

# Clinical Policy: Laser Therapy for Skin Conditions

Reference Number: CP.MP.123

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## 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 308nm 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 health plans affiliated with Centene Corporation<sup>®</sup> 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 health plans affiliated with Centene Corporation 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

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noted that 84% of the patients reached the primary outcome of at least 75% improvement after 10 or fewer treatments.<sup>26</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>11</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>1,11</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>12</sup>

The European Academy of Dermatology and Venereology published a position statement giving worldwide expert recommendations for diagnosis and management of vitiligo. Their findings indicated that detection and treatment of vitiligo at an early stage is essential for optimal management and to improve prognosis. Early aggressive treatment in rapidly progressive vitiligo to limit irreversible damage to pigment cells is appropriate. In active vitiligo, topical treatment, phototherapy and/or in rapidly progressive vitiligo systemic treatment are recommended. Varying treatment algorithms were cited in the position statement. Phototherapy remains an essential in the treatment of vitiligo and can be given with excimer devices which are more suited for localized forms of vitiligo.<sup>24,25</sup>

Notably, Alhawaish 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>7</sup> Although the response time and the duration of response varied, the excimer laser therapy was generally effective across all of the studies.<sup>7</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>15</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 (NB-UVB) 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 (NB-UVB) 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.

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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>22</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>23</sup>

The NCCN generally recommends skin-directed therapies as above, and systemic therapy regimens, which can be tolerated for longer periods of time with lower rates of cumulative toxicity, before moving on to treatments that carry a higher risk of cumulative toxicity and/or immunosuppression. The FDA has approved bexarotene, brentuximab vedotin, mogamulizumab, vorinostat, and romidepsin for treatment of MF and SS. Further suggested regimens by staging can be found in the NCCN guidelines.<sup>20</sup>

**Coding Implications**

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| CPT® Codes | Description   |
|------------|---|
| 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      | Excimer laser treatment for psoriasis; over 500 sq cm                 |

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

| ICD-10-CM Code | Description            |
|----------------|------------------------|
| L20.81         | Atopic neurodermatitis |

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| ICD-10-CM Code | Description  |
|----------------|--|
| L20.82         | Flexural eczema  |
| L20.84         | Intrinsic (allergic) eczema                                      |
| L20.89         | Other atopic dermatitis  |
| L40.0          | Psoriasis vulgaris (plaque psoriasis)                            |
| L80            | Vitiligo   |
| 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  | Revision Date | Approval Date |
|--|---------------|---------------|
| Policy developed.  | 07/16         | 08/16         |
| References reviewed and updated  | 05/18         | 06/18         |
| References reviewed and updated. Specialist review.  | 05/19         | 06/19         |
| Revised indication from “Mild, moderate, or severe psoriasis with < 10% body surface area (BSA) involvement” to “Localized plaque psoriasis <10% body surface area (BSA) involvement, individual lesions, or with more extensive disease.” Background updated with recent guidelines from AAD. References reviewed and updated.  | 05/20         | 06/20         |
| 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.” | 06/21         | 06/21         |

| Reviews, Revisions, and Approvals   | Revision Date | Approval Date |
|---|---------------|---------------|
| Annual review. Background updated with no impact to policy statement. Specialist reviewed. References reviewed and updated.   | 03/22         | 03/22         |
| 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. | 03/23         | 03/23         |
| Annual review. Background updated with no impact on criteria. References reviewed and updated. Reviewed by external specialist.   | 03/24         | 03/24         |

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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. The Health Plan 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. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

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**Note: For Medicaid members/enrollees**, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

**Note: For Medicare members/enrollees**, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs LCDs and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Refer to the CMS website at <http://www.cms.gov> for additional information.

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