

**I.167 TARGETED PHOTOTHERAPY FOR PSORIASIS**

**(This replaces Policy VII.53, Xenon Chloride Excimer Laser Therapy for Phototherapeutic Treatment of Psoriasis)**

**DESCRIPTION:**

Targeted phototherapy describes the use of ultraviolet light that can be focused on specific body areas or lesions to treat patients with psoriasis. Conventional phototherapeutic options for treatment of psoriasis include photochemotherapy with psoralen plus ultraviolet A (PUVA) and both broad and narrowband ultraviolet B (UVB). UVB therapy has been commonly used to treat patients with moderate to severe psoriasis. While PUVA therapy is considered more effective than UVB, 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 severe recalcitrant psoriasis. UVB is typically directed to the whole body or large sections of the body with light panels or light cabinets, requiring multiple treatments given several times a week. Broadband UVB devices, which emit wavelengths from 290 to 320 nm have been largely replaced by narrowband UVB (NB-UVB) devices. NB-UVB devices eliminate wavelengths below 296 nm, which are considered erythmogenic 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. Xenon chloride (XeCl) lasers and lamps have been developed as targeted NB-UVB treatment devices. These devices generate monochromatic or very narrow band radiation with a  $\lambda$  max of 308 nm. In 2001, a XeCl excimer laser (XTRAC™ by PhotoMedex) received 510(k) clearance from the U.S. Food and Drug Administration (FDA) for the treatment of mild to moderate psoriasis. 510(k) clearance has subsequently been obtained for a number of targeted UVB lamps and lasers, including the XTRAC XL™ and VTRAC™ lamp (PhotoMedex), the BClear™ lamp (Lumenis), and the European manufactured Excilite™ and Excilite  $\mu$ ™ XeCL lamps. The indicated use of these devices is targeted UVB phototherapy for treatment of skin conditions including psoriasis, vitiligo, atopic dermatitis, and leukoderma.

This type of FDA approval does not require data regarding clinical efficacy; essentially, these devices are considered a different technique for generating UVB light. The proposed advantage of a hand-held device is that it specifically targets individual lesions, thus limiting exposure to the surrounding normal tissues. Targeted phototherapy 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 patients with mild to moderate psoriasis, defined as involvement of less than 10% of the skin. Typically, these patients have not been considered candidates for light box therapy, since the risks of exposing the entire skin to the carcinogenic effects of UVB light may outweigh the benefits of treating a small number of lesions. Patients with mild localized psoriasis are treated primarily with topical therapy. A variety of agents may be used; calcipotriene (Dovonex®), tazarotene (Tazovac®), and fluocinonide (Lidex®) are examples.

There is concern for the possibility of cancer induction with long-term UVB treatment. PUVA has been associated with increased cancer risk; there is currently no evidence that supports increased risk following extended UVB treatment. Given the higher MED of plaques and reduced exposure of

unaffected skin, targeted NB-UVB may have an improved benefit/risk ratio over non-targeted phototherapy for localized psoriasis.

There is currently no evidence to recommend any one targeted or non-targeted NB-UVB device over another. Devices with smaller focal areas may result in more frequent blistering due to “tiling,” the practice of overlapping adjoining treatment zones.

The literature supports the use of targeted phototherapy for the treatment of moderate to severe psoriasis comprising less than 20% body area for which NB-UVB or PUVA are indicated, and for the treatment of mild to moderate psoriasis that is unresponsive to conservative treatment.

Based on this review, evidence is lacking for the use of targeted phototherapy for the first-line treatment of mild psoriasis or for the treatment of generalized psoriasis or psoriatic arthritis.

**POLICY:**

Targeted phototherapy may be considered **medically necessary** for the treatment of moderate to severe psoriasis comprising less than 20% body area for which NB-UVB or PUVA are indicated.

Targeted phototherapy may be considered **medically necessary** for the treatment of mild to moderate psoriasis that is unresponsive to conservative treatment.

Targeted phototherapy is considered **investigative** for the first-line treatment of mild to moderate psoriasis.

Targeted phototherapy is considered **investigative** for the treatment of generalized psoriasis or psoriatic arthritis

All other uses of targeted phototherapy are investigative.

**EXCEPTIONS/CONSIDERATIONS:**

In 2002, CPT established separate codes (96920-96922) that describe ultraviolet light laser treatment for inflammatory disease (psoriasis) according to the surface area of skin treated (mild: total area less than 250 sq cm, moderate: 250 sq cm-500 sq cm, and severe: over 500 sq cm).

The laser treatment codes are distinct from codes that describe the dermatological use of ultraviolet light, also known as actinotherapy (96900), and photochemotherapy (96910-96913).

Established treatments for psoriasis include use of topical ointments and ultraviolet light (“light lamp”) treatments. Lasers and targeted UVB lamps are considered to be equivalent devices; targeted ultraviolet devices are comparable to ultraviolet light panels for treatment purposes. First-line treatment of UV- sensitive lesions may involve around 6–10 office visits, treatment of recalcitrant lesions may involve around 24–30 office visits. Maintenance therapy or repeat courses of treatment may be required.

<b>CODES</b>	<b>NUMBER</b>	<b>DESCRIPTION</b>
CPT	96900	Actinotherapy (ultraviolet light)



(mild)	96920	Laser treatment for inflammatory skin disease (psoriasis); total area less than 250 sq cm
(moderate)	96921	Total area 250–500 sq cm
(severe)	96922	Total area over 500 sq cm
ICD-9 Procedure		
ICD-9 Diagnosis	696.1	Psoriasis
Type of Service	Medicine	
Place of Service	Outpatient	

ORIGINAL EFFECTIVE DATE: 06/13/07

**REVISION DATE**

**REVIEWED:**

REVISION NO.: