient went to the emergency room with characteristic **GMG** symptoms such as asthenia, myalgia, proximal limb weakness and ptosis in both eyes.

The treatment consisted of **methylprednisolone** (2 mg/kg), **tacrolimus**, high-dose **pyridostigmine** (90 mg/4) h), immunoglobulins (2 g/kg) and 7 plasmapheresis sessions. Tacrolimus was included as immunosuppressive therapy and cyclosporine was intended to be started, but both were discontinued due to the risk of worsening the **bicytopenia**. It was then decided to perform an **antibody study** in order to guide the treatment. The **positive** result of the **anti-AChR antibodies** and the lack of control of the pathology after conventional treatment, suggested starting a treatment with efgartigimod 800 mg/week for 4 weeks.

WHAT HAS BEEN ACHIEVED?

After four efgartigimod cycles, there was a progressive **improvement** in neurological weakness, with persistent oculomotor impairment and palpebral ptosis. Almost two months after the efgartigimod treatment, an excellent progressive evolution has been observed and discharge is expected in one week. Nowadays, the patient continues with high doses of pyridostigmine, prednisone in a descending regimen and follow-up by dysphagia and speech therapy units.

WHAT IS NEXT?

MG is an **immune-related adverse effect** caused by ICI, such as pembrolizumab, whose **prevalence** is growing with the increasing use of these drugs. In cases of persistent MG, efgartigimod is considered an effective **option** as an add-on treatment that provides **symptom improvement** in clinical practice.





