Reference number(s)
1974-A

Specialty Guideline Management Strensiq

Products Referenced by this Document

Drugs that are listed in the following table include both brand and generic and all dosage forms and strengths unless otherwise stated. Over-the-counter (OTC) products are not included unless otherwise stated.

Brand Name	Generic Name
Strensiq	asfotase alfa

Indications

The indications below including FDA-approved indications and compendial uses are considered a covered benefit provided that all the approval criteria are met and the member has no exclusions to the prescribed therapy.

FDA-Approved Indication[1]

Strensiq is indicated for the treatment of patients with perinatal/infantile- and juvenile-onset hypophosphatasia (HPP).

All other indications are considered experimental/investigational and not medically necessary.

Documentation

Submission of the following information is necessary to initiate the prior authorization review:

Initial requests:

- Chart notes or medical record documentation of presence of condition before the age of 18, if applicable.

- Chart notes or medical record documentation confirming diagnosis which includes either of the following:
    - Genetic test results confirming a mutation in the ALPL gene
    - Submission of ALL of the following:
        - Radiographic imaging demonstrating skeletal abnormalities (see Appendix B)
        - A serum alkaline phosphatase (ALP) level below the gender and age-specific reference range of the laboratory performing the test
        - Elevated tissue non-specific alkaline phosphatase (TNSALP) substrate level (e.g., serum pyridoxal 5-phosphate [PLP] level, urine phosphoethanolamine [PEA] level, or urinary or plasma inorganic pyrophosphate [PPi] level)

Continuation requests:

Chart notes or medical record documentation of at least one of the following showing benefit to therapy:

- Radiographic Global Impression of Change (RGI-C) rating
- Height and weight measurements as measured by z-scores
- Modified Performance Oriented Mobility Assessment-Gait (MPOMA-G) score
- Distance walked in the 6 Minute Walk Test (6MWT)
- Timed Up & Go (TUG) Test
- Chair Rise Test
- Lower Extremity Function Scale (LEFS)

Coverage Criteria

Perinatal/Infantile- and Juvenile-Onset Hypophosphatasia (HPP)[1-4]

Authorization of 12 months may be granted for treatment of HPP when all of the following criteria are met:

- Member has clinical signs and/or symptoms of hypophosphatasia (see Appendix A).
- The onset of the disease was perinatal/infantile or juvenile. If the member is 18 years of age or older at the time of the request, documentation of the presence of the condition before the age of 18 must be provided (e.g., member began experiencing symptoms at age 10).
- Member's diagnosis was confirmed by either of the following:
    - The presence of a known pathological mutation in the ALPL gene as detected by ALPL molecular genetic testing
    - The diagnosis is supported by ALL of the following:
        - Radiographic imaging demonstrating skeletal abnormalities (see Appendix B)
        - A serum alkaline phosphatase (ALP) level below the gender- and age-specific reference range of the laboratory performing the test

    - Elevated tissue-nonspecific alkaline phosphatase (TNSALP) substrate level (e.g., serum PLP level, urine PEA level, or urinary or plasma PPi level) as defined by the laboratory performing the test
- Member's weekly dose will not exceed either of the following:
    - 9 mg/kg weekly in a member with perinatal/infantile-onset HPP
    - 6 mg/kg weekly in a member with juvenile-onset HPP

Continuation of Therapy

Authorization of 12 months may be granted for continued treatment in members requesting reauthorization for an indication listed in the coverage criteria section who are currently receiving the requested medication through a paid pharmacy or medical benefit when both of the following criteria are met:

- Member is experiencing benefit from therapy as demonstrated by one of the following:
    - Member has experienced improvement in skeletal manifestations from baseline as assessed by the Radiographic Global Impression of Change (RGI-C) scale.
    - Member is less than 18 years of age and has experienced an improvement in height and weight compared to baseline, as measured by z-scores.
    - Member has experienced an improvement in step length by at least 1 point in either foot compared to baseline based on the Modified Performance Oriented Mobility Assessment-Gait (MPOMA-G) scale.
    - Member has experienced an improvement in 6 Minute Walk Test (6MWT) compared to baseline.
    - Member has experienced an improvement in Timed Up & Go (TUG) Test compared to baseline.
    - Member has experienced an improvement in Chair Rise Test compared to baseline.
    - Member has experienced an improvement in Lower Extremity Function Scale (LEFS) compared to baseline.
- Member's weekly dose will not exceed either of the following:
    - 9 mg/kg weekly in a member with perinatal/infantile-onset HPP
    - 6 mg/kg weekly in a member with juvenile-onset HPP

Appendix

Appendix A. Examples of Signs and Symptoms of HPP[2-4]

Perinatal/Infantile-Onset HPP

- Generalized hypomineralization with rachitic features, chest deformities and rib fractures

- Skeletal abnormalities (e.g., short limbs, abnormally shaped chest, soft skull bone)
- Respiratory problems (e.g., pneumonia)
- Hypercalcemia
- Failure to thrive
- Severe muscular hypotonia and weakness
- Nephrocalcinosis secondary to hypercalciuria
- Swallowing problems
- Seizures

Juvenile-Onset HPP

- Premature loss of deciduous teeth
- Failure to thrive with anorexia, nausea, and gastrointestinal problems
- Short stature with bowed legs or knock knees
- Skeletal deformities (e.g., enlarged wrist and ankle joints, abnormal skull shape)
- Bone and joint pain
- Rickets
- Fractures
- Delayed walking
- Waddling gait

Appendix B. Examples of Radiographic Findings that Support HPP Diagnosis[2-4]

- Infantile rickets
- Alveolar bone loss
- Focal bony defects of the metaphyses
- Metatarsal stress fractures or metaphyseal fractures
- Osteomalacia with lateral pseudofractures
- Osteopenia, osteoporosis, or low bone mineral content for age (as detected by dual-energy x-ray absorptiometry [DEXA])
- Prenatal long bone bowing with osteochondral spurs

References

1. Strensiq [package insert]. Boston, MA: Alexion Pharmaceuticals, Inc.; July 2024.
2. Bianchi ML. Hypophosphatasia: an overview of the disease and its treatment. Osteoporos Int. 2015; 26(12):2743-57.
3. Mornet E, Nunes ME. Hypophosphatasia. GeneReviews [Internet]. Available at http://www.ncbi.nlm.nih.gov/books/NBK1150. Updated March 30, 2023. Accessed August 9, 2024.
4. Whyte, MP. Hypophosphatasia: An overview for 2017. Bone. 2017;102:15-25.