

Lamzede (velmanase alfa-tycv)
PAM-072

Iowa Medicaid Program:	Prior Authorization	Effective Date:	01/01/2024
Revision Number:	1	Last Rev Date:	04/19/2024
Reviewed By:	Medicaid Medical Director	Next Rev Date:	04/18/2025
Approved By:	Medicaid Clinical Advisory Committee	Approved Date:	04/19/2024

Overview

Medication: ¹	velmanase alfa-tycv
Brand Name:	Lamzede®
Pharmacologic Category:	recombinant human lysosomal alpha-mannosidase
FDA-Approved Indication(s):	Treatment of non-central nervous system manifestations of alpha-mannosidosis in adult and pediatric patients
How Supplied:	<ul style="list-style-type: none"> • Single-dose vial, 10 mg • Supplied in cartons of one, five, or ten vials
Dosage and Administration:	1 mg/kg (actual body weight) once weekly, administered via intravenous infusion
Benefit Category:	Medical

BOXED WARNING: SEVERE HYPERSENSITIVITY REACTIONS

Patients treated with Lamzede® have experienced hypersensitivity reactions, including anaphylaxis. Appropriate medical support measures, including cardiopulmonary resuscitation equipment, should be readily available during LAMZEDE administration. If a severe hypersensitivity reaction (e.g., anaphylaxis) occurs, discontinue Lamzede® immediately and initiate appropriate medical treatment. In patients with severe hypersensitivity reaction, a desensitization procedure to Lamzede® may be considered.

Descriptive Narrative

Alpha-mannosidosis belongs to a group of diseases known as the lysosomal storage disorders. Lysosomes are particles bound in membranes within cells that function as the primary digestive units. Enzymes within the lysosomes break down or digest particular nutrients, such as complex molecules composed of a sugar attached to a protein (glycoproteins). Low levels or inactivity of the alpha-mannosidase enzyme leads to the abnormal accumulation of compounds upstream in the metabolic pathway in the cells of affected individuals with unwanted consequences.

Alpha-mannosidosis is inherited in an autosomal recessive pattern and is caused by changes (variants or mutations) in the *MAN2B1* gene. The *MAN2B1* gene contains instructions for

producing the enzyme lysosomal alpha-mannosidase (LAMAN). This enzyme is essential for breaking down (metabolizing) certain glycoproteins. Without proper levels of functional version of this enzyme, these glycoproteins abnormally accumulate in and damage various tissues and organs of the body. Variants of the *MAN2B1* gene result in the lack of production of the alpha-D-mannosidase enzyme or the production of a defective, inactive form of the enzyme.

The prevalence of alpha-mannosidosis is estimated to be 1 in every 500,000 people in the general population. Alpha-mannosidosis affects males and females in equal numbers and can potentially affect individuals of any ethnic group worldwide.

In 2023, the U.S. Food and Drug Administration (FDA) approved velmanase alfa (Lamzede®) as the first enzyme replacement therapy to treat the non-central nervous system manifestations of alpha-mannosidosis.²

Guidelines

Guidelines for diagnostic confirmation and management of presymptomatic individuals with lysosomal storage diseases were last published in 2011, prior to the approval of Lamzede®.³

Criteria

Prior authorization is required.

Lamzede® is considered medically necessary when **ALL** of the following are met:

1. Diagnosis of alpha-mannosidosis (AM), confirmed by one of the following (a or b):
 - a. A documented deficiency of alpha-mannosidase activity as measured in blood leukocytes or fibroblasts; or
 - b. Genetic testing results documenting a mutation in the *MAN2B1* gene; **AND**
2. Member is 18 years of age or older; **AND**
3. Documentation of member's therapeutic goals based on their individual non-neurologic baseline symptoms, such as:
 - a. Stabilization and motor function (e.g., 3-minute stair climb test, 6-minute walk test, etc.); and/or
 - b. Pulmonary function [e.g., forced vital capacity (FVC, percent predicted)]; and/or
 - c. Serum oligosaccharide levels; and/or
 - d. Overall health and quality of life; and/or
 - e. Other indicators of therapeutic goals as determined by the prescribing provider; **AND**
4. Member is not being treated for CNS disease manifestations of AM; **AND**
5. Prescribed by, or in consultation with, an endocrinologist, neurologist, geneticist, or other specialist with expertise in the treatment of lysosomal storage disorders; **AND**
6. Request meets one of the following (a or b):
 - a. Regimen prescribed does not exceed 1 mg/kg once weekly (based on member's actual body weight); or
 - b. Regimen is supported by clinical practice guidelines. Supporting clinical documentation must be provided with any request for which regimen prescribed does not align with FDA-approved labeling.

Lamzede® is considered medically necessary for continuation of therapy when **ALL** of the following are met:

1. Member is currently receiving medication through the Iowa Medicaid benefit or has previously met initial approval criteria; **AND**
2. Documentation of positive clinical response to therapy, as demonstrated by low disease activity and/or improvements in the condition's signs and symptoms, such as:
 - a. Improvement of stabilization in motor function (e.g., 3-minute stair climbing test, 6-minute walk test, etc.); and/or
 - b. Improvement in pulmonary function [e.g., forced vital capacity (FVC, percent predicted)]; and/or
 - c. Reduction in frequency of infections; and/or
 - d. Reduction in oligosaccharide levels; and/or
 - e. Improvement in other indicators of therapeutic goals as determined by the prescribing provider; **AND**
3. Prescribed by, or in consultation with, an endocrinologist, neurologist, geneticist, or other specialist with expertise in the treatment of lysosomal storage disorders; **AND**
4. Request meets one of the following (a or b):
 - a. Regimen prescribed does not exceed 1 mg/kg once weekly (based on member's actual body weight); or
 - b. Regimen is supported by clinical practice guidelines. Supporting clinical documentation must be provided with any request for which regimen prescribed does not align with FDA-approved labeling.

Approval Duration and Quantity Limits

	Initial Authorization	Subsequent Authorization(s)
Approval Duration	6 months	12 months
Quantity Limits	1 mg/kg (based on actual body weight) once weekly	

Coding and Product Information

The following list(s) of codes and product information are provided for reference purposes only and may not be all inclusive. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment, nor does the exclusion of a code imply that its association to the HCPCS code is inappropriate.

HCPCS	Description
J0217	Injection, velmanase alfa-tycv, 1 mg

ICD-10	Description
E77.1	Defects in glycoprotein degradation

NDC (Strength)	Labeler	Dosage	Pkg Size	Pkg Qty	Units/Pkg
10122-0180-02 (one 10 mg single-dose vial)	Chiesi USA, Inc.	1 mg	1 EA	1	10
10122-0180-05 (five 10 mg single-dose vials)	Chiesi USA, Inc.	1 mg	1 EA	1	50
10122-0180-10 (ten 10 mg single-dose vials)	Chiesi USA, Inc.	1 mg	1 EA	1	100

Compliance

1. Should conflict exist between this policy and applicable statute, the applicable statute shall supersede.
2. Federal and State law, as well as contract language, including definitions and specific contract provisions or exclusions, take precedence over medical policy and must be considered first in determining eligibility for coverage.
3. Medical technology is constantly evolving, and Iowa Medicaid reserves the right to review and update medical policy on an annual or as-needed basis.

Medical necessity guidelines have been developed for determining coverage for member benefits and are published to provide a better understanding of the basis upon which coverage decisions are made. Medical necessity guidelines are developed for selected physician-administered medications found to be safe and proven to be effective in a limited, defined population or clinical circumstances. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in the service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations. Criteria are revised and updated annually, or more frequently if new evidence becomes available that suggests needed revisions.

References

¹ Lamzede[®] prescribing information (02/2023). Chiesi USA, Inc.: Cary, NC. Available online at: www.lamzede.com/hcp. Accessed January 2, 2024.

² *Alpha-Mannosidosis*. NORD: National Organization of Rare Diseases. Topic last updated November 27, 2023. Available online at: rarediseases.org/rare-diseases/alpha-mannosidosis. Accessed March 1, 2024.


³ Wang RY, Bodamer OA, Watson MS, Wilcox WR; ACMG Work Group on Diagnostic Confirmation of Lysosomal Storage Diseases. Lysosomal storage diseases: diagnostic confirmation and management of presymptomatic individuals. *Genet Med*. 2011 May;13(5):457-84. PMID: 21502868.

Development of utilization management criteria may also involve research into other state Medicaid programs, other payer policies, consultation with experts and review by the Medicaid Clinical Advisory Committee (CAC). These sources may not be referenced individually unless they are specifically published and are otherwise applicable to the criteria at issue.

Criteria Change History

Change Date	Changed By	Description of Change	Version
[mm/dd/yyyy]	CAC		
Signature			

Change Date	Changed By	Description of Change	Version
[mm/dd/yyyy]	CAC		
Signature			

Change Date	Changed By	Description of Change	Version
04/19/2024	CAC	Criteria implementation.	1
Signature			
William (Bill) Jagiello, DO			

CAC = Medicaid Clinical Advisory Committee