STATE OF IOWA DEPARTMENT OF
Health AND Human
SERVICES

Xenpozyme (olipudase alfa-rpcp)
PAM–068

Iowa Medicaid Program:	Prior Authorization	**Effective Date:**	04/01/2023
Revision Number:	1	**Last Rev Date:**	01/19/2024
Reviewed By:	Medicaid Medical Director	**Next Rev Date:**	01/17/2025
Approved By:	Medicaid Clinical Advisory Committee	**Approved Date:**	01/19/2024

Overview

Medication:[1]	olipudase alfa-rpcp
Brand Name:	Xenpozyme®
Pharmacologic Category:	Endocrinology, enzyme deficiencies
FDA-Approved Indication(s):	Treatment of non–central nervous system manifestations of acid sphingomyelinase deficiency (ASMD) in adult and pediatric patients
How Supplied:	Single-dose vial containing either 4 mg or 20 mg

Dosage and Administration:	• Administer via intravenous (IV) infusion every 2 weeks
	• Weight-based dosing as follows:
	  ○ Body mass index (BMI) ≤ 30: dosage is based on actual body weight (kg)
	  ○ BMI > 30: dosage is based on adjusted body weight (kg)
	  Adjusted body weight (kg) = (actual height in meters)^2 x 30
	• Follow dose escalation regimens to reduce the risk of hypersensitivity and infusion associated reactions or transaminase levels (table below)

Benefit Category:	Medical

BOXED WARNING: SEVERE HYPERSENSITIVITY REACTIONS

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

Dose Escalation Regimen (dose escalation phase includes the first 3 mg/kg dose)			
Adult patients (18 years and older)		**Pediatric Patients (0 to 17 years)**	
First dose (Day 1/Week 0)	0.1 mg/kg	First dose (Day 1/Week 0)	0.03 mg/kg
Second dose (Week 2)	0.3 mg/kg	Second dose (Week 2)	0.1 mg/kg
Third dose (Week 4)	0.3 mg/kg	Third dose (Week 4)	0.3 mg/kg
Fourth dose (Week 6)	0.6 mg/kg	Fourth dose (Week 6)	0.3 mg/kg
Fifth dose (Week 8)	0.6 mg/kg	Fifth dose (Week 8)	0.6 mg/kg
Sixth dose (Week 10)	1 mg/kg	Sixth dose (Week 10)	0.6 mg/kg
Seventh dose (Week 12)	2 mg/kg	Seventh dose (Week 12)	1 mg/kg
Eighth dose (Week 14)	3 mg/kg*	Eighth dose (Week 14)	2 mg/kg
* 3 mg/kg is the recommended maintenance dose		Ninth dose (Week 16)	3 mg/kg*

Descriptive Narrative

Acid sphingomyelinase deficiency (ASMD), also known as Niemann-Pick disease type A and type B, is a rare lysosomal storage disorder resulting from deficiency of the lysosomal enzyme acid sphingomyelinase (ASM) due to bi-allelic mutations in the sphingomyelin phosphodiesterase 1 gene, *SMPD1*. ASMD results primarily in the progressive accumulation of sphingomyelin within the mononuclear phagocytic system and hepatocytes, and manifests as a multi-system disease involving the spleen, liver, lung, bone marrow, and lymph nodes, and in severe forms of the disease, the central nervous system (CNS) and peripheral nervous system. The deficiency of ASM causes an intra-lysosomal accumulation of sphingomyelin (as well as cholesterol and other cell membrane lipids) in various tissues.[2]

While the same metabolic defect is common to all ASMD patients, disease severity is determined by the presence or absence of neurological involvement, the extent of systemic disease, and the rate of disease progression, resulting in a wide spectrum of clinical manifestations. ASMD broadly can be divided into infantile neurovisceral ASMD A, chronic neurovisceral ASMD A/B, and chronic visceral ASMD B.[3]

Xenpozyme® is an enzyme replacement therapy that provides an exogenous source of ASM. It is not expected to cross the blood-brain barrier or modulate the CNS manifestations of ASMD.

Guidelines

There are no published national or international consensus guidelines for the diagnosis and management of patients with acid sphingomyelinase deficiency (ASMD). Xenpozyme® is the first disease-specific treatment for ASMD. It was approved by the U.S. Food and Drug Administration (FDA) in August 2022.

Criteria

Prior authorization is required.

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

1. Diagnosis of acid sphingomyelinase deficiency (ASMD); **AND**
2. Diagnosis is confirmed by one of the following (a or b):
    a. Enzyme assay demonstrating reduced or absent activity of acid sphingomyelinase (ASM) enzyme in fibroblasts, leukocytes, or dried blood spot**;** or
    b. Genetic testing identifying mutation in the sphingomyelin phosphodiesterase-1 (SMPD1) gene; **AND**
3. Member has a clinical presentation consistent with ASMD type B or type A/B; **AND**
4. Documentation that Xenpozyme® is being used for the treatment of non-central nervous system disease manifestations; **AND**
5. Prescribed by, or in consultation with, a geneticist, hepatologist, gastroenterologist, or pulmonologist, or other specialist with expertise in the diagnosis and management of ASMD; **AND**
6. Documentation of member's current weight including weight, height, and body mass index (BMI), within the last 30 days (NOTE: Dosing for BMI greater than 30 should be based on adjusted body weight); **AND**
7. Request meets one of the following (a or b):
    a. Regimen prescribed does not exceed 3 mg/kg once every 2 weeks (after completion of the dose escalation regimen); 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.

Xenpozyme® 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. Member has positive clinical response to therapy, as evidenced by an improvement, stabilization, or slowing of disease progression (e.g., improvement in pulmonary function, splenomegaly, hepatomegaly, or platelet count); **AND**
3. Prescribed by, or in consultation with, a geneticist, hepatologist, gastroenterologist, or pulmonologist, or other specialist with expertise in the diagnosis and management of acid sphingomyelinase deficiency (ASMD); **AND**
4. Documentation of member's current weight including weight, height, and body mass index (BMI), within the last 30 days (NOTE: Dosing for BMI greater than 30 should be based on adjusted body weight); **AND**
5. Request meets one of the following (a or b):
    a. Regimen prescribed does not exceed 3 mg/kg once every 2 weeks; 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	3 mg/kg every 2 weeks (after completion of dose escalation regimen)	3 mg/kg every 2 weeks

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
J0218	Injection, olipudase alfa-rpcp, 1 mg

ICD-10	Description
E75.244 – E75.249	Acid sphingomyelinase deficiency (ASMD)

NDC	Labeler	Dosage	Pkg Size	Pkg Qty	Units/Pkg
58468-0050-01	Genzyme Corporation (58468)	1 mg	1	EA	20
58468-0051-01	Genzyme Corporation (58468)	1 mg	1	EA	4

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] Xenpozyme® prescribing information (07/2023). Genzyme Corporation: Cambridge, MA. Available online at: www.xenpozyme.com/hcp. Accessed November 16, 2023.

[2] Wasserstein M, Dionisi-Vici C, et al. Recommendations for clinical monitoring of patients with acid sphingomyelinase deficiency (ASMD). Mol Genet Metab. 2019 Feb;126(2):98-105. Epub 2018 Nov 29. PMID: 30514648; PMCID: PMC7249497.

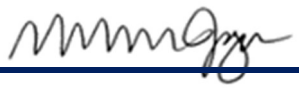
[3] Geberhiwot T, Wasserstein M, Wanninayake S, et al. Consensus clinical management guidelines for acid sphingomyelinase deficiency (Niemann–Pick disease types A, B and A/B). Orphanet J Rare Dis 18, 85 (2023). PMID: 37069638.

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
01/19/2024	CAC	Criteria implementation.	1
Signature William (Bill) Jagiello, DO			

CAC = Medicaid Clinical Advisory Committee