02-10000-16

Original Effective Date: 04/17/00

Reviewed: 01/25/24

Revised: 10/01/24

Subject: Psoralens Plus Ultraviolet A (PUVA) Therapy (Photochemotherapy)

THIS MEDICAL COVERAGE GUIDELINE IS NOT AN AUTHORIZATION, CERTIFICATION, EXPLANATION OF BENEFITS, OR A GUARANTEE OF PAYMENT, NOR DOES IT SUBSTITUTE FOR OR CONSTITUTE MEDICAL ADVICE. ALL MEDICAL DECISIONS ARE SOLELY THE RESPONSIBILITY OF THE PATIENT AND PHYSICIAN. BENEFITS ARE DETERMINED BY THE GROUP CONTRACT, MEMBER BENEFIT BOOKLET, AND/OR INDIVIDUAL SUBSCRIBER CERTIFICATE IN EFFECT AT THE TIME SERVICES WERE RENDERED. THIS MEDICAL COVERAGE GUIDELINE APPLIES TO ALL LINES OF BUSINESS UNLESS OTHERWISE NOTED IN THE PROGRAM EXCEPTIONS SECTION.

DESCRIPTION:

Psoralen plus ultraviolet A uses a psoralen derivative in conjunction with long-wavelength ultraviolet A (UVA) light (sunlight or artificial) for photochemotherapy of skin conditions. Psoralens are tricyclic furocoumarins that occur in certain plants and can also be synthesized. They are available in oral and topical forms. Oral PUVA is generally given 1.5 hours before exposure to UVA radiation. Topical PUVA therapy refers to the direct application of psoralen to the skin with subsequent exposure to UVA light. With topical PUVA, UVA exposure is generally administered within 30 minutes of psoralen application. No topical psoralen formulation is currently available in the US. PUVA has most commonly been used to treat severe psoriasis, vitiligo, and other severe skin conditions not responsive to conservative treatment.

Summary and Analysis of Evidence: For patients with severe psoriasis or vitiligo who have not responded to conservative therapy who receive PUVA, the evidence includes systematic reviews and random control trials. There is some evidence from randomized studies, mainly those published before 1985, that PUVA is more effective than a placebo for treating vitiligo. PUVA is generally considered more effective than targeted phototherapy for the treatment of psoriasis. However, the requirement of systemic exposure and the higher risk of adverse reactions (including a higher carcinogenic risk) have generally limited PUVA therapy to patients with more severe disease. The need for assessment to determine the effectiveness of the treatments and the development of side effects has limited PUVA therapy to the office setting. National Comprehensive Cancer Network (NCCN 2024) Primary Cutaneous Lymphomas guideline includes: "…psoralen plusultraviolet A1 (PUVA/UVA-1) are effective treatment options for patients with early-stage MF [Mycosis Fungoides]". An UpToDate review on "Palmoplantar pustulosis- Treatment" (Brunasso and Massone 2023) stated that "A six-week trial in which 17 patients

with PPP were randomly assigned to treatment of PPP on one side of the body with Grenz ray therapy and a sham treatment on the contralateral side found greater improvement in PPP on the side of the body exposed to Grenz rays. However, the response was moderate, and no patients achieved disease clearance." Based on the available evidence and clinical guidelines, PUVA may be considered in patients with vitiligo, severe disabling psoriasis, and other severe skin conditions. There is limited evidence to support the use of Grenz Ray therapy for the treatment of dermatologic conditions.

POSITION STATEMENT:

Psoralens plus ultraviolet A (PUVA) therapy, ordered by a physician, **meets the definition of medical necessity** for the following indications:

- vitiligo or severe disabling psoriasis not responsive to other forms of conservative treatment; or other severe skin conditions not responsive to conservative treatment (e.g., topical corticosteroids, coal/tar preparations, ultraviolet light).
- cutaneous manifestations of mycosis fungoides exhibited when the member is being treated for lymphatic, splenic, or other organ system involvement.

NOTE: Documentation of physician's supervision during PUVA therapy and monitoring of treatment response is required.

PUVA **meets the definition of medical necessity** only when the above criteria are met and the service is provided in a clinical setting and not in the home. During PUVA therapy, the member must be assessed on a regular basis to determine the effectiveness of the treatments and the development of side effects.

Grenz Ray therapy is considered **experimental or investigational** for the treatment of dermatologic conditions. The evidence is insufficient to permit conclusions on health outcomes.

BILLING/CODING INFORMATION:

CPT Coding:

96912	Photochemotherapy; psoralens and ultraviolet A (PUVA)
96913	Photochemotherapy (Goeckerman and/or PUVA) for severe photoresponsive dermatoses requiring at least 4 to 8 hours of care under direct supervision of the physician (includes application of medication and dressings)

HCPCS Coding:

E0691	Ultraviolet light therapy system, includes bulbs/lamps, timer and eye protection; treatment area 2 square feet or less **(non-covered)**
E0692	Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, four foot panel **(non-covered)**
E0693	Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, six foot panel **(non-covered)**

ICD-10 Diagnosis Codes That Support Medical Necessity:

A67.2	Late lesions of pinta
C84.00 – C84.09	Mycosis fungoides

C84.10 – C84.19	Sezary's disease
H02.731 – H02.739	Vitiligo of eyelid and periocular area
L20.0 – L20.82 L20.84 – L20.9	Atopic dermatitis
L25.8, L25.9	Unspecified contact dermatitis
L26	Exfoliative dermatitis
L29.89, L29.9	Pruritus
L30.1	Dyshidrosis
L30.4	Erythema dermatitis
L40.0 – L41.9	Psoriasis and parapsoriasis
L42	Pityriasis rosea
L43.0 – L43.9	Lichen planus
L53.8	Other specified erythematous conditions
L54	Erythema in diseases classified elsewhere
L56.0 – L56.3 L56.8 – L56.9	Other acute skin changes due to ultraviolet radiation
L63.2 – L63.9	Alopecia areata
L66.10, L66.11, L66.19	Lichen planopilaris
L80	Vitiligo
L92.0	Granuloma annulare
L95.1	Erythema elevatum diutinum
L98.2	Febrile neutrophilic dermatosis [Sweet]
Q82.1 – Q82.3 Q82.8	Other congenital malformations of skin
T86.00 – T86.09	Complications of bone marrow transplant

REIMBURSEMENT INFORMATION:

Refer to section entitled **POSITION STATEMENT**.

PROGRAM EXCEPTIONS:

Federal Employee Program (FEP): Follow FEP guidelines.

State Account Organization (SAO): Follow SAO guidelines.

Medicare Advantage products: The following National Coverage Determination (NCD) was reviewed on the last guideline reviewed date: Treatment of Psoriasis (250.1) located at cms.gov.

If this Medical Coverage Guideline contains a step therapy requirement, in compliance with Florida law 627.42393, members or providers may request a step therapy protocol exemption to this requirement if based on medical necessity. The process for requesting a protocol exemption can be found at Coverage Protocol Exemption Request

DEFINITIONS:

Grenz Ray Therapy: A type of ultrasoft radiation waves used in the treatment of skin conditions. Grenz rays are x-rays produced at low kilovotages giving them a very low penetration power.

RELATED GUIDELINES:

Excimer Laser Therapy for Treatment of Dermatologic Conditions, 02-10000-13

OTHER:

None applicable.

REFERENCES:

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15. Taieb A, Alomar A, Bohm M, et al. Guideline on Vitiligo, Br J Dermatol. Jan 2013;168(1):5-19.
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18. Vieyra-Garcia PA, Wolf P. A deep dive into UV-based phototherapy:Mechanisms of action and emerging molecular targets in inflammation and cancer. Pharmacol Ther. 2020 Dec 11;222:107784. doi: 10.1016/j.pharmthera.2020.107784.PMID:33316286.

COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy and Coverage Committee on 01/25/24.

GUIDELINE UPDATE INFORMATION:

04/17/00	Medical Coverage Guideline Reformatted and Revised.
03/15/02	MCG References updated.
03/15/04	Scheduled review. References updated. Converted MCG to “Guideline No Longer Scheduled For Routine Review”.
09/15/04	Revision to guideline consisting of adding HCPCS E0691 – E0694 as non-covered.
09/15/07	Reviewed; coverage statement maintained, guideline reformatted, references updated.
04/02/09	Information regarding Grenz Ray therapy added to the guideline.
01/01/10	Annual HCPCS coding update: revised descriptor for code 96913.
10/15/10	Revision; related ICD-10 codes added.
01/01/12	Annual HCPCS coding update. Revised descriptor for code E0691; coding section updated.
01/15/13	Revision; position statement section and references updated; formatting changes.
05/11/14	Revision: Program Exceptions section updated.
10/01/15	Revision; ICD9 & ICD10 coding sections updated.
11/01/15	Revision: ICD-9 Codes deleted.
10/01/16	Revision; formatting changes.
06/15/17	Revision; title, description, position statements, coding, and references updated.
02/15/19	Revision; Code E0694 deleted (refer to MCG 09-A0000-00).
06/15/19	Review; position statements maintained and references updated.
04/15/21	Review; Position statements maintained, title and references updated.
05/15/23	Review: Position statements maintained; references updated.
05/23/23	Update to Program Exceptions section.
02/15/24	Review: Position statements maintained; description and references updated.
10/01/24	Annual ICD10 coding update. Codes L29.89, L66.10, L66.11 L66.19 added; codes L29.8 and L66.1 deleted.