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Last P&T Approval/Version: 07/26/2023
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Policy Number: C8716-A

Lumizyme (alglucosidase alfa)

PRODUCTS AFFECTED

Lumizyme (alglucosidase alfa)

COVERAGE POLICY

Coverage for services, procedures, medical devices and drugs are dependent upon benefit eligibility as outlined in the member's specific benefit plan. This Coverage Guideline must be read in its entirety to determine coverage eligibility, if any.
This Coverage Guideline provides information related to coverage determinations only and does not imply that a service or treatment is clinically appropriate or inappropriate. The provider and the member are responsible for all decisions regarding the appropriateness of care. Providers should provide Molina Healthcare complete medical rationale when requesting any exceptions to these guidelines.

Documentation Requirements:
Molina Healthcare reserves the right to require that additional documentation be made available as part of its coverage determination; quality improvement; and fraud; waste and abuse prevention processes. Documentation required may include, but is not limited to, patient records, test results and credentials of the provider ordering or performing a drug or service. Molina Healthcare may deny reimbursement or take additional appropriate action if the documentation provided does not support the initial determination that the drugs or services were medically necessary, not investigational or experimental, and otherwise within the scope of benefits afforded to the member, and/or the documentation demonstrates a pattern of billing or other practice that is inappropriate or excessive.

DIAGNOSIS:
Pompe disease (GAA deficiency)

REQUIRED MEDICAL INFORMATION:
This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. If a drug within this policy receives an updated FDA label within the last 180 days, medical necessity for the member will be reviewed using the updated FDA label information along with state and federal requirements, benefit being administered and formulary preferencing. Coverage will be determined on a case-by case basis until the criteria can be updated through Molina Healthcare, Inc. clinical governance. Additional information may be required on a case-by-case basis to allow for adequate review. When the requested drug product for coverage is dosed by weight, body surface area or other member specific measurement, this data element is required as part of the medical necessity review.

A. POMPE DISEASE:
1. Documented diagnosis of Pompe Disease (GAA deficiency) confirmed by ONE of the following: Deficiency of acid alpha-glucosidase enzyme activity OR Detection of pathogenic variants in the GAA gene by molecular genetic testing. [DOCUMENTATION REQUIRED]

AND

2. Documented baseline values for one or more of the following [DOCUMENTATION REQUIRED]:
   (a) Infantile-onset disease: muscle weakness, motor function, respiratory function, cardiac involvement, percent predicted forced vital capacity (FVC)
   OR
   (b) Late-onset (non-infantile) disease: percent predicted forced vital capacity (FVC), baseline walking distance or 6-minute walk test (6MWT) or gastrointestinal symptoms *NOTE: 6MWT excluded for members at an age not able to walk*
   AND
3. Prescriber attests that the member will be monitored for IgG antibody formation every 3 months for 2 years and then annually thereafter, as well as liver enzymes (baseline and periodically; elevation maybe due to disease process); vital signs (prior to each infusion rate increase) during and following infusion; immune-mediated reactions involving skin and other organs; volume overload; urinalysis (periodically)
   AND
4. Prescriber attests Lumizyme (alglucosidase) will not be used concurrently with Nexviazyme (avalglucosidase)

CONTINUATION OF THERAPY:

A. POMPE DISEASE:
   1. Prescriber attests to monitoring IgG, liver enzymes, and urinalysis as recommended or clinically indicated
      AND
   2. Documentation that member has demonstrated a beneficial response to therapy compared to pretreatment baseline in one or more of the following [DOCUMENTATION REQUIRED]:
      a. Infantile-onset disease: stabilization or improvement in muscle weakness, motor function, respiratory function, cardiac involvement, or FVC
         OR
      b. Late-onset (non-infantile) disease: stabilization or improvement in FVC and/or 6MWT and signs/symptoms of the condition

      AND
   3. Prescriber attests to or clinical reviewer has found no evidence of intolerable adverse effects or drug toxicity (e.g., IgG antibody formation, abnormal liver enzymes, severe infusion reactions since starting therapy, etc.)

DURATION OF APPROVAL:

Initial authorization: 6 months, Continuation of therapy: 12 months

PRESCRIBER REQUIREMENTS:

Prescribed by, or in consultation with, a metabolic specialist, endocrinologist, biochemical geneticist, or physician experienced in the management of Pompe disease. [If prescribed in consultation, consultation notes must be submitted with initial request and reauthorization requests.]

AGE RESTRICTIONS:

No restriction

QUANTITY:

Max dose does not exceed 20mg/kg (of actual body weight) every 2 weeks.
Note: Doses of 40 mg/kg IV once every 2 weeks have also been studied; however, no differences in outcomes between 20 mg/kg and 40 mg/kg IV are apparent (5)

PLACE OF ADMINISTRATION:

The recommendation is that infused medications in this policy will be for pharmacy or medical benefit coverage administered in a place of service that is a non-hospital facility-based location as per the Molina

Note: Site of Care Utilization Management Policy applies for Lumizyme (alglucosidase alfa). For information on site of care, see

Specialty Medication Administration Site of Care Coverage Criteria (molinamarketplace.com)

DRUG INFORMATION

ROUTE OF ADMINISTRATION:
Intravenous

DRUG CLASS:
GAA Deficiency Treatment - Agents

FDA-APPROVED USES:
Indicated for patients with Pompe disease (acid alpha-glucosidase [GAA] deficiency)

COMPENDIAL APPROVED OFF-LABELED USES:
None

APPENDIX

APPENDIX:
None

BACKGROUND AND OTHER CONSIDERATIONS

BACKGROUND:
Lysosomal acid alpha-glucosidase (GAA, also called acid maltase) deficiency (Pompe disease, formerly classified as glycogen storage disease type II [GSD II]) is an autosomal recessive disorder with considerable allelic heterogeneity. It is caused by mutations in the gene for lysosomal acid alpha-1,4-glucosidase. Deficiency of lysosomal GAA leads to accumulation of glycogen in lysosomes and cytoplasm, which results in tissue destruction.

- The infantile form (early onset) of GAA deficiency is characterized by cardiomyopathy and severe, generalized hypotonia. Most patients with this form die within the first year or two of life without treatment.
- The juvenile and adult form (late onset) is characterized by skeletal myopathy (usually in a limb-girdle distribution) and a protracted course leading to respiratory failure.
- Infantile-onset GAA deficiency should be suspected in infants with profound hypotonia and cardiac insufficiency. Juvenile or adult-onset GAA deficiency should be considered in patients with progressive weakness in a limb-girdle distribution. Supportive findings may include:
  - Electrocardiogram demonstrating short PR interval and giant QRS complexes in all leads, suggesting biventricular hypertrophy, although this is a nonspecific finding (infantile form).
  - Electromyogram demonstrating myopathic discharges, sometimes associated with abundant myotonic and complex repetitive discharges, most prominent in the paraspinal muscles (juvenile and adult form).
  - Elevated serum creatine kinase (all forms).

  Demonstration of reduced GAA activity in a dried blood spot or leukocytes, followed by sequencing of the GAA gene, confirms the disease. Enzyme activity assays using skin fibroblasts or muscle tissue are alternatives to genetic testing to confirm the diagnosis.

- GAA deficiency is treated with enzyme replacement therapy (ERT), physical and occupational therapy, and supportive care (e.g., mechanical ventilation for respiratory failure).
- The advent of ERT has improved clinical outcomes and survival for both early- and late-onset GAA deficiency. However, patients on ERT may still develop gradual pelvic girdle muscle weakness. Additional complications may include fractures and sleep-disordered breathing.

CONTRAINDICATIONS/EXCLUSIONS/DISCONTINUATION:
All other uses of Lumizyme (alglucosidase alfa) are considered experimental/investigational and therefore, will follow Molina's Off- Label policy. Contraindications to Lumizyme (alglucosidase alfa) include: No labeled contraindications.

OTHER SPECIAL CONSIDERATIONS:
Lumizyme has an FDA labeled Black Box Warning for risk of anaphylaxis, hypersensitivity and immune-mediated reactions, and risk of cardiorespiratory failure. Life-threatening anaphylactic reactions and severe hypersensitivity reactions have occurred in some patients during and after alglucosidase alfa infusions. Immune mediated reactions presenting as proteinuria, nephrotic syndrome, and necrotizing skin lesions have occurred in some patients following alglucosidase alfa treatment. Closely observe patients during and after alglucosidase alfa administration and be prepared to manage anaphylaxis and hypersensitivity reactions.
Inform patients of the signs and symptoms of anaphylaxis, hypersensitivity reactions, and immune mediated reactions and have them seek immediate medical care should signs and symptoms occur. Infantile-onset Pompe disease patients with compromised cardiac or respiratory function may be at risk of serious acute exacerbation of their cardiac or respiratory compromise due to fluid overload, and require additional monitoring.

CODING/BILLING INFORMATION

Note: 1) This list of codes may not be all-inclusive. 2) Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement

HCPCS CODE	DESCRIPTION
J0221	Injection, alglucosidase alfa, (lumizyme), 10 mg

AVAILABLE DOSAGE FORMS:
Lumizyme SOLR 50MG single-dose vial

REFERENCES

1. Lumizyme [package insert]. Cambridge, MA; Genzyme Corporation; March 2023.
2. Cupler EJ, Berger KI, Leshner RT, et al. Consensus treatment recommendations for late onset Pompe disease. Muscle Nerve. 2012 Mar; 45(3):319-33. Doi:10.1002/mus.22329. Epub 2011 Dec 15.
3. Leslie N, Tinkle BT. Glycogen Storage Disease Type II (Pompe Disease). In: Pagon RA, Adam MP, Bird TD, Dolan CR, Fong CT, Stephens K, editors. GeneReviews™ [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2013. 2007 Aug 31 [updated 2013 May9].
4. Kishnani PS, Steiner RD, Bali D, et al. Pompe disease diagnosis and management guidelines. Genet Med 2006; 8:267-88.
5. Nancy L, Bailey L. Pompe Disease. GeneReviews. www.ncbi.nlm.nih.gov/books/NBK1261/
6. Kishnani PS, Howell RR. Pompe disease in infants and children. JPediatr.2004;144(suppl):S35–S43.
7. Toscano, A, Schoser, B. Enzyme replacement therapy in late-onset Pompe disease: a systematic literature review. Journal of neurology. 2013 Apr;260(4):951-9. PMID:22926164
8. Nicolino M, Byrne B, Wraith JE, et al. Clinical outcomes after long-term treatment with alglucosidase alfa in infants and children with advanced Pompe disease. Genet Med2009;11:210-9.

SUMMARY OF REVIEW/REVISIONS	DATE
REVISION- Notable revisions: Required Medical Information Continuation of Therapy	Q3 2023
REVISION- Notable revisions: Required Medical Information Continuation of Therapy Duration of Approval Prescriber Requirements Quantity Contraindications/Exclusions/Discontinuation Other Special Considerations	Q3 2022
Q2 2022 Established tracking in new format	Historical changes on file