Clinical Policy: Asfotase Alfa (Strensiq)

Reference Number: CP.PHAR.328
Effective Date: 03.01.17
Last Review Date: 11.20
Line of Business: Commercial, HIM, Medicaid

Coding Implications
Revision Log

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

Description

Asfotase alfa (Strensiq®) is a tissue nonspecific alkaline phosphatase.

FDA Approved Indication(s)

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

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.

It is the policy of health plans affiliated with Centene Corporation® that Strensiq is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Perinatal/Infantile- and Juvenile-Onset Hypophosphatasia (must meet all)**:**

1. Diagnosis of perinatal/infantile- or juvenile-onset HPP as evidenced by all of the following (a, b, and c):
   a. Age of onset is < 18 years;
   b. Presence of one of the following laboratory indices (i or ii):
      i. Mutation in the *ALPL* gene encoding for tissue non-specific alkaline phosphatase (TNSALP)*;
      ii. Serum alkaline phosphatase (ALP) below the age-adjusted normal range and either of the following (a or b):
         a) Plasma pyridoxal 5'-phosphate (PLP; main circulating form of vitamin B6) above the upper limit of normal (ULN);
         b) Urinary phosphoethanolamine (PEA) above the ULN;
   c. History of one of the following HPP clinical manifestations (i, ii, iii, or iv):
      i. Vitamin B6-dependent seizures;
      ii. Failure to thrive or growth failure/short stature;
      iii. Nephrocalcinosis with hypercalcemia/hypercalciuria;
      iv. Skeletal abnormalities and associated impairments (any of the following):
         a) Craniosynostosis (premature fusion of one or more cranial sutures) with increased intracranial pressure;
         b) Rachitic chest deformity (costochondral junction enlargement seen in advanced rickets) with associated respiratory compromise;
         c) Limb deformity with delayed walking or gait abnormality;

d) Compromised exercise capacity due to rickets and muscle weakness;
e) Low bone mineral density for age with unexplained fractures;
f) Alveolar bone loss with premature loss of deciduous (primary) teeth;

2. Prescribed by or in consultation with an endocrinologist;
3. Dose does not exceed the following (a or b):
   a. Perinatal/infantile-onset HPP: 9 mg/kg per week;
   b. Juvenile-onset HPP: 6 mg/kg per week.

Approval duration:
Medicaid/HIM – 6 months
Commercial – 6 months or to member's renewal date, whichever is longer

**TNSALP is an ALP isoenzyme; a functional mutation in the gene (ALPL) encoding for TNSALP results in low TNSALP activity (as evidenced by a low serum ALP level) and increased levels of TNSALP substrates (PLP and PEA).*

B. Other diagnoses/indications

1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PHAR.21 for health insurance marketplace, and CP.PMN.53 for Medicaid.

II. Continued Therapy

A. Perinatal/Infantile- and Juvenile-Onset Hypophosphatasia (must meet all)**:**

1. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
2. Member is responding positively to therapy, as evidenced by improvement in any of the following on initial re-authorization request:
   a. Height velocity;
   b. Respiratory function;
   c. Skeletal manifestations (e.g., bone mineralization, bone formation and remodeling, fractures, deformities);
   d. Motor function, mobility, or gait;
3. If request is for a dose increase, new dose does not exceed the following (a or b):
   a. Perinatal/infantile-onset HPP: 9 mg/kg per week;
   b. Juvenile-onset HPP: 6 mg/kg per week.

Approval duration:
Medicaid/HIM – 12 months
Commercial – 6 months or to member's renewal date, whichever is longer

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

1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy.
   Approval duration: Duration of request or 6 months (whichever is less); or
2. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is

NOT authorized): CP.CPA.09 for commercial, HIM.PHAR.21 for health insurance marketplace and CP.PMN.53 for Medicaid.

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 – CP.CPA.09 for commercial, HIM.PHAR.21 for health insurance marketplace and CP.PMN.53 for Medicaid, or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

ALP: alkaline phosphatase
FDA: Food and Drug Administration
HPP: hypophosphatasia
PEA: phosphoethanolamine
PLP: pyridoxal 5'-phosphate
TNSALP: tissue non-specific alkaline phosphatase
ULN: upper limit of normal

Appendix B: Therapeutic Alternatives

Not applicable

Appendix C: Contraindications/Boxed Warnings

None reported

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
Perinatal/infantile-onset HPP	6 mg/kg SC per week as either: • 2 mg/kg three times per week, or • 1 mg/kg six times per week The dose may be increased for lack of efficacy (e.g., no improvement in respiratory status, growth, or radiographic findings) up to 9 mg/kg per week, administered as 3 mg/kg SC three times per week.	9 mg/kg/week
Juvenile-onset HPP	6 mg/kg SC per week as either: • 2 mg/kg three times per week, or • 1 mg/kg six times per week	6 mg/kg/week

VI. Product Availability

Single-use vials: 18 mg/0.45 mL, 28 mg/0.7 mL, 40 mg/mL, 80 mg/0.8 mL

VII. References

1. Strensiq Prescribing Information. New Haven, CT: Alexion Pharmaceuticals, Inc.; June 2020. Available at http://strensiq.com/images/Strensiq_PRESCRIBING_INFORMATION.pdf. Accessed July 21, 2020.

2. Beck C, Morback H, Stenzel M. Hypophosphatasia: Recent advances in diagnosis and treatment. Open Bone J. 2009; 1:8-15.
3. Scott LJ. Asfotase alfa in perinatal/infantile-onset and juvenile-onset hypophosphatasia: A guide to its use in the USA. Bio Drugs. 2016; 30:41-48. DOI 10.1007/s40259-016-0161-x.
4. Whyte MP, Rockman-Greenberg C, Ozono K, et al. Asfotase alfa treatment improves survival for perinatal and infantile hypophosphatasia. J Clin Endocrinol Metab. January 2016; 101(1):334-42. Doi: 10.1210/jc.2015-3462. Epub 2015 Nov 3.
5. Orimo H. Pathophysiology of hypophosphatasia and the potential role of asfotase alfa. Ther Clin Risk Manag. May 17, 2016; 12:777-86. Doi: 10.2147/TCRM.S87956. eCollection 2016.
6. Mornet E, Nunes ME. Hypophosphatasia. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2016. 2007 Nov 20 [updated 2016 Feb 4]. Available at https://www.ncbi.nlm.nih.gov/books/NBK1150/. Accessed August 30, 2017.
7. Bishop N. Clinical management of hypophosphatasia. Clin Cases miner Bone Metab. 2015; 12(2): 170-173.
8. Kishnani PS, et al. Monitoring guidance for patients with hypophosphatasia treated with asfotase alfa. Mol Genetics and Metab. 2017;122:4-17.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J3490	Unclassified drugs

Reviews, Revisions, and Approvals	Date	P&T Approval Date
New policy developed, specialist reviewed	01.17	03.17
Policy converted to new template. Authorization limits extended from 3 and 6 months to 6 and 12 months for initial and continued approval, respectively. Prescriber requirement added.	08.30.17	11.17
4Q 2018 annual review: policies combined for commercial and Medicaid lines of business; no significant changes from previously approved corporate policy; Commercial: added diagnosis confirmation and specialist requirements along with specific criteria for confirmation of positive response to therapy for renewals; references reviewed and updated.	07.13.18	11.18
4Q 2019 annual review: no significant changes; references reviewed and updated.	08.22.19	11.19
Added HIM line of business.	02.13.20	
4Q 2020 annual review: no significant changes; for Commercial line of business revised approval duration to "6 months or to member's renewal date, whichever is longer"; references reviewed and updated.	07.21.20	11.20

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. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan's affiliates, as applicable.

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This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. 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. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

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and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

Note: For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

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