# Medical Coverage Policy

**Effective Date.....6/15/2024**
**Next Review Date.....6/15/2025**
**Coverage Policy Number..... 0482**

# Rosacea Procedures

## Table of Contents



## Related Coverage Resources

Botulinum Therapy
Phototherapy, Photochemotherapy, Excimer Laser, Dermabrasion and Chemical Peels for Dermatologic Conditions
Topical Alpha Adrenergic Agonists
Topical Rosacea Products

***INSTRUCTIONS FOR USE***

*The following Coverage Policy applies to health benefit plans administered by Cigna Companies. Certain Cigna Companies and/or lines of business only provide utilization review services to clients and do not make coverage determinations. References to standard benefit plan language and coverage determinations do not apply to those clients. Coverage Policies are intended to provide guidance in interpreting certain standard benefit plans administered by Cigna Companies. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement, Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document always supersedes the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Each coverage request should be reviewed on its own merits. Medical directors are expected to exercise clinical judgment where appropriate and have discretion in making individual coverage determinations. Where coverage for care or services does not depend on specific circumstances, reimbursement will only be provided if a requested service(s) is submitted in accordance with the relevant criteria outlined in the applicable Coverage Policy, including covered diagnosis and/or procedure code(s). Reimbursement is not allowed for services when billed for conditions or diagnoses that are not covered under this Coverage Policy (see "Coding Information" below). When billing, providers must use the most appropriate codes as of the effective date of the submission. Claims submitted for services that are not accompanied by covered code(s) under the applicable Coverage Policy*

*will be denied as not covered. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. In certain markets, delegated vendor guidelines may be used to support medical necessity and other coverage determinations.*

## Overview

This Coverage Policy addresses nonpharmacologic treatments for rosacea, including rhinophyma.

## Coverage Policy

**Surgical excision, with or without skin grafting or flap reconstruction for the treatment of advanced nodular rhinophyma, is considered medically necessary when BOTH of the following criteria are met:**

- rhinophyma is documented to be causing a functional impairment (e.g., airway obstruction)
- frontal, lateral, and worm's eye photographs document the condition

**The following treatments for the untoward cosmetic effects associated with rosacea (e.g., telangiectasia, erythema) are considered cosmetic in nature and not medically necessary:**

- intense pulsed light (IPL)
- laser therapy (e.g., pulsed dye)

**The following treatments for the untoward cosmetic effects associated with rosacea (e.g., telangiectasia, erythema) are cosmetic and not covered or reimbursable:**

- chemical peels of any type
- dermabrasion

## Health Equity Considerations

Health equity is the highest level of health for all people; health inequity is the avoidable difference in health status or distribution of health resources due to the social conditions in which people are born, grow, live, work, and age.

Social determinants of health are the conditions in the environment that affect a wide range of health, functioning, and quality of life outcomes and risks. Examples include safe housing, transportation and neighborhoods; racism, discrimination and violence; education, job opportunities and income; access to nutritious foods and physical activity opportunities; access to clean air and water; and language and literacy skills.

Rosacea is most commonly diagnosed in individuals with lightly-pigmented skin (Fitzpatrick skin phototypes I and II). However, skin pigmentation may mask some of the signs of rosacea, potentially leading to the under-diagnosis of patients with moderately to highly pigmented skin (Maier and Helfrich, 2022; Shao, et al., 2022; Alexis, et al., 2019). Delayed diagnosis may lead to more advanced disease, inadequate treatment, disfigurement, and in the case of ocular rosacea, impairment or loss of sight. Strategies to enhance timely diagnosis of rosacea in individuals with moderately to highly pigmented skin include an increased awareness that erythema may not be

readily visible in all individuals; use of dermoscopy to detect telangiectasia; use of diascopy or photography against a dark blue background to visualize erythema; and attentiveness to other characteristic signs of rosacea concentrated in the central face (e.g., dry appearance, edema, and hyperpigmentation) (Alexis, et al., 2019).

## General Background

Rosacea is a chronic disorder affecting the facial skin and is associated with blushing. Rosacea develops slowly, starting with redness around the cheeks and worsening to additional symptoms and affecting other parts of the face. The condition affects approximately 5% of adults, typically over the age of 30. Although rosacea occurs more often in women, the presentation can be more severe when it occurs in men. In general, treatment of rosacea is aimed at improving the untoward cosmetic effects associated with the condition. Surgery may be indicated in a select subset of individuals with advanced nodular rhinophyma (a skin disorder of the nose causing thickened, irregular skin), when the condition is causing a significant functional impairment.

The signs and symptoms of rosacea vary from person to person and are often intermittent. The clinical conditions of rosacea include (American Academy of Dermatology [AAD], 2024a):

- erythema or flushing of the face/neck
- pimples, papules and/or pustules (may appear as small red bumps)
- red lines (telangiectasia), which appear or become more noticeable when the skin is flushed
- nasal bumps (rhinophyma) – an uncommon sign seen especially in untreated rosacea
- facial dryness, burning, stinging or itching

Historically, rosacea was classified as one of the following four subtypes: erythematotelangiectatic (vascular), papulopustular (inflammatory), phymatous/glandular, or ocular. However, rosacea is now considered a consistent multivariate disease process with multiple clinical manifestations, rather than distinct subtypes of disease. A diagnosis of rosacea may be made in the presence of either of the following diagnostic phenotypes: fixed centrofacial erythema in a characteristic pattern that may periodically intensify, or phymatous changes. Alternatively, a diagnosis made be made in the presence of two or more major phenotypes: papules and pustules, flushing, telangiectasia, or ocular manifestations. Secondary signs and symptoms may appear with one or more diagnostic or major phenotypes and may include the following: burning or stinging, edema, or dry appearance (Ferri, 2024; Maier and Helfrich, 2022; van Zuuren, et al., 2021; Gallo, et al., 2018).

Ocular involvement may occur in the presence or absence of skin manifestations. Signs and symptoms of ocular rosacea may include blepharitis, foreign body sensations, lid margin telangiectasia, tear abnormalities, meibomian gland inflammation, conjunctivitis, frequent chalazion, and rarely, corneal ulcers and vascularization (Maier and Helfrich, 2022; Gallo, et al., 2018).

**Treatments**
The symptoms of rosacea can be treated and controlled, but there is no cure. Since the pathophysiology of rosacea is unknown, the treatments or therapies for rosacea empirically target the signs and symptoms of the disease. Treatment for rosacea is usually performed solely for cosmesis, with the primary purpose being to improve the appearance of the skin. However, in certain rare cases of advanced nodular rhinophyma, the condition causes a functional impairment such as airway obstruction, and thus surgical therapy may be indicated. In most patients who receive treatment, symptom suppression can be achieved, though flare-ups can occur.

Prior to initiating therapy, any potential trigger factors are considered. Triggers are both exposures and situations that can cause a flare-up of the skin changes and flushing in rosacea. Trigger factors are specific to each individual and do not affect every person. Common triggers include: hot or cold temperature, wind, hot drinks, exercise, spicy food, alcohol, emotions, topical products that irritate the skin or impair barrier function, menopausal flushing, and medications that promote flushing. It is recommended that those trigger factors that induce flushing be avoided. Patients are recommended to use a broad-spectrum, gentle sunscreen daily, avoid midday sun, and use protective clothing when in the sun. The untoward cosmetic signs of rosacea may be camouflaged with nonirritating concealers and cosmetics. A combination of treatments is often prescribed, depending on the individual's needs. Sometimes both an oral antibiotic and a topical medication are prescribed (Ferri, 2024; Maier and Helfrich, 2022; Kupiec Banasikowska, 2021).

**Erythema or Flushing:** Electrosurgery, intense pulsed light (IPL), and laser surgery or vascular lasers are often used to destroy visible blood vessels below the skin to reduce erythema. Multiple IPL or laser therapy treatments may be needed to achieve the optimum results. Anecdotal evidence indicates treatment of rosacea with medications that reduce flushing may include anticholinergic medications (e.g., glycopyrrolate), alpha-2 adrenergic agonists (e.g., brimonidine), beta-blockers, clonidine, and psychotropic medications. These medications can have serious side effects that should be weighed against potential benefits. These therapies or treatments do not treat the underlying cause of rosacea but rather the red appearance of the skin which is associated with rosacea; therefore, these treatments are cosmetic in nature.

**Papules and Pustules:** Topical medications (e.g., metronidazole) and/or oral antibiotics (e.g., doxycycline) are frequently prescribed. The oral antibiotics tend to work faster than the topical medications. Glycolic acid peels, washes, and creams have been proposed to be used in combination with oral antibiotics. Chemical peel solutions damage the outer layers of the skin and stimulate collagen formation, resulting in dermal regeneration, thereby improving the appearance of the skin. Alpha-hydroxy acids (AHA), such as glycolic, lactic, or fruit acid, are used in superficial peeling to rejuvenate and resurface sun-damaged skin, soften the appearance of pores, treat fine wrinkles and reduce uneven pigmentation. For severe cases, off-label use of the retinoid isotretinoin may be used to help shrink thickened facial skin and diminish nodular rosacea. Due to the serious side effects of isotretinoin, it is commonly reserved for cases in which multiple treatments have failed.

**Ocular Rosacea:** It is recommended that those patients with eyelid inflammation cleanse their eyelids often by gently scrubbing the eyelids with diluted baby shampoo or an over-the-counter eyelid cleaning product and apply warm compresses several times daily. Oral antibiotics are used to treat the ocular symptoms of rosacea. A short course of topical corticosteroid solution may be useful for symptomatic relief of ocular rosacea. It is recommended that ocular steroid therapy be initiated and managed by an ophthalmologist because experience with this treatment is limited. Liquid tears are useful for dry eyes and relief of ocular itching.

**Rhinophyma:** Early treatment of rhinophyma is recommended to help prevent the condition from progressing and becoming more difficult to treat. Changes due to rhinophyma can become permanent. The nasal skin can be erythematous with telangiectasias and sometimes become purple in color. In severe cases, the skin can have pits, fissures, and scarring. Infection and bleeding may occur. In the rare advanced stages, rhinophyma can result in collapse of the nostrils, resulting in airway obstruction. Rhinophyma does not respond well to medical therapy. The condition can be corrected surgically, but it may recur. Generally, cosmetic surgery is performed to remove thickened tissue that can appear around the nose, and sculpt areas to a

more normal appearance. Such cosmetic treatments may include dermabrasion, cryosurgery, electrosurgery, and/or laser surgery.

Surgical procedures are indicated for the treatment of advanced nodular rhinophyma, which may result in functional impairment, such as airway obstruction. The surgical procedures can broadly be divided into full excision of the abnormal tissue and repair of the defect by graft or flap, and partial excision leaving the lower part of the pilosebaceous unit intact (superficial decortication). It has been reported that the latter appears to result in better results and is the treatment of choice. Treatment options may be combined to obtain best results. Frontal, lateral, and worm's eye photographs may be taken to document the condition (Dick and Patel, 2023; Ferri, 2024; Maier and Helfrich, 2022).

**Laser and Intense Pulsed Light (IPL) Treatments:** An ever-increasing number of lasers and a non-laser light therapy called intense pulsed light (IPL) are available for treating rosacea. Data on the effectiveness and safety of lasers and non-laser light therapy is limited. While there is some evidence that laser and light therapies may reduce the symptoms of rosacea, studies are limited by small study populations, variable patient selection criteria, treatment protocols, study design, and short term follow up (Hayes, 2020; van Zuuren, et al., 2015). Most of what is known comes from observations made while treating individual patients.

Lasers and IPL do not cure rosacea, and ongoing treatments to maintain improvement are often required. Potential adverse effects of laser and IPL include skin dyspigmentation, blistering, ulceration, and scarring (Maier, 2022). Since these therapies or treatments do not treat the underlying cause of rosacea but rather the appearance of the skin, they are considered cosmetic in nature. It is recommended that patients continue to consult their primary care physician or dermatologist for treatment and avoid personal rosacea triggers.

**U.S. Food and Drug Administration (FDA)**
Several light and laser systems have been cleared for marketing via the 510(k) Premarket Notification process. Such devices are categorized as Class II devices. Intense pulsed light is referred to by a variety of trade names or service marks (e.g., FotoFacial™, PhotoFacial™, EpiLight™, PlasmaLight™, Venus Versa™). The FDA classifies laser and light therapies as procedures; therefore, long-term studies are not required.

There are a variety of lasers including, but not limited to (Zachary, et al., 2025):

- argon
- carbon dioxide ($CO_2$)
- copper-bromide
- erbium: yttrium aluminum garnet (Er:YAG)
- krypton
- neodymium: yttrium aluminum garnet (Nd:YAG)
- potassium-titanyl-phosphate (KTP)
- pulsed dye (e.g., Candela V-Beam)

**Professional Societies/Organizations**
**American Academy of Ophthalmology (AAO):** The 2023 AAO Preferred Practice Pattern for blepharitis supported the use of topical azelaic acid, topical ivermectin, brimonidine, doxycycline and isotretinoin as effective treatments for patients with systemic rosacea. The guideline stated that while intense pulsed light has been used as a novel therapy for the treatment of meibomian gland dysfunction, there is insufficient evidence to determine its effectiveness in patients with rosacea.

## Medicare Coverage Determinations

| | Contractor | Determination Name/Number | Revision Effective Date |
|---|---|---|---|
| NCD | National | Laser Procedures (140.5) | 5/1/1997 |
| LCD | CGS Administrators, LLC | Cosmetic and Reconstructive Surgery (L39506) | 5/28/2023 |
| LCD | First Coast Service Options, Inc. | Cosmetic and Reconstructive Surgery (L38914) | 7/11/2021 |
| LCD | Novitas Solutions, Inc. | Cosmetic and Reconstructive Surgery (L35090) | 7/11/2021 |
| LCD | Palmetto GBA | Cosmetic and Reconstructive Surgery (L33428) | 7/29/2021 |
| LCD | Wisconsin Physicians Service Insurance Corporation | Cosmetic and Reconstructive Surgery (L39051) | 11/30/2023 |

Note: Please review the current Medicare Policy for the most up-to-date information.
(NCD = National Coverage Determination; LCD = Local Coverage Determination.)

## Coding Information

**Notes:**

1. This list of codes may not be all-inclusive since the American Medical Association (AMA) and Centers for Medicare & Medicaid Services (CMS) code updates may occur more frequently than policy updates.
2. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

**Considered Medically Necessary when criteria in the applicable policy statements listed above are met:**

| CPT®* Codes | Description |
|---|---|
| 15120 | Split–thickness autograft face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or less or 1% of the body area of infants and children (except 15050) |
| 15260 | Full thickness graft, free, including direct closure of donor site, nose, ears, eyelids, and/or lips; 20 sq cm or less |
| 15261 | Full thickness graft, free, including direct closure of donor site, nose, ears, eyelids, and/or lips; each additional 20 sq cm, or part thereof (List separately in addition to code for primary procedure) |
| 15630 | Delay of flap or sectioning of flap (division and inset); at eyelids, nose, ears, or lips |
| 15731 | Forehead flap with preservation of vascular pedicle (eg, axial pattern flap, paramedian forehead flap) |
| 30120 | Excision or surgical planing of skin of nose for rhinophyma |

**Considered Not Medically Necessary/Cosmetic for the treatment of the untoward cosmetic effects associated with rosacea:**

| CPT®* Codes | Description |
|---|---|
| 17106† | Destruction of cutaneous vascular proliferative lesions (eg, laser technique); less than 10 sq cm |
| 17107† | Destruction of cutaneous vascular proliferative lesions (eg, laser technique); 10.0 to 50.0 sq cm |
| 17108† | Destruction of cutaneous vascular proliferative lesions (eg, laser technique); over 50.0 sq cm |
| 17999† | Unlisted procedure, skin, mucous membrane and subcutaneous tissue |
| 96999† | Unlisted special dermatological service or procedure |

**†Note: Considered Not Medically Necessary/Cosmetic when used to report intense pulsed light (IPL) or laser therapy (e.g., pulsed dye) for the treatment of the untoward cosmetic effects associated with rosacea.**

**Cosmetic and Not Covered or Reimbursable:**

| CPT®* Codes | Description |
|---|---|
| 15780 | Dermabrasion; total face (eg, for acne scarring, fine wrinkling, rhytids, general keratosis) |
| 15781 | Dermabrasion; segmental, face |
| 15782 | Dermabrasion; regional, other than face |
| 15783 | Dermabrasion; superficial, any site, (eg, tattoo removal) |
| 15788 | Chemical peel, facial; epidermal |
| 15789 | Chemical peel, facial; dermal |
| 15792 | Chemical peel, nonfacial; epidermal |
| 15793 | Chemical peel, nonfacial; dermal |



## References

1. Alam M, Voravutinon N, Warycha M, Whiting D, Nodzenski M, Yoo S, et al. Comparative effectiveness of nonpurpuragenic 595-nm pulsed dye laser and microsecond 1064-nm neodymium:yttrium-aluminum-garnet laser for treatment of diffuse facial erythema: A double-blind randomized controlled trial. J Am Acad Dermatol. 2013 Sep;69(3):438-43.

2. Alexis AF, Callender VD, Baldwin HE, Desai SR, Rendon MI, Taylor SC. Global epidemiology and clinical spectrum of rosacea, highlighting skin of color: Review and clinical practice experience. J Am Acad Dermatol. 2019 Jun;80(6):1722-1729.e7.

3. American Academy of Dermatology (AAD). Rosacea resource center. © 2024a. Accessed Apr 18, 2024. Available at URL address: https://www.aad.org/public/diseases/rosacea

4. American Academy of Dermatology (AAD). Lasers and lights: How well do they treat rosacea? © 2024b. Accessed Apr 18, 2024. Available at URL address: https://www.aad.org/public/diseases/rosacea/treatment/lasers-lights

5. American Academy of Ophthalmology (AAO). Blepharitis Preferred Practice Pattern. Sep 2023. Accessed Apr 18, 2024. Available at URL address: https://www.aao.org/education/guidelines-browse?filter=Preferred%20Practice%20Patterns&sub=AllPreferredPracticePatterns

6. American Acne & Rosacea Society (AARS). Consensus Recommendations From the American Acne & Rosacea Society on the Management of Rosacea. 2013–2014. Accessed Apr 18, 2024. Available at URL address: https://acneandrosacea.org/medical-professionals/rosacea-medical-management-guidelines

7. Centers for Medicare & Medicaid Services (CMS). Local Coverage Determinations (LCDs) alphabetical index. Accessed Apr 18, 2024. Available at URL address: https://www.cms.gov/medicare-coverage-database/reports/local-coverage-proposed-lcds-alphabetical-report.aspx?proposedStatus=A&sortBy=title

8. Centers for Medicare & Medicaid Services (CMS). National Coverage Determination (NCD) for Laser Procedures (140.5). Accessed Apr 18, 2024. Available at URL address: https://www.cms.gov/Medicare-Coverage-Database/view/ncd.aspx?ncdid=69

9. Centers for Medicare & Medicaid Services (CMS). National Coverage Determinations (NCDs) alphabetical index. Accessed Apr 18, 2024. Available at URL address: https://www.cms.gov/medicare-coverage-database/reports/national-coverage-ncd-report.aspx?chapter=all&sortBy=title

10. Dick MK, Patel BC. Rhinophyma. [Updated 2023 Aug 8]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Accessed Apr 18, 2024. Available at URL address: https://www.ncbi.nlm.nih.gov/books/NBK544373/

11. Erceg A, de Jong EM, van de Kerkhof PC, Seyger MM. The efficacy of pulsed dye laser treatment for inflammatory skin diseases: a systematic review. J Am Acad Dermatol. 2013 Oct;69(4):609-615.e8.

12. Ferri FF. Rosacea. Ferri's Clinical Advisor 2024. Philadelphia, PA: Elsevier; 2024. 1222-1223.e1

13. Gallo RL, Granstein RD, Kang S, Mannis M, Steinhoff M, Tan J, Thiboutot D. Standard classification and pathophysiology of rosacea: The 2017 update by the National Rosacea Society Expert Committee. J Am Acad Dermatol. 2018 Jan;78(1):148-155.

14. Hayes, Inc. Hayes Medical Technology Directory Report, Comparative Effectiveness Review. Laser and Light Therapies for Rosacea. Hayes, Inc.; published Jan 25, 2018. Updated May 6, 2020.

15. Johnson LM, Van Durme DJ. Rosacea. In: Kellerman RD, Rakel DP, Heidelbaugh JJ, Lee EM (Eds). Conn's Current Therapy 2024. Philadelphia, PA: Elsevier; 2024. 1146-1147

16. Kelly KM. Laser and light therapy for cutaneous vascular lesions. In: UpToDate, Corona R (Ed). Sep 5, 2023. UpToDate, Waltham, MA. Accessed Apr 18, 2024.

17. Kupiec Banasikowska A. Rosacea. Medscape. Updated Jun 3, 2021. Accessed Apr 18, 2024. Available at URL address: https://emedicine.medscape.com/

18. Li Y, Wang R. Efficacy Comparison of Pulsed Dye Laser vs. Microsecond 1064-nm Neodymium:Yttrium-Aluminum-Garnet Laser in the Treatment of Rosacea: A Meta-Analysis. Front Med (Lausanne). 2022 Jan 20;8:798294.

19. Maier LE. Management of rosacea. In: UpToDate, Ofori AO (Ed). Jun 29, 2022. UpToDate, Waltham, MA. Accessed Apr 18, 2024

20. Maier LE, Helfrich YR. Rosacea: Pathogenesis, clinical features and diagnosis. In: UpToDate, Ofori AO (Ed). Mar 17, 2022. UpToDate, Waltham, MA. Accessed Apr 18, 2024.

21. Myers P, Bowler P, Hills S. A retrospective study of the efficacy of intense pulsed light for the treatment of dermatologic disorders presenting to a cosmetic skin clinic. J Cosmet Dermatol. 2005 Dec;4(4):262-6.

22. National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS). Rosacea. May 2021. Accessed Apr 18, 2024. Available at URL address: https://www.niams.nih.gov/

23. National Rosacea Society. Tools for the Professional. © 2024. Accessed Apr 18, 2024. Available at URL address: http://www.rosacea.org/physicians/tools-for-the-professional

24. Salem SA, Abdel Fattah NS, Tantawy SM, El-Badawy NM, Abd El-Aziz YA. Neodymium-yttrium aluminum garnet laser versus pulsed dye laser in erythemato-telangiectatic rosacea: comparison of clinical efficacy and effect on cutaneous substance (P) expression. J Cosmet Dermatol. 2013 Sep;12(3):187-94.

25. Schaller M, Almeida LMC, Bewley A, Cribier B, Del Rosso J, Dlova NC, Gallo RL, Granstein RD, Kautz G, Mannis MJ, Micali G, Oon HH, Rajagopalan M, Steinhoff M, Tanghetti E, Thiboutot D, Troielli P, Webster G, Zierhut M, van Zuuren EJ, Tan J. Recommendations for rosacea diagnosis, classification and management: update from the global ROSacea COnsensus 2019 panel. Br J Dermatol. 2020 May;182(5):1269-1276.

26. Schaller M, Almeida LM, Bewley A, Cribier B, Dlova NC, Kautz G, et al. Rosacea treatment update: recommendations from the global ROSacea COnsensus (ROSCO) panel. Br J Dermatol. 2017 Feb;176(2):465-471.

27. Seo KY, Kang SM, Ha DY, Chin HS, Jung JW. Long-term effects of intense pulsed light treatment on the ocular surface in patients with rosacea-associated meibomian gland dysfunction. Cont Lens Anterior Eye. 2018 Oct;41(5):430-435.

28. Shao K, Hooper J, Feng H. Racial and ethnic health disparities in dermatology in the United States. Part 2: Disease-specific epidemiology, characteristics, management, and outcomes. J Am Acad Dermatol. 2022 Oct;87(4):733-744.

29. Thiboutot D, Anderson R, Cook-Bolden F, Draelos Z, Gallo RL, Granstein RD, Kang S, Macsai M, Gold LS, Tan J. Standard management options for rosacea: The 2019 update by the National Rosacea Society Expert Committee. J Am Acad Dermatol. 2020 Jun;82(6):1501-1510.

30. U.S. Food and Drug Administration. Center for Devices and Radiological Health. 510(k) premarket notification database. Accessed Apr 18, 2024. Available at URL address: https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm

31. van Zuuren EJ, Arents BWM, van der Linden MMD, Vermeulen S, Fedorowicz Z, Tan J. Rosacea: New Concepts in Classification and Treatment. Am J Clin Dermatol. 2021 Jul;22(4):457-465.

32. van Zuuren EJ, Fedorowicz Z, Carter B, van der Linden MMD, Charland L. Interventions for rosacea. Cochrane Database of Systematic Reviews 2015, Issue 4. Art. No.: CD0032

33. Zachary CB, Kelly KM, Baugh EG. Lasers and Other Energy-Based Therapies. In: Bolognia JL, Schaffer JV, Cerroni L (Eds). Dermatology. 5th ed. Elsevier; 2025. 2400-2421

34. Zhang H, Tang K, Wang Y, Fang R, Sun Q. Rosacea Treatment: Review and Update. Dermatol Ther (Heidelb). 2021 Feb;11(1):13-24.

## Revision Details

| Type of Revision | Summary of Changes | Date |
|---|---|---|
| Annual review | • No clinical policy statement changes. | 6/15/2024 |
| Focused review | • Revised policy statement for dermabrasion and chemical peels. | 12/3/2023 |