

Clinical Policy: Laser Therapy for Skin Conditions

Reference Number: CP.MP.123

Last Review Date: 06/20

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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 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 health plans affiliated with Centene Corporation® 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.

- II. It is the policy of health plans affiliated with Centene Corporation that excimer laser targeted phototherapy is considered **experimental/investigational** for the following indications:
 - A. Patients with photosensitivity disorders;
 - B. Acute dermatitis;
 - C. 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.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 of their plaques within 1 month.⁷ 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.⁸

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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.⁸ Therefore, laser was comparable to or more effective than other standard treatments for psoriasis.⁸

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.)¹³

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.^{1,13} Treatment takes place 2-3 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.¹⁴The European Dermatology Forum and the British Association of Dermatologists provide guidelines for the management of vitiligo.³⁻⁴ 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.³ 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.⁹ Although the response time and the duration of response varied, the excimer laser therapy was generally effective across all of the studies.⁹

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 2020, 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

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ICD-10-CM Code	Description
L40.0	Psoriasis vulgaris (plaque psoriasis)
L80	Vitiligo

Reviews, Revisions, and Approvals	Date	Approval Date
Policy developed	07/16	08/16
References reviewed and updated.	07/17	08/17
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

References

1. Menter A, Korman NJ, Elmets CA, et al. "Guidelines of care for the management of psoriasis and psoriatic arthritis: Section 5. Guidelines of care for treatment of psoriasis with phototherapy and photochemotherapy." *Journal of the American Academy of Dermatology* 62, 1 (2010): 114-135
2. Sidbury R, Davis DM, Cohen DE, et al. "Guidelines of care for the management of atopic dermatitis: section 3. Management and treatment with phototherapy and systemic agents." *Journal of the American Academy of Dermatology* 71.2 (2014): 327-349.
3. Gawkrödger DJ, Ormerod AD, Shaw L, et al. "Guideline for the diagnosis and management of vitiligo." *British Journal of Dermatology* 159.5 (2008): 1051-1076.
4. Taieb A, Alomar A, Bohm M, et al. "Guidelines for the management of vitiligo: the European Dermatology Forum consensus." *Br J Dermatol.* 2013 Jan;168(1):5-19. doi: 10.1111/j.1365-2133.2012.11197.x. Epub 2012 Nov 2. .
5. Feldman, SR. “Targeted phototherapy.” In: UpToDate, Elmets CA. (Ed), April 11, 2019. Accessed May 14, 2020
6. Specchio F, Carboni I, Carnarozzo G, et al. "Excimer UV radiation in dermatology." *International journal of immunopathology and pharmacology.* 27.2 (2014): 287-289.
7. Feldman, SR, Mellen BG, Housman TS, et al. "Efficacy of the 308-nm excimer laser for treatment of psoriasis: results of a multicenter study." *Journal of the American Academy of Dermatology.* 46.6 (2002): 900-906.
8. Rodewald EJ, Housman TS, Mellen BG, et al. "The efficacy of 308nm laser treatment of psoriasis compared to historical controls." *Dermatology online journal.* 7.2 (2001).
9. Alhowaish, AK, Dietrich N, Onder M, Fitz K. "Effectiveness of a 308-nm excimer laser in treatment of vitiligo: a review." *Lasers in medical science.* 28.3 (2013): 1035-1041.
10. Grimes PE. Vitiligo: Management and prognosis. In: UpToDate. Tsao H. (Ed), May 5, 2017. Accessed May 14, 2020.
11. Salah Eldin MM, Sami NA, Aly DG, Hanafy NS. Comparison between (311-312 nm) Narrow Band Ultraviolet-B Phototherapy and (308 nm) Monochromatic Excimer Light

- Phototherapy in Treatment of Vitiligo: A Histopathological Study. *J Lasers Med Sci.* 2017 Summer;8(3):123-127. doi: 10.15171/jlms.2017.22. Epub 2017 Jun 27
12. Hayes Medical Technology Directory. Comparative Effectiveness Review. *Laser Therapy for Psoriasis.* April 25, 2019.
 13. Elmets CA, Lim HW, Stoff B, et al. Joint American Academy of Dermatology-National Psoriasis Foundation guidelines of care for the management and treatment of psoriasis with phototherapy. *J Am Acad Dermatol.* 2019 Sep;81(3):775-804. doi: 10.1016/j.jaad.2019.04.042. Epub 2019 Jul 25.
 14. Menter A, Cordoro KM, Davis DM, et al. Joint American Academy of Dermatology-National Psoriasis Foundation guidelines of care for the management and treatment of psoriasis in pediatric patients. *J Am Acad Dermatol.* 2020 Jan;82(1):161-201. doi: 10.1016/j.jaad.2019.08.049. Epub 2019 Nov 5
 15. Paller AS, Lund EB. Psoriasis in children: Management of chronic plaque psoriasis. UpToDate. Duffin KC, Levy ML. (Eds) February 19, 2020. Accessed 05 14, 2020.
 16. Feldman SR. Treatment of Psoriasis in Adults, UpToDate. Dellavalle RP, Duffin KC (Eds). March 27, 2020. Accessed May 14, 2020

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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This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

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Note: For Medicaid members, 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, 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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