

# Clinical Policy: Laser Therapy for Skin Conditions

Reference Number: LA.CP.MP.123

Date of Last Revision: 5/23

Coding Implications

Revision Log

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

## Description

Targeted phototherapy utilizes non-ionizing ultraviolet radiation with therapeutic benefit. Phototherapy is an efficacious local therapy that provides several advantages to traditional and biologic systemic therapies. Excimer lasers are monochromatic 308 nm xenon chloride lasers that are approved to treat certain inflammatory skin diseases. This policy describes the medical necessity requirements for excimer laser based targeted phototherapy.

## Policy/Criteria

- I. It is the policy of Louisiana Healthcare Connections that excimer laser based targeted phototherapy is **medically necessary** for the following indications after the failure of topical treatments:
  - A. Localized plaque psoriasis with <10% body surface area (BSA) involvement, individual lesions, or more extensive disease;
  - B. Vitiligo.
  - C. Atopic dermatitis
  - D. Cutaneous T-cell lymphoma (e.g., mycosis fungoides/ Sézary Syndrome).
- II. It is the policy of Louisiana Healthcare Connections that the evidence is insufficient to draw conclusions regarding the efficacy of excimer laser targeted phototherapy for the following indications:
  - A. Patients with photosensitivity disorders;
  - B. For the treatment of all other conditions than those specified above.

## Background

Targeted phototherapy uses a localized delivery of ultraviolet light to facilitate therapeutic relief of some conditions. Ultraviolet light is predominantly absorbed by skin DNA, leading to the generation of pyrimidine dimers, pyrimidine, and (6-4) photoproducts which are either repaired or marked for arrest or cell death through the cell's checkpoint machinery.<sup>5</sup> Various spectra of ultraviolet A (UVA) and ultraviolet B (UVB) wavelengths are utilized to treat a varying array of inflammatory skin disorders, including narrowband, broadband, and excimer lasers, as well as combinations of UVA and UVB with topical, systemic, biologic, and chemotherapeutic regimens.<sup>1</sup> Additionally, phototherapy is cost effective and avoids the immunosuppressive effects that often accompany traditional and biologic based systemic therapies.

Excimer lasers are monochromatic 308nm xenon chloride lasers that provide a safe and selective approach to treating dermatological conditions. Excimer lasers are associated with significant T-cell depletion, alterations in apoptosis-related molecules, reductions in proliferation indices, and immunomodulatory mechanisms.<sup>6</sup> An early study by Feldman *et al* assessed the efficacy of excimer lasers for the treatment of mild to moderate psoriasis in a multicenter study. The authors noted that 84% of the patients reached the primary outcome of at least 75% improvement of their plaques within 1 month.<sup>7</sup> Another study by Rodewald *et al* compared the excimer laser

to a non-intervention, placebo cohort, as well as other standard topical treatments for psoriasis.<sup>8</sup> The laser and topical calcipotriene had similar efficacies but both were more effective than topical tazarotene or fluocinonide and the time to achieve 75% improvement favored the excimer laser.<sup>8</sup> Therefore, laser was comparable to or more effective than other standard treatments for psoriasis.<sup>8</sup>

According to a joint updated guideline from the American Academy of Dermatology, National Psoriasis Foundation, the excimer laser is recommended for use in adults with localized plaque psoriasis (including palmoplantar psoriasis) <10% BSA, for individual lesions, or in patients with more extensive disease (recommendation based on consistent, good quality patient oriented evidence.) Excimer laser is also recommended in the treatment of scalp psoriasis in adults (based on inconsistent or limited-quality patient-oriented evidence.)<sup>13</sup>

The initial treatment dose of the excimer laser depends on the individual's skin type, plaque characteristics, and thickness, with subsequent doses adjusted in accordance to the patient's clinical response and side effects.<sup>1,13</sup> Treatment takes place two to three times per week until a patient is clear of symptoms. According to a separate guideline on children from the American Academy of Dermatology-National Psoriasis Foundation, excimer laser may be used in children with psoriasis and may be efficacious and well tolerated, but these options have limited supporting evidence.<sup>14</sup>

The European Dermatology Forum and the British Association of Dermatologists provide guidelines for the management of vitiligo.<sup>3-4</sup> The consensus of the European Dermatology Forum is that targeting phototherapy should be indicated for localized vitiligo and for small lesion of recent onset and childhood vitiligo.<sup>3</sup> Notably, Alhowaish et al documented the effectiveness of excimer laser treatments in vitiligo in 23 separate articles that included case studies, randomized controlled studies, retrospective analyses, randomized blinded studies, and controlled comparative studies.<sup>9</sup> Although the response time and the duration of response varied, the excimer laser therapy was generally effective across all of the studies.<sup>9</sup> While several treatment options are available for vitiligo, targeted laser therapy delivers high intensity light to the desired depigmented area to avoid exposure to surrounding neighboring healthy skin.<sup>17</sup>

Atopic dermatitis (eczema) is a chronic, pruritic, inflammatory skin disease with clinical presentation of dry skin, severe pruritus and cutaneous hyperreactivity to various environmental stimuli. Skin hydration with emollients and moisturizers is a key component of first-line therapy. Other topical treatments, i.e., anti-inflammatory therapy with topical corticosteroids or calcineurin inhibitors can be effective in controlling pruritus. When topical therapy alone is not enough, narrowband ultraviolet B (NBUVB) or ultraviolet A1 (UVA1) phototherapy can be added. Patients with moderate to severe disease despite topical therapy may require systemic treatment such as dupilumab. Narrowband ultraviolet B (NBUVB) phototherapy is also an alternative. However, phototherapy is not suitable for infants and young children. Phototherapy can be administered in the office two to three times weekly.

Mycosis fungoides (MF) and Sézary syndrome (SS) are common subtypes of cutaneous T cell lymphoma (CTCL). MF is a mature T cell non-Hodgkin lymphoma that presents in the skin but has potential involvement of the lymph nodes, blood, and viscera. Skin lesions include patches or

plaques, localized or widespread, along with tumors, and erythroderma. SS is an inflammatory skin disease with leukemic involvement by malignant T cells. Diagnosis of both MF and SS is made through skin biopsy, blood studies or nodal biopsy.

The TNMB systems is the standard method for staging MF and SS. The TNMB staging is based on evaluation of skin (T), lymph node (N), visceral (M), and blood (B). For MF, early stages (IA to IIA) consist of papules, patches, or plaques, with limited, if any, lymph node involvement and no visceral involvement. Skin-directed therapies can include topical corticosteroids, mechlorethamine, retinoids, imiquimod, localized radiation, or phototherapy (narrowband ultraviolet B [NBUVB] or psoralen plus ultraviolet A [PUVA]).<sup>24</sup> SS Stage IVA1 involves no significant lymph node or visceral involvement, Stage IVA2 is demonstrated by lymph node involvement, but no visceral involvement and Stage IVB includes visceral involvement, with or without nodal involvement. Although no standard initial therapy for patients with SS, systemic therapy can be given alone, with skin directed therapy, or with other systemic therapies.<sup>25</sup>

The NCCN recommends skin-directed therapies as above, used alone or in combination of other skin-directed therapies, dependent upon limited/localized skin involvement or generalized skin involvement.<sup>22</sup>

### Coding Implications

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CPT® Codes	Description
96920	Laser treatment for inflammatory skin disease (psoriasis); total area less than 250 sq. cm
96921	Laser treatment for inflammatory skin disease (psoriasis); 250 sq. cm to 500 sq. cm
96922	Laser treatment for inflammatory skin disease (psoriasis); over 500 sq. cm

### ICD-10-CM Diagnosis Codes that Support Coverage Criteria

ICD-10-CM Code	Description
L20.81	Atopic neurodermatitis
L20.82	Flexural eczema
L20.84	Intrinsic (allergic) eczema
L20.89	Other atopic dermatitis
L40.0	Psoriasis vulgaris (plaque psoriasis)
L80	Vitiligo

ICD-10-CM Code	Description
C84.00	Mycosis fungoides, unspecified site
C84.01	Mycosis fungoides, lymph nodes of head, face, and neck
C84.02	Mycosis fungoides, intrathoracic lymph nodes
C84.03	Mycosis fungoides, intra-abdominal lymph nodes
C84.04	Mycosis fungoides, lymph nodes of axilla and upper limb
C84.05	Mycosis fungoides, lymph nodes of inguinal region and lower limb
C84.06	Mycosis fungoides, intrapelvic lymph nodes
C84.07	Mycosis fungoides, spleen
C84.08	Mycosis fungoides, lymph nodes of multiple sites
C84.09	Mycosis fungoides, extranodal and solid organ sites
C84.10	Sezary disease, unspecified site
C84.11	Sezary disease, lymph nodes of head, face, and neck
C84.12	Sezary disease, intrathoracic lymph nodes
C84.13	Sezary disease, intra-abdominal lymph nodes
C84.14	Sezary disease, lymph nodes of axilla and upper limb
C84.15	Sezary disease, lymph nodes of inguinal region and lower limb
C84.16	Sezary disease, intrapelvic lymph nodes
C84.17	Sezary disease, spleen
C84.18	Sezary disease, lymph nodes of multiple sites
C84.19	Sezary disease, extranodal and solid organ sites

Reviews, Revisions, and Approvals	Review Date	Approval Date
Converted corporate to local policy.	08/15/2020	
Annual review. “Experimental/investigational” verbiage replaced in policy statement with “evidence is insufficient to draw conclusions.” Replaced all instances of “member” with “member/enrollee.” Coding reviewed. References reviewed and reformatted. Changed “review date” in the header to “date of last revision” and “date” in the revision log header to “revision date.”	11/11/2021	
Annual review. Background updated with no impact to policy statement. Specialist reviewed. References reviewed and updated. Added “and may not support medical necessity.”	5/22	
Annual review. Added medically necessary indications I.C. atopic dermatitis and I.D. cutaneous T-cell lymphoma. Removed II.B. atopic dermatitis from insufficient evidence section. Added codes L20.81, L20.82, L20.89, C84.00 through C84.09, and C84.10 through C84.19 to table of ICD-10-CM diagnosis codes that support coverage criteria. References reviewed and updated.	5/23	7/24/23

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### **Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. LHCC makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved.

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