Drug and Biologic Coverage Policy

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Coverage Policy Number 2014

Afamelanotide

Table of Contents

Related Coverage Resources

INSTRUCTIONS FOR USE
The following Coverage Policy applies to health benefit plans administered by Cigna Companies. Certain Cigna Companies and/or lines of business only provide utilization review services to clients and do not make coverage determinations. References to standard benefit plan language and coverage determinations do not apply to those clients. Coverage Policies are intended to provide guidance in interpreting certain standard benefit plans administered by Cigna Companies. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement, Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document always supersedes the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. In certain markets, delegated vendor guidelines may be used to support medical necessity and other coverage determinations.

Overview

This policy supports medical necessity review for afamelanotide (Scenesse®).

Coverage Policy

Afamelanotide (Scenesse) is considered medically necessary when ALL of the following are met:

- Individual is 18 years of age or older
- Documented diagnosis of Erythropoietic Protoporphyria (including X-Linked Protoporphyria) as confirmed by **ONE** of the following:
    - Free erythrocyte protoporphyrin level above the normal reference range for the reporting laboratory
    - Molecular genetic testing consistent with the diagnosis (for example, *FECH*, *CLPX* or *ALAS2* variant or pathogenic variant)
- Documented history of at least one porphyric phototoxic reaction
- Is prescribed by, or in consultation with, a Dermatologist, Gastroenterologist, Hepatologist, Medical Geneticist, or physician specializing in the treatment of cutaneous porphyrias

When coverage is available and medically necessary, the dosage, frequency, duration of therapy, and site of care should be reasonable, clinically appropriate, and supported by evidence-based literature and adjusted based upon severity, alternative available treatments, and previous response to therapy.

Note: Receipt of sample product does not satisfy any criteria requirements for coverage.

Reauthorization Criteria

Afamelanotide (Scenesse®) is considered medically necessary for continued use when **ALL** of the following criteria are met:

- Documented beneficial clinical response (for example, improvement in acute nonblistering cutaneous reactions following sun exposure, improvement on a pain-intensity Likert Scale or Quality of Life questionnaire, reduction in number of phototoxic reactions, increase duration of pain-free sun exposure)
- Is prescribed by, or in consultation with, a Dermatologist, Gastroenterologist, Hepatologist, Medical Geneticist, or physician specializing in the treatment of cutaneous porphyrias

Authorization Duration

Initial authorization is up to 6 months.

Reauthorization is up to 6 months.

Conditions Not Covered

Afamelanotide (Scenesse) considered experimental, investigational or unproven for ANY other use including the following:

- Other photosensitivity disorders or photodermatoses (for example, polymorphous light eruption, solar urticaria, drug-induced photosensitivity)

General Background

Overview

Scenesse, a melanocortin 1 receptor agonist, is indicated to increase pain-free light exposure in adults with a history of phototoxic reactions from erythropoietic protoporphyria (EPP).[1] The agent is a controlled-release dosage form that is implanted subcutaneously (SC). Scenesse should be administered by a healthcare professional. A single implant which contains 16 mg of afamelanotide is inserted SC above the anterior supra-iliac crest once every 2 months.

FDA Recommended Dosing

Scenesse should be administered by a health care professional.
A single Scenesse implant is inserted subcutaneously above the anterior supra-iliac crest every 2 months.
Maintain sun and light protection measures during treatment with Scenesse to prevent phototoxic reactions related to EPP.

***Refer to the prescribing information (product label) for complete dosing information.*

Disease Overview

Porphyrias are disorders caused by enzyme defects in heme biosynthesis.[2] There are at least eight different types of porphyrias, which are classified as cutaneous or acute depending on the specific enzyme that is deficient. EPP is a cutaneous porphyria characterized by extreme photosensitivity. It is estimated to occur in 2 to 5 in 1,000,000 individuals.[3]

Two subtypes of EPP exist which differ in their genetic inheritance patterns. Classic EPP is inherited in an autosomal recessive fashion (sometimes referred to as EPP-AR). In this form of EPP, mutations in the *FECH*

gene lead to decreased activity of ferrochelatase, the final enzymatic step in heme biosynthesis.[4] This results in accumulation of an intermediate metabolite called protoporphyrin. An X-linked subtype of EPP, often referred to in the literature as X-linked protoporphyria (XLP), accounts for 2% to 10% of all EPP cases. This type develops due to a gain-of-function mutation in the erythroid form of 5-aminolevulinate synthase 2 (ALAS2). This enzyme is responsible for an earlier step in heme biosynthesis; hyperactivity of the ALAS2 enzyme leads to excess protoporphyrin production.[3,4] The two subtypes share the same biochemical and clinical features, although females with XLP may be less severely affected. Diagnosis is confirmed by one or both of the following: 1) biochemically via markedly elevated free erythrocyte protoporphyrin, and/or 2) molecular genetic testing.[2,3]

In both EPP subtypes, protoporphyrin accumulates in the bone marrow and is taken up by the liver and vascular endothelium.[3,4] Accumulation in superficial skin vessels leads to phototoxicity upon light exposure, resulting in the hallmark symptoms of burning, tingling, and itching, which often occur without visible damage.[2-4] Some patients may also be sensitive to artificial light, as the photosensitivity is primarily due to visible blue light.[5,6] Phototoxic pain is not responsive to analgesics, including narcotics; management is focused on prevention of phototoxic episodes.[3]

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.

Considered Medically Necessary to report afamelanotide (Scenesse®) when criteria in the applicable policy statements listed above are met:

HCPCS Codes	Description
J7352	Afamelanotide implant, 1 mg

References

1. Scenesse® subcutaneous implant [prescribing information]. Menlo Park, CA: Clinuvel; October 2019.
2. Balwani M. Erythropoietic protoporphyria and X-linked protoporphyria. National Organization of Rare Disorders. Updated 2018. Available at: https://rarediseases.org/rare-diseases/erythropoietic-protoporphyria/. Accessed on January 2, 2020.
3. Balwani M, Bloomer J, Desnick R, et al.; Porphyrias Consortium of the NIH-Sponsored Rare Diseases Clinical Research Network. Erythropoietic protoporphyria, autosomal recessive. Last updated September 7, 2017. Available at: https://www.ncbi.nlm.nih.gov/books/NBK100826/. Accessed on January 2, 2020.
4. Balwani M, Naik H, Anderson KE, et al. Clinical, biochemical, and genetic characterization of North American patients with erythropoietic protoporphyria and X-linked protoporphyria. *JAMA Dermatol.* 2017;153(8):789-796.
5. Langendonk JG, Balwani M, Anderson KE, et al. Afamelanotide for erythropoietic protoporphyria. *N Engl J Med*. 2015;373(1):48-59.
6. Stözlel U, Doss MO, Schuppan D. Clinical guide and update on porphyrias. *Gastroenterology.* 2019;157(2):365-381.e4.