Policy Statement

I. Nonpharmacologic treatment of rosacea is considered investigational, including but not limited to the following:
   A. Chemical peels
   B. Dermabrasion
   C. Electrosurgery
   D. Laser and light therapy
   E. Surgical debulking

NOTE: Refer to Appendix A to see the policy statement changes (if any) from the previous version.

Policy Guidelines

State or federal mandates (e.g., FEP) may dictate that certain U.S. Food and Drug Administration-approved devices, drugs, or biologics may not be considered investigational, and thus these devices may be assessed only on the basis of their medical necessity.

Coding
There are a variety of CPT codes that would likely be used for the nonpharmacologic treatment of rosacea:

- **15780**: Dermabrasion; total face (e.g., for acne scarring, fine wrinkling, rhytids, general keratosis)
- **15781**: Dermabrasion; segmental, face
- **15782**: Dermabrasion; regional, other than face
- **15783**: Dermabrasion; superficial, any site (e.g., tattoo removal)
- **15788**: Chemical peel, facial; epidermal
- **15789**: Chemical peel, facial; dermal
- **15792**: Chemical peel, nonfacial; epidermal
- **15793**: Chemical peel, nonfacial; dermal
- **17106**: Destruction of cutaneous vascular proliferative lesions (e.g., laser technique); less than 10 sq cm
- **17107**: Destruction of cutaneous vascular proliferative lesions (e.g., laser technique); 10.0 to 50.0 sq cm
- **17108**: Destruction of cutaneous vascular proliferative lesions (e.g., laser technique); over 50.0 sq cm
- **30117**: Excision or destruction (e.g., laser), intranasal lesion; internal approach
- **30118**: Excision or destruction (e.g., laser), intranasal lesion; external approach (lateral rhinotomy)

The following HCPCS codes describe light therapy:

- **E0691**: Ultraviolet light therapy system, includes bulbs/lamps, timer and eye protection; treatment area 2 sq ft or less
- **E0692**: Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, 4 ft panel
- **E0693**: Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, 6 ft panel
Nonpharmacologic Treatment of Rosacea

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- **E0694**: Ultraviolet multidirectional light therapy system in 6 ft cabinet, includes bulbs/lamps, timer, and eye protection

**Description**

Rosacea is a chronic, inflammatory skin condition without a known cure; the goal of treatment is symptom management. Nonpharmacologic treatments, including laser and light therapy as well as dermabrasion, which are the focus of this evidence review, are proposed for patients who do not want to use or are unresponsive to pharmacologic therapy.

**Related Policies**

- N/A

**Benefit Application**

Benefit determinations should be based in all cases on the applicable contract language. To the extent there are any conflicts between these guidelines and the contract language, the contract language will control. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

Some state or federal mandates (e.g., Federal Employee Program [FEP]) prohibits plans from denying Food and Drug Administration (FDA)-approved technologies as investigational. In these instances, plans may have to consider the coverage eligibility of FDA-approved technologies on the basis of medical necessity alone.

**Regulatory Status**

Several laser and light therapy systems have been cleared for marketing by the U.S. Food and Drug Administration (FDA) through the 510(k) process for various dermatologic indications, including rosacea. For example, rosacea is among the indications for:

- Vbeam laser system (Candela)
- Stellar M22™ laser system (Lumenis)
- excel VT®, excel V®, and xeo® laser systems (Cutera)
- Harmony® XL multi-application platform laser device (Alma Lasers, Israel)
- UV-300 Pulsed Light Therapy System (New Star Lasers)
- CoolTouch® PRIMA Pulsed Light Therapy System (New Star Lasers).

FDA product code: GEX.

**Rationale**

**Background**

Rosacea

Rosacea is characterized by episodic erythema, edema, papules, pustules, and telangiectasia that occur primarily on the face but also present on the scalp, ears, neck, chest, and back. On occasion, rosacea may affect the eyes. Patients with rosacea tend to flush or blush easily. Because rosacea causes facial swelling and redness, it is easily confused with other skin conditions such as acne, skin allergy, and sunburn.
Rosacea mostly affects adults with fair skin between the ages of 20 and 60 years and is more common in women, but often is more severe in men. Rosacea is not life-threatening, but if not treated, it may lead to persistent erythema, telangiectasias, and rhinophyma (hyperplasia and nodular swelling and congestion of the skin of the nose). The etiology and pathogenesis of rosacea are unknown but may result from both genetic and environmental factors. Some theories on the causes of rosacea include blood vessel disorders, chronic Helicobacter pylori infection, Demodex folliculorum (mites), and immune system disorders.

While the clinical manifestations of rosacea do not usually impact the physical health status of the patient, psychological consequences from the most visually apparent symptoms (i.e., erythema, papules, pustules, telangiectasias) may impact quality of life. Rhinophyma, an end-stage form of chronic acne, has been associated with obstruction of nasal passages and basal cell carcinoma in rare, severe cases. The probability of developing nasal obstruction or basal or squamous cell carcinoma with rosacea is not sufficient to warrant the preventive removal of rhinophymatous tissue.

Treatment
Rosacea treatment can be effective in relieving signs and symptoms. Treatment may include oral and topical antibiotics, isotretinoin, β-blockers, α2-adrenergic agonists (e.g., oxymetazoline, clonidine), and anti-inflammatories. Patients are also instructed on various self-care measures such as avoiding skin irritants and dietary items thought to exacerbate acute flare-ups.

Nonpharmacologic therapy has also been tried in patients who cannot tolerate or do not want to use pharmacologic treatments. To reduce visible blood vessels, treat rhinophyma, reduce redness, and improve appearance, various techniques have been used such as laser and light therapy, dermabrasion, chemical peels, surgical debulking, and electrosurgery. Various lasers used include low-powered electrical devices and vascular light lasers to remove telangiectasias, carbon dioxide lasers to remove unwanted tissue from rhinophyma and reshape the nose, and intense pulsed lights that generate multiple wavelengths to treat a broader spectrum of tissue.

Literature Review
Evidence reviews assess the clinical evidence to determine whether the use of technology improves the net health outcome. Broadly defined, health outcomes are the length of life, quality of life, and ability to function including benefits and harms. Every clinical condition has specific outcomes that are important to patients and managing the course of that condition. Validated outcome measures are necessary to ascertain whether a condition improves or worsens; and whether the magnitude of that change is clinically significant. The net health outcome is a balance of benefits and harms. To assess whether the evidence is sufficient to draw conclusions about the net health outcome of technology, 2 domains are examined: the relevance, and quality and credibility. To be relevant, studies must represent 1 or more intended clinical use of the technology in the intended population and compare an effective and appropriate alternative at a comparable intensity. For some conditions, the alternative will be supportive care or surveillance. The quality and credibility of the evidence depend on study design and conduct, minimizing bias and confounding that can generate incorrect findings. The randomized controlled trial (RCT) is preferred to assess efficacy; however, in some circumstances, nonrandomized studies may be adequate. RCTs are rarely large enough or long enough to capture less common adverse events and long-term effects. Other types of studies can be used for these purposes and to assess generalizability to broader clinical populations and settings of clinical practice.

Nonpharmacologic Treatment of Rosacea
Clinical Context and Therapy Purpose
The purpose of nonpharmacologic treatments is to provide a treatment option in patients who have rosacea and do not want to use or are unresponsive to pharmacologic therapies. The following PICO was used to select literature to inform this review.
**Populations**
The relevant population of interest is individuals with rosacea. Rosacea is characterized by episodic erythema, edema, papules and pustules, and telangiectasia that occur primarily on the face. Clinical presentation varies in individual patients.

**Interventions**
The therapies being considered are nonpharmacologic treatments. Nonpharmacologic treatment options include laser and light therapy, dermabrasion, chemical peels, surgical debulking, and electrosurgery. Laser and light therapies are typically used for persistent erythema or telangiectasia. During laser and light therapy, light energy is absorbed by hemoglobin in cutaneous vessels, which leads to vessel heating and coagulation. Lasers vary from low-powered electrical devices and vascular light lasers (for telangiectasias removal) to carbon dioxide lasers and intense pulsed lights that generate multiple wavelengths to treat a broader spectrum of tissue.

Frequency and duration of laser and light therapy sessions vary, from once to twice per month, for several months. Because light-based techniques do not cure rosacea, periodic treatments may be necessary to maintain symptom relief.

**Comparators**
The comparators of interest are pharmacologic therapies, which include oral and topical antibiotics, isotretinoin, β-blockers, alpha2-adrenergic agonists (e.g., oxymetazoline, clonidine), and anti-inflammatory agents. The selection of a pharmacological agent is dependent on the clinical features present for an individual patient (e.g., redness, edema, papules and pustules).

**Outcomes**
The general outcome of interest is symptom reduction, which may include a change in redness of skin color or change in erythema score or telangiectasia score. Other outcomes of interest include a reduction in pain, subject satisfaction, and improvement in the quality of life. Outcome measures can be assessed on treatment completion. Because laser and light therapy are not curative, outcomes can be measured months after treatment to assess symptom recurrence.

**Study Selection Criteria**
Methodologically credible studies were selected using the following principles:
- To assess efficacy outcomes, comparative controlled prospective trials were sought, with a preference for RCTs;
- In the absence of such trials, comparative observational studies were sought, with a preference for prospective studies.
- To assess long-term outcomes and adverse effects, single-arm studies that capture longer periods of follow-up and/or larger populations were sought.
- Consistent with a 'best available evidence approach,' within each category of study design, studies with larger sample sizes and longer durations were sought.
- Studies with duplicative or overlapping populations were excluded.

**Review of Evidence**
**Systematic Reviews**
A meta-analysis by Chang and Chang (2022) compared the efficacy of pulsed dye laser to intense pulsed light. Only RCTs comparing these 2 modalities were included, and erythema was the only outcome analyzed in meta-analysis.

A meta-analysis by Husein-EIAhmed and Steinhoff (2021) compared the efficacy and tolerability of pulsed dye laser to other laser and light therapies. Both randomized and non-randomized studies were considered for inclusion; background erythema, telangiectasias, pain, and treatment success
were analyzed. The studies did not compare interventions with pharmacologic treatments or placebo controls, only pulsed dye laser to other laser and light therapies.

A Cochrane systematic review by van Zuuren et al (2015) assessed various interventions for rosacea; the same authors updated their systematic review in 2019 with a focus on rosacea phenotypes. In 2019, the authors identified only 7 trials on light and/or laser therapy, and the trials did not compare these interventions with pharmacologic treatments or placebo controls, although 2 studies evaluated laser therapy in combination with pharmacologic therapy. Trial findings on light and/or laser therapy were considered low-quality and were not pooled. The remainder of the RCTs in the review evaluated pharmacologic treatments.

Wat et al (2014) identified 9 studies on the efficacy of intense pulsed light (IPL) for treating rosacea. Two studies were controlled (left-right comparisons), and the remainder were uncontrolled, including a case report.

The systematic reviews by van Zuuren et al (2019) and Wat et al (2014) did not pool study findings on the nonpharmacologic treatment of rosacea. Findings of the published systematic reviews highlight the shortage of RCTs on light and laser therapy for treating rosacea. Table 1 compares the studies included in the systematic reviews. Tables 2 and 3 summarize the characteristics and results of the reviews, respectively.

### Table 1. Comparison of Trials/Studies Included in Systematic Reviews of Nonpharmacologic Treatment of Rosacea

<table>
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<tbody>
<tr>
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<td>Alam et al (2013)</td>
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<td>Seo et al (2016)</td>
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<td>Handler et al (2017)</td>
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<td>Kwon et al (2018)</td>
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<td>Campos et al (2019)</td>
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<td>Kim et al (2019)</td>
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<td>Tirico et al (2020)</td>
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</table>

*Study evaluated lasers in combination with other therapies. They are listed for completeness but are not included in the results table below.
Table 2. Systematic Review and Meta-Analysis Characteristics

<table>
<thead>
<tr>
<th>Study</th>
<th>Dates</th>
<th>Trials</th>
<th>Participants</th>
<th>N (Range)</th>
<th>Design</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wat et al (2014)§</td>
<td>2003 to 2013</td>
<td>9</td>
<td>Patients with rosacea who received IPL</td>
<td>304 (1 to 102)</td>
<td>2 prospective right-left comparison, 3 open-label(OL) trials, 3 retrospective, 1 case report</td>
<td>1 to 24 weeks</td>
</tr>
<tr>
<td>Van Zuuren et al (2019)§</td>
<td>2008 to 2016</td>
<td>7</td>
<td>Patients with rosacea who received laser and light therapies</td>
<td>233 (16 to 60)</td>
<td>RCT</td>
<td>4 to 24 weeks</td>
</tr>
<tr>
<td>Husein-ElAhmed and Steinhoff (2021)²</td>
<td>1998 to 2019</td>
<td>12</td>
<td>Patients with rosacea who received laser and light therapies</td>
<td>262 (9 to 39)</td>
<td>11 RCTs, 1 prospective right-left comparison</td>
<td>1 to 6 months</td>
</tr>
<tr>
<td>Chang and Chang (2022)¹</td>
<td>2017 to 2020</td>
<td>3</td>
<td>Patients with rosacea who received pulsed dye laser and IPL</td>
<td>29 (5 to 15)</td>
<td>RCT</td>
<td>4 to 12 weeks</td>
</tr>
</tbody>
</table>

IPL: intense pulsed laser; OL: open-label; RCT: randomized controlled trial.

Table 3. Systematic Review & Meta-Analysis Results

<table>
<thead>
<tr>
<th>Study (Year)</th>
<th>Reduced erythema</th>
<th>Reduced telangiectasia</th>
<th>Reduced blood flow</th>
<th>Visual clearance</th>
<th>Adverse events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wat et al (2014)§</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total N</td>
<td>300</td>
<td>201</td>
<td>4</td>
<td>60</td>
<td>304</td>
</tr>
<tr>
<td>Pooled effect</td>
<td><strong>NR</strong></td>
<td><strong>NR</strong></td>
<td><strong>NR</strong></td>
<td><strong>NR</strong></td>
<td><strong>NR</strong></td>
</tr>
<tr>
<td>p</td>
<td>p&lt;.05 in 1 study, p=.02 in 1 study</td>
<td>p&lt;.05 in 1 study, p&lt;.001 in 1 study</td>
<td>p&lt;.05 in 1 study</td>
<td>NR</td>
<td>NR</td>
</tr>
</tbody>
</table>

| Van Zuuren et al (2019)§ |                  |                        |                    |                  |                |
| Total N      | 65               | 56                     | NR                 | 40               | 155            |
| Pooled effect| Low to moderate certainty evidence for IPL, pulsed dye lasers, and Nd:YAG lasers; in 1 study, reduction in erythema index was similar with pulsed dye lasers vs dual wavelength lasers; in 1 study, erythema was reduced with pulsed dye lasers vs Nd:YAG lasers | Low to moderate certainty evidence for IPL, pulsed dye lasers, and Nd:YAG lasers; in 1 study, dual wavelength lasers led to greater improvement vs single wavelength lasers (RR, 4.5); 1 study reported no difference between IPL and pulsed dye laser | NR | Similar number of patients had 75% to 100% response and 50% to 74% response with IPL and long pulsed dye laser |
| p            | p=.02 in 1 study of pulsed dye | NR                     | NR                 | NR               | NR             |
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Study (Year) | Reduced erythema | Reduced telangiectasia | Reduced blood flow | Visual clearance | Adverse events
--- | --- | --- | --- | --- | ---
Husein-ElAhmed and Steinhoff (2021)\(^2\) | | | | | Pain, pulsed dye lasers vs other laser and light therapies: mean difference, -0.23 (95% CI, -0.96 to 0.49)
Pooled effect | Pulsed dye lasers vs other laser and light therapies: RR, 0.54 (95% CI, -0.87 to 1.94) | Treatment success per physician assessment, pulsed dye lasers vs other laser and light therapies: OR, 1.23 (95% CI, 0.74 to 2.04) | | |

\(p = .35\) | NR | NR | 148 | 185 |

Chang and Chang (2022)\(^3\) | | | | | 
Pooled effect | SMD: -0.112 (95% CI, -0.669 to 0.446) | | | |

\(p = .695\) | NR | NR | NR | NR

CI: confidence interval; IPL: intense pulsed light; Nd:YAG: neodymium-doped yttrium aluminum garnet; NR: not reported; OR, odds ratio; RR: relative risk; SMD: standard mean difference.

Randomized Controlled Trials

Several randomized trials evaluating nonpharmacologic treatment for rosacea, all of which used split-faced designs, were identified. \(^20,30,12,10,27,28,29,31,32\). Most compared 2 types of lasers, and none used a placebo control or a pharmacologic treatment as a comparator. Additional RCTs were identified that evaluated the combination of nonpharmacologic and pharmacologic treatments against nonpharmacologic or pharmacologic treatment alone.\(^33,34,35,36\). No RCTs evaluating dermabrasion, chemical peels, surgical debulking, or electrosurgery for treating rosacea were identified.

Most studies reported a significant difference in erythema compared to baseline with laser treatments, but no studies found significant differences between laser modalities. For telangiectasia, significant improvements were observed with laser treatments, but only the study by Karsai et al (2008) reported a significant difference between laser modalities in favor of dual wavelength compared to single wavelength.\(^10\). In the RCT by Campos et al (2019), the primary outcome of change in Dermatology Life Quality Index was significant compared to baseline after the first (\(p<.001\)), second (\(p = .018\)), and third (\(p = .001\)) treatments.\(^27\). Three studies reported positive findings in subjective measures of patient satisfaction, including patient assessment of change in erythema.\(^20,30,12\). Adverse effects in these studies were mild and transient overall. One study reported a significant difference in pain, which was in favor of pulsed dye laser compared to neodymium-doped yttrium aluminum garnet (Nd:YAG) lasers.\(^20\). One RCT reported similar improvements in erythema with pulsed dye laser with topical oxymetazoline compared to topical oxymetazoline alone.\(^33\). A more recent RCT reported greater improvement in erythema with broadband light (intense pulsed light) plus intradermal botulinum toxin compared to broadband light alone.\(^35\). A summary of key RCT characteristics and results is presented in Tables 4 and 5, respectively. Tables 6 and 7 provide an overview of the relevance and study design/conduct limitations of these RCTs.

Table 4. Summary of Key Randomized Controlled Trial Characteristics

<table>
<thead>
<tr>
<th>Study (Year)</th>
<th>Countries</th>
<th>Sites</th>
<th>Dates</th>
<th>Participants</th>
<th>Active</th>
<th>Comparator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karsai et al (2008)(^a10)</td>
<td>Germany</td>
<td>1</td>
<td>2006</td>
<td>Patients with nasal telangiectasia with similar vessel densities on</td>
<td>Pulsed dye laser or Nd:YAG laser on 1 side of the</td>
<td>Dual wavelength laser on opposite</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Study Authors</th>
<th>Location</th>
<th>Age</th>
<th>Race</th>
<th>Description of Interventions</th>
<th>Description of Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuhaus et al (2009)&lt;sup&gt;a12&lt;/sup&gt;</td>
<td>US</td>
<td>1</td>
<td>NR</td>
<td>Patients age 18 years or older with moderate erythematotelangiectatic rosacea with background erythema and small vessels (&lt;1 mm) involving the central face</td>
<td>Pulsed dye laser on 1 side of the face (n=22) (n=4) or IPL (n=4) on opposite side of the face (n=8)</td>
</tr>
<tr>
<td>Maxwell et al (2010)&lt;sup&gt;a30&lt;/sup&gt;</td>
<td>Canada</td>
<td>1</td>
<td>NR</td>
<td>Patients with erythematotelangiectatic acne rosacea, a personal history of flushing, a family history of rosacea, and rosacea exacerbation by sun, alcohol, and/or spicy food</td>
<td>532 nm long-pulse laser on 1 side of the face (n=11)</td>
</tr>
<tr>
<td>Alam et al (2013)&lt;sup&gt;a20&lt;/sup&gt;</td>
<td>US</td>
<td>1</td>
<td>NR</td>
<td>Patients age 18 years or older with erythematotelangiectatic rosacea</td>
<td>Pulsed dye laser on 1 side of the face (n=14)</td>
</tr>
<tr>
<td>Campos et al (2019)&lt;sup&gt;a27&lt;/sup&gt;</td>
<td>Spain</td>
<td>1</td>
<td>2015</td>
<td>Patients age 18 years or older with erythematotelangiectatic rosacea and no laser treatment within the past year</td>
<td>Pulsed dye laser on 1 side of the face (n=27)</td>
</tr>
<tr>
<td>Kim et al (2019)&lt;sup&gt;a28&lt;/sup&gt;</td>
<td>Korea</td>
<td>1</td>
<td>NR</td>
<td>Patients with rosacea</td>
<td>Short pulse IPL on 1 side of the face (n=9)</td>
</tr>
<tr>
<td>Tirico et al (2020)&lt;sup&gt;a29&lt;/sup&gt;</td>
<td>US</td>
<td>1</td>
<td>2016</td>
<td>Patients age 18 years or older with facial redness and none or mild tan</td>
<td>Short pulse IPL on 1 side of the face (n=5)</td>
</tr>
<tr>
<td>Sodha et al (2021)&lt;sup&gt;a33&lt;/sup&gt;</td>
<td>US</td>
<td>1</td>
<td>NR</td>
<td>Patients age 18 years or older with erythematotelangiectatic rosacea</td>
<td>Pulsed dye laser (3 treatments every 4 weeks) plus daily topical oxymetazoline 1% (n=17)</td>
</tr>
</tbody>
</table>
### Description of Interventions

<table>
<thead>
<tr>
<th>Study (Year)</th>
<th>Country</th>
<th>Subjects</th>
<th>Intervention Details</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osman et al (2022)[^34]</td>
<td>Egypt</td>
<td>1 NR</td>
<td>Patients with erythematotelangiectatic or papulopustular rosacea</td>
<td>Pulsed dye laser (4 treatments every 4 weeks) plus daily topical ivermectin 1% (n=15)</td>
</tr>
<tr>
<td>Tong et al (2022)[^33],</td>
<td>China</td>
<td>1 2021</td>
<td>Patients 14 years or older with rosacea with erythema and flushing as primary symptoms and inadequate response to traditional pharmacologic treatment; no local or systemic pharmacologic treatment within the past 2 weeks</td>
<td>IPL (3 treatments every 4 weeks) plus one-time intradermal botulinum toxin on 1 side of the face (n=22)</td>
</tr>
<tr>
<td>Wang et al (2022)[^31],</td>
<td>China</td>
<td>1 2018 to 2020</td>
<td>Patients 18 to 60 years with rosacea not treated with glucocorticoids, estrogen, or tretinoin within the past 30 days, or with laser treatment within the past 6 months</td>
<td>ALA-PDT plus IPL (2 treatments every 3 weeks) (n=38)</td>
</tr>
<tr>
<td>Barbarino et al (2022)[^36],</td>
<td>US</td>
<td>1 NR</td>
<td>Patients 18 to 80 years with moderate-to-severe rosacea including erythema and telangiectasia; no local or systemic therapy within the past 2 weeks</td>
<td>IPL (one treatment) plus the following to right side of face only: phyto-corrective mask application (once per week), phyto-corrective gel (twice daily), topical resveratrol (once daily) (n=10)</td>
</tr>
<tr>
<td>Park et al (2022)[^32],</td>
<td>Korea</td>
<td>1 2021</td>
<td>Patients with erythematotelangiectatic or papulopustular rosacea not treated with antibiotics within the past 4 weeks or with laser treatment within the past 3 months</td>
<td>Long-pulsed alexandrite laser on 1 side of the face (n=23) (4 treatments every 4 weeks)</td>
</tr>
</tbody>
</table>

**ALA-PDT**: 5-aminolevulinic acid photodynamic therapy; **IPL**: intense pulsed light; **Nd:YAG**: neodymium-doped yttrium aluminum garnet; **NR**: not reported.

\[^a\] Split face design, yielding an equal number of patients in each treatment group.

### Table 5. Summary of Key Randomized Controlled Trial Results/Outcomes

<table>
<thead>
<tr>
<th>Study (Year)</th>
<th>Change in erythema</th>
<th>Change in telangiectasia</th>
<th>Adverse events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karsai et al (2008)[^10], Dual wavelength vs. single wavelength</td>
<td>Percentage, p</td>
<td>NR</td>
<td>&gt;50% vessel clearance: 90% vs. 20%, p&lt;.0001 Transient purpura, posttreatment erythema</td>
</tr>
<tr>
<td>Neuhaus et al (2009)[^12], IPL vs. pulsed dye laser</td>
<td>Percentage, p</td>
<td>Malar and alar regions (both treatments): NS Cheek region: IPL vs. control, p=.04; Pulsed dye laser vs. control, p=.05 All locations: IPL vs. pulsed dye laser, NS</td>
<td>Malar and alar region: Pulsed dye laser vs control, both p=.02 IPL vs. control, p=.016 and p=.09, respectively</td>
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</tbody>
</table>

Reproduction without authorization from Blue Shield of California is prohibited
<table>
<thead>
<tr>
<th>Study (Year)</th>
<th>Change in erythema</th>
<th>Change in telangiectasia</th>
<th>Adverse events</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maxwell et al (2010)</strong>&lt;sup&gt;10&lt;/sup&gt;</td>
<td>Laser vs. no laser treatment</td>
<td>IPL vs. pulsed dye laser, NS</td>
<td></td>
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<tr>
<td>Percentage, p</td>
<td>Mild/moderate improvement: 100%</td>
<td>Mild/moderate improvement: 100%</td>
<td>NR</td>
</tr>
<tr>
<td><strong>Alam et al (2013)</strong>&lt;sup&gt;10&lt;/sup&gt;</td>
<td>Pulsed dye laser vs. Nd:YAG</td>
<td></td>
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<tr>
<td>Difference (95% CI), p</td>
<td>Pain: Worse with Nd:YAG vs. pulsed dye laser (p=.0028)</td>
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<tr>
<td></td>
<td>Pulsed dye laser vs. baseline: 8.9% (95% CI, -12.9% to -4.95%), p=.0003</td>
<td>NR</td>
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<tr>
<td></td>
<td>Nd:YAG vs. baseline: 2.5% (95% CI, -6.37% to 1.29%), p=.1762</td>
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<tr>
<td></td>
<td>Pulsed dye laser vs. Nd:YAG: p=.199</td>
<td></td>
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<tr>
<td><strong>Campos et al (2019)</strong>&lt;sup&gt;17&lt;/sup&gt;</td>
<td>Pulsed dye laser vs. multiplexed laser</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference, p</td>
<td>Adverse effects: 48.1% to 55.6% (pulsed dye laser), purpura most common 14.8% to 33.3% (multiplexed laser), edema most common</td>
<td></td>
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<tr>
<td></td>
<td>Erythema index mean change: No difference between treatments (at 3 facial areas), p=.231, p=.674, p=.966, respectively</td>
<td>NR</td>
<td></td>
</tr>
<tr>
<td><strong>Kim et al (2019)</strong>&lt;sup&gt;28&lt;/sup&gt;</td>
<td>Short pulse IPL vs. pulsed dye laser</td>
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<tr>
<td>Difference, p</td>
<td>None observed</td>
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<tr>
<td></td>
<td>Erythema index mean change: -4.93±1.59 (short pulse IPL) -4.27±1.23 (pulsed dye laser)</td>
<td>NR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Difference between treatments: NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tirico et al (2020)</strong>&lt;sup&gt;19&lt;/sup&gt;</td>
<td>Short pulse IPL vs. pulsed dye laser</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference, p</td>
<td>Mild pain (mean scores 3.5 to 3.6 for short pulse IPL, mean scores 2.6 to 2.8 for pulsed dye laser)</td>
<td>NR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improvement: 60% vs. 45%, NS</td>
<td></td>
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<tr>
<td><strong>Sodha et al (2021)</strong>&lt;sup&gt;33&lt;/sup&gt;</td>
<td>Pulsed dye laser + oxymetazoline vs. oxymetazoline alone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference, p</td>
<td>Adverse effects: Pulsed dye laser: transient erythema (87%), edema (51%), and purpura (30%) Oxymetazoline (both groups): mild dryness (7%)</td>
<td>NR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinical Erythema Assessment, change from baseline: Combination: -0.6, -0.7, and -1.2 at 1-, 2-, and 3-months (p ≤.01 compared to baseline for all) Oxymetazoline alone: -0.6, -1.2, and -0.9 at 1-, 2-, and 3-months (p ≤.01 compared to baseline for all)</td>
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<td></td>
</tr>
<tr>
<td><strong>Osman et al (2022)</strong>&lt;sup&gt;34&lt;/sup&gt;</td>
<td>Pulsed dye laser + ivermectin vs. pulsed dye laser alone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference, p</td>
<td>Mild post-procedural purpura in both groups</td>
<td>NR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Erythema severity grade significantly reduced compared to baseline in both groups (p=.005 for combination, p=.001 for pulsed dye laser alone) Difference between treatments: p =.341</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tong et al (2022)</strong>&lt;sup&gt;35&lt;/sup&gt;</td>
<td>IPL + intradermal botulinum toxin vs. IPL alone</td>
<td></td>
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<tr>
<td>Difference, p</td>
<td>Mild erythema and pain at injection site</td>
<td>NR</td>
<td></td>
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<tr>
<td></td>
<td>Erythema index mean change at 3 months: -93.03±42.33 (combination) -66.33±37.53 (IPL alone)</td>
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</tbody>
</table>

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### Nonpharmacologic Treatment of Rosacea

#### Table 6. Study Relevance Limitations

<table>
<thead>
<tr>
<th>Study</th>
<th>Population</th>
<th>Intervention</th>
<th>Comparator</th>
<th>Outcomes</th>
<th>Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karsai et al (2008) (^{10})</td>
<td>2 - no comparison to established pharmacologic treatment group alone</td>
<td>2 - no comparison to established pharmacologic treatment group alone</td>
<td>5 - clinically significant difference not prespecified</td>
<td>1 - only 1 treatment</td>
<td></td>
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<tr>
<td>Neuhaus et al (2009) (^{32})</td>
<td>2 - no comparison to established pharmacologic treatment group alone</td>
<td>2 - no comparison to established pharmacologic treatment group alone</td>
<td>3 - no mention of harms</td>
<td>5 - clinically significant difference not prespecified</td>
<td></td>
</tr>
</tbody>
</table>

**Table 6.** Study Relevance Limitations

**Notes:** 5-aminolevulinic acid photodynamic therapy; CI: confidence interval; IPL: intense pulsed laser; NR: not reported; NS: not significant.
<table>
<thead>
<tr>
<th>Study</th>
<th>Population</th>
<th>Intervention</th>
<th>Comparator</th>
<th>Outcomes</th>
<th>Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maxwell et al (2010)</td>
<td></td>
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<td>3 - no mention of harms</td>
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<td>4 - major outcomes were patient-rated subjective improvements</td>
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<td></td>
<td>5 - clinically significant difference not prespecified</td>
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<tr>
<td>Alam et al (2013)</td>
<td></td>
<td>2 - no comparison to established pharmacologic treatment group alone</td>
<td></td>
<td>5 - clinically significant difference not prespecified</td>
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<tr>
<td>Campos et al (2019)</td>
<td></td>
<td>2 - no comparison to established pharmacologic treatment group alone</td>
<td></td>
<td>5 - clinically significant difference not prespecified</td>
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<tr>
<td>Kim et al (2019)</td>
<td></td>
<td>2 - no comparison to established pharmacologic treatment group alone</td>
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<tr>
<td>Tirico et al (2020)</td>
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<td>5 - clinically significant difference not prespecified</td>
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<tr>
<td>Sodha et al (2021)</td>
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<td>2 - missing inclusion of a laser-based treatment group only</td>
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<td>Osman et al (2022)</td>
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<td>Tong et al (2022)</td>
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<td>2 - no comparison to established pharmacologic treatment group alone</td>
<td></td>
<td>5 - clinically significant difference not prespecified</td>
<td></td>
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<tr>
<td>Wang et al (2022)</td>
<td>3 - differences in treatment schedules among groups</td>
<td></td>
<td></td>
<td>1 - erythema, telangiectasia, and other disease outcomes not individually reported</td>
<td>4 - composite skin lesion scoring without individual component reporting is not an established/validated outcome 5 - clinically</td>
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<tr>
<td></td>
<td>2 - place in therapy of ALA-PDT unclear; no comparison to established pharmacologic treatment group alone</td>
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<td>1 - schedule of post-treatment evaluation(s) not reported</td>
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<tr>
<td>Study</td>
<td>Population</td>
<td>Intervention</td>
<td>Comparator</td>
<td>Outcomes</td>
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<td>Barbarino et al (2022)36</td>
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<td>2 - only a</td>
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<td>6 - clinically significant difference</td>
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</table>

ALA-PDT: 5-aminolevulinic acid photodynamic therapy

The study limitations stated in this table are those notable in the current review; this is not a comprehensive gaps assessment.

- Population key: 1. Intended use population unclear; 2. Clinical context for treatment is unclear; 3. Study population unclear; 4. Study population not representative of intended use; 5. Study population is subpopulation of intended use.
- Intervention key: 1. Not clearly defined; 2. Version used unclear; 3. Delivery not similar intensity as comparator.
- Comparator key: 1. Not clearly defined; 2. Not standard or optimal; 3. Delivery not similar intensity as intervention; 4. Not delivered effectively.
- Follow-up key: 1. Not sufficient duration for benefits; 2. Not sufficient duration for harms.

### Table 7. Study Design and Conduct Limitations

<table>
<thead>
<tr>
<th>Study</th>
<th>Allocation</th>
<th>Blinding</th>
<th>Selective Reporting</th>
<th>Follow-Up</th>
<th>Power</th>
<th>Statistical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karsai et al (2008)30.</td>
<td>1 - no mention of patient blinding</td>
<td>1 - no mention of power</td>
<td>3 - p-value for primary efficacy comparison not reported</td>
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<tr>
<td>Neuhaus et al (2009)32.</td>
<td>1 - no mention of patient blinding</td>
<td>1 - no mention of power</td>
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</tr>
<tr>
<td>Maxwell et al (2010)35.</td>
<td>1 - no mention of patient blinding</td>
<td>1 - no mention of power</td>
<td>4 - treatments were not statistically compared</td>
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</tbody>
</table>

6 - only reported results for patients that completed the study
<table>
<thead>
<tr>
<th>Study</th>
<th>Allocationa</th>
<th>Blindingb</th>
<th>Selective Reportingc</th>
<th>Follow-Upd</th>
<th>Powere</th>
<th>Statisticalf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alam et al (2013)20.</td>
<td></td>
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<td>6 - only reported results for patients that completed the study</td>
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<tr>
<td>Campos et al (2019)27.</td>
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<td>6 - only reported results for patients that completed the study</td>
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<tr>
<td>Tirico et al (2020)29.</td>
<td></td>
<td></td>
<td>6 - only reported results for patients that completed the study</td>
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<tr>
<td>Sodha et al (2021)33.</td>
<td></td>
<td></td>
<td>2 - power not reported for primary outcome; authors noted adequate power not achieved due to closure of the clinic due to COVID-19</td>
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<tr>
<td>Osman et al (2022)34.</td>
<td>1 - no mention of patient blinding</td>
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<tr>
<td>Tong et al (2022)35.</td>
<td>1 - no mention of patient blinding</td>
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<tr>
<td>Wang et al (2022)31.</td>
<td></td>
<td></td>
<td>1 - no mention of power</td>
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<tr>
<td>Barbarino et al (2022)36.</td>
<td>1 - no mention of blinding 3 - outcome assessed by</td>
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<td>1 - not registered 1 - not registered 2 - evaluation of reduction in procedure-related adverse 1 - no inferential statistical analysis 3 - no inferential statistical analysis</td>
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### Summary of Evidence

For individuals who have rosacea who receive nonpharmacologic treatment (e.g., laser therapy, light therapy, dermabrasion), the evidence includes systematic reviews and several small randomized, split-face design trials. Relevant outcomes are symptoms, change in disease status, and treatment-related morbidity. The systematic reviews reported favorable effects on erythema and telangiectasia with several laser types, including IPL, pulsed dye lasers, and Nd:YAG lasers. However, the systematic reviews did not pool results from individual studies and the studies differed in the specific lasers being compared. Overall the systematic review results were insufficient to establish whether any laser type is more effective and safe than others. The RCTs evaluated laser and light therapy. One RCT compared combination laser and pharmacologic therapy with pharmacologic therapy alone and 2 RCTs compared combination laser and pharmacologic therapy with laser therapy alone, but the lack

<table>
<thead>
<tr>
<th>Study</th>
<th>Allocation&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Blinding&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Selective Reporting&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Follow-Up&lt;sup&gt;d&lt;/sup&gt;</th>
<th>Power&lt;sup&gt;e&lt;/sup&gt;</th>
<th>Statistical&lt;sup&gt;f&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park et al (2022)&lt;sup&gt;32.&lt;/sup&gt;</td>
<td>treating physician events with intervention stated in study aims, but no safety results reported 3 - senior author is journal’s editor-in-chief, third author is on journal’s advisory committee</td>
<td>2 - details of handling data for dropout cases not reported 6 - dropout cases appear to be excluded from analysis, procedure not detailed</td>
<td>1 - no mention of power</td>
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</tr>
</tbody>
</table>

The study limitations stated in this table are those notable in the current review; this is not a comprehensive gaps assessment.


<sup>b</sup> Blinding key: 1. Not blinded to treatment assignment; 2. Not blinded outcome assessment; 3. Outcome assessed by treating physician.

<sup>c</sup> Selective reporting key: 1. Not registered; 2. Evidence of selective reporting; 3. Evidence of selective publication.

<sup>d</sup> Follow-up key: 1. High loss to follow up or missing data; 2. Inadequate handling of missing data; 3. High number of crossovers; 4. Inadequate handling of crossovers; 5. Inappropriate exclusions; 6. Not intent to treat analysis (per protocol for noninferiority trials).

<sup>e</sup> Power key: 1. Power calculations not reported; 2. Power not calculated for primary outcome; 3. Power not based on clinically important difference.

<sup>f</sup> Statistical key: 1. Test is not appropriate for outcome type: a) continuous; b) binary; c) time to event; 2. Test is not appropriate for multiple observations per patient; 3. Confidence intervals and/or p-values not reported; 4. Comparative treatment effects not calculated.
Nonpharmacologic Treatment of Rosacea

of an arm evaluating laser therapy alone against established pharmacologic therapy does not allow a direct assessment on the efficacy of laser or light treatment compared with alternative treatments. No trials assessing other nonpharmacologic treatments were identified. There is a need for RCTs that compare nonpharmacologic treatments with placebo controls and with pharmacologic treatments. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Supplemental Information
The purpose of the following information is to provide reference material. Inclusion does not imply endorsement or alignment with the evidence review conclusions.

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 Acne and Rosacea Society
In 2014, the American Acne and Rosacea Society issued consensus recommendations on the management of rosacea. The Society stated that lasers and intense pulsed light (IPL) devices could improve certain clinical manifestations of rosacea that have not responded to medical therapy. The recommendations indicated that these therapies would have to be repeated intermittently to sustain improvement.

In 2016, the American Acne and Rosacea Society issued updated consensus recommendations on the management of rosacea. The update focused on how medical and device therapies are used—whether concurrently or in a staggered fashion—noting that there is a lack of evidence to justify either use. The Society’s consensus recommendation on rosacea management correlated with clinical manifestations observed at the time of presentation is summarized in Table 8:

Table 8. Recommendations on Use of Lasers and Intense Pulsed Light Devices for the Management of Rosacea

<table>
<thead>
<tr>
<th>Condition</th>
<th>Recommendation</th>
<th>Grade*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistent central facial erythema without papulopustular lesions</td>
<td>IPL, potassium titanyl phosphate crystal laser, or pulsed dye laser</td>
<td>B</td>
</tr>
<tr>
<td>Diffuse central facial erythema with papulopustular lesions</td>
<td><em>While the data on the use of IPL, potassium titanyl phosphate or pulsed dye laser are limited for papulopustular lesions, these options are useful to treat erythema</em></td>
<td>NR</td>
</tr>
<tr>
<td>Granulomatous rosacea</td>
<td>• Intense pulsed dye laser&lt;br&gt;• “No current standard of treatment; limited data based on case reports”</td>
<td>C</td>
</tr>
<tr>
<td>Phymatous Rosacea</td>
<td>• “Surgical therapy for fully developed phymatous changed (carbon dioxide laser, erbium-doped [YAG] laser, electrosurgery, dermabrasion)”&lt;br&gt;• “Treatment selection dependent on stage of development (early or fibrotic) and extent of inflammation (active or burnt out)”</td>
<td>C</td>
</tr>
</tbody>
</table>

IPL: intense pulsed light, YAG: yttrium aluminum garnet; NR: not reported.

* Grade A: Criteria not described in recommendation; Grade B: Systematic review/meta-analysis of lower-quality clinical trials or studies with limitations and inconsistent findings; lower-quality clinical trial; Grade C: Consensus guidelines; usual practice, expert opinion, case series—limited trial data
Rosacea Consensus Panel
In 2017, the Rosacea Consensus panel, comprised of international experts including representatives from the U.S., published recommendations for rosacea treatment. The panel agreed that treatments should be based on phenotype. IPL and pulsed dye laser were recommended for persistent erythema, but not for transient erythema. IPL and lasers were also recommended for telangiectasia rosacea.

The panel updated their recommendations on rosacea treatment in 2019, agreeing that lasers were recommended for persistent centrofacial erythema. They also noted that “use of IPL and vascular lasers in darker skin phototypes requires consideration by a healthcare provider with experience... as it can result in dyspigmentation.” The panel also acknowledged that combining treatments could benefit patients with more severe rosacea and multiple rosacea features; however “there remains an ongoing need for more studies to support combination treatment use in rosacea.”

National Rosacea Society
In 2019, the National Rosacea Society Executive Committee published an expert consensus document on management options for rosacea. This document endorses treatment goals of an Investigator Global Assessment score of 0 and normalization of skin tone and color due to the notable impact of rosacea on patient quality of life. Light devices are discussed as treatment options along with medications, skin care, and lifestyle interventions. Based on weak evidence, IPL, pulsed dye lasers, and potassium titanyl phosphate lasers are listed as moderately effective treatment options for persistent erythema, particularly due to telangiectasia. Both IPL and potassium titanyl phosphate are described as having at least some efficacy for flushing. Nonpharmacologic interventions that are listed as more highly effective treatment options for non-inflamed phymas (based on weak evidence) include carbon dioxide lasers, erbium lasers, cold steel, electrosurgery, and radiofrequency; these same interventions are listed for use in combination with other treatment modalities for inflammatory phymas. Carbon dioxide lasers, erbium lasers, cold steel, electrosurgery, and radiofrequency carry a risk of post-inflammatory hyperpigmentation and should only be provided by appropriately trained individuals.

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 ongoing and unpublished trials that might influence this review are listed in Table 9.

Table 9. Summary of Key Trials

<table>
<thead>
<tr>
<th>NCT No.</th>
<th>Trial Name</th>
<th>Planned Enrollment</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCT04889703</td>
<td>A Pilot Study Testing the Effects of Chemical Peels in Patients With Rosacea</td>
<td>20</td>
<td>May 2024</td>
</tr>
<tr>
<td>NCT05592548</td>
<td>Rosacea Treatment Using Non-thermal (Cold) Atmospheric Plasma Device</td>
<td>10</td>
<td>Jun 2023</td>
</tr>
</tbody>
</table>

NCT: national clinical trial.
References


35. Barbarino SC, Bucay VW, Cohen JL, et al. Integrative skincare trial of intense pulsed light followed by the phyto-corrective mask, phyto-corrective gel, and resveratrol BE for


### Documentation for Clinical Review

- No records required

### Coding

This Policy relates only to the services or supplies described herein. Benefits may vary according to product design; therefore, contract language should be reviewed before applying the terms of the Policy.

The following codes are included below for informational purposes. Inclusion or exclusion of a code(s) does not constitute or imply member coverage or provider reimbursement policy. Policy Statements are intended to provide member coverage information and may include the use of some codes for clarity. The Policy Guidelines section may also provide additional information for how to interpret the Policy Statements and to provide coding guidance in some cases.

<table>
<thead>
<tr>
<th>Type</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPT*</td>
<td>15780</td>
<td>Dermabrasion; total face (e.g., for acne scarring, fine wrinkling, rhytids, general keratosis)</td>
</tr>
<tr>
<td></td>
<td>15781</td>
<td>Dermabrasion; segmental, face</td>
</tr>
<tr>
<td></td>
<td>15782</td>
<td>Dermabrasion; regional, other than face</td>
</tr>
<tr>
<td></td>
<td>15783</td>
<td>Dermabrasion; superficial, any site (e.g., tattoo removal)</td>
</tr>
<tr>
<td></td>
<td>15788</td>
<td>Chemical peel, facial; epidermal</td>
</tr>
<tr>
<td></td>
<td>15789</td>
<td>Chemical peel, facial; dermal</td>
</tr>
<tr>
<td></td>
<td>15792</td>
<td>Chemical peel, nonfacial; epidermal</td>
</tr>
<tr>
<td></td>
<td>15793</td>
<td>Chemical peel, nonfacial; dermal</td>
</tr>
<tr>
<td></td>
<td>17106</td>
<td>Destruction of cutaneous vascular proliferative lesions (e.g., laser technique); less than 10 sq cm</td>
</tr>
<tr>
<td></td>
<td>17107</td>
<td>Destruction of cutaneous vascular proliferative lesions (e.g., laser technique); 10.0 to 50.0 sq cm</td>
</tr>
<tr>
<td></td>
<td>17108</td>
<td>Destruction of cutaneous vascular proliferative lesions (e.g., laser technique); over 50.0 sq cm</td>
</tr>
</tbody>
</table>
### Type

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>17110</td>
<td>Destruction (e.g., laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettage), of benign lesions other than skin tags or cutaneous vascular proliferative lesions; up to 14 lesions</td>
</tr>
<tr>
<td>17111</td>
<td>Destruction (e.g., laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettage), of benign lesions other than skin tags or cutaneous vascular proliferative lesions; 15 or more lesions</td>
</tr>
<tr>
<td>30117</td>
<td>Excision or destruction (e.g., laser), intranasal lesion; internal approach</td>
</tr>
<tr>
<td>30118</td>
<td>Excision or destruction (e.g., laser), intranasal lesion; external approach (lateral rhinotomy)</td>
</tr>
<tr>
<td>30120</td>
<td>Excision or surgical planing of skin of nose for rhinophyma</td>
</tr>
<tr>
<td>E0691</td>
<td>Ultraviolet light therapy system, includes bulbs/lamps, timer and eye protection; treatment area 2 sq ft or less</td>
</tr>
<tr>
<td>E0692</td>
<td>Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, 4 ft panel</td>
</tr>
<tr>
<td>E0693</td>
<td>Ultraviolet light therapy system panel, includes bulbs/lamps, timer and eye protection, 6 ft panel</td>
</tr>
<tr>
<td>E0694</td>
<td>Ultraviolet multidirectional light therapy system in 6 ft cabinet, includes bulbs/lamps, timer, and eye protection</td>
</tr>
</tbody>
</table>

### Policy History

This section provides a chronological history of the activities, updates and changes that have occurred with this Medical Policy.

<table>
<thead>
<tr>
<th>Effective Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/15/2007</td>
<td>New Policy Adoption</td>
</tr>
<tr>
<td>10/28/2009</td>
<td>Coding Update</td>
</tr>
<tr>
<td>04/02/2010</td>
<td>Coding Update</td>
</tr>
<tr>
<td>07/01/2011</td>
<td>Policy revision without position change</td>
</tr>
<tr>
<td>06/30/2015</td>
<td>Coding update</td>
</tr>
<tr>
<td>10/30/2015</td>
<td>Policy title change from Non-Pharmacologic Treatment of Rosacea</td>
</tr>
<tr>
<td>03/01/2016</td>
<td>Policy revision without position change</td>
</tr>
<tr>
<td>06/01/2016</td>
<td>Coding update</td>
</tr>
<tr>
<td>02/01/2017</td>
<td>Policy revision without position change</td>
</tr>
<tr>
<td>02/01/2018</td>
<td>Policy revision without position change</td>
</tr>
<tr>
<td>02/01/2019</td>
<td>Policy revision without position change</td>
</tr>
<tr>
<td>02/01/2020</td>
<td>Annual review. No change to policy statement. Literature review updated.</td>
</tr>
<tr>
<td>02/01/2021</td>
<td>Annual review. No change to policy statement. Literature review updated.</td>
</tr>
<tr>
<td>02/01/2022</td>
<td>Annual review. No change to policy statement. Literature review updated.</td>
</tr>
<tr>
<td>02/01/2023</td>
<td>Annual review. No change to policy statement. Literature review updated.</td>
</tr>
</tbody>
</table>

### Definitions of Decision Determinations

**Medically Necessary:** Services that are Medically Necessary include only those which have been established as safe and effective, are furnished under generally accepted professional standards to treat illness, injury or medical condition, and which, as determined by Blue Shield, are: (a) consistent with Blue Shield medical policy; (b) consistent with the symptoms or diagnosis; (c) not furnished primarily for the convenience of the patient, the attending Physician or other provider; (d) furnished
at the most appropriate level which can be provided safely and effectively to the patient; and (e) 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 the Member’s illness, injury, or disease.

Investigational/Experimental: A treatment, procedure, or drug is investigational when it has not been recognized as safe and effective for use in treating the particular condition in accordance with generally accepted professional medical standards. This includes services where approval by the federal or state governmental is required prior to use, but has not yet been granted.

Split Evaluation: Blue Shield of California/Blue Shield of California Life & Health Insurance Company (Blue Shield) policy review can result in a split evaluation, where a treatment, procedure, or drug will be considered to be investigational for certain indications or conditions, but will be deemed safe and effective for other indications or conditions, and therefore potentially medically necessary in those instances.

Prior Authorization Requirements and Feedback (as applicable to your plan)

Within five days before the actual date of service, the provider must confirm with Blue Shield that the member’s health plan coverage is still in effect. Blue Shield reserves the right to revoke an authorization prior to services being rendered based on cancellation of the member’s eligibility. Final determination of benefits will be made after review of the claim for limitations or exclusions.

Questions regarding the applicability of this policy should be directed to the Prior Authorization Department at (800) 541-6652, or the Transplant Case Management Department at (800) 637-2066 ext. 3507708 or visit the provider portal at www.blueshieldca.com/provider.

We are interested in receiving feedback relative to developing, adopting, and reviewing criteria for medical policy. Any licensed practitioner who is contracted with Blue Shield of California or Blue Shield of California Promise Health Plan is welcome to provide comments, suggestions, or concerns. Our internal policy committees will receive and take your comments into consideration.

For utilization and medical policy feedback, please send comments to: MedPolicy@blueshieldca.com

Disclaimer: This medical policy is a guide in evaluating the medical necessity of a particular service or treatment. Blue Shield of California may consider published peer-reviewed scientific literature, national guidelines, and local standards of practice in developing its medical policy. 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 covered services. Member contracts may differ in their benefits. Blue Shield reserves the right to review and update policies as appropriate.
Appendix A

<table>
<thead>
<tr>
<th>POLICY STATEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(No changes)</strong></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>BEFORE</th>
<th>AFTER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nonpharmacologic Treatment of Rosacea 2.01.71</strong></td>
<td><strong>Nonpharmacologic Treatment of Rosacea 2.01.71</strong></td>
</tr>
<tr>
<td><strong>Policy Statement:</strong></td>
<td><strong>Policy Statement:</strong></td>
</tr>
<tr>
<td>Nonpharmacologic treatment of rosacea is considered <strong>investigational</strong>, including but not limited to the following:</td>
<td>Nonpharmacologic treatment of rosacea is considered <strong>investigational</strong>, including but not limited to the following:</td>
</tr>
<tr>
<td>A. Chemical peels</td>
<td>A. Chemical peels</td>
</tr>
<tr>
<td>B. Dermabrasion</td>
<td>B. Dermabrasion</td>
</tr>
<tr>
<td>C. Electrosurgery</td>
<td>C. Electrosurgery</td>
</tr>
<tr>
<td>D. Laser and light therapy</td>
<td>D. Laser and light therapy</td>
</tr>
<tr>
<td>E. Surgical debulking</td>
<td>E. Surgical debulking</td>
</tr>
</tbody>
</table>