

5.85.11

Section:	Prescription Drugs	Effective Date:	July 1, 2022
Subsection:	Hematological Agents	Original Policy Date:	September 8, 2011
Subject:	Soliris	Page:	1 of 8

Last Review Date: June 16, 2022

Soliris

Description

Soliris (eculizumab)

Background

Soliris (eculizumab) is a complement inhibitor indicated for the treatment of patients with paroxysmal nocturnal hemoglobinuria (PNH), atypical hemolytic uremic syndrome (aHUS), generalized myasthenia gravis (gMG), and neuromyelitis optica spectrum disorder (NMOSD). Soliris is a humanized monoclonal IgG antibody that binds to complement protein C5, preventing cleavage into C5a and C5b. Blocking the formation of C5b inhibits the subsequent formation of terminal complex C5b-9 or MAC. Terminal complement-mediated intravascular hemolysis is a key clinical feature of paroxysmal nocturnal hemoglobinuria (PNH), blocking the formation of membrane attack complex (MAC) results in stabilization of hemoglobin and a reduction in the need for RBC transfusions. Impairment of complement activity regulation leads to uncontrolled complement activation in atypical hemolytic uremic syndrome (aHUS) (1-2).

Regulatory Status

FDA- approved indications: Soliris is a complement inhibitor indicated for: (1)

1. The treatment of patients with paroxysmal nocturnal hemoglobinuria (PNH) to reduce hemolysis.
2. The treatment of patients with atypical hemolytic uremic syndrome (aHUS) to inhibit complement-mediated thrombotic microangiopathy.
 - a. Limitation of Use: Soliris is not indicated for the treatment of patients with Shiga toxin E. coli related hemolytic uremic syndrome (STEC-HUS).

Section:	Prescription Drugs	Effective Date:	July 1, 2022
Subsection:	Hematological Agents	Original Policy Date:	September 8, 2011
Subject:	Soliris	Page:	2 of 8

3. The treatment of generalized myasthenia gravis (gMG) in adult patients who are anti-acetylcholine receptor (AChR) antibody positive.
4. The treatment of neuromyelitis optica spectrum disorder (NMOSD) in adult patients who are anti-aquaporin-4 (AQP4) antibody positive.

The International Consensus Guidance for Management of Myasthenia Gravis recommends the use of chronic IVIG and immunosuppressants (3).

Soliris includes a boxed warning citing the risk of life-threatening and fatal meningococcal infections. Additionally, all patients must be vaccinated with a meningococcal vaccine at least 2 weeks prior to receiving their first dose (1).

Soliris is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS). Under the Soliris REMS, prescribers must enroll in the program (1).

In addition, Soliris has warnings regarding infusion-related reactions and using caution when administering Soliris to patients with any other systemic infection (1).

The safety and effectiveness of Soliris for the treatment of PNH, gMG, and NMOSD in pediatric patients less than 18 years of age have not been established. The safety and effectiveness of Soliris for the treatment of aHUS have been established in pediatric patients (1).

Related policies

Empaveli, Enspryng, Ultomiris, Uplizna

Policy

This policy statement applies to clinical review performed for pre-service (Prior Approval, Precertification, Advanced Benefit Determination, etc.) and/or post-service claims.

Soliris may be considered **medically necessary** for the treatment of paroxysmal nocturnal hemoglobinuria (PNH), atypical hemolytic uremic syndrome (aHUS), generalized myasthenia gravis (gMG), or neuromyelitis optica spectrum disorder (NMOSD); and if the conditions indicated below are met.

Soliris may be considered **investigational** for all other indications.

Prior-Approval Requirements

Section:	Prescription Drugs	Effective Date:	July 1, 2022
Subsection:	Hematological Agents	Original Policy Date:	September 8, 2011
Subject:	Soliris	Page:	3 of 8

Diagnoses

The patient must have **ONE** of the following:

1. Paroxysmal nocturnal hemoglobinuria (PNH)
 - a. 18 years of age or older
 - b. Documented baseline value for serum lactate dehydrogenase (LDH)
 - c. **NO** dual therapy with another Prior Authorization (PA) medication for PNH (see Appendix 1)
2. Atypical hemolytic uremic syndrome (aHUS)
 - a. Documented baseline value for serum lactate dehydrogenase (LDH)
 - b. Patient does **NOT** have Shiga toxin E. coli related hemolytic uremic syndrome (STEC-HUS)
 - c. **NO** dual therapy with another Prior Authorization (PA) medication for aHUS (see Appendix 2)
3. Generalized myasthenia gravis (gMG)
 - a. 18 years of age or older
 - b. Positive serologic test for anti-AChR antibodies
 - c. Myasthenia Gravis Foundation of America (MGFA) Clinical Classification Class II to IV
 - d. Documented baseline MG-Activities of Daily Living (MG-ADL) total score ≥ 6 (http://c.peerview.com/inReview/programs/150204324/downloads/PVI_practiceaids_RMU.pdf)
 - e. Patient has had an inadequate treatment response, intolerance, or contraindication to at least **ONE** immunosuppressive therapy, such as:
 - i. azathioprine
 - ii. cyclosporine
 - iii. mycophenolate mofetil
 - iv. tacrolimus
 - v. methotrexate
 - vi. cyclophosphamide
 - f. Patient has had an inadequate treatment response, intolerance, or contraindication to chronic IVIG therapy
 - g. **NO** dual therapy with another Prior Authorization (PA) C5 complement inhibitor for gMG (see Appendix 3)
4. Neuromyelitis optica spectrum disorder (NMOSD)
 - a. 18 years of age or older
 - b. Anti-aquaporin-4 (AQP4) antibody positive

AND ALL of the following:

Section:	Prescription Drugs	Effective Date:	July 1, 2022
Subsection:	Hematological Agents	Original Policy Date:	September 8, 2011
Subject:	Soliris	Page:	4 of 8

- a. Vaccination against *Neisseria meningitidis* at least 2 weeks prior to initiation [unless Soliris (eculizumab) treatment cannot be delayed]
- b. Prescriber is enrolled in Soliris REMS program

Prior – Approval *Renewal* Requirements

Diagnoses

The patient must have **ONE** of the following:

1. Paroxysmal nocturnal hemoglobinuria (PNH)
 - a. 18 years of age or older
 - b. Decrease in serum LDH from pretreatment baseline
 - c. **NO** dual therapy with another Prior Authorization (PA) medication for PNH (see Appendix 1)
2. Atypical hemolytic uremic syndrome (aHUS)
 - a. Decrease in serum LDH from pretreatment baseline
 - b. Patient does **NOT** have Shiga toxin E. coli related hemolytic uremic syndrome (STEC-HUS)
 - c. **NO** dual therapy with another Prior Authorization (PA) medication for aHUS (see Appendix 2)
3. Generalized myasthenia gravis (gMG)
 - a. 18 years of age or older
 - b. Decrease of MG-ADL total score from baseline
(http://c.peerview.com/inReview/programs/150204324/downloads/PVL_practiceaids_RMU.pdf)
 - c. **NO** dual therapy with another Prior Authorization (PA) C5 complement inhibitor for gMG (see Appendix 3)
4. Neuromyelitis optica spectrum disorder (NMOSD)
 - a. 18 years of age or older
 - b. Patient has had fewer relapses while on Soliris therapy

AND ALL of the following:

- a. Absence of unacceptable toxicity from the drug
- b. Prescriber is enrolled in Soliris REMS program

Section:	Prescription Drugs	Effective Date:	July 1, 2022
Subsection:	Hematological Agents	Original Policy Date:	September 8, 2011
Subject:	Soliris	Page:	5 of 8

Pre – PA Allowance

None

Prior - Approval Limits

Duration 12 months

Prior – Approval *Renewal* Limits

Same as above

Rationale

Summary

Soliris (eculizumab) is a complement inhibitor indicated for the treatment of patients with paroxysmal nocturnal hemoglobinuria (PNH), atypical hemolytic uremic syndrome (aHUS), generalized myasthenia gravis (gMG) and neuromyelitis optica spectrum disorder (NMOSD). Soliris includes a boxed warning citing the risk of life-threatening and fatal meningococcal infections. Soliris is not indicated for the treatment of patients with Shiga toxin E. coli- related hemolytic uremic syndrome (STEC-HUS). Soliris is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS). In addition, Soliris has warnings regarding infusion-related reactions and using caution when administering Soliris to patients with any other systemic meningococcal infections. The safety and effectiveness of Soliris for the treatment of PNH, gMG, and NMOSD in pediatric patients less than 18 years of age have not been established. The safety and effectiveness of Soliris for the treatment of aHUS have been established in pediatric patients (1).

Prior authorization is required to ensure the safe, clinically appropriate and cost-effective use of Soliris while maintaining optimal therapeutic outcomes.

References

1. Soliris [package insert]. Boston MA: Alexion Pharmaceuticals, Inc.; November 2020.
2. Soliris. Drug Facts and Comparisons. eFacts [online]. Last updated 2022. Available from Wolters Kluwer Health, Inc.
3. Sanders DB, Wolfe GI, Benatar M, et al. International consensus guidance for management of myasthenia gravis: Executive summary. *Neurology*. 2016; 87(4):419. Epub 2016 Jun 29.

Section:	Prescription Drugs	Effective Date:	July 1, 2022
Subsection:	Hematological Agents	Original Policy Date:	September 8, 2011
Subject:	Soliris	Page:	6 of 8

Policy History

Date	Action
September 2011	New Policy
January 2012	New FDA-approved diagnosis of aHUS added to criteria
September 2012	Annual editorial and reference update
March 2013	Annual editorial and reference update
March 2014	Annual review and reference update
March 2015	Annual review and reference update
December 2016	Annual editorial review and reference update Policy code changed from 5.10.11 to 5.85.11
September 2017	Annual editorial review and reference update
November 2017	Addition of myasthenia gravis (gMG) and renewal requirements Addition of documented baseline value for serum lactate dehydrogenase (LDH) and decrease of serum LDH from pretreatment baseline
March 2018	Annual review
August 2018	Removal of requirements: documented baseline value for serum lactate dehydrogenase (LDH) from initiation and decrease in serum LDH from pretreatment baseline from renewal for gMG
September 2018	Annual review and reference update
January 2019	Addition of requirement of no dual therapy with another terminal complement inhibitor such as Ultomiris to PNH indication
March 2019	Annual review
June 2019	Annual review
July 2019	Addition of indication: neuromyelitis optica spectrum disorder (NMOSD)
September 2019	Annual review
November 2019	Addition of aHUS requirement of no dual therapy with another terminal complement inhibitor such as Ultomiris and vaccination requirement is only necessary if Soliris treatment can be delayed
December 2019	Annual review
February 2020	Addition of Myasthenia Gravis requirement to t/f IVIG and an immunosuppressant per FEP
March 2020	Annual review
September 2020	Annual review
December 2020	Annual review
June 2021	Addition of Appendices 1 and 2. Updated no dual therapy requirements. MG-ADL link updated
September 2021	Annual review

5.85.11

Section:	Prescription Drugs	Effective Date:	July 1, 2022
Subsection:	Hematological Agents	Original Policy Date:	September 8, 2011
Subject:	Soliris	Page:	7 of 8

March 2022	Annual review and reference update
May 2022	Moved requirement of no STEC-HUS under aHUS indication per PI. Added “generalized” to myasthenia gravis indication. MG-ADL link updated. Added no dual therapy with another PA C5 complement inhibitor for gMG and added Appendix 3
June 2022	Annual review

Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on June 16, 2022 and is effective on July 1, 2022.

Section:	Prescription Drugs	Effective Date:	July 1, 2022
Subsection:	Hematological Agents	Original Policy Date:	September 8, 2011
Subject:	Soliris	Page:	8 of 8

Appendix 1 - List of PA Medications for PNH

Generic Name	Brand Name
eculizumab	Soliris
pegcetacoplan	Empaveli
ravulizumab-cwvz	Ultomiris

Appendix 2 - List of PA Medications for aHUS

Generic Name	Brand Name
eculizumab	Soliris
ravulizumab-cwvz	Ultomiris

Appendix 3 - List of PA C5 complement inhibitors for gMG

Generic Name	Brand Name
eculizumab	Soliris
ravulizumab-cwvz	Ultomiris