



Medical Policies



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Policy Number: 394
 Policy Name: Laser Treatment of Active Acne
 Policy Type: Medical
 Effective Date: 01-01-2023

Policy Subtype: Dermatology
 Last Review Date: 08-01-2025

POLICY:

Laser treatment of active acne is considered investigational.

DESCRIPTION OF PROCEDURE OR SERVICE:

Lasers have been used to treat acne scarring and may also be useful for active acne. Various types of laser treatments are available, including pulsed and non-pulsed devices and differing wavelengths of emitted light. It has been reported that lasers may improve active acne by killing propionibacterium acnes (P. acnes) and/or by reducing inflammation.

Acne is a very common disorder of the pilosebaceous follicles that primarily affects adolescents and young adults and may be classified as inflammatory or noninflammatory. Acne is characterized by comedones, nodules, and eruptions of papules, pustules, and nodulocystic lesions. Lesions are found in areas with the greatest concentration of sebaceous glands, i.e., the face, neck, and upper part of the trunk. The four causal factors of acne are androgen-mediated sebaceous gland hyperplasia and excess sebum production; abnormal follicular keratinization, which results in plugging of the follicles, and comedo formation; proliferation of propionibacterium acnes (P. acnes); and inflammation resulting from the chemoattractant and proinflammatory byproducts of P. acnes. Genetic factors, diet, and stress may also contribute to the development and severity of acne. Treatment of active acne usually consists of a good skin care regimen, benzoyl peroxide, antibiotics, and retinoids. Active acne is distinct from acne scarring, which may occur for tissue damage after inflammatory lesions subside.

Pulsed dye laser has been used in the treatment of acne scarring; however, more recently, lasers have been investigated for the treatment of active inflammatory acne. Laser therapy at various irradiation levels or fluencies (e.g., low-and mid-level irradiation lasers and long-pulse diode lasers) has been used to destroy active acne lesions and enlarged sebaceous glands. Lasers are believed to improve active acne lesions by reducing the presence of P. acnes, which contain porphyrins that are destroyed by inflammatory affects (i.e., red light of 660nm) that may improve active acne. Low fluence pulsed dye lasers are less ablative and purpuric and may be preferred in active acne treatment to limit tissue damage and potential treatment-related scarring. Laser treatment of active acne lesions may also reduce potential acne scarring that can occur in severe cases.

KEY POINTS:

The most recent update with literature review covers the period through August 5, 2025.

Summary of Evidence

Due to the small sample sizes of the published trials, lack of long-term follow-up, small number of studies on any particular type of laser, and paucity of studies comparing light therapy to standard acne treatments, the evidence is insufficient to draw conclusions on the impact of laser treatments on health outcomes in individuals with active acne.

Practice Guidelines and Position Statements

American Academy of Dermatology (AAD)

In a guideline of care for the management of AV, the AAD (2024) states that there is limited evidence to recommend the use and benefit of physical modalities for the routine treatment of acne, including PDL. According to the AAD, large, prospective, multicenter, randomized, double-blinded controlled trials comparing light and laser devices to placebo are needed. The AAD further states that comparative effectiveness clinical trials for safety and efficacy of different light and laser sources/wavelengths and which types of lesions they improve are also needed.

American Society of Dermatologic Surgery (ASDS)

The ASDS (2017) board of directors proposed a committee of experts in the field to develop consensus documents on different treatments. An expert panel reviewed the literature on PDT and discussed the findings. According to the ASDS, PDT is highly effective in the treatment of inflammatory acne papules, but not comedones. PDT is an excellent option for moderate-to-severe acne when isotretinoin is not an option. Drawbacks of PDT for acne include time commitment, discomfort during treatment, posttreatment erythema, and crusting. According to the ASDS, there is no widely accepted protocol for treating inflammatory acne patients. This is a consensus based guide that was developed by considering evidence based reviews.

APPROVED BY GOVERNING BODIES:

A number of laser and focused light devices have received marketing clearance for the treatment of acne via the U.S. Food and Drug Administration's (FDA's) 510(k) mechanism. These include lasers that emit light at 1320 nm (Candela Smoothbeam™ and CoolTouch®); intense pulsed light systems, which emit light in the range of 590 to 1200nm (Radiance ClearTouch™, MED flash ii and Elisped I2PL); pulsed dye lasers (ICN Photonics NLite System); and lasers or high-intensity light devices, which emit violet or blue (around 414 nm) and red (around 633 nm) light (Aura™, Clearlight and Dermilume). The specific indications for these devices vary; Candela Smoothbeam™ is indicated solely for the treatment of acne on the back, others are indicated for the treatment of inflammatory acne or for mild to moderate acne with no location specified. In 2006, a thermal device (ThermaClear™) was cleared for marketing for the "treatment of individual acne pimples in persons with mild to moderate inflammatory acne" in both a practitioner's office environment and a consumer home-use environment. A novel 1726-nm laser system (AviClear Laser System) received FDA clearance in 2022; there no RCT currently.

BENEFIT APPLICATION:

Coverage is subject to member's specific benefits. Group-specific policy will supersede this policy when applicable.

ITS: Home Policy provisions apply

FEP contracts: Special benefit consideration may apply. Refer to member's benefit plan.

CURRENT CODING

CPT:

17110	DESTRUCTION BENIGN LESIONS UP TO 14
17111	DESTRUCTION BENIGN LESIONS 15/>

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KEY WORDS

Laser, Candela Smoothbeam, CoolTouch, Radiancy ClearTouch, ThermaClear, Clearlight, Dermilume, acne vulgaris, YAG laser, pulsed dye laser, AviClear Laser System, Aura™

POLICY HISTORY:

Medical Policy Group, December 2009 (3)

Medical Policy Administration Committee, January 2010

Available for comment January 26-March 11, 2010

Medical Policy Group, January 2015 (3): No new literature or references to update; no change in policy statement. Effective 1/1/2015 this policy is no longer scheduled for regular literature reviews and updates.

Medical Policy Group, October 2019 (7): Reviewed by consensus. Updates to Key Points and References. No new published peer-reviewed literature available that would alter the coverage statement in this policy.

Medical Policy Group, August 2021 (5): Updates to Key Points and References. Policy statement updated to remove “not medically necessary,” no change to policy intent. Reviewed by consensus. There is no new published peer-reviewed literature available that would alter the coverage statement in this policy.

Medical Policy Group, August 2022 (5): Updates to Key Points and References. Reviewed by consensus. There is no new published peer-reviewed literature available that would alter the coverage statement in this policy.

Medical Policy Group, August 2023 (5) Reviewed by consensus. Updates to Key Points and Benefit Application. There is no new published peer-reviewed literature available that would alter the coverage statement in this policy.

Medical Policy Group, August 2024 (5): Reviewed by consensus. Updates to Key Points; Practice Guidelines and Position Statements, Key Words: AviClear Laser System, Approved By Governing Bodies, and References. There is no new published peer-reviewed literature available that would alter the coverage statement in this policy.

Medical Policy Group, August 2025 (3): Updates to Key Points and References. Reviewed by consensus. There is no new published peer-reviewed literature available that would alter the coverage statement in this policy.

This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member's plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.

This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield's administration of plan contracts.

The plan does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. The plan administers benefits based on the member's contract and corporate medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

As a general rule, benefits are payable under health plans only in cases of medical necessity and only if services or supplies are not investigational, provided the customer group contracts have such coverage.

The following Association Technology Evaluation Criteria must be met for a service/supply to be considered for coverage:

1. The technology must have final approval from the appropriate government regulatory bodies;
2. The scientific evidence must permit conclusions concerning the effect of the technology on health outcomes;
3. The technology must improve the net health outcome;
4. The technology must be as beneficial as any established alternatives;
5. The improvement must be attainable outside the investigational setting.

Medical Necessity means that health care services (e.g., procedures, treatments, supplies, devices, equipment, facilities or drugs) that a physician, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury or disease or its symptoms, and that are:

1. In accordance with generally accepted standards of medical practice; and
2. Clinically appropriate in terms of type, frequency, extent, site and duration and considered effective for the patient's illness, injury or disease; and
3. Not primarily for the convenience of the patient, physician or other health care provider; and

4. Not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient's illness, injury or disease.

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