Approved Revision: Do Not Implement until 8/31/21

Alpha-1 Proteinase Inhibitor Therapy (Aralast NP®, Glassia®, Prolastin®-C, Zemaira®)

NDC CODE(S)

00053-7201-XX ZEMAIRA 1000MG Solution Reconstituted (CSL BEHRING)
00944-2803-XX ARALAST NP 500MG Solution Reconstituted (BAXALTA US)
00944-2804-XX ARALAST NP 1000MG Solution Reconstituted (BAXALTA US INC)
00944-2814-XX ARALAST NP 500MG Solution Reconstituted (BAXALTA)
00944-2815-XX ARALAST NP 1000MG Solution Reconstituted (BAXALTA)
00944-2884-XX GLASSIA 1000MG/50ML Solution (BAXALTA)
13533-0700-XX PROLASTIN-C 1000MG Solution Reconstituted (GRIFOLS USA)
13533-0702-XX PROLASTIN C 1000MG Solution Reconstituted (GRIFOLS THERAPE)
13533-0703-XX PROLASTIN-C 1000MG Solution Reconstituted (GRIFOLS USA)
13533-0705-XX PROLASTIN-C 1000MG/20ML Solution (GRIFOLS USA)

DESCRIPTION

Alpha-1 Proteinase Inhibitor (Alpha-1PI) Deficiency or Alpha-1 Antitrypsin (AAT) Deficiency is a rare, chronic, autosomal, co-dominant hereditary disorder characterized by reduced or non-existent levels of endogenous Alpha-1PI in the blood and lungs. Alpha-1-antitrypsin (AAT), a naturally occurring inhibitor of serine proteases such as neutrophil elastase, is normally produced in the liver. With insufficient Alpha-1PI, proteolytic enzymes, such as trypsin and elastin become imbalanced, resulting in a gradual destruction of pulmonary connective tissue and loss of alveolar units, presenting as slowly progressive, moderate to severe panacinar emphysema that presents most often in the third or fourth decade of life .

AAT blocks the destructive action of trypsin and elastin as well as several other proteases. Replacement therapy for AAT deficiency with human plasma derived Alpha-1PI has been shown to increase serum and lung levels of AAT with significantly lower CT-measured mean annual rate of lung density loss at total lung capacity.

POLICY

- Alpha-1 proteinase inhibitor therapy is considered ***medically necessary*** for the treatment of emphysema due to congenital alpha-1 antitrypsin (AAT) deficiency if the medical appropriateness criteria are met. **(See Medical Appropriateness below.)**
- $Alpha_1$-proteinase inhibitor therapy for the treatment of other conditions/diseases, including, but not limited to, the following is considered ***investigational:***
  - Cystic fibrosis
  - Lung disease without congenital alpha-1-antitrypsin (A1A) deficiency

MEDICAL APPROPRIATENESS

INITIAL APPROVAL CRITERIA

- Patient is at least 18 years of age; **AND**

Universal Criteria

- Patient is not a tobacco smoker; **AND**
- Patient is receiving optimal medical therapy (e.g., comprehensive case management, pulmonary rehabilitation, vaccinations, smoking cessation, self-management skills, etc.); **AND**
- Patient does not have immunoglobulin-A (IgA) deficiency with antibodies against IgA; **AND**

Emphysema due to alpha-1-antitrypsin (AAT) deficiency

- Patient has an FEV1 in the range of 30-65% of predicted; **AND**
- Patient has alpha-1-antitrypsin (AAT) deficiency with PiZZ, PiZ (null), or Pi (null, null) phenotypes; **AND**
- Patient has AAT- deficiency and clinical evidence of panacinar/panlobular emphysema; **AND**
- Patient has low serum concentration of AAT ≤ 507 mg/dL or ≤ 11 µM/L as measured by nephelometry

RENEWAL CRITERIA

- Patient continues to meet universal and other indication-specific relevant criteria such as concomitant therapy requirements (not including prerequisite therapy), performance status, etc. identified in the Initial Approval Criteria; **AND**
- Disease response with treatment as defined by elevation of AAT levels above baseline, substantial reduction in rate of deterioration of lung function as measured by percent predicted FEV1, or improvement in CT scan lung density; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include severe hypersensitivity reactions, etc.

DOSAGE/ADMINISTRATION

INDICATION	DOSE
Emphysema due to AAT deficiency	60 mg/kg by intravenous (IV) infusion administered once every 7 days (weekly)

LENGTH OF AUTHORIZATION

Coverage will be provided for 12 months and may be renewed.

DOSING LIMITS

Max Units (per dose and over time) [HCPCS Unit]:

- 700 billable units every 7 days

APPLICABLE TENNESSEE STATE MANDATE REQUIREMENTS

BlueCross BlueShield of Tennessee's Medical Policy complies with Tennessee Code Annotated Section 56-7-2352 regarding coverage of off-label indications of Food and Drug Administration (FDA) approved drugs when the off-label use is recognized in one of the statutorily recognized standard reference compendia or in the published peer-reviewed medical literature.

IMPORTANT REMINDER

We develop Medical Policies to provide guidance to Members and Providers. This Medical Policy relates only to the services or supplies described in it. The existence of a Medical Policy is not an authorization, certification, explanation of benefits or a contract for the service (or supply) that is referenced in the Medical Policy. For a determination of the benefits that a Member is entitled to receive under his or her health plan, the Member's health plan must be reviewed. If there is a conflict between the Medical Policy and a health plan, the express terms of the health plan will govern.

ADDITIONAL INFORMATION

For appropriate chemotherapy regimens, dosage information, contraindications, precautions, warnings, and monitoring information, please refer to one of the standard reference compendia (e.g., the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) published by the National Comprehensive Cancer Network®, Drugdex Evaluations of Micromedex Solutions at Truven Health, or The American Hospital Formulary Service Drug Information).

SOURCES

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2. Zemaira [package insert]. Kankakee, IL; CSL Behring LLC; April 2019. Accessed March 2021.
3. Aralast NP [package insert]. Lexington, MA; Baxalta US Inc.; December 2018. Accessed March 2021.
4. Prolastin-C Liquid [package insert]. Research Triangle Park, NC; Grifols Therapeutics, Inc.; August 2018. Accessed March 2021.
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6. American Thoracic Society/European Respiratory Society Statement: Standards for the Diagnosis and Management of Individuals with Alpha-1 Antitrypsin Deficiency. American Thoracic Society; European Respiratory Society. Am J Respir Crit Care Med. 2003 Oct 1;168(7):818-900.
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8. Sandhaus RA, Turino G, Brantly ML, et al. The diagnosis and management of alpha-1 antitrypsin deficiency in the adult. Chronic Obstr Pulm Dis (Miami). 2016; 3(3):668-682.
9. 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(2):109-16.
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11. Global Initiative for Chronic Obstructive Lung Disease (GOLD). Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease. Global Initiative for Chronic Obstructive Lung Disease (GOLD); 2020.
12. Miravitlles M, Dirksen A, Ferrarotti I, et al. European Respiratory Society statement: diagnosis and treatment of pulmonary disease in α1-antitrypsin deficiency. Eur Respir J 2017; 50.
13. Lexi-Comp Online. AHFS DI. (2020, March). *α1-proteinase inhibitor (human)*. Retrieved May 11, 2020 from Lexi-Comp Online with AHFS.
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EFFECTIVE DATE 8/31/2021

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