Clinical Policy: Laser Therapy for Skin Conditions

Reference Number: PA.CP.MP.123
Effective Date: 01/01/2018
Date of Last Revision: 04/2024

Coding Implications
Revision Log

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 PA Health & Wellness® (PHW) 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 PHW 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.

* It is the policy of PA Health & Wellness ® (PHW) that determinations for services that are considered **not medically necessary** must be considered on a case-by-case basis by a physician or ad hoc committee and must be made in accordance with the Benefit Plan Contract provisions and applicable state and federal requirements. Denials will require medical director review.

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.[5] 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.[1] 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.[6] 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 after 10 or fewer treatments.[26]

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.)[11]

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.[1,11] 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.[12]

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 cite 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. [24,25]

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.[7] Although the response time and the duration of response varied, the excimer laser therapy was generally effective across all of the studies.[7] 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.[15]

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]).[22] 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.[23]

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. [20]

Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2023, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

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
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.	09/17	
References reviewed and updated.	09/18	
References reviewed and updated. Specialist review.	10/19	
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.	10/2020	12/7/2020
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"	9/29/2021	

Reviews, Revisions, and Approvals	Revision Date	Approval Date
in the header to "date of last revision" and "date" in the revision log header to "revision date."		
Annual review. Background updated with no impact to policy statement. Specialist reviewed. References reviewed and updated.	03/23	
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	
Annual review. Background updated with no impact on criteria. References reviewed and updated. Reviewed by external specialist.	04/2024	

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