Scenesse (afamelanotide) Medical Drug Criteria with Quantity Limit Program Summary

POLICY REVIEW CYCLE

Effective Date **Date of Origin**
12/1/2022

FDA APPROVED INDICATIONS AND DOSAGE

Agent(s)	FDA Indication(s)	Notes	Ref#
Scenesse® (afamelanotide) Implant	To increase pain free light exposure in adult patients with a history of phototoxic reactions from erythropoietic protoporphyria (EPP)		1

See package insert for FDA prescribing information: https://dailymed.nlm.nih.gov/dailymed/index.cfm

CLINICAL RATIONALE

CLINICAL RATIONALE	Erythropoietic protoporphyria (EPP) is a rare inherited metabolic disorder characterized by a deficiency of the enzyme ferrochelatase (FECH). EPP can result either from mutations of the ferrochelatase gene (FECH), or less commonly the delta-aminolevulinic acid synthase-2 gene (ALAS2). Due to abnormally low levels of the FECH enzyme, excessive amounts of protoporphyrin accumulate in the bone marrow, blood plasma, and red blood cells. The major symptom of this disorder is hypersensitivity of the skin to sunlight and some types of artificial light (such as fluorescent lights). After exposure to light, the skin may become itchy and red. After continued exposure, individuals may also experience a burning sensation on their skin. The hands, arms, and face are the most commonly affected areas. Usually, these symptoms subside in 12 to 24 hours and heal without significant scarring. Blistering and scarring are characteristic of other types of cutaneous porphyria but are unusual in EPP. Some people with EPP may also have complications related to liver and gallbladder function.(2) EPP affects males and females in equal numbers. It is estimated that the disorder occurs in about 1 in 74,300[2] or 1 in 200,000 individuals.(3) The onset of symptoms affecting the skin usually occurs in infancy, however, in some cases, onset may not occur until adolescence or adulthood. In addition, diagnosis is often delayed since blistering is not common and, because the porphyrins are insoluble, they usually escape detection on urine analysis. The biochemical diagnosis of EPP is established by the detection of significantly elevated total erythrocyte protoporphyrin with a predominance (85%-100%) of metal-free protoporphyrin rather than zinc protoporphyrin.(3) A diagnosis of X-linked protoporphyria may be made through blood tests that can detect markedly increased levels of metal-free and zinc-bound protoporphyrin within erythrocytes. A higher ratio of zinc-bound to metal-free protoporphyrin can differentiate XLP from EPP. DNA studies are important for confirming the diagnosis of EPP and for genetic counseling. The diagnosis may also be confirmed by testing the erythrocytes for increased levels of protoporphyrin.(2)

	The mainstay of management of EPP is protection from sunlight. Life style, employment, travel, and recreation require adjustment in order to avoid painful reactions to light. For these reasons, EPP can substantially affect quality of life.(2) Sun protective clothing, tanning creams which increase skin pigmentation or sunscreens that reflect light, window tinting of car and home windows can all be of benefit. A high potency form of oral beta-carotene (Lumitene, OTC, Tishcon) has been used to improve an affected individual's tolerance of sunlight. While some patients report improvement, recent studies show that there is no data to support the benefit of this treatment.(4) Scenesse is a melatonin 1 receptor (MC1-R) agonist that has been approved to increase pain free light exposure in adult patients with a history of phototoxic reactions from EPP. This receptor binding increases production of eumelanin in the skin independently of exposure to sunlight or artificial UV light. The drug comes in the form as a controlled-release subcutaneous implant. A single implant is inserted subcutaneously above the anterior supra-iliac crest every 2 months.(1)
Efficacy	Two clinical trials of Scenesse were conducted in subjects with EPP, CUV039 and CUV209. They were both designed to assess exposure to direct sunlight on days with no phototoxic pain. CUV039 enrolled 93 subjects, 38 of whom received Scenesse (16 mg every 2 months) and 45 receiving a placebo vehicle. Subjects received 3 implants and were followed for 180 days. Each day patients 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 from 10 am to 6 pm on days with no pain. The median total number of hours over 180 days spent in direct sunlight on days with no pain was 64.1 hours for Scenesse subjects and 40.5 hours for placebo.(1) Study CUV209 enrolled 74 subjects, with 38 receiving Scenesse and 36 receiving placebo vehicle implants every 2 months. Subjects received five implants and were studied for 270 days. On each 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 "most of the day" was spent in direct sunlight. 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 Scenesse group and 0.75 hours for the placebo group. The study analysis did not include sun exposure on days for which subjects reported spending time in a combination of both direct sunlight and shade.(1)

REFERENCES

Number	Reference
1	Scenesse Prescribing Information. Clinuvel, Inc. October 2019.
2	American Prophyria Foundation. "Erythropoietic Protoporphyria (EPP) and X-Linked Protoporphyria (XLP). https://porphyriafoundation.org/for-patients/types-of-porphyria/epp-xlp/
3	Balwani M. "Erythropoietic Protoporphyria and X-linked Protoporphyria: pathophysiology, genetics, clinical manifestations, and management." Molecular Genetics and Metabolism 128 (2019) 298-303.
4	National Organization for Rare Disorders. "Erythropoietic Protoporphyria and X-Linked Protoporphyria". https://rarediseases.org/rare-diseases/erythropoietic-protoporphyria/

POLICY AGENT SUMMARY – MEDICAL PRIOR AUTHORIZATION

HCPC Codes	Agent Names	Strength	Targeted MSC	Available MSC	Preferred Status	Effective Date
J7352	SCENESSE (afamelanotide acetate implant)	16 MG	M ; N ; O ; Y	N		

POLICY AGENT SUMMARY QUANTITY LIMIT

Target Agent GPI	Agent Names	Strength	QL Amount	Dose Form	Days Supply	Duration	Addtl QL Info	Allowed Exceptions	Targeted NDCs When Exclusions Exist	Effective Date
90922010102320	SCENESSE (afamelanotide acetate implant)	16 MG	1.0	IMPLNT	60	Days				

CLIENT SUMMARY – PRIOR AUTHORIZATION

Agent Names	Strength	Client Formulary
SCENESSE (afamelanotide acetate implant)	16 MG	Commercial ; HIM

CLIENT SUMMARY – QUANTITY LIMITS

Agent Names	Strength	Client Formulary
SCENESSE (afamelanotide acetate implant)	16 MG	Commercial ; HIM

PRIOR AUTHORIZATION CLINICAL CRITERIA FOR APPROVAL

Module	Clinical Criteria for Approval
	CRITERIA FOR APPROVAL **Initial Evaluation** **Target Agent** will be approved when ALL of the following are met: 1. ONE of the following: A. The patient has a diagnosis of Erythropoietic Protoporphyria **OR** B. The patient has another FDA approved indication for the requested agent and route of administration **AND** 2. ONE of the following: A. The patient's age is within FDA labeling for the requested indication for the requested agent **OR** B. The prescriber has provided information in support of using the requested agent for the patient's age for the requested indication **AND** 3. The prescriber is a specialist in the area of the patient's diagnosis (e.g., dermatologist, hematologist) or the prescriber has consulted with a specialist in the area of the patient's diagnosis **AND** 4. The patient does NOT have any FDA labeled contraindications to the requested agent **AND** 5. ONE of the following: A. The requested quantity (dose) does NOT exceed the program quantity limit **OR**

Module	Clinical Criteria for Approval
	B. ALL of the following: 1. The requested quantity (dose) is greater than the program quantity limit **AND** 2. The requested quantity (dose) does NOT exceed the maximum FDA labeled dose for the requested indication **AND** 3. The requested quantity (dose) cannot be achieved with a lower quantity of a higher strength that does not exceed the program quantity limit **Length of Approval:** 6 months **Renewal Evaluation** **Target Agent** will be approved when ALL of the following are met: 1. The patient has been previously approved for the requested agent through the plan's Medical Drug Review process **AND** 2. The patient has had clinical benefit with the requested agent **AND** 3. The prescriber is a specialist in the area of the patient's diagnosis (e.g., dermatologist, hematologist) or the prescriber has consulted with a specialist in the area of the patient's diagnosis **AND** 4. The patient does NOT have any FDA labeled contraindications to the requested agent **AND** 5. ONE of the following: A. The requested quantity (dose) does NOT exceed the program quantity limit **OR** B. ALL of the following: 1. The requested quantity (dose) is greater than the program quantity limit **AND** 2. The requested quantity (dose) does NOT exceed the maximum FDA labeled dose for the requested indication **AND** 3. The requested quantity (dose) cannot be achieved with a lower quantity of a higher strength that does not exceed the program quantity limit **Length of Approval:** 12 months