Reference number(s)
2453-A

STANDARD MEDICARE PART B MANAGEMENT

Alpha$_1$-Proteinase Inhibitors

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])

POLICY

I. INDICATIONS

The indications below including FDA-approved indications and compendial uses are considered a covered benefit provided that all the approval criteria are met and the member has no exclusions to the prescribed therapy.

A. ARALAST NP
FDA-Approved Indication
Chronic augmentation therapy in adults with clinically evident emphysema due to severe congenital deficiency of alpha$_1$-proteinase inhibitor (alpha-antitrypsin deficiency)

B. GLASSIA
FDA-Approved Indication
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)

C. PROLASTIN-C
FDA-Approved Indication
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)

D. ZEMAIRA
FDA-Approved Indication
Chronic augmentation and maintenance therapy in adults with alpha$_1$-proteinase inhibitor (alpha$_1$-antitypsin) deficiency and clinical evidence of emphysema

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

II. DOCUMENTATION

Documentation of pretreatment serum alpha$_1$-antitrypsin (AAT) level must be available, upon request, for all submissions.

III. CRITERIA FOR INITIAL THERAPY

Alpha$_1$-proteinase inhibitor (alpha$_1$-antitrypsin) deficiency
Authorization of 12 months may be granted for treatment of alpha$_1$-antitrypsin deficiency when all of the following criteria are met:

A. Members display clinically evident emphysema.
B. 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).

IV. CONTINUATION OF THERAPY

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

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

A. The member is currently receiving therapy with an alpha$_1$-proteinase inhibitor.
B. The alpha$_1$-proteinase inhibitor is being used to treat an indication enumerated in Section III.
C. The member is receiving benefit from therapy.

V. SUMMARY OF EVIDENCE

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

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

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.

VI. 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 mol/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.

VII. REFERENCES

1. Aralast NP [package insert]. Lexington, MA: Baxalta US Inc.; December 2018.
2. Glassia [package insert]. Lexington, MA: Takeda Pharmaceuticals US Inc.; March 2022.
3. Prolastin-C Liquid [package insert]. Research Triangle Park, NC: Grifols Therapeutics Inc.; May 2020.
4. Prolastin-C [package insert]. Research Triangle Park, NC: Grifols Therapeutics Inc.; January 2022.
5. Zemaira [package insert]. Kankakee, IL: CSL Behring LLC; September 2022.
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.

