BlueCross BlueShield of Alabama

Name of Blue Advantage Policy:

Phototherapy for the Treatment of Skin Disorders

Policy #: 301
Latest Review Date: January 2025
Category: Medical/DME

BACKGROUND:

Blue Advantage *medical policy does not conflict with Local Coverage Determinations (LCDs), Local Medical Review Policies (LMRPs) or National Coverage Determinations (NCDs) or with coverage provisions in Medicare manuals, instructions or operational policy letters. In order to be covered by Blue Advantage the service shall be reasonable and necessary under Title XVIII of the Social Security Act, Section 1862(a)(1)(A). The service is considered reasonable and necessary if it is determined that the service is:*

1. *Safe and effective;*
2. *Not experimental or investigational*;*
3. *Appropriate, including duration and frequency that is considered appropriate for the service, in terms of whether it is:*
   - *Furnished in accordance with accepted standards of medical practice for the diagnosis or treatment of the patient's condition or to improve the function of a malformed body member;*
   - *Furnished in a setting appropriate to the patient's medical needs and condition;*
   - *Ordered and furnished by qualified personnel;*
   - *One that meets, but does not exceed, the patient's medical need; and*
   - *At least as beneficial as an existing and available medically appropriate alternative.*

Routine costs of qualifying clinical trial services with dates of service on or after September 19, 2000 which meet the requirements of the Clinical Trials NCD are considered reasonable and necessary by Medicare. Providers should bill* ***Original Medicare* *for covered services that are related to* ***clinical trials*** *that meet Medicare requirements (Refer to Medicare National Coverage Determinations Manual, Chapter 1, Section 310 and Medicare Claims Processing Manual Chapter 32, Sections 69.0-69.11).*

POLICY:

Blue Advantage will treat **ultraviolet A or B therapy (CPT 96900)** as a **covered benefit** in the treatment of the following conditions:

- Chronic urticaria
- Eczema (atopic dermatitis)
- Lichen planus
- Mycosis fungoides (cutaneous T-cell lymphoma)
- Pityriasis lichenoides
- Pityriasis rosea
- Pruritus of renal failure
- Vitiligo
- Localized scleroderma

Blue Advantage will treat **ultraviolet B light therapy (HCPCS E0691- E0694)** administered in the home as a **covered benefit** for the following conditions and when conducted under a physician's supervision with regularly scheduled exams:

- Atopic dermatitis-mild to moderate forms when standard treatment has failed
- Lichen planus
- Mycosis fungoides
- Pityriasis lichenoides
- Pruritus of hepatitis disease
- Pruritus of renal failure
- Psoriasis-mild to moderate forms when conventional treatment has failed
- Severe atopic dermatitis
- Severe psoriasis

Blue Advantage will treat **ultraviolet B light therapy (CPT 96900)** administered in the home as a **non-covered benefit** for conditions not listed above.

Blue Advantage will treat **psoralens and ultraviolet A light (PUVA) therapy (CPT 96912)** as a **covered benefit** for the following conditions:

- Acrodermatitis continua
- Acute/chronic pityriasis lichenoides
- Eczema (atopic dermatitis)
- Lichen planus
- Mycosis fungoides (cutaneous T-cell lymphoma)
- Nummular dermatitis
- Palmoplantar pustulosis
- Parapsoriasis
- Poikiloderma vasculare
- Psoriasis
- Pustulosis palmaris
- Vitiligo

Blue Advantage will treat **photochemotherapy (Goeckerman and/or PUVA)** for severe photoresponsive dermatoses requiring at least 4-8 hours of care under direct supervision of the physician (CPT 96913) as a **covered benefit** for the following conditions:

- Acrodermatitis continua
- Acute/chronic pityriasis lichenoides
- Eczema (atopic dermatitis)
- Lichen planus
- Mycosis fungoides (cutaneous T-cell lymphoma)
- Psoriasis
- Pustulosis palmaris
- Vitiligo

Blue Advantage will treat **excimer laser treatment of vitiligo of the face, neck, trunk, abdomen, back and/or proximal limbs** as a **covered benefit** for up to three sessions per week for 12 weeks.

Blue Advantage will treat **excimer laser treatment of vitiligo of the distal limbs and bony prominences (i.e., fingers, wrists, elbows, knees)** as a **non-covered benefit**.

Blue Advantage will treat **targeted phototherapy for the treatment of localized psoriasis** as a **covered benefit** when:

1. Treatment is for localized, symptomatic psoriasis of the hands, feet, knees, elbows, scalp, or face and conventional treatment has failed. Conventional treatment may include sunlight, topical steroids, coal tar preparations, calcipotriene (Dovonex®), vitamin A (Tazarotene®), Anthralin®, salicylic acid, and other forms of light therapy. For a conventional treatment to be considered a failure, an adequate trial of the therapy should be documented.
2. Total treatment area should be no more than 20% of the body surface.
3. May be used to treat resistant lesions.
4. No more than 10 sessions per course of treatment. A session should include all areas treated on a day.
5. An additional course of treatment may be necessary if the individual's psoriasis responded positively to the initial course of treatment and then worsened over time.

Blue Advantage will treat **psoralen plus ultraviolet A (PUVA)** as a **covered benefit** for the treatment of severe, disabling psoriasis, which is not responsive to other forms of conservative therapy (e.g., topical corticosteroids, coal/tar preparations, and ultraviolet light).

Blue Advantage will treat **ultraviolet B with the addition of topical coal tar** (also known as Goeckerman treatment) or petrolatum (CPT 96910) as a **covered benefit** for severe psoriasis (defined as psoriasis that affects more than 10% of the body surface area).

Blue Advantage will treat **ultraviolet B with the addition of topical coal tar** (also known as Goeckerman treatment) or petrolatum as a **non-covered benefit** for all other indications.

Blue Advantage will treat **targeted phototherapy** as the first-line treatment of mild psoriasis, as a **non-covered benefit**.

Blue Advantage will treat **targeted phototherapy** for the treatment of generalized psoriasis or psoriatic arthritis as a **non-covered benefit**.

Blue Advantage will treat **targeted phototherapy** for the treatment of all other skin disorders as a **non-covered benefit**.

Blue Advantage does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Advantage administers benefits based on the members' contract and medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

DESCRIPTION OF PROCEDURE OR SERVICE:

Phototherapy is defined as the exposure to nonionizing radiation for therapeutic benefit. It may involve exposure to UVA UVB or various combinations of UVA and UVB radiation. UV light therapy, including phototherapy and photochemotherapy, is used for the treatment of certain skin conditions.

Light therapy for psoriasis includes both targeted phototherapy and photochemotherapy with psoralen plus ultraviolet A (PUVA). Targeted phototherapy describes the use of ultraviolet light that can be focused on specific body areas or lesions. PUVA uses a psoralen derivative in conjunction with long wavelength ultraviolet A (UVA) light (sunlight or artificial) for photochemotherapy of skin conditions.

Targeted phototherapy may also be used in specific conditions that have not responded to standard therapies describes the use of ultraviolet light that can be focused on specific body areas or lesions. In contrast, photochemotherapy or psoralens in conjunction with UVA is the therapeutic use of radiation in combination with a photosensitizing chemical. Treatment with these modalities may involve partial or whole-body exposure. Photochemotherapy has been used for a large number of skin diseases but confirmed data of its usefulness is available in only a relatively few. PUVA uses a psoralen derivative in conjunction with long wavelength UVA light (sunlight or artificial) for photochemotherapy of skin conditions.

Targeted phototherapy with handheld lamps or lasers is also being evaluated. Potential advantages of targeted phototherapy include the ability to use higher treatment doses and to limit

exposure to surrounding tissue. Original UVB devices consisted of a Phillips TL-01 fluorescent bulb with a maximum wavelength (lambda max) at 311 nm. Subsequently, xenon chloride (XeCl) lasers and lamps were developed as targeted UVB treatment devices; these devices generate monochromatic or very narrowband (NB) radiation with a lambda max of 308 nm. Targeted phototherapy devices are directed at specific lesions or affected areas, thus limiting exposure to the surrounding normal tissues. They may therefore allow higher dosages compared with a light box, which could result in fewer treatments.

There are numerous medical and surgical treatments aimed at decreasing disease progression and/or attaining repigmentation. Topical corticosteroids, alone or in combination with topical vitamin D3 analogues, are common first-line treatment for vitiligo. Alternative first-line therapies include topical calcineurin inhibitors, systemic steroids, and topical antioxidants. Treatment options for vitiligo recalcitrant to first-line therapy include, among others, light box therapy with narrowband ultraviolet B (NB-UVB) and psoralen plus ultraviolet A (PUVA) and targeted light therapy.

Light therapy for vitiligo includes both targeted phototherapy and photochemotherapy with psoralen plus PUVA. Vitiligo is an idiopathic skin disorder that causes depigmentation of sections of skin, most commonly on the extremities. Depigmentation occurs because melanocytes are no longer able to function properly. The cause of vitiligo is unknown; it is sometimes considered an autoimmune disease. The most common form of the disorder is nonsegmental vitiligo (NSV) in which depigmentation is generalized, bilateral, symmetrical, and increases in size over time. In contrast, segmental vitiligo (SV), also called asymmetric or focal vitiligo, covers a limited area of skin. The typical natural history of vitiligo involves stepwise progression with long periods in which the disease is static and relatively inactive, and relatively shorter periods in which areas of pigment loss increase.

PUVA uses a psoralen derivative in conjunction with long-wavelength UVA light (sunlight or artificial) for photochemotherapy of skin conditions. Psoralens are tricyclic furocoumarin 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 the direct application of psoralen to the skin with subsequent exposure to UVA light. With topical PUVA, UVA exposure is generally administered within thirty minutes of psoralen application. No topical psoralen formulation is currently available in the US.

Excimer laser is a form of ultraviolet laser proposed for the treatment of various dermatologic conditions including atopic dermatitis, psoriasis and vitiligo. Laser therapy provides intense UVB light to a limited area of skin, providing the potential benefit of more rapid clinical

response from targeted phototherapy while avoiding the side effects of ultraviolet light on unaffected skin.

Psoriasis

Psoriasis is a common chronic immune-mediated disease characterized by skin lesions ranging from minor localized patches to complete body coverage. There are several types of psoriasis; most common is plaque psoriasis, which is associated with red and white scaly patches on the skin. In addition to being a skin disorder, psoriasis can negatively impact many organ systems and is associated with an increased risk of cardiovascular disease, some types of cancer, and autoimmune diseases (e.g., celiac disease, Crohn disease). Although disease severity is minimally defined by body surface area, (mild psoriasis affects 10% of body surface area), lesion characteristics (e.g., location and severity of erythema, scaling, induration, pruritus) and impact on QOL are also taken into account.

Treatment of Psoriasis

Topical therapy (e.g., corticosteroids, vitamin D analogs) is generally considered to be a first-line treatment of psoriasis, especially for mild disease. Phototherapy and systemic therapy are treatment options for individuals with more extensive and/or severe disease and those who fail conservative treatment with topical agents. Phototherapy is available in various forms including exposure to natural sunlight, use of broadband ultraviolet B (BB-UVB) devices, narrowband (NB-UVB) devices and psoralen plus ultraviolet A (PUVA). This policy addresses 2 treatments: PUVA and targeted phototherapy, i.e., use of ultraviolet light that can be focused on specific body areas or lesions.

Psoralen plus Ultraviolet A

Psoralens with UVA (PUVA) uses a psoralen derivative in conjunction with long-wavelength UVA light (sunlight or artificial) for photochemotherapy of skin conditions. Psoralens are tricyclic furocoumarin 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 U.S. Food and Drug Administration (FDA). Paint 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 (8-MOP) 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.

PUVA has most commonly been used to treat 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, pruritus, irregular pigmentation, and gastrointestinal tract 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. 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 individuals with more severe cases.

Targeted Phototherapy

Potential advantages of targeted phototherapy include the ability to use higher treatment doses and to limit exposure to surrounding tissue. Broadband (BB)-UVB devices, which emit wavelengths from 290 to 320 nanometers (nm) have been largely replaced by narrowband (NB)-UVB devices. NB-UVB devices eliminate wavelengths below 296 nm, which are considered erythemogenic and carcinogenic but not therapeutic. NB-UVB is more effective than BB-UVB and approaches PUVA in efficacy. Original NB-UVB devices consisted of a Phillips TL-01 fluorescent bulb with a maximum wavelength (lambda max) at 311 nm. Subsequently, xenon chloride (XeCl) lasers and lamps were developed as targeted NB-UVB treatment devices; they generate monochromatic or very narrow band radiation with a lambda max of 308 nm. Targeted phototherapy devices are directed at specific lesions or affected areas, thus limiting exposure to the surrounding normal tissues. They may therefore allow higher dosages compared to a light box, which could result in fewer treatments to produce clearing. The original indication of the excimer laser was for individuals with mild to moderate psoriasis, defined as involvement of less than 10% of the skin. Newer XeCl laser devices are faster and more powerful than the original models, which may allow the treatment of individuals with more extensive skin involvement, 10–20% of body surface area.

KEY POINTS:

The most recent literature update was performed through October 29, 2024.

Summary of Evidence

For individuals who have vitiligo who receive targeted phototherapy, the evidence includes systematic reviews of randomized controlled trials (RCTs), 2 individual RCTs, and 2 retrospective studies. Relevant outcomes are a change in disease status, quality of life (QOL), and treatment-related morbidity. Individual studies tend to have small sample sizes, and few were designed to isolate the effect of laser therapy. Two meta-analyses were attempted; however, results from a meta-analysis could not be verified because the selected studies were not available in English, and 1 estimate was imprecise due to the small number of studies and participants.

RCTs have shown targeted phototherapy to be associated with statistically significant improvements in Vitiligo Area Scoring Index (VASI) scores and/or repigmentation compared to alternate treatment options in some studies, but the results are inconsistent. Overall, there is a lack of clinical trial evidence that compares targeted phototherapy with more conservative treatments or no treatment/placebo.

For individuals who have vitiligo who have not responded to conservative therapy who receive PUVA (photochemotherapy), the evidence includes systematic reviews and RCTs. Relevant outcomes are a change in disease status, quality of life, and treatment-related morbidity. There is some evidence from randomized studies, mainly those published before 1985, that PUVA is more effective than a placebo for treating vitiligo. When compared with narrowband UVB (NB-UVB) in meta-analyses, results have shown that individuals receiving NB-UVB experienced higher rates of repigmentation than individuals receiving PUVA, though the differences were not statistically significant. Based on the available evidence and clinical guidelines, PUVA may be considered in individuals with vitiligo who have not responded adequately to conservative therapy.

Practice Guidelines and Position Statements
Vitiligo Working Group
The Vitiligo Working Group is supported by the National Institute of Arthritis and Musculoskeletal and Skin Diseases(NIAMS), part of the National Institutes of Health(NIH). In 2017, the group published guidelines on current and emerging treatments for vitiligo. The Working Group indicated that psoralens with UVA has largely been replaced by NB-UVB, but that "PUVA may be considered in individuals with darker Fitzpatrick skin phototypes or those with treatment-resistant vitiligo (level I evidence)." The Working Group also stated that "Targeted phototherapy (excimer lasers and excimer lamps) can be considered when <10% of body surface area is affected (level II evidence)."

U.S. Preventive Services Task Force Recommendations
Not applicable.

KEY WORDS:
Phototherapy, photochemotherapy, UVA, UVB, PUVA, ultraviolet A, ultraviolet B, excimer laser phototherapy, excimer laser, 308-nm excimer laser, 308-nm xenon chloride excimer laser, vitiligo, psoralen plus, atopic dermatitis, Handisol II®, XTRAC® , Xenon monochloride (XeCl),

APPROVED BY GOVERNING BODIES:
In 2001, XTRAC® (PhotoMedex), a XeCl excimer laser, was cleared for marketing by the U.S. Food and Drug Administration (FDA) through the 510(k) process for the treatment of skin conditions such as vitiligo. The 510(k) clearance has subsequently been obtained for a number of targeted UVB lamps and lasers, including newer versions of the XTRAC® system including the XTRAC® Ultra, the VTRAC™ lamp (PhotoMedex), the BClear™ lamp (Lumenis), the 308 excimer lamp phototherapy system (Quantel Medical), MultiClear Multiwavelength Targeted Phototherapy System, Psoria-LightTM, and the Excilite™ and Excilite µ™ XeCl lamps. The

intended use of all of these devices includes vitiligo among other dermatologic indications. Some light-emitting devices are handheld.

The oral psoralen product,methoxsalen soft gelatin capsules(previously available under the brand name Oxsoralen Ultra), has been approved by the FDA.

BENEFIT APPLICATION:

Coverage is subject to the member's specific benefits. Group-specific policy will supersede this policy when applicable.

CURRENT CODING:

CPT Codes:

96900	Actinotherapy (ultraviolet light)
96910	Photochemotherapy; tar and ultraviolet B (Goeckerman treatment) or petrolatum and ultraviolet B
96912	; psoralens and ultraviolet A
96913	Photochemotherapy (Goeckerman and/or PUVA) for severe photoresponsive dermatoses requiring at least four to eight hours of care under direct supervision of the physician (includes application of medication and dressings)
96920	Laser treatment for inflammatory skin disease (psoriasis); total area less than 250 sq cm
96921	; 250 sq cm to 500 sq cm
96922	; over 500 sq cm
96999	Unlisted special dermatological service or procedure

HCPCS:

E0691	Ultraviolet light therapy system, includes bulbs/lamps, timer and eye protection; treatment area 2 square feet or less
E0692	; 4 foot panel
E0693	; 6 foot panel

E0694	Ultraviolet multidirectional light therapy system in six foot cabinet, includes bulbs/lamps, timer and eye protection

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POLICY HISTORY:

Adopted for Blue Advantage, March 2007
Available for comment April 30-June 13, 2007
Medical Policy Group, June 2007
Available for comment July 5-August 18, 2007
Medical Policy Group, May 2009
Available for comment May 16-June 28, 2009
Medical Policy Group, July 2009
Available for comment July 20-September 2, 2009
Medical Policy Group, November 2011
Medical Policy Group, December 2011
Medical Policy Group, April 2013
Medical Policy Group, April 2014
Medical Policy Group, June 2015
Medical Policy Group, January 2016
Medical Policy Group, April 2016
Available for comment April 5 through May 20, 2016
Medical Policy Group, December 2016
Medical Policy Group, August 2017
Medical Policy Group, December 2017
Medical Policy Group, April 2019
Medical Policy Group, December 2019
Medical Policy Group, March 2020: Updates to Coding Section to include CPT codes 96920, 96921, 96922, and 96999.
Medical Policy Group, January 2021
Medical Policy Group, January 2022
Medical Policy Group, December 2022
UM Committee, December 2023: Policy approved by UM Committee for use for Blue Advantage business.
Medical Policy Group, January 2024
UM Committee, January 2024: Annual review of policy approved by UM Committee for use for Blue Advantage business.
Medical Policy Group, January 2025
UM Committee January 2025: Annual review of policy approved by UM Committee for use for Blue Advantage business.

Medical Policy Group, March 2025: Clarification to policy statement related to UVB home indications. No change to policy intent.
Medical Policy Group, April 2025: Clarification to policy statement. Added statement "Blue Advantage will treat targeted phototherapy for the treatment of all other skin disorders as a non-covered benefit." No change to policy intent.
