

Federal Employee Program.
Blue Cross Blue Shield Association 750 9th St NW, Suite 900
Washington, D.C. 20001
1-800-624-5060
Fax 1-877-378-4727

5.30.044

Section: Prescription Drugs Effective Date: April 1, 2025

Subsection: Endocrine and Metabolic Drugs Original Policy Date: September 9, 2008

Subject: Aldurazyme Page: 1 of 5

Last Review Date: March 7, 2025

Aldurazyme

Description

Aldurazyme (laronidase)

Background

Aldurazyme (laronidase) is used to treat Mucopolysaccharidosis I (MPS I) an inherited disorder caused by a deficiency of an enzyme called alpha-L-iduronidase. This enzyme is needed for the breakdown of certain substances in the body commonly referred to as GAG (glycosaminoglycans). As more and more GAG builds up in a person's body organs can become permanently damaged. MPS I has also been called Hurler, Hurler-Scheie, and Scheie syndromes (1).

Regulatory Status

FDA-approved indications: (1)

Aldurazyme is a hydrolytic lysosomal glycosaminoglycan (GAG)-specific enzyme indicated for patients with Hurler and Hurler-Scheie forms of Mucopolysaccharidosis I (MPS I) and for patients with the Scheie form who have moderate to severe symptoms.

Limitations of use: (1)

- The risks and benefits of treating mildly affected patients with the Scheie form have not been established.
- Aldurazyme has not been evaluated for effects on the central nervous system manifestations of the disorder

Aldurazyme has been shown to improve pulmonary function and walking capacity (1).

Section: Prescription Drugs Effective Date: April 1, 2025

Subsection: Endocrine and Metabolic Drugs Original Policy Date: September 9, 2008

Subject: Aldurazyme Page: 2 of 5

Aldurazyme includes a boxed warning citing the risk of hypersensitivity reactions including anaphylaxis, and acute respiratory complications associated with administration. Patients treated with Aldurazyme have experienced life-threatening hypersensitivity reactions, including anaphylaxis. Appropriate medical monitoring and support measures, including cardiopulmonary resuscitation equipment, should be readily available during Aldurazyme administration. Patients with compromised respiratory function or acute respiratory disease may be at risk of serious acute exacerbation of their respiratory compromise due to infusion reactions and require additional monitoring (1).

Patients with an acute febrile or respiratory illness at the time of Aldurazyme infusion may be at greater risk for infusion reactions. Careful consideration should be given to the patient's clinical status prior to administration of Aldurazyme and consider delaying Aldurazyme infusion (1).

Administration of Aldurazyme should be exercised with caution when administering to patients susceptible to fluid overload, or patients with acute underlying respiratory illness or compromised cardiac and/or respiratory function for whom fluid restriction is indicated. These patients may be at risk of serious exacerbation of their cardiac or respiratory status during infusions. Prior to administration of Aldurazyme pretreatment is recommended to reduce the risk of infusion reactions. Patients should receive antipyretics and/or antihistamines prior to infusion (1).

The safety and effectiveness of Aldurazyme was assessed in patients with MPS I, ages 6 months to 5 years old, and was found to be similar to the safety and effectiveness of Aldurazyme in pediatric patients 6 to 18 years, and adults (1).

Related policies

Elaprase, Mepsevii, Naglazyme, Vimizim

Policy

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

Aldurazyme may be considered **medically necessary** if the conditions indicated below are met.

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

Section: Prescription Drugs Effective Date: April 1, 2025

Subsection: Endocrine and Metabolic Drugs Original Policy Date: September 9, 2008

Subject: Aldurazyme Page: 3 of 5

Prior-Approval Requirements

Age 6 months of age or older

Diagnoses

Patient must have **ONE** of the following:

- 1. Mucopolysaccharidosis I (MPS I)
- 2. Hurler's syndrome
- 3. Hurler-Scheie syndrome
- 4. Scheie syndrome with moderate or severe symptoms

Prior - Approval Renewal Requirements

Age 6 months of age or older

Diagnoses

Patient must have **ONE** of the following:

- 1. Mucopolysaccharidosis I (MPS I)
- 2. Hurler's syndrome
- 3. Hurler-Scheie syndrome
- 4. Scheie syndrome

Policy Guidelines

Pre - PA Allowance

None

Prior – Approval Limit

Duration 2 years

Prior - Approval Renewal Limits

Same as above

Rationale

Summary

Aldurazyme (laronidase) is indicated for patients 6 months of age or older with Hurler and Hurler-Scheie forms of Mucopolysaccharidosis I (MPS I) and for patients with the Scheie form

5.30.044

Section: Prescription Drugs Effective Date: April 1, 2025

Subsection: Endocrine and Metabolic Drugs Original Policy Date: September 9, 2008

Subject: Aldurazyme Page: 4 of 5

who have moderate to severe symptoms. Aldurazyme carries a boxed warning of the risk of anaphylaxis during infusion. Patients with an acute febrile or respiratory illness at the time of Aldurazyme infusion may cause greater risk for infusion reactions. Patients susceptible to fluid overload may be at risk of acute cardiorespiratory failure. Medical support should be readily available when Aldurazyme is administered with additional monitoring for patients with compromised respiratory function or acute respiratory disease. Patients should receive a pretreatment of antipyretics and/or antihistamines prior to infusion to reduce the risk of infusion reactions (1).

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

References

1. Aldurazyme [package insert]. Cambridge, MA: Genzyme Corporation; December 2023.

Policy History	
Date	Action
March 2010	Age updated to reflect current package insert
June 2012	Annual editorial review and reference update
September 2012	Annual editorial review and reference update
March 2013	Annual editorial review and reference update
June 2013	Annual editorial review and reference update
September 2014	Annual editorial review and reference update
September 2015	Annual review
September 2016	Annual editorial review and reference update
	Policy number change from 5.08.01 to 5.30.44
December 2017	Annual editorial review
June 2018	Annual editorial review
December 2019	Annual editorial review
_	Changed approval duration from lifetime to 2 years
December 2020	Annual review and reference update
March 2021	Annual editorial review
March 2022	Annual review
March 2023	Annual review. Changed policy number to 5.30.044
March 2024 March 2025	Annual editorial review and reference update Annual review
	Allitual leview
Keywords	

5.30.044

Section: Prescription Drugs Effective Date: April 1, 2025

Subsection: Endocrine and Metabolic Drugs Original Policy Date: September 9, 2008

Subject: Aldurazyme Page: 5 of 5

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on March 7, 2025 and is effective on April 1, 2025.