Reference number(s)
2453-A

Standard Medicare Part B Management Alpha1-Proteinase Inhibitors

Products Referenced by this Document

Drugs that are listed in the following table include both brand and generic and all dosage forms and strengths unless otherwise stated. Over-the-counter (OTC) products are not included unless otherwise stated.

Brand Name	Generic Name
Aralast NP	alpha$_1$-proteinase inhibitor [human]
Glassia	alpha$_1$-proteinase inhibitor [human]
Prolastin-C	alpha$_1$-proteinase inhibitor [human]
Zemaira	alpha$_1$-proteinase inhibitor [human]

Indications

FDA-approved Indications[1-5]

Aralast NP

Chronic augmentation therapy in adults with clinically evident emphysema due to severe congenital deficiency of alpha$_1$-proteinase inhibitor (alpha-antitrypsin deficiency)

Glassia

Chronic augmentation and maintenance therapy in adults with clinically evident emphysema due to severe hereditary deficiency of alpha$_1$-proteinase inhibitor (alpha$_1$-antitypsin deficiency)

Prolastin-C

Chronic augmentation and maintenance therapy in adults with clinical evidence of emphysema due to severe hereditary deficiency of alpha$_1$- proteinase inhibitor (alpha$_1$- antitrypsin deficiency)

Zemaira

Chronic augmentation and maintenance therapy in adults with alpha$_1$-proteinase inhibitor (alpha$_1$-antitypsin) deficiency and clinical evidence of emphysema

Compendial Uses[8]

Acute graft-versus-host disease (GVHD)

All other indications will be assessed on an individual basis. Submissions for indications other than those listed in this criteria should be accompanied by supporting evidence from Medicare approved compendia.

Documentation

Documentation of pretreatment serum alpha1-antitrypsin (AAT) level must be available, upon request, for all submissions where applicable.

Coverage Criteria

Alpha$_1$-proteinase Inhibitor (alpha$_1$-antitrypsin) Deficiency[1-7]

Authorization of 12 months may be granted for treatment of emphysema due to alpha1-antitrypsin (AAT) deficiency when the member's pretreatment serum AAT level is less than 11 micromol/L (80 mg/dL by radial immunodiffusion or 50 mg/dL by nephelometry).

Acute Graft-Versus-Host Disease (GVHD)[8]

Authorization of 12 months may be granted for the treatment of steroid-refractory acute graft-versus-host disease (GVHD) following hematopoietic stem cell transplantation.

Continuation of Therapy

All members (including new members) requesting authorization for continuation of therapy must be currently receiving alpha$_1$-proteinase inhibitor therapy.

Alpha$_1$-proteinase Inhibitor (alpha$_1$-antitrypsin) Deficiency

Authorization for 12 months may be granted when all of the following criteria are met:

- The member is currently receiving therapy with an alpha$_1$-proteinase inhibitor.
- The alpha$_1$-proteinase inhibitor is being used to treat emphysema due to alpha1-antitrypsin (AAT) deficiency.
- The member is receiving benefit from therapy.

Acute Graft-Versus-Host Disease (GVHD)

All members requesting authorization for continuation of therapy must meet all requirements in the coverage criteria.

Summary of Evidence

The contents of this policy were created after examining the following resources:

- The prescribing information for Aralast NP, Glassia, Prolastin-C, and Zemaira.
- The available compendium
    - National Comprehensive Cancer Network (NCCN) Drugs and Biologics Compendium
    - Micromedex DrugDex
    - American Hospital Formulary Service- Drug Information (AHFS-DI)
    - Lexi-Drugs
    - Clinical Pharmacology
- American Thoracic Society/European Respiratory Society statement: standards for the diagnosis and management of individuals with alpha-1 antitrypsin deficiency.
- Alpha-1 antitrypsin deficiency targeted testing and augmentation therapy: a Canadian Thoracic Society clinical practice guideline.
- NCCN Guideline: Hematopoietic Cell Transplantation (HCT)

After reviewing the information in the above resources, the FDA-approved indications listed in the prescribing information for Aralast NP, Glassia, Prolastin-C, and Zemaira are covered in addition to acute graft-versus-host disease.

Explanation of Rationale

Support for FDA-approved indications can be found in the manufacturer's prescribing information.

Support for using the member's pretreatment serum AAT level is found in the guidelines published by the American Thoracic Society and Canadian Thoracic Society. Alpha 1-antitrypsin is an antiprotease found in human plasma that inhibits the neutrophil elastase enzyme from degrading elastin tissues in the lung. According to American Thoracic Society (2003) guidelines, a "protective" threshold plasma AAT level of 11 micromol/L corresponds to 80 mg/dl if measured by radial immunodiffusion and to 50 mg/dl if measured by nephelometry. This protective threshold has evolved from the observation that patients with heterozygote phenotypes whose levels of AAT exceed this level are usually free from emphysema.

Support for acute graft versus host disease (GVHD) can be found in the National Comprehensive Cancer Network's guideline for hematopoietic cell transplantation. The NCCN Guideline for hematopoietic cell transplantation supports the use of alpha1-proteinase inhibitors in conjunction with systemic corticosteroids following no response (steroid-refractory disease) to first-line therapy options. Therapy for steroid-refractory acute GVHD is often used in conjunction with the original immunosuppressive agent.

References

1. Aralast NP [package insert]. Lexington, MA: Baxalta US Inc.; March 2023.
2. Glassia [package insert]. Lexington, MA: Takeda Pharmaceuticals US Inc.; September 2023.
3. Prolastin-C Liquid [package insert]. Research Triangle Park, NC: Grifols Therapeutics LLC.; May 2020.
4. Prolastin-C [package insert]. Research Triangle Park, NC: Grifols Therapeutics LLC.; January 2022.
5. Zemaira [package insert]. Kankakee, IL: CSL Behring LLC; January 2024.
6. American Thoracic Society/European Respiratory Society statement: standards for the diagnosis and management of individuals with alpha-1 antitrypsin deficiency. Am J Respir Crit Care Med. 2003;168:818-900.
7. Marciniuk DD, Hernandez P, Balter M, et al. Alpha-1 antitrypsin deficiency targeted testing and augmentation therapy: a Canadian Thoracic Society clinical practice guideline. Can Respir J. 2012;19:109-116.
8. The NCCN Drugs & Biologics Compendium® © 2024 National Comprehensive Cancer Network, Inc. http://www.nccn.org. Accessed December 16, 2024.