Effective Date: 03/01/2018
Reviewed: 5/2019, 9/2019, 1/2020, 7/2020, 4/2021, 2/2022, 1/2023, 12/2023, 01/2024, 02/2025
Pharmacy Scope: Medicaid
Medical Scope: Medicaid, Commercial, Medicare-Medicaid Plan (MMP)

Strensiq (asfotase alfa) subcutaneous

Summary of Evidence:

Strensiq is a tissue nonspecific alkaline phosphatase indicated for the treatment of patients with perinatal/infantile- and juvenile-onset hypophosphatasia (HPP). Clinical trials evaluating the efficacy and safety of Strensiq in patients with hypophosphatasia (HPP) have demonstrated significant therapeutic benefits, including improved skeletal mineralization, reduction in skeletal abnormalities, and prevention of disease progression. Common adverse events reported are injection site reactions, hypersensitivity reactions, and transient increases in serum calcium and phosphorus levels.

Initial Criteria Coverage

- Prescriber is an endocrinologist or specialist in the treatment of perinatal/infantile or juvenile hypophosphatasia (HPP); and
- The following documentation must be included with the request:
    - ALPL molecular genetic testing results
    - Serum alkaline phosphatase (ALP) level
    - Tissue-non-specific alkaline phosphatase (TNSALP) substrate level; AND
- Patient must be clinically diagnosed with perinatal/infantile or juvenile HPP initially prior to 18 years of age; and
- Supporting documentation of diagnosis of perinatal/infantile- or juvenile onset HPP prior to 18 years old must be provided; and
- Patient has clinical signs and/or symptoms of hypophosphatasia as supported by clinical notes provided (see appendix A); and
- Diagnosis is supported by one of the following:
    - Molecular genetic testing supporting the presence of mutation in the ALPL gene detected; or
    - Diagnosis is supported by ALL of the following (provided with submitted request):
        - Radiographic imaging provided that demonstrates skeletal abnormalities supporting diagnosis of hypophosphatasia (e.g., infantile rickets, alveolar bone loss, osteoporosis, low bone mineral content for age [as detected by DEXA]) such as the following clinical features; and
            - Craniosynostosis (premature fusion of one or more cranial sutures) with increased intracranial pressure;
            - Rachitic chest deformity (costochondral junction enlargement seen in advanced rickets) with associated respiratory compromise;
            - Limb deformity with delayed walking or gait abnormality;
            - Compromised exercise capacity due to rickets and muscle weakness;

        - Low bone mineral density for age with unexplained fractures;
        - Alveolar bone loss with premature loss of deciduous (primary) teeth.
    - A low baseline serum alkaline phosphatase (ALP) lab results provided supporting level below the gender- and age-specific reference range of the laboratory performing the test; and
    - Elevated TNSALP substrate level as supported by lab results provided (i.e. serum PLP level, serum or urine PEA level, urinary PPi level); and
- Baseline ophthalmology exam; and
- Baseline renal ultrasound; and
- Member weight within 30 days of request; and
- Dose is than no greater than 2mg/kg three (3) times weekly and appropriate vials must be used for patient;
- MMP members who have previously received this medication within the past 365 days are not subject to Step Therapy Requirements

Renewal Coverage Criteria:

- Supporting documentation provided that Strensiq has been effective in management of HPP and patient is responding to treatment such as:
    - Improvements in weight;
    - Improvement in height velocity;
    - Improvement in ventilator status, respiratory function;
    - Improvement in skeletal manifestations (e.g. bone mineralization, bone formation and remodeling, fractures, deformities, Radiographic Global Impression of Change (RGI-C) scale);
    - Improvement in motor function, mobility or gait (e.g., Modified Performance Oriented Mobility Assessment-Gait (MPOMA-G) scale, 6-minute walk test, Timed Up & Go (TUG) Test, Chair Rise Test, Lower Extremity Function Scale (LEFS));
- Patient is tolerating therapy with Strensiq; and
- Documented ophthalmology exam once yearly to monitor ectopic calcifications; and
- Documented renal ultrasound once yearly to monitor ectopic calcifications.

Coverage durations:

- Initial coverage: 6 months
- Renewal coverage: 6 months

Per §§ 42 CFR 422.101, this clinical medical policy only applies to INTEGRITY in the absence of National Coverage Determination (NCD) or Local Coverage Determination (LCD).

Policy Rationale:

Strensiq was reviewed by the Neighborhood Health Plan of Rhode Island Pharmacy & Therapeutics (P&T) Committee. Neighborhood adopted the following clinical coverage criteria to ensure that its members use Strensiq according to Food and Drug Administration (FDA) approved labeling and/or relevant clinical literature. Neighborhood worked with network prescribers and pharmacists to draft these criteria. These criteria will help ensure its members are using this drug for a medically accepted indication, while minimizing the risk for adverse effects and ensuring more cost-effective options are used first, if applicable and appropriate. For INTEGRITY (Medicare-Medicaid Plan) members, these coverage criteria will only apply in the absence of National Coverage Determination (NCD) or Local Coverage Determination (LCD) criteria. Neighborhood will give individual consideration to each request it reviews based on the information submitted by the prescriber and other information available to the plan.

Appendix A:

Examples of Signs and Symptoms of HPP

A. 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

Investigational use: All therapies are considered investigational when used at a dose or for a condition other than those that are recognized as medically accepted indications as defined in any one of the following standard reference compendia: American Hospital Formulary Service Drug information (AHFS-DI), Thomson Micromedex DrugDex, Clinical Pharmacology, Wolters Kluwer Lexi-Drugs, or Peer-reviewed published medical literature indicating that sufficient evidence exists to support use. Neighborhood does not provide coverage for drugs when used for investigational purposes.

Applicable Codes:

Below is a list of billing codes applicable for covered treatment options. The below tables are provided for reference purposes and may not be all-inclusive. Requests received with codes from tables below do not guarantee coverage. Requests must meet all criteria provided in the procedure section.

The following HCPCS/CPT codes are:

HCPCS/CPT Code	Description
J3490 (NOC)	Unclassified drugs

References:

1. Strensiq (asfotase alfa) (Prescribing Information). New Haven , CT: Alexion Pharmaceuticals, Inc.; 2023 March. Accessed January 2025.
2. Whyte MP, Greenberg CR, Salman NJ, et al. Enzyme-replacement therapy in life-threatening hypophosphatasia. N Engl J Med. 2012;366(10):904-913.
3. Whyte MP, Rockman-Greenberg C, Ozono K, et al. Asfotase alfa treatment improves survival for perinatal and infantile hypophosphatasia. J Clin Endocrinol Metab. 2016;101(1):334