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 erythrogenic and carcinogenic but not therapeutic. NB-UVB is more effective than broadband 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 µ™ 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. 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.

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 investigational for the first-line treatment of mild psoriasis.
Targeted phototherapy is considered investigative for the treatment of generalized psoriasis or psoriatic arthritis (696.0 - Psoriatic arthropathy).

POLICY EXCEPTIONS

None

POLICY GUIDELINES

Investigative service is defined as the use of any treatment procedure, facility, equipment, drug, device, or supply not yet recognized by certifying boards and/or approving or licensing agencies or published peer review criteria as standard, effective medical practice for the treatment of the condition being treated and as such therefore is not considered medically necessary.

The coverage guidelines outlined in the Medical Policy Manual should not be used in lieu of the Member's specific benefit plan language.

POLICY HISTORY

5/2002: Approved by Medical Policy Advisory Committee (MPAC), Code Reference section completed, CPT code 96910, 96999 added, ICD-9 diagnosis code 969.1 added

11/2002: Reviewed by MPAC; maintained investigational status

3/7/2003: Code Reference section updated, CPT code 96910 deleted, CPT code 96920, 96921, 96922 added

8/1/2003: ICD-9 diagnosis code 969.1 deleted, ICD-9 diagnosis code 696.1 added

8/26/2005: Code Reference section updated, CPT code 96920, 96921, 96922 deleted, ICD-9 diagnosis code 696.1 deleted

1/10/2007: Policy reviewed, no changes

3/15/2007: Code Reference section reviewed. CPT codes 96920, 96921, and 96922 added to non-covered table.


SOURCE(S)

CODE REFERENCE

This is not intended to be a comprehensive list of codes. Some codes may be variable, and coverage will be based on the clinical indication for the service.

**Covered Codes**

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<thead>
<tr>
<th>Code Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>CPT-4</td>
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<tr>
<td>96920</td>
<td>Laser treatment for inflammatory skin disease (psoriasis); total area less than 250 sq cm (added 3-15-2007) (moved to covered 3-20-2007)</td>
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<tr>
<td>96921</td>
<td>Laser treatment for inflammatory skin disease (psoriasis); 250 sq cm to 500 sq cm (added 3-15-2007) (moved to covered 3-20-2007)</td>
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<td>96922</td>
<td>Laser treatment for inflammatory skin disease (psoriasis); 500 sq cm (added 3-15-2007) (moved to covered 3-20-2007)</td>
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<td>ICD-9 Procedure</td>
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<td>696.1</td>
<td>Psoriasis (added 3-20-2007)</td>
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