



## ***Targeted Phototherapy for the Treatment of Psoriasis***

**Effective:** March 1, 2025

**Next Review:** November 2025

**Last Review:** January 2025

### **IMPORTANT REMINDER**

Medical Policies are developed to provide guidance for members and providers regarding coverage in accordance with contract terms. Benefit determinations are based in all cases on the applicable contract language. To the extent there may be any conflict between the Medical Policy and contract language, the contract language takes precedence.

PLEASE NOTE: Contracts exclude from coverage, among other things, services or procedures that are considered investigational or cosmetic. Providers may bill members for services or procedures that are considered investigational or cosmetic. Providers are encouraged to inform members before rendering such services that the members are likely to be financially responsible for the cost of these services.

### **DESCRIPTION**

The purpose of targeted phototherapy is to provide a treatment option that is an alternative to or an improvement on existing therapies for patients with psoriasis.

### **MEDICAL POLICY CRITERIA**

**Note:** Services described in this medical policy are not routinely reviewed; however, claims may be subject to audit including but not limited to review of member benefit application, medical appropriateness, frequency utilization, documentation requirements, accurate code selection, and reimbursement. Some devices or services may be subject to the health plan's reimbursement policy manual or may not be covered based on benefit contracts. Claim adjudication is also subject to claim processing guidelines and provider contracts.

- I. Psoralen plus ultraviolet A may be considered **medically necessary** for the treatment of severe, disabling psoriasis, which is not responsive to other forms of conservative therapy (e.g., topical corticosteroids, coal/tar preparations, ultraviolet light).
- II. Targeted phototherapy may be considered **medically necessary** for either of the following indications:

- A. Treatment of moderate-to-severe localized psoriasis (i.e., comprising <20% body area) for which narrowband ultraviolet B or psoralen plus ultraviolet A are indicated.
- B. Treatment of mild-to-moderate localized psoriasis that is unresponsive to conservative treatment.
- III. Psoralen plus ultraviolet A is considered **not medically necessary** when Criterion I. is not met.
- IV. Targeted phototherapy is considered **not medically necessary** when Criterion II. is not met.
- V. Targeted phototherapy or psoralen plus ultraviolet A is considered **investigational** for all other indications including but not limited to first-line treatment of mild psoriasis and for the treatment of generalized psoriasis or psoriatic arthritis.

*NOTE: A summary of the supporting rationale for the policy criteria is at the end of the policy.*

## POLICY GUIDELINES

Treatments are done in a provider's office, a psoriasis clinic or at home with provider-prescribed phototherapy unit using the following guidelines:

- Twice per week treatment sessions with a minimum of 48 hours between treatments are recommended by the National Psoriasis Foundation.
- An average of 4-10 sessions is generally adequate to treat most cases of psoriasis.
- More than 10 sessions may be appropriate if significant improvement is demonstrated.

## CROSS REFERENCES

None

## BACKGROUND

### TREATMENT OF PSORIASIS

Topical therapy (eg, corticosteroids, vitamin D analogues) is generally considered first-line treatments of psoriasis, especially for mild disease. Phototherapy and systemic therapy are treatment options for patients 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 devices, narrowband ultraviolet B (NB-UVB) devices, targeted phototherapy, and psoralen plus ultraviolet A (PUVA). NB-UVB is an established treatment for psoriasis, based on efficacy and safety. This evidence review addresses two alternative treatments: targeted phototherapy, which uses ultraviolet light that can be focused on specific body areas or lesions, and PUVA.

#### Targeted Phototherapy

Potential advantages of targeted phototherapy include the ability to use higher treatment doses and to limit exposure to surrounding tissue. Broadband ultraviolet B devices, which emit wavelengths from 290 to 320 nm, have been largely replaced by 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 broadband ultraviolet B and approaches PUVA in efficacy. Original NB-UVB devices consisted of a Phillips TL-01 fluorescent bulb with a maximum wavelength ( $\lambda_{\text{max}}$ ) at 311 nm. Subsequently, an excimer (excited dimer) laser using xenon chloride (XeCl) and lamps were developed as targeted NB-UVB treatment devices; they generate monochromatic or very narrow band radiation with a  $\lambda_{\text{max}}$  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 to produce clearing. The original indication of the excimer laser was for patients 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 patients with more extensive skin involvement (10%-20% body surface area).

### **Psoralen Plus Ultraviolet A**

PUVA 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 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 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 (eg, systemic therapies such as methotrexate, phototherapy, biologic therapies) has associated benefits and risks. Common minor toxicities associated with PUVA include erythema, pruritus, irregular pigmentation, and gastrointestinal tract symptoms; they generally can be managed by altering the dose of psoralen or ultraviolet light. Potential long-term effects include photoaging and skin cancer, particularly squamous cell carcinoma 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 patients with more severe disease.

### **REGULATORY STATUS**

In 2001, XTRAC™ (PhotoMedex), a XeCl excimer laser, was cleared for marketing by the FDA through the 510(k) process for the treatment of mild-to-moderate psoriasis. The 510(k) clearance was subsequently obtained for a number of targeted UVB lamps and lasers, including newer versions of the XTRAC system (eg, XTRAC Ultra™), the VTRAC™ lamp (PhotoMedex), the BCLEAR™ lamp (Lumenis), and the European manufactured Excilite™ and Excilite  $\mu$ ™ XeCl lamps. FDA product code: FTC.

In 2010, the Levia Personal Targeted Phototherapy® UVB device (Daavlin; previously manufactured by Lerner Medical Devices) was cleared for marketing by the FDA through the

510(k) process for home treatment of psoriasis.

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 (eg, Oxsoralen; Valeant Pharmaceuticals).

## EVIDENCE SUMMARY

Evidence reviews assess the clinical evidence to determine whether the use of technology improves the net health outcome. Broadly defined, health outcomes are the length of life, quality of life (QOL), and ability to function including benefits and harms. Every clinical condition has specific outcomes that are important to patients and managing the course of that condition. Validated outcome measures are necessary to ascertain whether a condition improves or worsens; and whether the magnitude of that change is clinically significant. The net health outcome is a balance of benefits and harms.

To assess whether the evidence is sufficient to draw conclusions about the net health outcome of technology, two domains are examined: the relevance, and quality and credibility. To be relevant, studies must represent one or more intended clinical use of the technology in the intended population and compare an effective and appropriate alternative at a comparable intensity. For some conditions, the alternative will be supportive care or surveillance. The quality and credibility of the evidence depend on study design and conduct, minimizing bias and confounding that can generate incorrect findings. The randomized controlled trial (RCT) is preferred to assess efficacy; however, in some circumstances, nonrandomized studies may be adequate. RCTs are rarely large enough or long enough to capture less common adverse events and long-term effects. Other types of studies can be used for these purposes and to assess generalizability to broader clinical populations and settings of clinical practice.

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 (eg, celiac disease, Crohn disease). Although disease severity is minimally defined by body surface area (mild psoriasis affects <5% of body surface area, moderate psoriasis affects 5%-10%, and severe disease affects >10% of body surface area), lesion characteristics (eg, location and severity of erythema, scaling, induration, pruritus) and impact on QOL are also taken into account.<sup>[1-3]</sup>

The most appropriate comparator for targeted therapy is narrowband ultraviolet B (NB-UVB), which is an established treatment for psoriasis and can be administered in the home. The efficacy of psoralen plus ultraviolet A (PUVA) has been compared with NB-UVB, which has fewer side effects, or with ultraviolet A (UVA) with placebo.

## TARGETED PHOTOTHERAPY FOR MILD LOCALIZED PSORIASIS

### Evidence Base

The original indication of the excimer laser was mild-to-moderate psoriasis, defined as involvement of less than 10% of the skin. Typically, this patient population has not been

considered for light box therapy, because the risks of exposing the entire skin to the carcinogenic effects of ultraviolet B (UVB) light may outweigh the benefits of treating a small number of lesions. The American Academy of Dermatology does not recommend phototherapy for patients with mild localized psoriasis whose disease can be controlled with topical medications, including steroids, coal tar, vitamin D analogues (eg, calcipotriol, calcitriol), tazarotene, and anthralin.<sup>[4]</sup>

### **Section Summary: Mild Localized Psoriasis**

There is no evidence and no clinical recommendation for targeted phototherapy to treat patients with mild localized psoriasis whose disease can be controlled with topical medications.

## **TARGETED PHOTOTHERAPY FOR TREATMENT-RESISTANT MILD PSORIASIS**

### **Nonrandomized Studies**

Several small studies have suggested that targeted phototherapy can be effective for treatment-resistant lesions. One 2003 patch comparison reported effective clearing (pre-Psoriasis Area and Severity Index [PASI] score, 6.2; post-PASI score, 1.0) of treatment-resistant psoriatic lesions; 6 of the patients had previously received topical treatment, 5 had received conventional phototherapy, and 3 had received combined treatments including phototherapy.<sup>[5]</sup> In 2004, the same investigator group reported that 12 of 13 patients with “extensive and stubborn” scalp psoriasis (ie, unresponsive to class I topical steroids used in conjunction with tar and/or zinc pyrithione shampoos for at least 1 month) showed clearing following treatment with the 308-nm laser.<sup>[6]</sup> In a 2006 open trial from Europe, 44 (81%) of 54 patients with palmoplantar psoriasis resistant to combined phototherapy and systemic treatments were cleared of lesions with a single NB-UVB lamp treatment weekly for 8 weeks.<sup>[7]</sup>

### **Section Summary: Treatment-Resistant Mild Psoriasis**

Several nonrandomized studies have found that targeted phototherapy can improve health outcomes in patients with treatment-resistant psoriasis.

## **TARGETED PHOTOTHERAPY FOR MODERATE-TO-SEVERE LOCALIZED PSORIASIS**

### **Systematic Reviews**

There are several systematic reviews of the literature on targeted phototherapy. Reviews differed in the type of study selected and the comparison interventions. A systematic review by Almutawa (2015) considered only RCTs; PUVA was the comparison intervention.<sup>[8]</sup> Reviewers identified three RCTs comparing the efficacy of targeted UVB phototherapy with PUVA for the treatment of plaque psoriasis. Two of the 3 trials used an excimer laser (308 nm) as the source of targeted phototherapy, and the third used localized NB-UVB light. There was no statistically significant difference between the techniques in the proportion of patients with at least a 75% reduction in psoriasis. The pooled odds ratio was 3.48 (95% confidence interval, 0.56 to 22.84).

Mudigonda (2012) published a systematic review of controlled studies (RCTs and non-RCTs) on targeted vs nontargeted phototherapy for patients with localized psoriasis.<sup>[9]</sup> Reviewers identified 3 prospective nonrandomized studies comparing the 308-nm excimer laser with NB-UVB. Among these studies was a study by Goldinger (2006) that compared the excimer laser with full-body NB-UVB in 16 patients.<sup>[10]</sup> At the end of 20 treatments, PASI scores were equally

reduced on the 2 sides, from a baseline of 11.8 to 6.3 for laser and from 11.8 to 6.9 for nontargeted NB-UVB. A study by Kollner et al (2005) included 15 patients with stable plaque psoriasis.<sup>[11]</sup> The study compared the 308-nm laser, the 308-nm excimer lamp, and standard TL-01 lamps. One psoriatic lesion per patient was treated with each therapy (ie, each patient received all three treatments). Investigators found no significant differences in the efficacy of the three treatments after ten weeks. The mean number of treatments to achieve clearance of lesions was 24.

## **Section Summary: Moderate-to-Severe Localized Psoriasis**

Systematic reviews of small RCTs and non-RCTs in patients with moderate-to-severe psoriasis have found that targeted phototherapy has efficacy similar to whole-body phototherapy or PUVA. Targeted phototherapy is presumed to be safer or at least no riskier than whole body phototherapy, due to risks of exposing the entire skin to the carcinogenic effects of UVB light.

## **PSORALEN PLUS ULTRAVIOLET A FOR GENERALIZED PSORIASIS**

### **Systematic Reviews and Randomized Controlled Trials**

A number of RCTs and systematic reviews of RCTs have compared PUVA with other light therapies or with placebo. A Cochrane review by Chen et al (2013) assessed light therapy for psoriasis.<sup>[12]</sup> However, that review is less useful for this evidence evaluation because reviewers combined results of studies using PUVA and broadband UVB, rather than reporting outcomes separately for these treatment modalities.

### **PUVA vs NB-UVB**

An industry-sponsored systematic review by Archier (2012) focused on studies comparing PUVA with NB-UVB in patients who had chronic plaque psoriasis.<sup>[13]</sup> Pooled analysis of 3 RCTs found a significantly higher psoriasis clearance with PUVA than with NB-UVB (odds ratio=2.79; 95% confidence interval, 1.40 to 5.55). In addition, significantly more patients remained clear at 6 months with PUVA than with NB-UVB (odds ratio=2.73; 95% confidence interval, 1.18 to 6.27).

### **PUVA vs Topical Steroids**

Amirnia (2012) published a trial in which 88 patients with moderate plaque psoriasis were randomized to PUVA or topical steroids.<sup>[14]</sup> Treatment was continued for four months or until clearance was achieved. Clearance was defined as the disappearance of at least 90% of baseline lesions. All patients in both groups achieved clearance within the four-month treatment period. Recurrence (defined as a resurgence of at least 50% of the baseline lesions) was reported significantly more often in the topical steroid group (9/44 [20.5%]) than in the PUVA group (3/44 [6.8%];  $p=0.007$ ) (see Table 1).

### **PUVA vs UVA Without Psoralens**

El-Mofty (2014) published an RCT comparing PUVA with broadband-UVA in 61 patients who had psoriasis affecting at least 30% body surface area.<sup>[15]</sup> Clinical outcomes were significantly better in the PUVA group than in the broadband-UVA groups (see Table 1). For example, complete clearance was obtained by 23 (77%) of 30 patients in the PUVA group, 5 (31%) of 16

patients in the 10 J/cm2 UVA group, and 5 (33%) of 15 patients in the 15 J/cm2 UVA group (p=0.020).

Sivanesan (2009) published a double-blind RCT evaluating the efficacy of 8-methoxy psoralen PUVA treatment in patients with moderate-to-severe psoriasis affecting at least 10% body surface area.<sup>[16]</sup> The trial included 40 patients randomized to PUVA (n=30) and/or UVA plus placebo psoralens (n=10). Patients were treated 3 times weekly for 12 weeks. The primary outcome was a 75% or greater improvement in PASI 75 score. At 12 weeks, 19 (63%) of 30 patients in the PUVA group and 0 (0%) of 10 patients in the UVA plus placebo group achieved the primary outcome measure (p<0.001) (see Table 1). There were no serious adverse events.

**Table 1. Summary of Individual RCTs of PUVA vs Other Light Treatments**

Study	Intervention Modality	No. of Participants	PUVA Effectiveness	p
El-Mofty (2014) <sup>[15]</sup>	PUVA vs UVA without psoralens	61	Complete clearance obtained by 77% of PUVA group vs 31% and 33% of UVA-only groups	0.020
Amirinia (2012) <sup>[14]</sup>	PUVA vs topical steroids	88	Recurrence reported significantly more often in topical steroid group than PUVA group	0.007
Sivanesan (2009) <sup>[16]</sup>	PUVA vs UVA without psoralens	40	63% of PUVA group had ≥75% improvement in PASI 75 score at 12 wk vs 0% of UVA plus placebo group	<0.001

PASI: Psoriasis Area Severity Index; PUVA: psoralen plus ultraviolet A; RCT: randomized controlled trials; UVA: ultraviolet A.  
Section Summary: Psoralen Plus UVA

RCTs and systematic reviews of RCTs have found that PUVA is more effective than NB-UVB, topical steroids, or UVA without psoralens in patients with moderate-to-severe psoriasis. Due to side effects, PUVA is typically restricted to more severe cases.

**SUMMARY OF EVIDENCE**

For individuals who have mild localized psoriasis who receive targeted phototherapy, there is little evidence. The relevant outcomes are symptoms, change in disease status, QOL, and treatment-related morbidity. The evidence is lacking on the use of targeted phototherapy as a first-line treatment of mild psoriasis. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have mild psoriasis that is resistant to topical medications who receive targeted phototherapy, the evidence includes small within-subject studies. The relevant outcomes are symptoms, change in disease status, QOL, and treatment-related morbidity. The available pre-post studies have shown that targeted phototherapy can improve mild localized psoriasis (<10% body surface area) that has not responded to topical treatment. Targeted phototherapy is presumed to be safer or at least no riskier than whole body phototherapy, due to risks of exposing the entire skin to the carcinogenic effects of UVB light. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals who have moderate-to-severe localized psoriasis who receive targeted phototherapy, the evidence includes RCTs and systematic reviews of RCTs. The relevant outcomes are symptoms, change in disease status, QOL, and treatment-related morbidity. Systematic reviews of small RCTs and non-RCTs in patients with moderate-to-severe

psoriasis have found that targeted phototherapy has efficacy similar to whole-body phototherapy and supports the use of targeted phototherapy for the treatment of moderate-to-severe psoriasis comprising less than 20% of body surface area for which NB-UVB or phototherapy with PUVA are indicated. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals who have generalized psoriasis who receive PUVA, the evidence includes RCTs and systematic reviews. The relevant outcomes are symptoms, change in disease status, QOL, and treatment-related morbidity. RCTs and systematic reviews of RCTs have found that PUVA is more effective than NB-UVB, topical steroids, or UVA without psoralens in patients with generalized psoriasis. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

## PRACTICE GUIDELINE SUMMARY

### AMERICAN ACADEMY OF DERMATOLOGY – NATIONAL PSORIASIS FOUNDATION

The AAD and NPF joint guidelines (2019) on the management and treatment of psoriasis with phototherapy give strong recommendations for the use of targeted UVB (Table 2).<sup>[17]</sup>

**Table 2. AAD-NPF Strength of Recommendations for Targeted UVB**

No.	Recommendation	Strength
3.1	Targeted UVB phototherapy, including excimer laser, excimer light, and targeted NB-UVB light, for use in adults with localized plaque psoriasis, for individual lesions, or in patients with more extensive disease	A
3.2	For maximal efficacy, treatment with targeted UVB phototherapy for adults with localized plaque psoriasis should be carried out 2-3 times/wk rather than once every 1-2 wk	A
3.3	The starting dose for targeted UVB phototherapy for adults with localized plaque psoriasis can be determined on the basis of the MED or by a fixed-dose or skin phototype protocol	A
3.4	An excimer laser is more efficacious than an excimer light, which is more efficacious than localized NB-UVB light for the treatment of localized plaque psoriasis in adults	B
3.5	Recommend targeted UVB phototherapy, including excimer laser and excimer light, for use in adults with plaque psoriasis, including palmoplantar psoriasis	A
3.6	Excimer laser may be combined with topical corticosteroids in the treatment of plaque psoriasis in adults	B
3.7	Recommend excimer laser in the treatment of scalp psoriasis in adults	B

Table adapted from Elmetts et al (2019).<sup>[17]</sup>

NB-UVB: narrowband ultraviolet B; UVB: ultraviolet B.

The guidelines state of home NB-UVB therapy that evidence shows similar results regarding efficacy, quality of life, and side effects between patients with mild-to-severe psoriasis who received home treatments and those who received treatments at hospitals. In addition, home treatment was found to significantly lessen the burden on patients who had to travel to a phototherapy center.

The AAD and NPF also published joint guidelines for the management of pediatric psoriasis, noting that the UV equipment machine may provoke anxiety in children (Table 3).<sup>[18]</sup>



**Table 3. AAD-NPF Recommendations for Pediatric Psoriasis and Phototherapy/Photochemotherapy**

No.	Recommendation	Strength
17.1	NB-UVB is recommended as a treatment option for moderate to severe pediatric plaque and guttate psoriasis.	B
17.2	The use of excimer laser or PUVA therapy in children with psoriasis may be efficacious and well tolerated but has limited supporting evidence.	C

## AMERICAN ACADEMY OF DERMATOLOGY

The American Academy of Dermatology (2010) guidelines on the management of psoriasis recommended that patients with psoriasis who are compliant could, under dermatologist supervision, be considered appropriate candidates for home ultraviolet B therapy.<sup>[4]</sup> Targeted phototherapy was recommended for patients with mild, moderate, or severe psoriasis with less than 10% involvement of the body surface area. Systemic psoralen plus ultraviolet A was indicated in adults with generalized psoriasis resistant to topical therapy.

## NATIONAL PSORIASIS FOUNDATION

The National Psoriasis Foundation (2017) published consensus guidance based on a task force review of the literature on the treatment for psoriasis involving skinfolds (inverse or intertriginous) psoriasis.<sup>[19]</sup> The treatment guidance for intertriginous or genital psoriasis stated: "....here is anecdotal evidence demonstrating the strong clinical efficacy of biologic treatment; with limited knowledge on the effects of biologics on intertriginous or genital psoriasis." The guidance on inverse psoriasis is provided in Table3.

**Table 3. Recommendations on Treatment of Inverse Psoriasis**

Line of Therapy	Recommendation
First-line therapy	Low potency topical steroids for periods less than 2-4 wks
	Other topical therapies to consider are tacrolimus, pimecrolimus, calcitriol, or calcipotriene to avoid steroid side effects with long-term treatment
Second- and third-line therapies	Antimicrobial therapy, emollients, and tar-based products
	Axillary involvement can be treated with botulinum toxin injection to reduce perspiration and inhibit inflammatory substance release
	Excimer laser therapy or systemic agents

The National Psoriasis Foundation (2017) also published recommendations based on a review of the literature on the treatment for psoriasis in solid organ transplant patients.<sup>[20]</sup> Because organ transplant patients are excluded from randomized controlled trials, there are limited data. The recommendations were based on case series (see Table 4).

**Table 4. Recommendations on Treatment of Psoriasis for Solid Organ Transplant Patients**

Line of Therapy	Recommendation
First-line therapy for mild-to-moderate psoriasis	Topical therapy

Line of Therapy	Recommendation
First-line therapy for moderate-to-severe psoriasis	<ul style="list-style-type: none"> <li>• Acitretin with narrowband ultraviolet light or</li> <li>• Narrowband ultraviolet light or</li> <li>• Acitretin</li> </ul>
Second-line therapy	Increasing the current anti-rejection drug dose
Severe psoriasis or refractory cases	Systemic or biologic therapies

## SUMMARY

There is enough evidence to show that targeted phototherapy may improve health outcomes in certain populations. Additionally, clinical practice guidelines recommend the use of targeted phototherapy for certain indications. Therefore, the use of targeted phototherapy may be considered medically necessary when policy criteria are met.

There is enough evidence to show that psoralen plus ultraviolet A may improve health outcomes when used for the treatment of severe, disabling psoriasis, which is not responsive to other forms of conservative therapy (e.g., topical corticosteroids, coal/tar preparations, ultraviolet light). Additionally, clinical practice guidelines recommend the use of psoralen plus ultraviolet A for certain populations. Therefore, the use of psoralen plus ultraviolet A may be considered medically necessary when policy criteria are met.

There are insufficient positive health outcomes in patients with the use of psoralen plus ultraviolet A in mild psoriasis or when conservative therapy is effective. Therefore, the use of psoralen plus ultraviolet A is considered not medically necessary when policy criteria are not met.

The evidence is lacking on the use of targeted phototherapy as the first-line treatment of mild psoriasis. The evidence is insufficient to determine the effects of the technology on health outcomes. Therefore, the use of targeted phototherapy as the first-line treatment of mild psoriasis is considered investigational.

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## CODES

<b>Codes</b>	<b>Number</b>	<b>Description</b>
CPT	96446	Chemotherapy administration into the peritoneal cavity via implanted port or catheter
	96912	Photochemotherapy; psoralens and ultraviolet A (PUVA)
	96900	Actinotherapy (ultraviolet light)
	96920	Excimer laser treatment for psoriasis; total area less than 250 sq cm
	96921	Excimer laser treatment for psoriasis; 250 sq cm to 500 sq cm
	96922	Over 500 sq cm
HCPCS	E0691	Ultraviolet light therapy system, includes bulbs/lamps, timer and eye protection; treatment area 2 sq ft or less
	E0692	Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, 4 ft panel
	E0693	Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, 6 ft panel
	E0694	Ultraviolet multidirectional light therapy system in 6 ft cabinet, includes bulbs/lamps, timer, and eye protection

**Date of Origin:** November 2020