Clinical Policy: Olipudase Alfa-rpcp (Xenpozyme)

Reference Number: ERX.SPA.484
Effective Date: 12.01.22
Last Review Date: 11.22
Line of Business: Commercial, Medicaid

Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description
Olipudase alfa (Xenpozyme™) is a hydrolytic lysosomal sphingomyelin-specific enzyme.

FDA Approved Indication(s)
Xenpozyme is indicated for treatment of non-central nervous system manifestations of acid sphingomyelinase deficiency (ASMD) in adult and pediatric patients.

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.

Health plan approved formularies should be reviewed for all coverage determinations. Requirements to use preferred alternative agents apply only when such requirements align with the health plan approved formulary.

It is the policy of health plans affiliated with Envolve Pharmacy Solutions™ that Xenpozyme is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Acid Sphingomyelinase Deficiency (must meet all)**:**

1. Diagnosis of ASMD confirmed by one of the following (a or b):
   a. Enzyme assay demonstrating a deficiency of acid sphingomyelinase activity;
   b. DNA testing;
2. A diagnosis of Gaucher disease has been ruled out by determination of glucocerebrosidase activity;
3. Member has ASMD Type B or Type A/B;
4. For members aged ≥ 18 years, member has all of the following (a, b, and c):
   a. Diffuse capacity of the lung for carbon monoxide (DLco) ≤ 70%;
   b. Spleen volume ≥ 6 multiples of normal (MN) as measured by magnetic resonance imaging (MRI);
   c. Splenomegaly related score (SRS) ≥ 5;
5. For members aged < 18 years, member has both of the following (a and b):
   a. Spleen volume ≥ 5 MN as measured by MRI;
   b. Height Z-score ≤ -1;
6. Documentation of member's weight (in kg);
7. Dose does not exceed 3 mg/kg every two weeks.

Approval duration: 6 months

B. Other diagnoses/indications

1. Refer to ERX.PA.01 if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized).

II. Continued Therapy

A. Acid Sphingomyelinase Deficiency (must meet all)**:**

1. Currently receiving medication via a health plan affiliated with Envolve Pharmacy Solutions or member has previously met initial approval criteria;

2. Member is responding positively to therapy as evidenced by improvement in, but not limited to, any of the following parameters: lung function, reduced or stabilized spleen volume, or (in pediatrics only) improved height Z-scores *(see Appendix D for examples of individual patients' ASMD disease manifestation profiles)*;
3. Documentation of member's weight (in kg);
4. If request is for a dose increase, new dose does not exceed 3 mg/kg every two weeks.

Approval duration: 6 months

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

1. Currently receiving medication via a health plan affiliated with Envolve Pharmacy Solutions and documentation supports positive response to therapy.
   Approval duration: Duration of request or 6 months (whichever is less); or
2. Refer to ERX.PA.01 if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized).

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 policy – ERX.PA.01 or evidence of coverage documents;

B. ASMD Type A.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

ASMD: acid sphingomyelinase deficiency
DLco: diffuse capacity of the lung for carbon monoxide
FDA: Food and Drug Administration
MN: multiples of normal
MRI: magnetic resonance imaging
SRS: splenomegaly related score

Appendix B: Therapeutic Alternatives

Not applicable

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s): none reported
- Boxed warning(s): hypersensitivity reactions including anaphylaxis

Appendix D: General Information

- Individual patient manifestations of ASMD may include hepatomegaly, splenomegaly, bleeding/bruising, thrombocytopenia, dyslipidemia, interstitial lung disease (with decreased DLco), delayed growth and puberty, osteoporosis/osteopenia, liver dysfunction with progressive fibrosis, and cardiac disease.
- ASMD Type A (infantile neurovisceral disease) includes severe neurologic symptoms and is uniformly fatal in early childhood. Olipudase alfa does not cross the blood-brain barrier and thus is not appropriate for the treatment of patients with ASMD Type A.
- ASMD and Gaucher disease have several clinical manifestations in common. Simultaneous determination of acid sphingomyelinase activity and glucocerebrosidase activity to distinguish ASMD from Gaucher disease is recommended.

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
ASMD Type B and Type A/B	Pediatrics: IV dosing every 2 weeks starting with 0.03 mg/kg/dose titrated to a final target maintenance dose by Week 16 of 3 mg/kg every 2 weeks	3 mg/kg every 2 weeks

Indication	Dosing Regimen	Maximum Dose
	Adults: IV dosing every 2 weeks starting with 0.1 mg/kg/dose titrated to a final target maintenance dose by Week 14 of 3 mg/kg every 2 weeks	

VI. Product Availability

Vial with lyophilized powder for reconstitution: 20 mg

VII. References

1. Xenpozyme Prescribing Information. Cambridge, MA: Genzyme Corporation; August 2022. Available at: https://products.sanofi.us/xenpozyme/xenpozyme.pdf. Accessed September 8, 2022.
2. Wasserstein M, Lachmann R, Hollak C, et al. A randomized, placebo-controlled clinical trail evaluating olipudase alfa enzyme replacement therapy for chronic acid sphingomyelinase deficiency (ASMD) in adults: one year results. *Genetics in Medicine.* 2022;1-12. https://doi.org/10.1016/j.gim.2022.03.021.
3. Diaz GA, Jones SA, Scarpa M, et al. One-year results of a clinical trial of olipudase alfa enzyme replacement therapy in pediatric patients with acid sphingomyelinase deficiency. *Genetics in Medicine.* 2021;23:1543-50. https://doi.org/10.1038/s41436-021-01156-3.
4. McGovern MM, Dionisi-Vici C, Giugliani R, et al. Consensus recommendation for a diagnostic guideline for acid sphingomyelinase deficiency. *Genetics in Medicine.* Sept 2017;19(9):967-74.
5. Wasserstein M, Dionisi-Vici C, Giugliani R, et al. Recommendations for clinical monitoring of patients with acid sphingomyelinase deficiency (ASMD). *Molecular Genetics and Metabolism.* 2019;126:98-105.

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Policy created	09.08.22	11.22

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.

This Clinical Policy is not intended to dictate to providers how to practice medicine, nor does it constitute a contract or guarantee regarding payment or results. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members.

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