

***Phototherapy and Photochemotherapy Treatment  
(Ultraviolet A [PUVA] and B [UBV])***

<b>Origination:</b> 09/27/07	<b>Revised:</b> 03/21/08	<b>Annual Review:</b> 12/15/11
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**Purpose:**

The Medical Technology Assessment Committee will review published scientific literature and information from appropriate government regulatory bodies (when available) related to Phototherapy and Photochemotherapy Treatment (PUVA and UBV) in order to determine inclusion in the benefit plan.

**Compliance Status:**

- CMS – Chapter 1, Part 4 Publication 100-3; Manual Section 250.1 Treatment of Psoriasis
- Florida Statutes – 641.31(33) Health Maintenance Contracts<sup>1</sup>

**Recommendation:**

A recommendation was made by the MTAC following discussion by committee members based on current literature:

***Additional Information***

- “The criteria may include a maximum of five office visits to a dermatologist without prior authorization for a dermatologic problem within a 12-month period”<sup>1</sup>, however, AvMed’s systems are configured to look for certain diagnosis codes to process claims and would deny if billed with a non-covered diagnosis code.
- PUVA has been effective in up to 90% of psoriasis cases; the skin clears after about 25 treatments. [Source: Web MD]

***Definitions***

There are several different types of psoriasis:

- **Plaque psoriasis.** Also called psoriasis vulgaris is the most common type and represents about 90% of all cases of psoriasis. This form of psoriasis is characterized by raised, thickened patches of inflamed skin, called plaques, which are covered with silvery-white scales.
- **Guttate psoriasis.** This form of psoriasis usually affects children, teenagers, and young adults. It often appears after a bacterial infection, such as strep throat. Its typical symptoms are red, scaly, raindrop-shaped spots on the skin, usually over the abdomen, arms, legs and scalp. It can often clear up on its own without treatment.

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### **Recommendation, continued:**

#### ***Definitions, continued***

There are several different types of psoriasis, continued:

- **Pustular psoriasis.** The typical symptoms of pustular psoriasis are pus-filled blisters on the skin. The blisters usually dry up, turn brown, become scaly and peel off. The lesions usually occur on the hands and feet.
- **Erythrodermic psoriasis.** Symptoms include red and scaly skin over large areas of the body. This condition can evolve from other forms of psoriasis or be triggered by psoriasis treatment. It can also be triggered by withdrawal from drugs such as corticosteroids (often taken for diseases such as asthma).
- **Inverse psoriasis.** In people with this condition, dry and bright red patches appear in folds of skin, for instance under the breasts, in the armpits, or on the genitals. This type of psoriasis can be exacerbated by obesity.

#### ***Contraindications***

- PUVA should be used in the lowest doses possible. Higher doses and more exposure increase the risk of skin cancer. Psoralens increase the skin's sensitivity to UV light, including sunlight. They are used to improve the effectiveness of UV light therapy for patients with moderate to severe psoriasis (covering more than 20% of the skin).  
[Source: Wed MD]

#### ***Exclusions***

- Psoralens should not be used by:
  - ❖ Children under age 12 because the UV light therapy may cause cataracts
  - ❖ Individuals with medical conditions such as lupus erythematosus, porphyria or skin cancer that require one to avoid the sun or family history of allergy to sunlight
  - ❖ Fertile men and women who do not use birth control (due to a small risk of birth defects)
  - ❖ Pregnant or nursing women
  - ❖ A history of arsenic intake (e.g., Fowler's solution)
  - ❖ Previous ionizing radiation therapy (Grenz ray or X-ray)
  - ❖ Heart or blood pressure problems so severe that one can't tolerate heat or prolonged standing
  - ❖ A history of skin cancer
  - ❖ Liver disease (may increase levels of medicine in the blood, although people with liver disease may use bath PUVA)

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**Recommendation, continued:**

***Conventional Treatment*** [Source: National Psoriasis website]

Members must have tried and failed (e.g., did not tolerate) or did not respond to conventional treatments **OR** conventional treatments are contraindicated for the following, but not limited to:

• Salicylic acid	• Tar	• Other over-the-counter topicals	• Anthralin
• Dovonex	• Taclonex	• Tazorac	• Topical steroids

***Treatment***

**Topical (applied to the skin)** – Mild to moderate psoriasis

- If psoriasis can't be controlled by topical treatments, your healthcare provider might suggest phototherapy, or light therapy.
- Using topical treatments, such as creams and ointments is often the first step in treating psoriasis. These include topical application of steroids or other drugs.
- For psoriasis that covers more than 10% to 20% of the skin, topical treatment usually won't work at least not on its own.

**UVB (Ultraviolet B).** While sunlight can help, artificial ultraviolet light can be used on psoriasis plaques with more precision. UVB treatment involves exposure to lights designed to emit the sort of ultraviolet rays that are most helpful for psoriasis. UVB treatment is provided in an independent practitioners's office.

- UVB treatment can be used by adults and children and will be effective in treating psoriasis for at least two-thirds of Members who meet these criteria:
  - ❖ Thin plaques (decreased scale build up)
  - ❖ Moderate to severe disease (involving more than 3% of the skin)
  - ❖ Responsive to natural sunlight

Typical treatment is for three (3) to five (5) days a week for two (2) or three (3) months. UVB treatment may be combined with other approaches:

- **Goeckerman regimen**, consists of UVB therapy combined with coal tar.
- **Ingram Regime**, combines UVB and a coal tar bath with an anthralin-salicylic paste.

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**Recommendation, continued:**

***Treatment, continued***

**PUVA (Psoralen plus Ultraviolet A).** PUVA uses a different band of ultraviolet light to treat psoriasis -- ultraviolet A -- in combination with psoralen, an oral or topical medication that makes skin more sensitive to light. Because this approach uses medication as well as light, PUVA is sometimes called photochemotherapy. PUVA is particularly effective at clearing up severe psoriasis quickly and with long-lasting results, but it has some side effects, including nausea, exhaustion, headaches, burning and itching. Most importantly, using PUVA over a long period of time can increase risk of skin cancer.

- PUVA therapy is covered for treatment of intractable, disabling psoriasis, but only after the psoriasis has not responded to more conventional treatment.
- A usual course of PUVA treatments includes 25 sessions in a physician office setting two (2) or three (3) times a week.
- Treatment exceeding 30 days must include documentation to support improvement.
- PUVA is considered for moderate to severe cases of psoriasis in adults. Stable plaque psoriasis, guttate psoriasis, and psoriasis of the palms and soles are especially responsive to PUVA treatments.
- PUVA is not normally recommended for children or teenagers. However, it can be used by young people to avoid unwanted side effects of other treatments or if other treatments have not been successful.

***Eligibility Criteria***

- Ultraviolet A (PUVA) or B is considered medically appropriate to treat **any** of the following conditions:
  - ❖ Atopic dermatitis; **or**
  - ❖ Eczema; **or**
  - ❖ Lichen planus; **or**
  - ❖ Mycosis fungoides; **or**
  - ❖ Psoriasis; **or**
  - ❖ Vitiligo
- Ultraviolet A (PUVA) is considered medically appropriate to treat the following condition:
  - ❖ Acute/chronic pityriasis lichenoides; **or**

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**Recommendation, continued:**

***Eligibility Criteria, continued***

- Ultraviolet B is considered medically appropriate to treat any of the following conditions:
  - ❖ Chronic urticaria; **or**
  - ❖ Pityriasis lichenoides; **or**
  - ❖ Pityriasis rosea; **or**
  - ❖ Pruritus of renal failure
  
- The use of Ultraviolet B laser therapy (Xenon-Chlorida, Excimer) for the treatment of psoriasis is considered medically appropriate when **both** of the following criteria are met:
  - ❖ The psoriasis is limited to less than 10% of the Member’s body surface; **and**
  - ❖ Documented failed previous 2-month trial of conservative therapy with topical agents, with or without standard non-laser ultraviolet therapy
  
- Requests for the following ICD-9 codes receive consideration for PUVA or Photochemotherapy (Tar, UVB) therapies:
  - ❖ 202.10-18      Mycosis fungoides (cutaneous T-cell lymphoma)
  - ❖ 697.0            Lichen planus (severe)
  - ❖ 709.01          Vitiligo
  - ❖ 996.85          Complications of bone marrow transplant (skin conditions)
  - ❖ 698.8            Other pruritic conditions (pruritic eruptions of HIV infection)
  
- For Members who meet the criteria (supported by documentation provided by the requesting physician indicating that the Member has not responded to conventional treatment), coverage would be approved for the following diagnosis codes and ICD9 codes for up to 30 days:

PUVA: Dx E0690 and 96912	103.2; 202.10-18; 202.20-28; 374.53; 576.2; 576.8; 585; 692.72; 697.0; 698.8; 698.9; 709.01; 782.4; 996.80-89
Photochemotherapy – Tar, UV B: Dx E0690, 96910, and 96913	691.8; 696.0-8

***Exclusion***

- Not Covered (Investigational/Experimental):
  - ❖ The use of ultraviolet A (PUVA) and B is considered investigational/experimental for any condition not specifically outlined as a covered condition.

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**References:**

1. Medicare Coverage Guidelines, NCD 250.1 – Trauma of Psoriasis; 2007.
2. Guidelines of Care for Phototherapy and Photochemotherapy. Am. Acad. of Dermatology Committee on Guidelines of Coverage. J. AM Acad. Dermatology 1994;31(4)643-648.
3. Griffiths, Clark, Chambers: A Systematic Review of Treatments for Severe Psoriasis. Health Technology Assessment 2000:4(40).

**Disclaimer Information:**

Coverage Issues Guidelines and Medical Technology Assessment Recommendations are developed to determine coverage for AvMed Health Plan benefits, and are published to provide a better understanding of the basis upon which coverage decisions are made. AvMed Health Plan makes coverage decisions using these guidelines, along with the Member's benefit document. The use of this guideline is neither a guarantee of payment nor a final prediction of how specific claim(s) will be adjudicated.

Coverage Issues Guidelines and Medical Technology Assessment Recommendations are developed for selected therapeutic or diagnostic services found to be safe, but proven effective in a limited, defined population of patients or clinical circumstances. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in the AvMed Health Plan service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations.

Treating providers are solely responsible for the medical advice and treatment of Members. This guideline may be updated and therefore is subject to change.