LOUISIANA BLUE

Chemical Peels

Policy # 00915
Original Effective Date: 03/01/2025
Current Effective Date: 03/01/2025

Applies to all products administered or underwritten by Blue Cross and Blue Shield of Louisiana and its subsidiary, HMO Louisiana, Inc. (collectively referred to as the "Company"), unless otherwise provided in the applicable contract. Medical technology is constantly evolving, and we reserve the right to review and update Medical Policy periodically.

Note: Dermatologic Applications of Photodynamic Therapy is addressed separately in medical policy 00098.

When Services Are Eligible for Coverage

Coverage for eligible medical treatments or procedures, drugs, devices or biological products may be provided only if:

- *Benefits are available in the member's contract/certificate, and*
- *Medical necessity criteria and guidelines are met.*

Based on review of available data, the Company may consider dermal chemical peels used to treat individuals with numerous (>10) actinic keratoses or other premalignant skin lesions, such that treatment of the individual lesions becomes impractical, to be **eligible for coverage.****

Based on review of available data, the Company may consider epidermal chemical peels used to treat individuals with active acne that has failed a trial of topical and/or oral antibiotic acne therapy to be **eligible for coverage.****

Note: In this setting, superficial chemical peels with 40% to 70% alpha hydroxy acids are used as a comedolytic therapy.

Based on review of available data, the Company may consider dermabrasion (controlled surgical scraping, dermaplaning, salabration) for the treatment of numerous (>10) actinic keratoses, other premalignant skin lesions and localized non-melanoma malignant skin lesions (e.g., superficial basal cell carcinoma, carcinoma in-situ) when conventional methods (e.g., cryotherapy, curettage, excision, 5-fluorouracil, imiquimod) are impractical or contraindicated, to be **eligible for coverage.****

When Services Are Considered Investigational

Coverage is not available for investigational medical treatments or procedures, drugs, devices or biological products.

Based on review of available data, the Company considers dermal chemical peels, epidermal chemical peels, and dermabrasion when coverage above is not met to be **investigational**.*

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When Services Are Not Covered

Based on review of available data, the Company considers chemical peels in all other situations, including but not limited to treating photoaged skin, uneven epidermal pigmentation, wrinkles, or acne scarring or dermal peels used to treat end-stage acne scarring to be cosmetic and **not covered.****

Based on review of available data, the Company considers dermabrasion in all other situations, including but not limited to when intended to change a physical appearance, e.g., to enhance the appearance of the skin as a result of acne, acne scars, scar revision, striae distensae (stretch marks), uneven pigmentation or wrinkles to be cosmetic and **not covered.****

Note: Cosmetic procedures are considered an exclusion in member contracts.

Policy Guidelines

Requests for all chemical peels should be carefully evaluated to determine whether the rationale is primarily cosmetic.

Epidermal peels would be considered medically necessary in individuals with active acne who have failed other therapy because active severe acne may lead to acne scarring and may be psychologically painful leading to low self-esteem, depression, and anxiety.

Dermal peels would be considered medically necessary in individuals with multiple actinic keratoses because these premalignant lesions may warrant destruction or removal as an alternative to watchful waiting.

Other applications of chemical peels, including treatment of photoaged skin, wrinkles, and acne scarring, are considered cosmetic.

Background/Overview

Chemical Peels

Chemical peels involve a controlled partial-thickness removal of the epidermis and the outer dermis. When skin is regenerated, a 2- to 3-mm band of dense, compact collagen is formed between the epidermis and the damaged layers of the dermis, resulting in the ablation of fine wrinkles and a reduction in pigmentation. These changes can be long-term, lasting 15 to 20 years and may be permanent in some individuals. Potential local complications include scarring, infection, hypopigmentation, hyperpigmentation, activation of herpes simplex, and toxic shock syndrome.

Types of Peels

Chemical peels are often categorized by the depth of the peel: categories include superficial, medium-depth, and deep chemical peels. The precise depth of the peel depends on the concentration of the agent used, the duration of the application, and the number of applications. Possible indications for each type of peel and common chemicals used, as described by Cummings et al (2005) and others, is as follows.

Superficial Peels
Superficial peels (epidermal peels) affect the epidermis and the interface of the dermis-epidermis. This depth is considered appropriate for treating mild photoaging, melasma, comedonal acne, and postinflammatory erythema. Common chemical agents used for superficial peels include low concentrations of glycolic acid, 10% to 20% trichloroacetic acid (TCA), Jessner solution (a mixture of resorcinol, salicylic acid, lactic acid, and ethanol), tretinoin, and salicylic acid. As part of the treatment process, superficial peels generally cause mild erythema and desquamation, and healing time ranges from 1 to 4 days, depending on the strength of the chemical agent. With superficial peels, patients often undergo multiple sessions, generally, 6 to 8 peels performed weekly or biweekly.

Medium-Depth Peels
Medium-depth peels (dermal peels) extend into the epidermis to the papillary dermis. They are used for moderate photoaging, actinic keratoses, pigmentary dyschromias, and mild acne scarring. In the past, 50% TCA was a common chemical agent for medium-depth peels, but its use has decreased due to high rates of complications (eg, pigmentary changes, scarring). Currently, the most frequently used agent is a combination of 35% TCA with Jessner solution or 70% glycolic acid. Phenol 88% alone is also used for medium-depth peels. The healing process involves mild-to-moderate edema, followed by the appearance of new, erythematous epithelium. Individuals are advised to wait at least 3 months before resuming skincare services (eg, superficial chemical peels) and repeat medium-depth chemical peels should not be performed for at least 1 year.

Deep Peels
Deep chemical peels (another type of dermal peel) penetrate the mid-reticular dermis and have been used for patients with severe photodamage, premalignant skin neoplasms, acne scars, and dyschromias. The most common chemical agent used is Baker solution (which consists of 3 mL of 88% phenol, 8 drops of hexachlorophene [Septisol], 3 drops of croton oil, 2 mL of distilled water). The same depth can be achieved using 50% or greater TCA peel; however, the latter has a higher risk of scarring and pigmentation problems. Phenol is cardiotoxic, and patients must be screened for cardiac arrhythmias or medications that could potentially precipitate an arrhythmia. Phenol can also have renal and hepatic toxicities.

The likelihood and potential severity of adverse events increase as the strength of the chemicals and the depth of peels increases. With deep chemical peels, there is the potential for long-term pigmentary disturbances (ie, areas of hypopigmentation), and selection of individuals willing to always wear makeup is advised. Moreover, chemical peels reduce melanin protection, so patients must use protective sunscreen for 9 to 12 months after a medium- to deep-facial peel.

Applications
Chemical peels are a potential treatment option for actinic keratoses and moderate-to-severe acne. Actinic keratoses are common skin lesions associated with extended exposure to the sun, with an estimated prevalence in the U.S. of 11% to 26%. These lesions are generally considered to be a precursor of squamous cell carcinoma. The risk of progression to invasive squamous cell carcinoma

is unclear, but estimates vary from 0.1% to 20%. For patients with multiple actinic keratoses, the risk of developing invasive squamous cell carcinoma is estimated as being between 0.15% and 80%. Treatment options include watchful waiting, medication treatment, cryosurgery, and surgical resection.

Acne vulgaris is the most common skin condition among adolescents, affecting an estimated 80% of teenagers aged 13 to 18 years old. Acne, particularly moderate-to-severe manifestations, can cause psychologic distress including low self-esteem, depression, and anxiety. There are a variety of oral and topical treatments for acne.

Dermabrasion
The mechanical resurfacing of the skin with dermabrasion induces dermal collagen remodeling and formation, resulting in clinical and histologic improvement in skin integrity and appearance.

Dermabrasion involves the use of tools (e.g., high-speed brush, diamond cylinder, fraise, or silicon carbide sandpaper) to remove the epidermis or epidermis and part of the dermis. It is a surgical procedure performed to treat actinic keratoses and improve the appearance of rhytides, lentigines, and scars on the skin. Dermabrasion is highly operator dependent, requires meticulous intraoperative assistance, and has the potential for severe postoperative scarring, dyspigmentation, and milia formation.

Based upon reports of severe scarring in patients treated with dermabrasion during isotretinoin therapy, dermabrasion has not been historically used for treatment of active acne and a waiting period of 6 to 12 months after completion of isotretinoin treatment is usually recommended prior to performing a dermabrasion procedure. Active acne is a relative contraindication to dermabrasion as it may predispose to postoperative infection.

Microdermabrasion is a more superficial procedure in which abrasive crystals (e.g., aluminum oxide crystals) are propelled onto the skin within a controlled vacuum suction system. The depth of abrasion during microdermabrasion remains in the epidermis. Cosmetic improvement in acne scars after microdermabrasion is minimal.

Complications resulting from dermabrasion include infection, scarring, dyspigmentation, milia, and persistent erythema.

FDA or Other Governmental Regulatory Approval

U.S. Food and Drug Administration (FDA)
U.S. Food and Drug Administration (FDA) clearance or approval of chemical agents used in peeling may not be relevant because these agents are prepared in-office, may have predated FDA approval, and/or may be considered cosmetic ingredients.

Rationale/Source

This medical policy was developed through consideration of peer-reviewed medical literature generally recognized by the relevant medical community, U.S. Food and Drug Administration approval status, nationally accepted standards of medical practice and accepted standards of medical practice in this community, technology evaluation centers, reference to regulations, other plan medical policies, and accredited national guidelines.

Description

A chemical peel is a controlled removal of various layers of the skin with the use of a chemical agent. The most common use of chemical peeling is the treatment of photoaged skin. Chemical peeling has also been used for other conditions, including actinic keratoses, active acne, and acne scarring.

Dermabrasion is a cosmetic procedure that results in improvement in the appearance of rhytides, lentigines, actinic keratoses, and scars.

Summary of Evidence

For individuals who have actinic keratoses who receive dermal chemical peels, the evidence consists of a systematic review involving 8 studies - 4 randomized controlled trials (RCTs), 2 non-randomized controlled trials, and 2 single-arm studies. Relevant outcomes are symptoms, morbid events, quality of life, and treatment-related morbidity. Data analysis and interpretation of results were challenged by the high risk of bias of the primary studies, their imprecision, the variability of their peeling application protocols, and their focus on short-term clearance rates. Additional controlled studies, preferably randomized, are needed. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have moderate-to-severe active acne who receive epidermal chemical peels, the evidence includes an RCT. Relevant outcomes are symptoms, morbid events, quality of life, and treatment-related morbidity. Results from the single, small, randomized, placebo-controlled, split-faced trial found greater efficacy with active treatment than with placebo. However, no studies were identified comparing chemical peel agents with conventional acne treatment. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Supplemental Information

Clinical Input From Physician Specialty Societies and Academic Medical Centers

While the various physician specialty societies and academic medical centers may collaborate with and make recommendations during this process, through the provision of appropriate reviewers, input received does not represent an endorsement or position statement by the physician specialty societies or academic medical centers, unless otherwise noted.

2010 Input
In response to requests, input was received from 3 physician specialty societies and 4 academic medical centers while this policy was under review in 2010. Input was consistently in agreement with the medically necessary indications for dermal and epidermal chemical peels. Several reviewers supported the use of chemical peels for post-acne scarring.

Practice Guidelines and Position Statements
Guidelines or position statements will be considered for inclusion in 'Supplemental Information' if they were issued by, or jointly by, a US professional society, an international society with US representation, or National Institute for Health and Care Excellence (NICE). Priority will be given to guidelines that are informed by a systematic review, include strength of evidence ratings, and include a description of management of conflict of interest.

American Academy of Dermatology
In 2024, the American Academy of Dermatology (AAD) published guidelines on the management of acne vulgaris, which included the following statement on chemical peels:

"Available evidence is insufficient to develop a recommendation on the use of...chemical peels (including glycolic acid, trichloroacetic acid, salicylic acid, Jessner's solution, or mandelic acid)…for the treatment of acne."

In 2021, the AAD published guidelines on the management of actinic keratosis, which gave a conditional recommendation based on moderate quality of evidence for the use of specific chemical peels for actinic keratosis. The recommendation stated: "For patients with AKs [actinic keratosis], we conditionally recommend treatment with ALA [aminolevulinic acid]-red light PDT [photodynamic therapy] over trichloroacetic acid peel."

American Society for Dermatologic Surgery
In 2017, the American Society for Dermatologic Surgery published recommendations on the use of several skin treatments following a course of isotretinoin, a treatment for severe cystic acne. Previously, a number of cosmetic skin treatments, including chemical peels, were discouraged for 6 months after the use of isotretinoin. These 2017 guidelines evaluated various treatments in the context of scarring and found that superficial chemical peels were safe as a treatment either concurrent with isotretinoin or within 6 months of its discontinuation. The lack of data on medium or deep chemical peels did not permit the Society to make a recommendation on those treatments.

U.S. Preventive Services Task Force Recommendations
Not applicable.

Medicare National Coverage
There is no national coverage determination. In the absence of a national coverage determination, coverage decisions are left to the discretion of local Medicare carriers.

Ongoing and Unpublished Clinical Trials
Some currently unpublished trials that might influence this review are listed in Table 1.

Table 1. Summary of Key Trials

NCT No.	Trial Name	Planned Enrollment	Completion Date
Ongoing			
NCT04429308	PDT Versus the Combination of Jessner's Solution and 35% TCA for Treatment of Actinic Keratoses on Upper Extremities: A Randomized Controlled Split-arm Trial	60	December 2025

NCT: national clinical trial.

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Policy History

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02/06/2025 Medical Policy Committee review
02/12/2025 Medical Policy Implementation Committee approval. New policy.
Next Scheduled Review Date: 02/2026

Coding

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Codes used to identify services associated with this policy may include (but may not be limited to) the following:

Code Type	Code
CPT	15780, 15781, 15782, 15783, 15786, 15787, 15788, 15789, 15792, 15793
HCPCS	N/A
ICD-10 Diagnosis	C4400-C4499, D030-D039, D040-D049, D220-D229, D230-D239, D485, D492, L570, L700-L709

*Investigational – A medical treatment, procedure, drug, device, or biological product is Investigational if the effectiveness has not been clearly tested and it has not been incorporated into standard medical practice. Any determination we make that a medical treatment, procedure, drug, device, or biological product is Investigational will be based on a consideration of the following:

A. Whether the medical treatment, procedure, drug, device, or biological product can be lawfully marketed without approval of the U.S. Food and Drug Administration (FDA) and whether such approval has been granted at the time the medical treatment, procedure, drug, device, or biological product is sought to be furnished; or
B. Whether the medical treatment, procedure, drug, device, or biological product requires further studies or clinical trials to determine its maximum tolerated dose, toxicity, safety, effectiveness, or effectiveness as compared with the standard means of treatment or diagnosis, must improve health outcomes, according to the consensus of opinion among experts as shown by reliable evidence, including:
    1. Consultation with technology evaluation center(s);
    2. Credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community; or

3. Reference to federal regulations.

**Medically Necessary (or "Medical Necessity") - Health care services, treatment, procedures, equipment, drugs, devices, items or supplies that a Provider, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury, disease or its symptoms, and that are:

A. In accordance with nationally accepted standards of medical practice;
B. Clinically appropriate, in terms of type, frequency, extent, level of care, site and duration, and considered effective for the patient's illness, injury or disease; and
C. Not primarily for the personal comfort or convenience of the patient, physician or other health care provider, and 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.

For these purposes, "nationally accepted standards of medical practice" means standards that are based on credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community, Physician Specialty Society recommendations and the views of Physicians practicing in relevant clinical areas and any other relevant factors.

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NOTICE: If the Patient's health insurance contract contains language that differs from the BCBSLA Medical Policy definition noted above, the definition in the health insurance contract will be relied upon for specific coverage determinations.

NOTICE: Medical Policies are scientific based opinions, provided solely for coverage and informational purposes. Medical Policies should not be construed to suggest that the Company recommends, advocates, requires, encourages, or discourages any particular treatment, procedure, or service, or any particular course of treatment, procedure, or service.

NOTICE: Federal and State law, as well as contract language, including definitions and specific contract provisions/exclusions, take precedence over Medical Policy and must be considered first in determining eligibility for coverage.