

**Clinical Policy: Alpha<sub>1</sub>-Proteinase Inhibitors (Aralast NP, Glassia, Prolastin-C, Zemaira)**

Reference Number: CP.PHAR.94

Effective Date: 03.01.12

Last Review Date: 02.21

Line of Business: Commercial, HIM, Medicaid

[Coding Implications](#)[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

**Description**

The following are alpha<sub>1</sub>-proteinase inhibitors requiring prior authorization: alpha<sub>1</sub>-proteinase inhibitor, human (Aralast<sup>™</sup> NP, Glassia<sup>®</sup>, Prolastin<sup>®</sup>-C, Zemaira<sup>®</sup>).

**FDA Approved Indication(s)**

Aralast NP, Glassia, Prolastin-C, and Zemaira are indicated for chronic augmentation and maintenance therapy in adults with clinical evidence of emphysema due to severe congenital deficiency of alpha<sub>1</sub>-PI (alpha<sub>1</sub>-antitrypsin [AAT] deficiency). Alpha<sub>1</sub>-PI products increase antigenic and functional (anti-neutrophil elastase capacity) serum levels and antigenic lung epithelial lining fluid levels of alpha<sub>1</sub>-PI.

**Limitation(s) of use:**

- The effect of augmentation therapy with alpha<sub>1</sub>-PI products on pulmonary exacerbations and on the progression of emphysema in alpha<sub>1</sub>-PI deficiency has not been conclusively demonstrated in randomized, controlled clinical trials.
- Clinical data demonstrating the long-term effects of chronic augmentation and maintenance therapy of individuals with alpha<sub>1</sub>-PI products are not available.
- Alpha<sub>1</sub>-PI products are not indicated as therapy for lung disease in patients in whom severe alpha<sub>1</sub>-PI deficiency has not been established.

**Policy/Criteria**

*Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.*

It is the policy of health plans affiliated with Centene Corporation<sup>®</sup> that Aralast NP, Glassia, Prolastin-C, and Zemaira are **medically necessary** when the following criteria are met:

**I. Initial Approval Criteria****A. Alpha<sub>1</sub>-Antitrypsin Deficiency (must meet all):**

1. Diagnosis of severe congenital AAT deficiency;
2. Prescribed by or in consultation with a pulmonologist;
3. Age ≥ 18 years;
4. Member meets one of the following (a or b):
  - a. Documentation of plasma AAT level < 11 micromol/L (approximately 50 mg/dL using nephelometry or 80 mg/dL by radial immunodiffusion);

- b. If member has an AAT level >11 umol/L, then the member must have one of the high-risk phenotypes (i.e. PiZZ, PiZnull, Pi(null, null), or one of a few rare phenotypes [e.g. Pi(Malton, Malton)]);
5. Member demonstrates clinical evidence of emphysema (a or b):
  - a. Forced expiratory volume in one second (FEV<sub>1</sub>) from ≥ 30% to ≤ 65% of predicted, post-bronchodilator;
  - b. FEV<sub>1</sub> from > 65% to < 80% of predicted, post-bronchodilator, and a rapid decline in lung function showing a change in FEV<sub>1</sub> > 100 mL/year;
6. Member is not an active smoker as evidenced by recent (within the last 30 days) negative nicotine metabolite (i.e., cotinine) test;
7. Dose does not exceed 60 mg/kg/week.

**Approval duration:**

**Medicaid/HIM** – 6 months

**Commercial** – 6 months or to the member’s renewal date, whichever is longer

**B. Other diagnoses/indications**

1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

**II. Continued Therapy**

**A. Alpha<sub>1</sub>-Antitrypsin Deficiency (must meet all):**

1. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
2. Member is responding positively to therapy;
3. If request is for a dose increase, new dose does not exceed 60 mg/kg/week.

**Approval duration:**

**Medicaid/HIM** – 12 months

**Commercial** – 6 months or to the member’s renewal date, whichever is longer

**B. Other diagnoses/indications (must meet 1 or 2):**

1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy.

**Approval duration: Duration of request or 6 months (whichever is less);** or

2. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

**III. Diagnoses/Indications for which coverage is NOT authorized:**

- A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid or evidence of coverage documents;

- B.** Immunoglobulin A (IgA) deficiency (IgA level less than 15 mg/dL) with known antibody against IgA.

**IV. Appendices/General Information**

*Appendix A: Abbreviation/Acronym Key*

AAT: alpha<sub>1</sub>-antitrypsin

Alpha<sub>1</sub>-PI: alpha<sub>1</sub>-proteinase inhibitors

COPD: chronic obstructive pulmonary disease

FDA: Food and Drug Administration

FEV<sub>1</sub>: forced expiratory volume in one second

*Appendix B: Therapeutic Alternatives*

Not applicable

*Appendix C: Contraindications/Boxed Warnings*

- Contraindication(s): use in IgA deficient patients with known antibodies against IgA and/or a history of anaphylaxis or other severe systemic reaction to alpha<sub>1</sub>-PI, due to the risk of severe hypersensitivity, including anaphylaxis.
- Boxed warning(s): none reported

*Appendix D: General Information*

- The American Thoracic Society (ATS) and the European Respiratory Society (ERS) state that alpha<sub>1</sub>-proteinase inhibitor therapy does not confer benefit in, and is not recommended for, patients who have alpha<sub>1</sub>-proteinase-associated liver disease.
- The 2016 COPD Foundation’s clinical practice guidelines for AAT deficiency in the adult recommend intravenous augmentation therapy for individuals with FEV<sub>1</sub> less than 30% predicted with a weak recommendation with a low quality of evidence, and low value placed on the cost of this therapy. The 2003 ATS-ERS guidelines mirror the COPD Foundation in that evidence of benefit from augmentation therapy is weak in those with severe airflow obstruction.
- Aralast NP, Glassia, Prolastin-C, Zemaira: Safety and effectiveness in the pediatric population have not been established
- Smoking is an important risk factor for the development of emphysema in patients with AAT deficiency. Both the 2003 ATS and 2016 COPD Foundation AAT guidelines state that smoking cessation is important in this patient population.
- The goal of AAT augmentation is to slow the progression of emphysema/lung function decline. Lung function can be measured with FEV<sub>1</sub>, which is most important predictor of survival of patients with emphysema due to AAT deficiency per the 2003 ATS AAT guidelines. Improvement, maintenance, or stabilization in FEV<sub>1</sub> rate of decline is therefore an acceptable example of positive response to therapy.

**V. Dosage and Administration**

Indication	Dosing Regimen	Maximum Dose
Emphysema due to AAT deficiency	60 mg/kg IV once weekly	60 mg/kg/week

**VI. Product Availability**

Drug Name	Availability
Alpha <sub>1</sub> -proteinase inhibitor, human (Aralast NP)	Single-use vial: 500 mg, 1,000 mg
Alpha <sub>1</sub> -proteinase inhibitor, human (Glassia)	Single-use vial: 1,000 mg/50 mL
Alpha <sub>1</sub> -proteinase inhibitor, human (Prolastin-C)	Single-use vial: 1,000 mg (Powder)
	Single-use vial: 1,000 mg/20 mL (Liquid)
Alpha <sub>1</sub> -proteinase inhibitor, human (Zemaira)	Single-use vial: 1,000 mg, 4,000 mg, 5,000 mg

**VII. References**

1. Aralast NP Prescribing Information. Westlake Village, CA: Baxter Healthcare Corporation; December 2018. Available at: [http://www.shirecontent.com/PI/PDFs/ARALASTNP\\_USA\\_ENG.pdf](http://www.shirecontent.com/PI/PDFs/ARALASTNP_USA_ENG.pdf). Accessed October 20, 2020.
2. Glassia Prescribing Information. Negev, Israel: Kamada, Ltd.; June 2017. Available at: <http://www.liquidglassia.com>. Accessed October 20, 2020.
3. Prolastin-C Powder Prescribing Information. Research Triangle Park, NC: Grifols Therapeutics, Inc.; June 2018. Available at: <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=91edab72-c889-470e-8315-1798b5548dca>. Accessed October 20, 2020.
4. Prolastin-C Liquid Prescribing Information. Research Triangle Park, NC: Grifols Therapeutics, Inc.; August 2018. Available at: <http://www.prolastin.com>. Accessed October 20, 2020.
5. Zemaira Prescribing Information. Kankakee, IL: CSL Behring LLC; April 2019. Available at: <http://www.zemaira.com>. Accessed October 20, 2020.
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(7): 818-900.
7. Sandhaus RA, Turino G, and Brantly ML, et al. The diagnosis and management of alpha-1 antitrypsin deficiency in the adult. *Journal of COPD Foundation*. 2016;3(3):668-682.
8. Cazzola M, MacNee W, Martinez FJ, et al.; American Thoracic Society; European Respiratory Society Task Force on outcomes of COPD. Outcomes for COPD pharmacological trials: from lung function to biomarkers. *Eur Respir J*. 2008;31:416-469.
9. Global Initiative for Chronic Obstructive Lung Disease (GOLD). Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease (2019 Report). Available at: <https://goldcopd.org/wp-content/uploads/2018/11/GOLD-2019-v1.7-FINAL-14Nov2018-WMS.pdf>.

**Coding Implications**

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J0256	Injection, alpha 1 proteinase inhibitor (human), not otherwise specified, 10 mg
J0257	Injection, alpha 1 proteinase inhibitor (human), (Glassia), 10 mg

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Initial criteria: Age removed; conditions representing potential contraindications to therapy are removed.	02.17	03.17
1Q18 annual review: Combined existing policies for Medicaid and commercial business; HIM added; Medicaid: removed requirement for supportive measures (avoidance of cigarette smoking and vaccinations) due to lack of actionability and objectivity; protective threshold value per nephelometry changed from 57 mg/dL to 50 mg/dL per American Thoracic Society 2003 guidelines; added “If the member has an AAT level >11 umol/L, then the member must have one of the high-risk phenotypes (i.e. PiZZ, PiZnull, Pi(null, null), or one of a few rare phenotypes [e.g. Pi(Malton, Malton)]” to allow treatment before clinical deterioration due to definite diagnosis; added prescriber requirement due to the complexity of disease diagnosis and management; Changed minimally significant change in FEV from 120 mL to 100 mL per ATC guidelines and specialist feedback; references reviewed and updated.	12.05.17	02.18
No significant changes: new Prolastin-C liquid formulation added.	07.13.18	
1Q 2019 annual review: per 2018 GOLD and 2003 ATS guidelines, corrected FEV <sub>1</sub> range to include 65% without requiring demonstration of rapid decline in lung function in FEV <sub>1</sub> of > 100 mL/year; added Aralast NP 500 mg and Prolastin-C Liquid as non-formulary for HIM; revised HIM continued approval duration to align with Medicaid; revised Commercial approval duration to 6 months or member’s renewal whichever is longer; references reviewed and updated.	10.30.18	02.19
No significant changes: new 4g and 5g formulations for Zemaira added.	04.30.19	
1Q 2020 annual review: no significant changes; removed HIM NF disclaimer statements; references reviewed and updated.	11.26.19	02.20
Added requirement that member is not an active smoker as supported by both ATS and COPD Foundation AAT guidelines.	04.14.20	05.20
1Q 2021 annual review: no significant changes; references to HIM.PHAR.21 revised to HIM.PA.154; references reviewed and updated.	10.20.20	02.21

**Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted

standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

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**Note:**

**For Medicaid members**, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

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