

# Scenesse® (Afamelanotide)

**Policy Number:** IEXD0092.06  
**Effective Date:** September 1, 2023

[U Instructions for Use](#)

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Related Policies
None

## Applicable States

This Medical Benefit Drug Policy applies to Individual Exchange benefit plans in all states except for Massachusetts, Nevada, and New York.

## Coverage Rationale

[U See Benefit Considerations](#)

**Scenesse (afamelanotide) is proven and medically necessary for the treatment of erythropoietic protoporphyria (EPP) when all the following criteria are met:**

### Initial Therapy

- Submission of medical records (e.g., chart notes, laboratory values, etc.) to support the diagnosis of erythropoietic protoporphyria (EPP) confirming **one** of the following:
  - **Both** of the following:
    - § Increased total erythrocyte protoporphyrin (usually 300 to 8000 mcg/dL; normal < 80 mcg/dL)
    - § Increased percentage of erythrocyte metal-free protoporphyrin rather than zinc protoporphyrin (generally greater than 85% of total porphyrins)
  - or**
  - Molecular/genetic testing confirming one of the following genetic abnormalities:
    - § Ferrochelatase (FECH) gene mutation
    - § Delta-aminolevulinatase synthase-2 (ALAS2) gain-of-function gene mutation
- and**
- Patient is 18 years of age or older; **and**
- Patient has a history of phototoxic reactions due to EPP; **and**
- Prescribed by, or in consultation with, a hematologist, or a specialist with expertise in the diagnosis and management of EPP; **and**

- Scenesse is to be administered by a healthcare professional proficient in the subcutaneous implantation procedure; **and**
- The administering healthcare professional has completed requisite procedural training provided by product manufacturer; **and**
- Scenesse dosing is in accordance with the United States Food and Drug Administration approved labeling; **and**
- Initial authorization will be for no more than 6 months

## Continuation of Therapy

- Patient has previously received Scenesse for the treatment of EPP; **and**
- Patient has experienced a positive clinical response while on Scenesse **and**
- Prescribed by, or in consultation with, a hematologist, or a specialist with expertise in the diagnosis and management of EPP; **and**
- Scenesse is to be administered by a healthcare professional proficient in the subcutaneous implantation procedure; **and**
- The administering healthcare professional has completed requisite procedural training provided by product manufacturer; **and**
- Scenesse dosing is in accordance with the United States Food and Drug Administration approved labeling; **and**
- Reauthorization will be for no more than 12 months

## Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

HCPCS Code	Description
J7352	Afamelanotide implant, 1 mg

Diagnosis Code	Description
E80.0	Hereditary erythropoietic porphyria

## Background

Erythropoietic protoporphyria (EPP) is an inherited cutaneous porphyria characterized by painful, non-blistering photosensitivity occurring acutely after sunlight exposure but leaving little residual skin damage. EPP is a genetic disorder in which impaired ferrochelatase activity results from accumulations of protoporphyrin IX. Pathophysiologically, protoporphyrin IX is released from erythroid cells into the circulation, gains access to the vascular endothelium and liver, and is excreted through the biliary system. There are two main clinical manifestations of raised protoporphyrin IX levels: cutaneous phototoxicity and hepatobiliary disease. Phototoxicity is the more common of these and it usually presents in early childhood as intolerance to sun-exposure with patients experiencing severe burning pain most often on the face and hands. EPP is recognized as the most common porphyria in children and the third most common in adults, after porphyria cutanea tarda and acute intermittent porphyria. Approximately 1 in 140,000 people in the United States are affected by EPP.

Available treatment modalities for patients with EPP are limited. Avoidance of strong sunlight, either from direct exposure or through windows glass and the use of protective clothing is essential to prevent phototoxic reactions. Systemic  $\beta$ -carotene has been shown to be of benefit in the treatment of EPP although good efficacy data are lacking. The clinical benefits of other treatments such as PUVA phototherapy, UVB phototherapy, oral cysteine, cholestyramine and combinations thereof remain to be proven. The most effective measures are reflecting sunscreens containing titanium dioxide.

## Benefit Considerations

Some Certificates of Coverage allow for coverage of experimental/investigational/unproven treatments for life-threatening illnesses when certain conditions are met. The member specific benefit plan document must be consulted to make coverage decisions for this service. Some states mandate benefit coverage for off-label use of medications for some diagnoses or under some circumstances when certain conditions are met. Where such mandates apply, they supersede language in the benefit document or in the medical or drug policy. Benefit coverage for an otherwise unproven service for the treatment of serious rare diseases may occur when certain conditions are met. Refer to the Policy and Procedure addressing the treatment of serious rare diseases.

## Clinical Evidence

Two multicenter, randomized, double-blind, placebo-controlled trials assessed the efficacy of subcutaneous implants containing 16 mg of afamelanotide. Patients in the European Union (74 patients) and the United States (94 patients) were randomly assigned, in a 1:1 ratio, to receive a subcutaneous implant containing either afamelanotide or placebo every 60 days (a total of five implants in the European Union study and three in the U.S study). The two trials differed in the number of days of follow-up, the time windows within a day in which time spent outdoors was recorded, and how the amount of time spent in direct sunlight on each day was characterized. The type and duration of sun exposure, number and severity of phototoxic reactions, and adverse events were recorded over the respective 180-day and 270-day study periods. The primary efficacy end point was the number of hours of direct exposure to sunlight without pain.

In the European Union study, 38 received 16 mg of afamelanotide administered subcutaneously every 2 months, 36 received vehicle. Subjects received five implants and were followed for 270 days. On each study day, subjects recorded the number of hours spent outdoors between 10 am and 3 pm, whether “most of the day” was spent in direct sunlight, shade, or a combination of both, and whether they experienced any phototoxic pain that day. The primary endpoint was the total number of hours over 270 days spent outdoors between 10 am and 3 pm on days with no pain for which “most of the day” was spent in direct sunlight. This analysis does not include sun exposure on days for which subjects reported spending time in a combination of both direct sunlight and shade. The median total number of hours over 270 days spent outdoors between 10 am and 3 pm on days with no pain for which “most of the day” was spent in direct sunlight was 6.0 hours for subjects in the afamelanotide group and 0.75 hours for subjects in the vehicle group.

In the U.S. study, 48 received 16 mg of afamelanotide administered subcutaneously every 2 months, 45 received vehicle. Subjects received three implants and were followed for 180 days. On each study day, subjects recorded the number of hours spent in direct sunlight between 10 am and 6 pm, the number of hours spent in shade between 10 am and 6 pm, and whether they experienced any phototoxic pain that day. The primary endpoint was the total number of hours over 180 days spent in direct sunlight between 10 am and 6 pm on days with no pain. The median total number of hours over 180 days spent in direct sunlight between 10 am and 6 pm on days with no pain was 64.1 hours for subjects receiving afamelanotide and 40.5 hours for subjects receiving vehicle.

## U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

Scenesse is indicated to increase pain free light exposure in adult patients with a history of phototoxic reactions from erythropoietic protoporphyria (EPP).

## References

1. Scenesse [package insert], Burlingame, CA: Clinuvel, Inc.; October 2022.
2. Langendonk JG, Balwani M, Anderson KE, et al. Afamelanotide for Erythropoietic Protoporphyrinemia. *N Engl J Med.* 2015;373(1):48-59.
3. Bissell DM, Anderson KE, Bonkovsky HL. Porphyria. *N Engl J Med.* 2017;377(9):862-872.

4. Mittal S Anderson KE. Erythropoietic protoporphyria and X-linked protoporphyria. In: UpToDate, Leung LLK, Tirnauer JS (Ed), UpToDate, Waltham, MA, 2023. Accessed June 13, 2023.

## Policy History/Revision Information

Date	Summary of Changes
09/01/2023	<p><b>Coverage Rationale</b></p> <ul style="list-style-type: none"> <li>Revised coverage criteria for continuation of therapy; replaced criterion requiring “the patient has experienced a positive clinical response while on Scenesse <i>by demonstrating both a reduction in phototoxic reactions and an increased duration of pain-free time in direct sunlight from pre-treatment baseline</i>” with “the patient has experienced a positive clinical response while on Scenesse”</li> </ul> <p><b>Supporting Information</b></p> <ul style="list-style-type: none"> <li>Updated <i>References</i> section to reflect the most current information</li> <li>Archived previous policy version IEXD0092.05</li> </ul>

## Instructions for Use

This Medical Benefit Drug Policy provides assistance in interpreting UnitedHealthcare benefit plans. When deciding coverage, the member specific benefit plan document must be referenced as the terms of the member specific benefit plan may differ from the standard benefit plan. In the event of a conflict, the member specific benefit plan document governs. Before using this policy, please check the member specific benefit plan document and any applicable federal or state mandates. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Benefit Drug Policy is provided for informational purposes. It does not constitute medical advice.

UnitedHealthcare may also use tools developed by third parties, such as the InterQual<sup>®</sup> criteria, to assist us in administering health benefits. UnitedHealthcare Medical Benefit Drug Policies are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.