Medical Drug Clinical Criteria

Subject:	Xenpozyme (olipudase alfa)		
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Overview

This document addresses the use of Xenpozyme (olipudase alfa-rpcp), a hydrolytic lysosomal sphingomyelin-specific enzyme approved by the Food and Drug Administration (FDA) for treatment of non–central nervous system manifestations of acid sphingomyelinase deficiency (ASMD) in adult and pediatric individuals.

ASMD is a lysosomal storage disease caused by pathogenic variants in the sphingomyelin phosphodiesterase-1 (SMPD1) gene encoding acid sphingomyelinase (ASM). Clinical manifestations of ASMD include hepatosplenomegaly, thrombocytopenia, interstitial lung disease, skeletal irregularities, neurologic deficits, hyperlipidemia and ocular abnormalities. ASMD can present in various phenotypes. ASMD type A is a severe early-onset form and ASMD type B is a less severe, later-onset form. Diagnosis confirmation through enzyme activity analysis or genetic testing are important to differentiate ASMD from other lysosomal storage disorders.

Xenpozyme is intravenous enzyme replacement therapy and the first FDA-approved treatment for ASMD. Xenpozyme is not expected to cross the blood-brain barrier and is intended to treat the non-central nervous system disease manifestations. Xenpozyme has only been studied in individuals with the type B and A/B phenotypes.

Xenpozyme has a black box warning for life-threatening hypersensitivity reactions including anaphylaxis. Appropriate medical support measures, including cardiopulmonary resuscitation equipment, should be readily available during Xenpozyme administration. If a severe hypersensitivity reaction occurs, Xenpozyme should be discontinued immediately, and appropriate medical treatment should be initiated. Therapy with Xenpozyme should be directed in consultation with physicians knowledgeable in the management of ASMD.

Clinical Criteria

When a drug is being reviewed for coverage under a member's medical benefit plan or is otherwise subject to clinical review (including prior authorization), the following criteria will be used to determine whether the drug meets any applicable medical necessity requirements for the intended/prescribed purpose.

Xenpozyme (olipudase alfa)

Initial requests for Xenpozyme (olipudase alfa) may be approved if the following criteria are met:

I. Individual has a diagnosis of acid sphingomyelinase deficiency (ASMD); **AND**
II. Individual has a clinical presentation consistent with ASMD type B **OR** ASMD type A/B; **AND**
III. Documentation is provided that diagnosis has been demonstrated by (McGovern 2017):
    A. Pathogenic sphingomyelin phosphodiesterase-1 (*SMPD1*) gene mutation; **OR**
    B. Deficiency in acid sphingomyelinase (ASM) activity as measured in fibroblasts, leukocytes or dried blood spot; **AND**
IV. Individual is using for the treatment of non-central nervous system disease manifestations.

Continuation requests for Xenpozyme (olipudase alfa) may be approved if the following criterion is met:

I. There is clinically significant improvement or stabilization in clinical signs and symptoms of disease (including but not limited to improvement in splenomegaly, hepatomegaly, pulmonary function or platelet count).

Requests for Xenpozyme (olipudase alfa) may not be approved for the following:

I. Individual has a clinical presentation consistent with ASMD type A; **OR**
II. Individual has a diagnosis of Niemann-Pick disease type C; **OR**
III. May not be approved when the above criteria are not met and for all other indications.

Approval Duration
Initial: 6 months
Continuation: 1 year

Quantity Limits

Xenpozyme (olipudase alfa) Quantity Limit

Drug	Limit
Xenpozyme (olipudase alfa) 4 mg, 20 mg vial	3 mg/kg every 2 weeks

Coding

The following codes for treatments and procedures applicable to this document are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

HCPCS

J0218	Injection, olipudase alfa-rpcp, 1 mg [Xenpozyme]

ICD-10 Diagnosis

E75.241	Nieman-Pick disease type B [Acid sphingomyelinase deficiency (ASMD)]
E75.244~~-E75.249~~	Nieman-Pick disease type A/B [Acid sphingomyelinase deficiency (ASMD)]~~Acid sphingomyelinase deficiency (ASMD)~~

Document History

Revised: 8/16/2024
Document History:

- 8/16/2024 – Annual Review: Add quantity limit for new vial strength. Coding Reviewed: Updated ICD-10-CM code range to include E75.241 for Niemann-Pick disease type B and E75.244 for Niemann-Pick disease type A/B.
- 9/11/2023 – Annual Review: Wording and formatting changes. Coding Reviewed: No changes.
- 12/12/2022 – Annual Review: Add may not approve criteria for all other indications. Coding Reviewed: No changes. 4/1/2023 Added HCPCS J0218. Removed HCPCS J3490, J3590, C9399. Added ICD-10-CM E75.244-E75.249.
- 9/7/2022 – Select Review: New clinical criteria and quantity limit for Xenpozyme. Coding Reviewed: Added HCPCS J3490, J3590, C9399. All diagnoses pend.

References

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2. DrugPoints® System [electronic version]. Truven Health Analytics, Greenwood Village, CO. Updated periodically.
3. Lexi-Comp ONLINE™ with AHFS™, Hudson, Ohio: Lexi-Comp, Inc. Updated periodically.
4. McGovern MM, Dionisi-Vici C, Giugliani R, et al. Consensus recommendation for a diagnostic guideline for acid sphingomyelinase deficiency. Genet Med. 2017;19(9):967-974.
5. Schiffmann R. Overview of Niemann-Pick disease. Updated: March 12, 2024. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. Accessed: June 28, 2024.
6. Wasserstein M, Lachmann R, Hollak C, et al. A randomized, placebo-controlled clinical trial evaluating olipudase alfa enzyme replacement therapy for chronic acid sphingomyelinase deficiency (ASMD) in adults: One-year results. Genet Med. 2022;24(7):1425-1436.

Federal and state laws or requirements, contract language, and Plan utilization management programs or polices may take precedence over the application of this clinical criteria.