Medical Drug Clinical Criteria

Subject:	Mepsevii (vestronidase alfa)		
Document #:	CC-0013	**Publish Date:**	10/23/2024
Status:	Reviewed	**Last Review Date:**	09/09/2024

Table of Contents

Overview

This document addresses Mepsevii (vestronidase alfa), an enzyme replacement therapy approved by the Food and Drug Administration (FDA) to treat individuals with Mucopolysaccharidosis VII (Sly syndrome).

The mucopolysaccharidoses are a group of inherited metabolic diseases caused by the deficiency of lysosomal enzymes needed to breakdown mucopolysaccharides or glycosaminoglycan (GAGs). The progressive accumulation of GAGs in lysosomes leads to respiratory, cardiac, skeletal and connectivity, neurologic and ophthalmologic complications. There are seven distinct types of mucopolysaccharidosis (I, II, III, IV, VI, VII, and IX). Accurate diagnosis is important to provide disease-specific enzyme replacement therapy. Diagnosis is confirmed through urinary GAG concentration measurement, enzymatic activity measurement or genetic testing.

Mepsevii is approved for treatment of pediatric and adult individuals with Mucopolysaccharidosis VII based on clinical trial data from a phase 3 randomized, placebo-controlled, single-crossover study in 12 participants with Mucopolysaccharidosis type VII. The participants were included in the study if they had a confirmed diagnosis of Mucopolysaccharidosis type VII based on leukocyte or fibroblast glucuronidase enzyme assay or genetic testing, an elevated urine GAG excretion at a minimum of 3-fold over the mean normal for age and at least one clinical sign of lysosomal storage disease. Following 24 weeks of treatment, clinical efficacy was determined by assessment of motor function, forced vital capacity and visual acuity. Ten of the participants were able to be assessed by the 6-minute walk test and 3 of the participants showed improvement. Seven participants had assessment of liver and spleen volume and most were unchanged following treatment. Not all of the clinical endpoints were assessable in some of the participants due to their extent of disease, age or level of cognition.

Mepsevii has a black box warning for anaphylaxis. Life-threatening anaphylactic reactions have occurred during Mepsevii infusions. Appropriate medical support should be available during Mepsevii administration, and the infusion should be discontinued if the individual experiences anaphylaxis. Individuals should be observed for 60 minutes after Mepsevii infusion.

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.

Mepsevii (vestronidase alfa)

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

I. Individual has a diagnosis of Mucopolysaccharidosis type VII (Sly syndrome); **AND**
II. Documentation is provided that diagnosis is demonstrated by (NCT 02230566, Lehman 2011):
    A. Deficiency in beta-glucuronidase enzyme activity as measured in fibroblasts or leukocytes; **OR**
    B. *GUSB* gene mutation; **AND**
III. Documentation is provided that elevated urine glycosaminoglycans excretion is at a minimum of 3-fold over the mean normal for age at screening (NCT 02230566).

Continuation requests for Mepsevii (vestronidase alfa) may be approved if the following criteria are met:

I. Documentation is provided that there is clinically significant improvement or stabilization in clinical signs and symptoms of disease (including but not limited to reduction in urinary GAG excretion, reduction in hepatosplenomegaly, improvement in

pulmonary function, improvement in walking distance and/or improvement in fine or gross motor function) compared to the predicted natural history trajectory of disease (NCT 02230566).

Mepsevii (vestronidase alfa) may not be approved when the above criteria are not met and for all other indications.

Length of approval for initial request and continuation request: 6 months

Quantity Limits

Mepsevii (vestronidase alfa) Quantity Limit

Drug	Limit
Mepsevii (vestronidase alfa) 10 mg vial	4 mg/kg once 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

J3397	Injection, vestronidase alfa-vjbk, 1 mg (Mepsevii)

ICD-10 Diagnosis

E76.29	Other mucopolysaccharidoses [when specified as MPS type VII, Sly syndrome]

Document History

Reviewed: 9/9/2024
Document History:

- 9/9/2024 – Annual Review: No changes. Coding Reviewed: Updated coding description for E76.29.
- 9/11/2023 – Annual Review: Clarify diagnosis confirmation criteria. Wording and formatting changes. Coding Reviewed: No changes.9/12/2022 – Annual Review: No changes. Coding Reviewed: No changes.
- 9/13/2021 – Annual Review: Wording and formatting changes. Coding Changes. No changes.
- 08/01/2021 – Administrative update to add documentation.
- 09/14/2020 – Annual Review: No changes. Coding Reviewed: No changes.
- 09/23/2019 – Administrative update to add drug specific quantity limit.
- 09/9/2019 – Annual Review: Clarify continuation criteria by adding examples of clinically significant improvements. Wording and formatting changes. Coding Reviewed: No changes.
- 08/17/2018 – Annual Review: Update continuation criteria by removing requirement to meet initiation criteria. Add references for non-label based criteria elements. Wording and formatting updates. Coding review: Add J3397. Delete J3490 (NOC).

References

1. DailyMed. Package inserts. U.S. National Library of Medicine, National Institutes of Health website. http://dailymed.nlm.nih.gov/dailymed/about.cfm. Accessed: September 7, 2024.
2. DrugPoints® System [electronic version]. Truven Health Analytics, Greenwood Village, CO. Updated periodically.
3. Lehman TJ, Miller N, Norquist B, Underhill L, Keutzer J. Diagnosis of the mucopolysaccharidoses. *Rheumatology (Oxford)*. 2011;50 Suppl 5:v41-v48. doi:10.1093/rheumatology/ker390.
4. Lexi-Comp ONLINE™ with AHFS™, Hudson, Ohio: Lexi-Comp, Inc. Updated periodically.
5. Ultragenyx Pharmaceutical Inc. A phase 3 study of UX003 rhGUS enzyme replacement therapy in patients with MPS 7. NLM Identifier: NCT 02230566. Last updated: July 30, 2020. Available at: https://clinicaltrials.gov/ct2/show/NCT02230566?term=Recombinant+Human+Beta-glucuronidase&rank=3. Accessed: September 7, 2024.

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.