

## Evidence Based Guideline

### PUVA (Psoralens with Ultraviolet A) Therapy

<b>File Name:</b>	puva_psoralens_with_ultraviolet_a_therapy
<b>Origination:</b>	8/1983
<b>Last CAP Review:</b>	3/2003
<b>Next CAP Review:</b>	1/2012
<b>Last Review:</b>	3/2011

#### Description of Procedure or Service

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PUVA (psoralens with 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 directly applying the psoralen to the skin with subsequent exposure to UVA light. Bath PUVA is used in some European countries for generalized psoriasis but the agent used, trimethylpsoralen, is not approved by the Food and Drug Administration (FDA). Paint PUVA and soak PUVA are other forms of topical application of psoralen and are often used for psoriasis localized to the palms and soles. In paint PUVA, 8-methoxypsoralen in an ointment or lotion form is put directly on the lesions. With soak PUVA, the affected areas of the body are placed in a basin of water containing psoralen. With topical PUVA, UVA exposure is generally administered within 30 minutes of psoralen application.

A PUVA regimen has four components: the dose of psoralen, the starting dose of UVA, the incremental increases in UVA dose and the treatment frequency. Dosage often takes skin type into consideration. Skin type is categorized according to the Fitzpatrick scale, as follows:

- Type I: Very fair; freckles; always burns, never tans:
- Type II: White; fair; usually burns, tans with difficulty
- Type III: Beige; sometimes mild burn, gradually tans
- Type IV: Beige with a brown tint; rarely burns, tans with ease
- Type V: Dark brown; very rarely burns, tans very easily
- Type VI Black; never burns, tans very easily.

PUVA has most commonly been used to treat moderate to severe psoriasis, for which there is no generally accepted first-line treatment. Each treatment option (e.g., systemic therapies such as methotrexate, phototherapy, biologic therapies, etc.) has associated benefits and risks. Common minor toxicities associated with PUVA include erythema, pruritis, irregular pigmentation and gastrointestinal symptoms; these generally can be managed by altering the dose of psoralen or UV light. Potential long-term effects include photoaging and skin cancer, particularly squamous cell carcinoma (SCC) and possibly malignant melanoma. The risk of skin cancer has been found to be related to the lifetime cumulative exposure to oral PUVA and may be higher in people with lighter skin types. Thus, an attempt is made to reduce the total exposure, especially in lighter skin types, such as limiting the number of treatments and/or avoiding maintenance treatment. There is also a concern from animal studies about a potential risk of cataract development and eye protection is recommended.

In addition to its use with psoriasis, PUVA has been used to treat other skin conditions including

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vitiligo (leukoderma), an autoimmune disorder in which melanocytes are destroyed, resulting in white patches that occur in the midst of normally pigmented skin.

## Regulatory Status

The oral psoralen products Oxsoralen-Ultra (methoxsalen soft gelatin capsules) and 8-MOP (methoxsalen hard gelatin capsules) have been approved by the FDA; both are made by Valeant Pharmaceuticals. Topical psoralen products have also received FDA approval e.g., Oxsoralen (Valeant Pharmaceuticals).

***\*\*\*Note: This Evidence Based Guideline is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.***

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## Evidence Based Guideline for PUVA (Psoralens with Ultraviolet A) Therapy

PUVA is recommended for the treatment of severe, refractory, disabling psoriasis which is resistant to or not adequately responsive to other forms of conservative therapy (e.g., topical corticosteroids, coal tar preparations, and ultraviolet light).

PUVA is recommended for the treatment of severe refractory atopic dermatitis and severe refractory pruritus that is resistant to or not responsive to conventional therapies.

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## Medical Evidence regarding PUVA (Psoralens with Ultraviolet A) Therapy indicates it is not recommended in the following situations

PUVA is not recommended in the following situations:

For diagnoses other than noted above

In general, home PUVA is not recommended

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## Benefits Application

This evidence based guideline relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this guideline.

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## Billing/Coding/Physician Documentation Information

This guideline may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at [www.bcbsnc.com](http://www.bcbsnc.com). They are listed in the Category Search on the Medical Policy search page.

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*Applicable codes: 96912, 96913*

## Scientific Background and Reference Sources

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### **For Policy entitled PUVA (Psoralens with Ultraviolet A) Therapy**

National Association - 12/95

External consultant review - 3/96

BCBSA Medical Policy Reference Manual - 11/1/98

Medical Policy Advisory Group Review - 3/99

### **Policies combined for new policy entitled: Photodynamic Therapy**

BCBSA Medical Policy Reference Manual, 8/18/2000; 8.01.06

BCBSA TEC Evaluation, 12/2000; Volume 15, No. 18

BCBSA Medical Policy Reference Manual, 12/15/2000; 9.03.08

Specialty Matched Consultant Advisory Panel 11/2001

BCBSA Medical Policy Reference Manual, 11/20/2001, 8.01.36 and 9.03.08

### **Photodynamic Therapy Policy separated. New policy name is PUVA (Psoralens with Ultraviolet A) Therapy**

BCBSA Medical Policy Reference Manual, 2.01.07; 04/15/02

ECRI Hotline Response: Phototherapy (UVA and UVB) for the Home-Based Treatment of Psoriasis and Atopic Dermatitis. 5/3/02

Specialty Matched Consultant Advisory Panel - 3/2003

BCBSA Medical Policy Reference Manual, 2.01.07; 04/29/03

Menter A, Korman NJ, Elmets CA et al. Guidelines of care for the management of psoriasis and psoriatic arthritis: Section 5. Guidelines of care for the treatment of psoriasis with phototherapy and photochemotherapy. J Am Acad Dermatol 2010; 62(1):114-35.

BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.07, 1/13/11

Senior Medical Director review 2/2011

## Policy Implementation/Update Information

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### **For policy entitled: PUVA (Psoralens with Ultraviolet A) Therapy**

8/83 Original policy: Generally accepted medical practice for severe, disabling and recalcitrant

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psoriasis

12/85 Evaluated: Eligible for coverage for Plans which consider vitiligo to be an illness. Not eligible for coverage under Uniform Medical Policy (considered cosmetic)

7/88 Reviewed: Reaffirmed

3/96 Evaluated Home PUVA is considered investigational

3/97 Reaffirmed

3/99 Reviewed by MPAG. Reaffirmed

6/99 Reformatted, Description of Procedure or Service changed. Medical Term Definitions added.

\*See Also: cosmetic and Reconstructive Surgery

## **Policies combined for new policy entitled: Photodynamic Therapy**

8/00 New combined policy issued. System coding changes.

3/01 Revised. New section IV added to include criteria for photodynamic therapy for treatment of age-related macular degeneration. Added statement under when extracorporeal photopheresis is not covered.

5/01 Revised. Added eligible criteria for palliative treatment of obstructing endobronchial lesions to Section III.

10/01 Coding format changes.

11/01 Specialty Matched Consultant Advisory Panel. No changes.

3/02 Policy statements revised in both covered and non-covered sections of the, "Photodynamic Therapy for Treatment of Age-related Macular Degeneration" and "Extracorporeal Photopheresis".

## **Photodynamic Therapy Policy separated. New policy name is PUVA (Psoralens with Ultraviolet A) Therapy**

11/03 New separated policy for PUVA Therapy issued. Specialty Matched Consultant Advisory Panel review 3/27/03. Benefits extended to cover severe refractory atopic dermatitis and severe refractory pruritus. Benefits Application and Billing/Coding sections revised. E0690 removed from Billing/Coding section and 96913 added. Policy status changed to: "Active policy, no longer scheduled for routine literature review."

6/22/10 Policy Number(s) removed (amw)

3/29/11 Policy returned to active status and changed to Evidence Based Guideline. Description section updated. References updated. Senior Medical Director review 2/2011.(mco)

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Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its

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medical policies periodically.