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Drug Class Update: Acne and Rosacea

Date of Review: April 2026

Date of Last Review: February 2021
Dates of Literature Search: 12/1/2020 – 01/14/2026

Current Status of PDL Class:
See **Appendix 1**.

Purpose for Class Update:
The purpose of this update is to evaluate new comparative evidence for efficacy or harms of medications used to treat acne since the previous update. Acne conglobata, acne fulminans, and severe cystic acne are funded conditions under the Oregon Health Plan (OHP). Rosacea will be funded with the Health Evidence Review Commission (HERC) benefit plan update in 2027. Evidence for rosacea treatments is also included in this drug class update.

Plain Language Summary:
- Acne is common skin condition caused by clogging of skin pores which leads to pimples, whiteheads and blackheads. These outbreaks occur on the face, chest, upper back, shoulders, and neck. Hormonal changes, excessive stress, and certain medications may trigger or worsen acne. Depending on its severity, acne can cause emotional distress, depression, and scar the skin.
- Acne treatment is usually started with an over-the-counter cream, gel, or lotion (benzoyl peroxide, salicylic acid) applied to the skin. If 6 to 8 weeks of treatment is not effective, prescription products applied to the skin (retinoids), or oral prescription medicines (antibiotics, retinoids, hormonal therapy) can be added. Oral retinoids may have unwanted side effects such as depression or birth defects if taken while pregnant.
- Rosacea is another common skin condition that causes facial redness (flushing), spider veins, or rash usually on the nose and cheeks. It may also cause eye or eyelid swelling. The cause of rosacea is not known, but flare-ups can be caused by emotional stress, alcohol, spicy foods, hot drinks, strenuous exercise, or spending time outside in the sun and wind.
- Treatments for rosacea include creams and gels (metronidazole, azelaic acid) applied to the skin (topical), oral medicines (doxycycline, isotretinoin), or light-based therapies. Rosacea that affects the eye may be treated with lubricating eye drops. In severe cases, oral antibiotics may be used to relieve the eyelid swelling.
- Oregon Health Plan (OHP) will pay for acne treatments including topical adapalene, benzoyl peroxide, clindamycin, dapsone, erythromycin, tretinoin, sulfacetamide and oral isotretinoin. For all other acne treatments, the provider must explain to the Oregon Health Authority (OHA) why a patient needs that product before Medicaid will pay for it. This process is called prior authorization.
- The Drug Use Research and Management group recommends paying for certain topical agents (metronidazole, azelaic acid) that are Food and Drug Administration (FDA)-approved for people with rosacea. All other rosacea treatments will require prior authorization before OHP will pay for them.

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Research Questions:

1. What is the comparative efficacy and effectiveness of treatments for acne or rosacea?
2. What are the comparative harms of treatments for acne or rosacea?
3. Are there subpopulations of patients in which a particular treatment for acne or rosacea would be more effective or associated with less harm?

Conclusions:

- This class review is limited by the lack of high-quality evidence from systematic reviews and guidelines which evaluate the comparative efficacy and safety of treatments for acne and rosacea. Since the last Pharmacy and Therapeutics (P & T) Committee review, one Cochrane systematic review and 3 high-quality guidelines have been published to guide treatment of acne. For the management of rosacea, one Cochrane systematic review and 5 high-quality guidelines were identified.

Acne Treatments

- A 2024 Cochrane Review evaluated the evidence on the efficacy and safety of topical therapies used in the treatment of acne vulgaris.[1] No high-certainty evidence for the effects of any therapy was identified.[1] The low-quality data for topical benzoyl peroxide, adapalene and clindamycin did not show that one treatment was more effective than the other.[1]
- The National Institute for Health and Care Excellence (NICE) updated guidance for acne vulgaris management in 2023.[2] The current guidelines recommend topical benzoyl peroxide combined with topical clindamycin for mild to moderate acne, and combined topical adapalene and topical benzoyl peroxide or topical azelaic acid combined with oral doxycycline for moderate to severe acne.[2] In addition, for any severity of acne, either topical adapalene combined with topical benzoyl peroxide or topical retinoids combined with topical clindamycin may be used, but antibiotic monotherapy or topical therapy plus oral antibiotics are not recommended.[2]
- Canada's Drug Agency (CDA) does not recommend reimbursement of clascoterone cream due to insufficent comparative evidence with other acne treatments to assess the impact of clascoterone on improving skin clearance, reducing scarring, and improving quality of life (2025).[3] The CDA recommends that topical clindamycin/benzoyl peroxide/adapalene (CABTREO) gel be reimbursed by Canadian public drug plans for the topical treatment of acne vulgaris in patients 12 years of age and older only if pricing for this drug can be negotiated with participating plans so that the cost of treatment does not exceed other topical therapies (2024).[4]

Rosacea Treatments

- A 2015 Cochrane review assessed the efficacy and safety of treatments for rosacea.[5] High-quality evidence supports the effectiveness and safety of brimonidine topical gel in the management of erythema due to rosacea.[5] For management of papulopustular rosacea, topical metronidazole, azelaic acid, and ivermectin, or oral anti-inflammatory dose doxycycline monohydrate (40 mg), tetracycline and isotretinoin 0.3 mg/kg appear to be effective and safe for short-term use (moderate- to high-quality evidence).[5] There is no clear evidence that any one of the treatments for papulopustular rosacea, or any combination of treatments, has a particular advantage in terms of higher remission rates or fewer adverse effects.[5]
- In 2019 the American Acne and Rosacea Society (AARS) published rosacea management recommendations based upon available moderate-quality evidence and clinical experience.[6] Recommendations include:
    - Initial use of topical metronidazole or topical azelaic acid concurrently with oral doxycycline is recommended for treatment of severe papulopustular rosacea with transition to topical therapy alone after adequate response is achieved.[6]
    - Topical brimonidine and topical ivermectin are recommended for treatment of papulopustular rosacea with diffuse persistent facial erythema of at least moderate severity.[6]
    - For ocular rosacea, cyclosporin 0.05% ophthalmic emulsion was shown to be more beneficial than artificial tears (low-quality evidence).[6] Further studies on treatment of ocular rosacea are warranted.[6]

- Combination treatment with potassium titanyl phosphate laser and topical brimonidine is recommended for diffuse persistent facial erythema of rosacea.[6]

- Canada's Drug Agency has published 3 reviews for rosacea treatments. In 2015, CDA recommended coverage of topical ivermectin for treatment of moderate to severe papulopustular rosacea if the drug plan cost for ivermectin did not exceed the drug plan cost of other topical rosacea treatments.[7] Due to insufficient evidence of comparative efficacy with doxycycline 100 mg, CDA did not recommend coverage for oral doxycycline monohydrate 40 mg capsules (ORACEA) for treatment of rosacea (2013).[8] In 2011, CDA recommended coverage of topical azelaic acid 15% gel for management of papulopustular rosacea.[9]
- In 2014, NICE reviewed the evidence for the use of topical brimonidine gel in management of facial erythema of rosacea.[10] NICE did not issue any recommendations for the use of brimonidine gel in rosacea but suggested that it may be an option for adults with moderate to severe rosacea and facial erythema. Specialists suggested that some people may only use brimonidine gel on days when they are particularly self-conscious about their appearance.[10] Before continuing long-term treatment with brimonidine gel, consideration should be given to how treatment efficacy can be assessed given the subjective nature of efficacy outcomes and the low response rates seen in clinical trials.[10]
- In 2016, NICE reviewed evidence for the use to topical ivermectin cream in treatment of inflammatory lesions associated with papulopustular rosacea.[11] NICE did not issue any recommendations for ivermectin cream in managing inflammatory lesions due to rosacea but suggested that mild to moderate papulopustular rosacea is usually treated with topical metronidazole or azelaic acid and moderate or severe papulopustular rosacea is often managed with oral antibiotics (i.e., tetracycline, erythromycin, doxycycline).[11] At the time of the review, ivermectin cream was more costly than metronidazole or azelaic acid, so NICE recommended that local decision makers consider the available evidence on efficacy and safety as well as cost when making decisions about using ivermectin cream or another topical agent for papulopustular rosacea.[11]
- With the exception of oral isotretinoin, there is insufficient evidence to determine if any subpopulations would particularly benefit or be harmed by a particular treatment for acne or rosacea.

New Formulations

- Two new formulations of topical agents were recently approved by the FDA for treatment of acne, and one oral product was approved for treatment of rosacea.
  - In July 2021, the FDA approved a new combination formulation of tretinoin 0.1% and benzoyl peroxide 3% (TWYNEO) cream indicated for topical treatment of acne vulgaris in adults and pediatric patients 9 years of age and older.[12]
  - In October 2023, the FDA approved a triple combination of clindamycin phosphate 1.2%, adapalene 0.15%, and benzoyl peroxide 3.1% (CABTREO) gel indicated for the topical treatment of acne vulgaris in adults and pediatric patients aged 12 years and older.[13]
  - A new oral formulation of minocycline 40 mg (EMROSI) received FDA approval in November 2024 and is indicated to treat inflammatory lesions of rosacea in adults.[14]

Recommendations:

- Make at least one generic topical metronidazole product approved for management of rosacea preferred. Make brimonidine nonpreferred based on clinical evidence. Created a new preferred drug list (PDL) class for rosacea treatments.
- Maintain TWYNEO and CABTREO as non-preferred medications on the PDL in rosacea topical medication class. Make EMROSI non-preferred on the PDL in the oral tetracycline drug class. No other changes to the PDL are recommended for acne and rosacea treatments.

- Revise acne prior authorization (PA) criteria to include non-preferred topical agents for management of rosacea and add documentation of baseline assessment of disease severity. Revise oral tetracycline PA criteria include baseline assessments of acne and rosacea, when prescribed for these indications. Add renewal criteria to topical acne/rosacea therapies and oral tetracyclines.
- After review of medication costs in executive session make adapalene cream (brand and generic), benzoyl peroxide (EPSOLAY) cream, clindamycin phosphate foam, and tretinoin microspheres gel nonpreferred. Make topical generic metronidazole gel and cream preferred and make all other topical rosacea medications nonpreferred.

Summary of Prior Reviews and Current Policy:

- The acne drugs were last reviewed by the P &T Committee at the February 2021 meeting. Clascoterone topical cream was designated as non-preferred on the OHP PDL. No other changes were made to the PDL. The oral tetracyclines were last reviewed in March 2019. After review, 2 recently approved tetracyclines, omadacycline and sarecycline were maintained as non-preferred on the PDL. Sarecycline is no longer on the PDL as the drug is not eligible for federal rebates.
- Preferred acne treatments on the PDL include generic topical formulations of adapalene, benzoyl peroxide, clindamycin, dapsone, erythromycin, tretinoin, and sulfacetamide and oral isotretinoin. Single-source brand formulations are non-preferred on the PDL given lack of high-quality data to support their use in acne. Preferred oral tetracyclines include generic formulations of doxycycline suspension, tablets, and capsules and tetracycline tablets and capsules. PDL status for both classes of medications is presented in **Appendix 1**.
- Prior authorization (PA) criteria for the acne PDL class, includes federal legend topical medications that have FDA approval and an OHA-funded indication for severe acne vulgaris. Oral tetracyclines have a quantity limit to prevent inappropriate use beyond two, 14-day supplies in a 3-month time period. Use for all medications is limited to OHP-funded conditions (**Appendix 5**).
- Rosacea is not currently a funded indication on the HERC prioritized list.[15] However, with implementation of the benefit plan update in 2027, a pathway to coverage will be needed for rosacea treatments.

Background:

Acne

Acne vulgaris is a common skin condition, affecting more than 85% of adolescents and often continuing into adulthood.[16,17] Current research indicates that the pathogenesis of acne involves 4 main processes: follicular hyperproliferation, excess sebum production, inflammation, and proliferation of skin bacteria.[16,18] Various types of lesions can present in acne vulgaris: non-inflammatory lesions (blackheads and whiteheads) and inflammatory lesions including papules, pustules, cysts, and nodules that usually appear on the face, neck, upper back, and chest.[16] Acne, particularly severe acne, may result in permanent scarring and psychological morbidity such as poor self-esteem, depression, anxiety and suicidal ideation.[19] Acne vulgaris affects approximately 9% of the population worldwide (approximately 85% of individuals aged 12-24 years, and approximately 50% of patients aged 20-29 years).[19]

Acne vulgaris is classified based on patient age, lesion morphology (comedonal, inflammatory, mixed, nodulocystic), distribution (location on face, trunk, or both), and severity (extent, presence or absence of scarring, post inflammatory erythema, or hyperpigmentation).[19] Acne conglobata and acne fulminans are two forms of severe acne.[20] Acne conglobata is a severe form of nodular acne that involves recurrent abscesses and communicating sinuses and often results in disfiguring scars.[20] Acne fulminans is a severe variant of inflammatory acne that presents with severe ulceration and occasionally the systemic symptoms of fever and arthralgia.[20]

Numerous acne clinical grading and classification systems have been used in research and clinical settings to assess overall acne disease severity, lesion number and morphologies, affected anatomic sites, and associated secondary changes such as dyspigmentation and scarring.[21] Available grading systems include the Investigator's Global Assessment (IGA), Leeds Revised Acne Grading System, Global Acne Grading System, Global Acne Severity Scale, and Comprehensive Acne Severity Scale.[21] While there is no universally accepted acne grading system in clinical settings, the IGA is most commonly used in the United States (US) and demonstrates good agreement between clinician and patient ratings.[21] The IGA scale has been used in many randomized controlled trials (RCTs) for acne treatments and is proposed as a cohesive framework upon which to establish an ideal acne grading system.[22] The IGA is a 5- or 6-point scale (0-5) that grades hyperpigmentation and erythema as clear, almost clear, mild, moderate, severe, and very severe.[23] A final IGA assessment of 0 to 1 (clear to almost clear) and at least a 2-grade improvement from baseline is defined by the Food and Drug Administration (FDA) as a clinically meaningful outcome for acne treatments.[23]

The main strategies for acne management are based on physiological targets: topical retinoids for comedolytic and keratolytic activity (minimizing comedonal plugging), antibiotics (doxycycline, minocycline) for antimicrobial and anti-inflammatory effects, hormonal therapies (contraceptives or spironolactone) targeting sebaceous gland activity, and systemic isotretinoin affecting all of these targets.[19] Topical therapies such as retinoids (e.g., tretinoin, adapalene), benzoyl peroxide, azelaic acid, and/or combinations of topical agents are first-line treatments for acne vulgaris.[19] Most topical preparations require at least 6 to 8 weeks before an improvement is seen, though response can be observed earlier with antibiotics (as early as 5 days) or later with retinoids (after 12 weeks).[3] For more severe disease, combinations of topical agents with systemic agents (oral antibiotics such as doxycycline and minocycline, hormonal therapies such as combination oral contraception or spironolactone, or isotretinoin) are recommended.[19] Isotretinoin is approved by the FDA for treating severe recalcitrant nodular acne but is often used to treat resistant or persistent moderate to severe acne, as well as acne that produces scarring or significant psychosocial distress.[19] These classes of medications are well-established and all have been FDA-approved for many years.

Rosacea

Rosacea is a chronic inflammatory skin disorder, primarily affecting the central face (cheeks, chin, nose and central forehead).[25] Rosacea often encompasses various combinations of symptoms including skin flushing, erythema, telangiectasias (fine, dilated blood vessels), edema, papules, pustules, ocular lesions and rhinophyma (bulbous nose) accompanied by itching, burning, or stinging.[26] Patients experience periods of exacerbation and remission, although facial redness is persistent.[27] Ocular involvement is found in more than 50% of rosacea patients, with symptoms including dryness, irritation, blepharitis, conjunctivitis and, more rarely, keratitis that may ultimately compromise eyesight.[27] Large retrospective database studies have yielded prevalence rates of rosacea ranging from 1.3% to 2.1%.[28] Rosacea occurs in both men and women, with similar prevalence rates.[29] Although it may occur at any age, the onset of rosacea typically begins at any time after age 30 years.[30] It has been most frequently observed in patients with fair skin but has also been diagnosed in Asians and African Americans.[26] In a survey on the racial/ethnic distribution of patients with rosacea, it was found that 2% of rosacea patients were Black, 2.3% were Asian or Pacific Islander, and 3.9% were Hispanic or Latino.[31] Rosacea can have a negative impact on quality of life, self-esteem, and well-being.[32]

In 2002, the National Rosacea Society outlined 4 distinct subtypes of rosacea.[30] The specific rosacea subtypes are presented in **Table 1**. With increasing knowledge of the pathophysiology of rosacea, a phenotype-based approach to diagnosis and management has evolved.[33] According to the 2019 Global Rosacea Consensus and National Rosacea Society there are 2 diagnostic phenotypes: 1) fixed centrofacial erythema with flushing, papules, pustules, and telangiectasia and 2) phymatous changes that may include ocular manifestions.[33,34] The major phenotypes include: 1) papules and pustules, 2) flushing, 3) telangiectasia, and 4) ocular manifestations.[33,34] In a systematic review and meta-analysis of 39 studies including more than 9000 patients, the proportion of erythematotelangiectatic rosacea was 57%, papulopustular rosacea, 43%, phymatous rosacea, 7%, and ocular rosacea, 11%.[29] Subtype distribution occurred equally among men and women except for phymatous rosacea, which was more prevalent in men.[29]

Table 1. National Rosacea Society: Rosacea Subtypes[30]

Subtype	Characteristics
Erythematotelangiectatic	Flushing and persistent central facial erythema with or without telangiectasia.
Papulopustular	Persistent central facial erythema with transient, central facial papules or pustules or both.
Phymatous	Thickening skin, irregular surface nodularities and enlargement. May occur on the nose, chin, forehead, cheeks, or ears.
Ocular	Foreign body sensation in the eye, burning or stinging, dryness, itching, ocular photosensitivity, blurred vision, telangiectasia of the sclera or other parts of the eye, or periorbital edema.

Since rosacea is a chronic inflammatory condition that waxes and wanes, with many triggers, the goal of treatment is to resolve acute flares with rapid-acting treatments and maintain the results with lifestyle modification and prolonged combination therapy.[35] The avoidance of triggers, particularly ultraviolet light exposure, is critical for long-term improvement and disease control, and should be an essential component of patient education.[35] The fundamental key for successful management of rosacea is based on identification of the specific subtype, understanding the severity of presentation, and tailoring treatments to best meet the expectations of the patient.[35] When assessing treatment, patients' perception and acceptance of their facial appearance—including its impact on their emotional, social, and professional lives—may be important in determining the level of therapy.[36] Patient surveys have suggested that the psychosocial burden of rosacea may be substantial regardless of severity and that the goal of achieving an IGA of 0 for inflammatory papules and pustules may often be appropriate and feasible.[36] NICE cites an IGA scale that has been used in clinical trials of therapeutic agents for rosacea and is presented in **Table 2**.

Table 2. Investigator Global Assessment Scale for Rosacea[11]

Score	Grade	Clinical Description
0	Clear	No inflammatory lesions present, no erythema
1	Almost Clear	Very few small papules/pustules, very mild erythema
2	Mild	Few small papules/pustules, mild erythema
3	Moderate	Several small or large papules/pustules, moderate erythema
4	Severe	Numerous small and/or large papules/pustules, severe erythema

The major treatments for persistent facial erythema include topical alpha-adrenergic agonists (brimonidine or oxymetazoline) and light-based therapies (laser or intense pulsed light treatments).[37] The FDA-approved topical therapies for the treatment of persistent facial erythema of rosacea in adults include brimonidine topical gel, 0.33%, and oxymetazoline hydrochloride cream, 1% applied once daily.[36] Brimonidine may reduce facial erythema within 30 minutes of application and peak around 3 to 6 hours after application; the total duration of erythema reduction is 3-12 hours.[38] Compared to placebo, there is high-quality evidence for the efficacy of brimonidine in reducing erythema, while the quality of evidence for oxymetazoline is moderate.[38] There are no head-to-head comparisons of brimonidine and oxymetazoline.[38] Telangiectasias are best managed with laser or intense pulsed light treatments.[37] Telangiectasias are unlikely to improve with medications.[37]

Topical and systemic therapy are the mainstays of treatment for rosacea presenting with inflammatory papules and/or pustules.[37] Mild to moderate papulopustular features can often be treated with topical therapy.[36,37] The FDA-approved topical therapies for inflammatory papules/pustules of rosacea include azelaic acid, 15%; ivermectin cream, 1%; and metronidazole, 1% and 0.75%.[36] Depending on the formulation, the topical products are applied once or twice daily.

When first-line treatments for inflammation are inadequate or when rosacea is more severe, off-label oral antibiotics or retinoids are sometimes used, although data are sparse for these treatments.[36] These may include tetracycline, doxycycline, minocycline, and oral isotretinoin.[36] Modified-release oral doxycycline capsules, 40 mg (30 mg immediate release and 10 mg delayed release beads), were approved by the FDA for the treatment of inflammatory papules/pustules of rosacea that are severe or poorly responsive to topical therapy alone.[39] Duration of therapy is recommended for 12 to 16 weeks or longer based on response to therapy.[39] This formulation is a lower dosage than that of doxycycline used to treat infections, and has been associated with fewer adverse effects than the 100 mg dosing regimen.[36] Studies suggest that medications primarily used for papulopustular features of rosacea (e.g., topical antimicrobials, azelaic acid, and oral antibiotics) may improve rosacea-associated facial erythema.[37] However, no high-quality randomized trials have evaluated these therapies in patients without concomitant papules and pustules.[37] Topical and oral therapy are often initially prescribed in combination, followed by long-term use of a single therapy alone to maintain remission.[36]

For ocular rosacea, lid scrubs and warm compresses may help improve meibomian gland function, and topical antibiotics (e.g., topical erythromycin, azithromycin, metronidazole) or topical ivermectin may quell mild lid inflammation.[37] For moderate to severe ocular rosacea, short courses of oral tetracycline-class antibiotics, macrolide antibiotics, or metronidazole are often needed.[37] Topical cyclosporine drops may be additive in decreasing the topical inflammation in these patients.[36] Tissue hypertrophy, dilated follicles, and irregular nodular overgrowths are characteristic features of the phymatous skin changes of rosacea.[37] These changes most commonly affect the nose (rhinophyma), but may also affect other areas such as the chin, cheeks, and ears.[37] Laser ablation and surgical techniques can be used to debulk and recontour tissue distorted by phymatous changes.[37]

Methods:
A Medline literature search for new systematic reviews and randomized controlled trials (RCTs) assessing clinically relevant outcomes to active controls, or placebo if needed, was conducted. The Medline search strategy used for this review is available in **Appendix 2**, which includes dates, search terms and limits used. The OHSU Drug Effectiveness Review Project, Agency for Healthcare Research and Quality (AHRQ), National Institute for Health and Clinical Excellence (NICE), Department of Veterans Affairs, the Oregon Mental Health Clinical Advisory Group (MHCAG), the Scottish Intercollegiate Guidelines Network (SIGN), and Canada's Drug Agency (CDA-AMA) resources were manually searched for high quality and relevant systematic reviews. When necessary, systematic reviews are critically appraised for quality using the AMSTAR tool and clinical practice guidelines using the AGREE tool. The FDA website was searched for new drug approvals, indications, and pertinent safety alerts.

The primary focus of the evidence is on high quality systematic reviews and evidence-based guidelines. Randomized controlled trials will be emphasized if evidence is lacking or insufficient from those preferred sources.

New Systematic Reviews:
Cochrane Review: Topical Interventions For Acne
A 2024 Cochrane Review evaluated the evidence on the efficacy and safety of topical therapies used in the treatment of acne vulgaris.[1] Literature was searched through December 2, 2021 for relevant systematic reviews.[1] Six systematic reviews with low risk of bias met the inclusion criteria.[1] The 6 reviews involved 40,910 people with acne from 275 trials and 1,316 people with acne scars from 37 trials.[1] The age of the participants ranged from 10 to 59 years.[1] No systematic review collected data for the following comparisons: topical antibiotics versus placebo or no treatment, topical retinoids versus placebo or no treatment, or topical retinoids versus topical antibiotics.[1] No high-certainty evidence for the effects of any therapy was identified.[1] The data for topical benzoyl peroxide, adapalene and clindamycin is summarized below.

Benzoyl Peroxide Versus Placebo or No Treatment

In 2 trials involving 1,012 participants over 12 weeks, benzoyl peroxide may reduce the total (mean difference (MD) -16.14, 95% confidence interval (CI) -26.51 to -5.78), inflammatory (MD -6.12, 95% CI -11.02 to -1.22), and non-inflammatory lesion counts (MD -9.69, 95% CI -15.08 to -4.29) when compared to placebo over 12 weeks, but the evidence is very uncertain (very low-certainty evidence).[1] Benzoyl peroxide may have little to no effect in improving participants' global self-assessment compared to placebo at 10 and 12 weeks (risk ratio (RR) 1.44, 95% CI 0.94 to 2.22; 2 trials, n=1,073; very low-certainty evidence).[1] Very low-certainty evidence suggested that benzoyl peroxide may improve IGA scores over 12 weeks (RR 1.77, 95% CI 1.37 to 2.28; 6 trials, n=4,110) compared to placebo.[1] Benzoyl peroxide may increase the risk of a less serious adverse event compared to placebo over 10 to 12 weeks (RR 1.46, 95% CI 1.01 to 2.11; 13 trials; n=4,287; very low-certainty evidence).[1]

Benzoyl Peroxide Versus Topical Retinoids

Benzoyl peroxide may increase the percentage change in total lesion count compared to adapalene (MD 10.8, 95% CI 3.38 to 18.22; 1 trial, 205 participants, 12 weeks; very low-certainty evidence).[1] When compared to adapalene, benzoyl peroxide may have little to no effect on the following outcomes: percentage change in inflammatory lesion counts (MD -7.7, 95% CI -16.46 to 1.06; 1 trial, 142 participants, 11 weeks; very low-certainty evidence), percentage change in non-inflammatory lesion counts (MD -3.9, 95% CI -13.31 to 5.51; 1 trial, 142 participants, 11 weeks; very low-certainty evidence), participant's global self-assessment (RR 0.96, 95% CI 0.86 to 1.06; 4 trials, 1123 participants, 11 to 12 weeks; low-certainty evidence), IGA score (RR 1.16, 95% CI 0.98 to 1.37; 3 trials, 1965 participants, 12 weeks; low-certainty evidence), and incidence of a less serious adverse event (RR 0.77, 95% CI 0.48 to 1.25, 1573 participants, 5 trials, 11 to 12 weeks; very low-certainty evidence).[1]

Benzoyl Peroxide Versus Topical Antibiotics

When compared to clindamycin, benzoyl peroxide may have little to no effect on the following outcomes: total lesion counts (MD -3.50, 95% CI -7.54 to 0.54; 1 trial, 641 participants, 12 weeks; very low-certainty evidence), inflammatory lesion counts (MD -1.20, 95% CI -2.99 to 0.59; 1 trial, 641 participants, 12 weeks; very low-certainty evidence), non-inflammatory lesion counts (MD -2.4, 95% CI -5.3 to 0.5; 1 trial, 641 participants, 12 weeks; very low-certainty evidence), participant's global self-assessment (RR 0.95, 95% CI 0.68 to 1.34; 1 trial, 240 participants, 10 weeks; low-certainty evidence), IGA score (RR 1.10, 95% CI 0.83 to 1.45; 2 trials, 2277 participants, 12 weeks; very low-certainty evidence), and incidence of a less serious adverse event (RR 1.27, 95% CI 0.98 to 1.64; 5 trials, 2842 participants, 10 to 12 weeks; low-certainty evidence).[1]

This Cochrane review summarizes the evidence from 6 systematic reviews regarding the effects of topical therapy (benzoyl peroxide, adapalene, clindamycin) for treating acne and acne scars. The evidence regarding the effects of most interventions is very uncertain.[1] The studies included in this review had limited observations of serious adverse effects and quality of life.[1] There was insufficient high-quality evidence to summarize the evidence for topical retinoids and topical antibiotics, specifically these 2 classes of drugs compared with placebo or no treatment and with each other.[1]

Cochrane Review: Interventions For Rosacea

A 2015 Cochrane review assessed the efficacy and safety of treatments for rosacea.[5] Literature was searched through July, 2014 for RCTs conducted in people with moderate to severe rosacea.[5] A total of 106 studies, comprising 13,631 participants met inclusion criteria.[5] Sample sizes of 30 to 100 participants and study duration of 2 to 3 months were most common.[5] More women than men were included, mean age of 48.6 years, and the majority had papulopustular rosacea, followed by erythematotelangiectatic rosacea.[5]

Topical interventions included: metronidazole, azelaic acid, ivermectin, or brimonidine.[5] Systemic interventions included: oral antibiotics and combinations with topical treatments or other systemic treatments, i.e. isotretinoin.[5] Several studies evaluated laser or light-based treatment.[5] The majority of studies (57/106) were assessed as unclear risk of bias, 37 studies were assessed as high risk of bias, and 12 trials were at low risk of bias.[5] The quality of the body of evidence was rated moderate to high for most outcomes, but for some outcomes low- to very low-quality.[5]

Eleven studies assessed the primary outcome of change in quality of life, 52 studies evaluated participant-assessed changes in rosacea severity and almost all studies addressed adverse events, although often only limited data were provided.[5] In most comparisons there were no statistically significant differences in number of adverse events, most events were mild and transient.[5] Five RCTs evaluated treatments for ocular rosacea.[5] Physician assessments including IGA scores, lesion counts, and erythema were evaluated in three-quarters of the studies, but time needed for improvement and duration of remission were incompletely or not reported.[5]

Data for several outcomes could only be pooled for topical metronidazole and azelaic acid.[5] Both were shown to be more effective than placebo in managing papulopustular rosacea (moderate-quality evidence for metronidazole and high-quality evidence for azelaic acid).[5] Pooled data from physician assessments in 3 trials demonstrated that metronidazole was more effective compared to placebo (RR 1.98, 95% CI 1.29 to 3.02).[5] Four trials provided data on participants' assessments, showing that azelaic acid was more effective than placebo (RR 1.46, 95% CI 1.30 to 1.63).[5] Improvements tended to appear after 3 to 6 weeks.[5] With metronidazole, very few people experienced mild itching, skin irritation and dry skin.[5] For some people, azelaic acid caused mild burning, stinging or irritation.[5]

Two studies showed a statistically significant and clinically important improvement in favor of topical ivermectin when compared to placebo (high-quality evidence).[5] Participants' assessments in these studies showed a RR of 1.78 (95% CI 1.50 to 2.11) and RR of 1.92 (95% CI 1.59 to 2.32),which were supported by physicians' assessments.[5] Topical ivermectin appeared to be slightly more effective than topical metronidazole for papulopustular rosacea, based on one study, for improving quality of life and participant and physician assessed outcomes (high-quality evidence for these outcomes).[5]

Topical brimonidine in 2 studies was more effective than vehicle in reducing erythema in rosacea at all time points over 12 hours (high-quality evidence).[5] At 3 hours the participants' assessments had a RR of 2.21 (95% CI 1.52 to 3.22) and RR of 2.00 (95% CI 1.33 to 3.01) in favor of brimonidine.[5] Physicians' assessments confirmed these data. There was no rebound or worsening of erythema after treatment cessation.[5] Topical clindamycin phosphate combined with tretinoin was not considered to be effective for improving rosacea severity compared to placebo (moderate-quality evidence).[5] Compared with artificial tears, topical cyclosporin ophthalmic emulsion demonstrated effectiveness and improved quality of life for people with ocular rosacea (low-quality evidence).[5]

Of the comparisons assessing oral treatments for papulopustular rosacea, there was moderate-quality evidence that tetracycline was effective but this was based on 2 dated studies completed in 1966 and 1971 and of short duration (6 weeks).[5] Physician-based assessments in two trials indicated that doxycycline appeared to be significantly more effective than placebo (RR 1.59, 95% CI 1.02 to 2.47 and RR 2.37, 95% CI 1.12 to 4.99; high-quality evidence).[5] There was no statistically significant difference in effectiveness between 100 mg and 40 mg doxycycline, but there was evidence of fewer adverse effects (e.g., diarrhea, nausea) with the lower doxycycline dose (RR 0.25, 95% CI 0.11 to 0.54; low-quality evidence).[5] There was very low-quality evidence from one study (assessed at high risk of bias) that doxycycline 100 mg was as effective as azithromycin.[5] Low dose minocycline (45 mg) was effective for papulopustular rosacea (low-quality evidence).[5]

Oral tetracycline was compared with topical metronidazole in 4 studies and showed no statistically significant difference between the 2 treatments for any rosacea outcome (low- to moderate-quality evidence).[5] Low dose isotretinoin was considered by both the participants (RR 1.23, 95% CI 1.05 to 1.43) and physicians (RR 1.18, 95% CI 1.03 to 1.36) to be slightly more effective than doxycycline 50-100 mg (high-quality evidence) for treating pimples and pustules associated with rosacea.[5]

In summary, the authors concluded:

- There was high-quality evidence to support the effectiveness and safety of brimonidine topical gel for reducing erythema over 12 hours after application in the management of persistent erythema in rosacea.[5] The effect of brimonidine was temporary.[5]
- For management of papulopustular rosacea, topical metronidazole, azelaic acid, and ivermectin, or oral anti-inflammatory dose doxycycline (40 mg), tetracycline and isotretinoin 0.3 mg/kg appear to be effective and safe for short-term use (moderate- to high-quality evidence).[5] It still needs to be established whether azelaic acid is more effective than topical metronidazole, but topical ivermectin appeared to be slightly more effective than topical metronidazole.[5] There is evidence that 40 mg doxycycline is at least as effective as 100 mg, with evidence of fewer adverse effects (low-quality evidence).[5] There is low-quality evidence for the effectiveness and safety of low dose minocycline 45 mg and very low-quality evidence of azithromycin for this rosacea subtype.[5] There is no clear evidence that any one of these treatments, or any combination of treatments, has a particular advantage in terms of higher remission rates or fewer adverse effects.[5]
- There was insufficient evidence to address the treatment of phymatous rosacea.[5]
- For ocular rosacea, cyclosporin 0.05% ophthalmic emulsion was shown to be more beneficial than artificial tears (low-quality evidence).[5] Further studies on treatment of ocular rosacea are warranted.[5]
- Time needed to response and response duration should be addressed more completely, with more rigorous reporting of adverse events.[5]

After review, 12 systematic reviews were excluded due to poor quality (e.g., indirect network-meta analyses or failure to meet AMSTAR criteria),[40-45] wrong study design of included trials (e.g., observational),[46] comparator (e.g., no control or placebo-controlled),[38,47-51] or outcome studied (e.g., non-clinical).

New Guidelines:

<u>High Quality Guidelines:</u>

Acne Guidance

Canada's Drug Agency: Reimbursement Recommendation for Clascoterone

In 2025 CDA issued reimbursement recommendations for the topical treatment of acne vulgaris with clascoterone.[3] Evidence from 2 clinical trials demonstrated that clascoterone increased the rate of treatment success (assessed using a measure of overall acne severity) compared with its vehicle cream (without active ingredient).[3] However, based on the evidence reviewed, the Canadian Drug Expert Committee (CDEC) could not determine if clascoterone would address the unmet needs (improving skin clearance, reducing scarring, and improving quality of life) relative to other active treatments.[3] The results for clinically relevant skin clearance outcomes, (change from baseline in noninflammatory lesion counts, inflammatory lesion counts, and total lesion counts), were statistically significant in the pivotal trials compared to the vehicle cream. However, the evidence was uncertain because of a high level of missing data, and the results did not reach the threshold for a minimally clinical important difference compared to the vehicle cream.[3] There was a lack of direct comparative data to assess how clascoterone compares to other acne treatments in terms of efficacy and tolerability.[3] For these reasons, the CDA recommends that clascoterone not be reimbursed for the topical treatment of acne vulgaris in patients aged 12 years and older.[3]

Canada's Drug Agency: Reimbursement Recommendation for Clindamycin/Benzoyl Peroxide/Adapalene Triple Therapy

The CDA provided reimbursement recommendations for the triple combination topical clindamycin/benzoyl peroxide/adapalene gel (CABTREO) in November 2024.[4] Evidence from 2 clinical trials showed that treatment with clindamycin/benzoyl peroxide/adapalene gel increased the rate of treatment success (measured using an acne severity scale) and reduced the number of inflammatory and noninflammatory lesions after 12 weeks of treatment compared with its vehicle gel in people with moderate to severe acne vulgaris.[4] The treatment effect of clindamycin/benzoyl peroxide/adapalene gel on acne, compared with topical treatments that are a combination of 2 active ingredients, was uncertain.[4]

Based on an assessment of the health economic evidence by the CDEC, clindamycin/benzoyl peroxide/adapalene does not represent good value to the health care system at the public list price.[4] The committee determined that there is not enough evidence to justify a greater cost for the triple combination product compared to topical therapies currently reimbursed by participating plans.[4] The CDA recommends that clindamycin/benzoyl peroxide/adapalene gel be reimbursed by public drug plans for the topical treatment of acne vulgaris in patients 12 years of age and older only if pricing for this drug can be negotiated with participating plans so that the cost of treatment does not exceed other topical therapies.[4]

National Institute For Health And Care Excellence Guideline On Acne Vulgaris: Management

NICE updated guidance for acne vulgaris management in 2023.[2] First-line treatment options with advantages and disadvantages are presented in **Table 3**. The current guidelines recommend topical benzoyl peroxide combined with topical clindamycin for mild to moderate acne, and combined topical adapalene with topical benzoyl peroxide or topical azelaic combined with oral doxycycline for moderate to severe acne.[2] Additionally, for any severity of acne, either topical adapalene combined with topical benzoyl peroxide or topical retinoids combined with topical clindamycin may be used, but antibiotic monotherapy or topical products plus oral antibiotics are not recommended. People should be offered a 12-week trial of one of the therapeutic options in **Table 3.**[2]

Table 3. National Institute for Health and Care Excellence: First-Line Recommendations for Treatment of Acne Vulgaris[2]

Acne Severity	Treatment	Advantages	Disadvantages
Any Severity	Fixed combination of topical adapalene with topical benzoyl peroxide	• Topical • Does not contain antibiotics	• Not for use during pregnancy • Use with caution during breastfeeding • Can cause skin irritation, photosensitivity, and bleaching of hair and fabrics
Any Severity	Fixed combination of topical tretinoin with topical clindamycin	• Topical	• Not for use during pregnancy or breastfeeding • Can cause skin irritation
Mild to Moderate	Fixed combination of topical benzoyl peroxide with topical clindamycin	• Topical • Can be used with caution during pregnancy and breastfeeding	• Can cause skin irritation, photosensitivity, and bleaching of hair and fabrics
Moderate to Severe	Fixed combination of topical adapalene with topical benzoyl peroxide plus oral doxycycline	• Oral components may be effective in treating affected areas that are difficult to reach with topical treatment (such as the back) • Treatment with adequate courses of standard therapy with systemic antibiotics and topical therapy is a requirement for subsequent oral tretinoin, which is only recommended for severe acne	• Not for use during pregnancy or breastfeeding or under the age of 12 years • Topical adapalene and benzoyl peroxide can cause skin irritation, photosensitivity, and bleaching of hair and fabrics • Oral antibiotics may cause systemic side effects and antimicrobial resistance • Oral tetracyclines can cause photosensitivity

Moderate to Severe	Topical azelaic acid plus oral doxycycline	• Oral components may be effective in treating affected areas that are difficult to reach with topical treatment (such as the back) • Treatment with adequate courses of standard therapy with systemic antibiotics and topical therapy is a requirement for subsequent oral tretinoin, which is only recommended for severe acne	• Not for use during pregnancy or breastfeeding or under the age of 12 years • Oral antibiotics may cause systemic side effects and antimicrobial resistance • Oral tetracyclines can cause photosensitivity

Other recommendations include:

- Consider topical benzoyl peroxide monotherapy as an alternative treatment to the options in **Table 2** if these treatments are contraindicated, or the person wishes to avoid using a topical retinoid or an antibiotic (topical or oral).[2]
- For people with moderate to severe acne who cannot tolerate or have contraindications to oral doxycycline, consider replacing these medications in the combination treatments in **Table 3** with trimethoprim, or an oral macrolide (e.g., erythromycin).[2]
- To reduce the risk of skin irritation associated with topical treatments, such as benzoyl peroxide or retinoids, start with alternate-day or short contact application (for example washing off after an hour). If tolerated, progress to using a standard, once daily application.[2]
- When discussing treatment choices in a person with childbearing potential be sure to stress that topical retinoids and oral tetracyclines are contraindicated during pregnancy and that effective contraception should be used during acne treatment with these agents.[2]
- If a person receiving treatment of acne wishes to use hormonal contraception, consider using the combined oral contraceptive pill in preference to the progesterone-only pill.[2]
- Consider oral tretinoin for people older than 12 years of age who have a severe form of acne that is resistant to adequate courses of standard therapy with systemic antibiotics and topical therapy. Severe forms of acne include: nodulo-cystic acne, acne conglobata, acne fulminans, and acne at risk of permanent scarring.[2]
- Do not use the following to treat acne: monotherapy with a topical antibiotic, monotherapy with an oral antibiotic, or a combination of an oral and topical antibiotic.[2]
- Review first-line treatments at 12 weeks and:
    - Assess whether the person's acne has improved, and whether they have any side effects.
    - In people whose treatment includes an oral antibiotic, if their acne has completely cleared consider stopping the antibiotic but continuing topical treatment.
    - In people whose treatment includes an oral antibiotic, if their acne has improved but not completely cleared, consider continuing the oral antibiotic, alongside topical treatment, for up to 12 more weeks.[2]
- If acne fails to respond adequately to a 12-week course of first-line treatment option and at review the severity is:
    - Mild to Moderate: Offer another option from the table of treatment choices.
    - Moderate to Severe: And the treatment did not include an oral antibiotic, offer another option which includes an oral antibiotic.
    - Moderate to Severe And the treatment included an oral antibiotic, consider referral to a dermatologist.[2]
- If mild to moderate acne fails to respond adequately to 2 different 12-week treatment courses, consider referral to a dermatologist.[2]

Rosacea Guidance

Update on the Management of Rosacea from the American Acne & Rosacea Society

In 2019 the AARS published rosacea management recommendations based upon available evidence and clinical experience.[6] In all cases, proper skin care, photoprotection, and avoidance of patient-specific rosacea triggers are suggested.[6] Recommendations include initial use of topical metronidazole or topical azelaic acid concurrently with oral doxycycline for treatment of severe papulopustular rosacea with transition to topical therapy alone after adequate response is achieved; topical brimonidine and topical ivermectin for treatment of papulopustular rosacea with diffuse persistent facial erythema of at least moderate severity; and combination treatment with potassium titanyl phosphate laser and topical brimonidine for diffuse persistent facial erythema of rosacea.[6] Recommendations and quality of evidence are presented in **Table 4**.

Most of the evidence was evaluated as "B" or moderate-quality, based upon systematic review/meta-analysis of lower-quality clinical trials or studies with limitations and inconsistent findings; lower-quality clinical trial. Low-quality evidence (rated as "C") was based upon consensus guidelines; usual practice, expert opinion, or case series—limited trial data. [6]

Table 4. American Acne and Rosacea Society Recommendations for Rosacea Management[6]

Rosacea Presentation	Management Options	Quality of Evidence (A, B, C)	Evidence Comments
Persistent central facial erythema without PP lesions	• Topical alpha-agonist: brimonidine or oxymetazoline • Intense pulsed light, potassium titanyl phosphate, crystal laser, or pulsed-dye laser	B	• More data are needed on optimal use of specific device therapies and topical alpha-agonist therapy in combination. • Combination of an oral and topical agent that reduces PP lesions and perilesional erythema based on severity; topical alpha-agonist used for persistent background erythema caused by fixed dilated vasculature.
Diffuse central facial erythema with PP lesions	• Topical metronidazole • Topical azelaic acid • Topical ivermectin • Oral tetracyclines • Topical alpha-agonists • Oral isotretinoin	B	• Sub-antibiotic dose doxycycline is the preferred initial oral therapy option due to absence of bacterial selection pressure. • Oral azithromycin is an alternative option if an oral tetracycline is not effective or poorly tolerated (caution in some patients due to potential cardiac risks). • Oral isotretinoin for refractory disease (transition to intermittent therapy after initial control). • Other alternative topical agents include sulfacetamide-sulfur, calcineurin inhibitors, retinoids, and permethrin (limited data available on these agents).
Flushing of rosacea (acute-subacute intermittent vasodilation)	• Flushing is better prevented than treated via avoidance of known triggers, such as sun exposure and photoprotection. • Use of low-dose oral drugs with vasoconstrictive properties, including mirtazapine, propranolol, or carvedilol.	B	• Data are limited on the management of flushing of rosacea. • Limited data exist on topical therapies. • Some botanicals and natural ingredients might improve facial redness and flushing (niacinamide, parthenolide-free extract of feverfew (*Tanacetum parthenium)*, licorice derivatives, chamomile, green tea) based on preliminary small studies. • An anti-inflammatory cleanser night mask combination was found to markedly reduce facial redness (limited data).
Ocular Rosacea	• Lid hygiene, sunglasses, eye lubrication formulations	B	• Data are based on clinical experience, case reports, and small studies • Topical corticosteroids for short-term therapy but avoid chronic use

	• Cyclosporin ophthalmic emulsion (3-month, randomized, controlled trial [n=37]) • Topical metronidazole or ivermectin (blepharitis; applied to external eyelid skin) • Oral doxycycline, erythromycin, or azithromycin		• Sub-antibiotic dose doxycycline suggested for long-term therapy
Granulomatous Rosacea	• Oral tetracyclines • Topical pimecrolimus (case reports) • Oral isotretinoin (0.7mg/kg/day for 6 months) • Oral dapsone • Intense pulsed-dye laser (case report) • Photodynamic therapy (case report) • Topical brimonidine	C	• No current standard of treatment; limited data based mostly on case reports • Oral isotretinoin may produce improvement without recurrence
Phymatous Rosacea	Surgical therapy for fully developed phymatous changes (carbon dioxide laser, erbium-doped yttrium aluminum garnet (YAG) laser, electrosurgery, dermabrasion	C	• Treatment selection dependent on stage of development (early or fibrotic) and extent of inflammation (active or burnt out) • Oral isotretinoin might improve early soft phymatous changes due to sebaceous hyperplasia
Abbreviations: PP = papulopustular			

Canada's Drug Agency: Topical Ivermectin, Oral Doxycycline 40 mg, and Topical Azelaic Acid

- In 2015, the Canadian Agency for Drugs and Technologies in Health (CADTH), now known as the CDA, issued recommendations for topical ivermectin 1% in the treatment of inflammatory rosacea lesions.[7] Two RCTs demonstrated that ivermectin 1% once daily was associated with a statistically significantly greater reduction in the number of inflammatory lesions and a statistically significantly higher success rate than vehicle-treated patients with rosacea.[7] One RCT demonstrated that ivermectin 1% was associated with a statistically significantly greater percentage reduction in the number of inflammatory lesions (−83.0% versus −73.7%) and a statistically significantly higher success rate (84.9% versus 75.4%) compared with metronidazole (0.75% cream applied twice daily); however, the clinical relevance of these differences is uncertain.[7] The CDEC recommended coverage of topical ivermectin for treatment of moderate to severe papulopustular rosacea if the drug plan cost for ivermectin did not exceed the drug plan cost of other topical rosacea treatments.[7]

- In 2013, CADTH issued recommendations for oral doxycycline monohydrate 40 mg modified-release (MR) capsules.[8] The CDEC considered the comparative benefit of doxycycline 40 mg MR capsules to be uncertain due to limitations in the design and analysis of a single RCT that compared doxycycline 40 mg MR capsules with doxycycline 100 mg capsules in adults with inflammatory lesions (papules and pustules) of rosacea.[8] For this reasons, the CDEC recommended that doxycycline 40 mg MR capsules not be reimbursed for the treatment of adults with rosacea.[8]

- In 2011 CADTH issued recommendations for topical azelaic aid 15% gel in management of papulopustular rosacea.[9] In 2 RCTs, azelaic acid 15% gel had similar efficacy compared with metronidazole as either 0.75% or 1% gel for patients with mild to moderate papulopustular rosacea in terms of reduced lesion count and IGA severity.[9] The CDEC recommended coverage of topical azelaic acid 15% gel for management of rosacea.[9]

National Institute for Health and Care Excellence: Topical Brimonidine Gel and Ivermectin

- In 2014, NICE reviewed the evidence for the use of topical brimonidine gel in management of facial erythema of rosacea.[10] In 2 short-term (4 weeks of treatment and 4 weeks of follow-up) RCTs (n=553) brimonidine tartrate gel was statistically significantly more effective than vehicle gel in reducing erythema in people with rosacea and moderate to severe erythema.[10] Success rates (defined as 2-grade reduction in severity of erythema assessed by both patients and clinicians) were just 25% to 30% with brimonidine gel compared with 10% for vehicle gel at day 29.[10] Efficacy endpoint for erythema of rosacea are not clearly established and the scales used in these clinical trials were subjective judgements, not objective measures, therefore, defining what a clinically important change on these scales is difficult.[10] The most commonly reported adverse effects with brimonidine gel included erythema, pruritus, flushing, and skin burning sensation.[10] Rosacea is a chronic condition and although brimonidine gel has a transient effect on erythema, it does not alter the course of the disease or have any effect on other features of rosacea such as telangiectasia or inflammatory papules.[10]

  NICE did not issue any recommendations for the use of brimonidine gel in rosacea but suggested that it may be an option for adults with moderate to severe rosacea and facial erythema. Specialists suggested that some people may only use brimonidine gel on days when they are particularly self-conscious about their appearance.[10] Before continuing long-term treatment with brimonidine gel, consideration should be given to how treatment efficacy can be assessed given the subjective nature of efficacy outcomes and the low response rates seen in clinical trials.[10] Specialists advised that it is important to ensure lifestyle recommendations, such as using sunscreen and avoiding triggers are optimized before initiating brimonidine gel.[10]

- In 2016, NICE reviewed evidence for the use to topical ivermectin cream in treatment of inflammatory lesions associated with papulopustular rosacea.[11] In 2 RCTs (n=1371) ivermectin cream was statistically significantly more effective than vehicle cream in improving rosacea severity score (IGA success rate [score of 0 or 1]: 39% vs. 15%) and reducing mean inflammatory lesion count (8 fewer lesions with ivermectin vs vehicle) over 4 weeks.[11] In another RCT (n=962), ivermectin was superior to metronidazole cream at reducing lesion count by 10% and improving rosacea severity score over 16 weeks (IGA success rate 85% vs. 75%, $p<0.001$).[11] There are no published studies comparing ivermectin with azelaic acid in patients with rosacea.[11] Local adverse events including skin burning sensation, skin irritation, pruritis and dry skin are common, although these are mostly transient, mild to moderate in severity and usually decrease when treatment is continued.[11]

  NICE did not issue any recommendations for ivermectin cream in managing inflammatory lesions due to rosacea but suggested that mild to moderate papulopustular rosacea is usually treated with topical metronidazole or azelaic acid with moderate or severe papulopustular rosacea often managed with oral antibiotics (i.e., tetracycline, erythromycin, doxycycline).[11] Metronidazole cream is generally considered first-line topical treatment for rosacea.[11] Azelaic acid may be more effective than metronidazole, but is often less well tolerated. Ivermectin may be slightly more effective than metronidazole with a comparable incidence of adverse events.[11] At the time of the review, ivermectin cream was more costly than metronidazole or azelaic acid, so NICE recommended that local decision makers consider the available evidence on efficacy and safety as well as cost when making decisions about using ivermectin cream or another topical agent for papulopustular rosacea.[11]

<u>Additional Guidelines for Clinical Context:</u>

American Academy of Dermatology: Guidelines Of Care For The Management Of Acne Vulgaris

Based on conflict of interest methodology, this guideline is not of high quality as over half of the work group (15/20) received grants, funding, stock options, or honoraria from pharmaceutical manufacturers.[24] Less than half of the work group (5/20 members) had no relevant relationships to disclose.[24] The AAD did not address how conflicts of interests of the guideline panel were mitigated.

The AAD updated recommendations for management of acne in 2024.[24] Strong recommendations are made for treating acne with benzoyl peroxide, topical retinoids, topical antibiotics, and oral doxycycline.[24] Oral isotretinoin is strongly recommended for acne that is severe, causing psychosocial burden or scarring, or failing standard oral or topical therapy.[24] Conditional recommendations are made for topical clascoterone, salicylic acid, and azelaic acid, as well as for oral minocycline, sarecycline, combined oral contraceptive pills, and spironolactone.[24] Combining topical therapies with multiple mechanisms of action, limiting systemic antibiotic use, combining systemic antibiotics with topical therapies, and adding intralesional corticosteroid injections for larger acne lesions are recommended as good practice statements.[24] A summary of recommendations and quality of evidence is provided in **Table 5**.

Table 5. American Academy of Dermatology Guidance for Acne Vulgaris Management in Adults, Adolescents, and Preadolescents (older than 9 years)[24]

Treatment	Strength of Recommendation	Certainty of Evidence
Topical Agents		
When managing acne with topical medications, we recommend multimodal therapy combining multiple mechanisms of action.	Good Practice Statement	N/A
For patients with acne, we recommend benzoyl peroxide.	Strong	Moderate
For patients with acne, we recommend topical retinoids.	Strong	Moderate
For patients with acne, we recommend topical antibiotics. Remark: Topical antibiotic monotherapy is not recommended.	Strong	Moderate
For patients with acne, we conditionally recommend clascoterone.	Conditional*	High
For patients with acne, we conditionally recommend salicylic acid.	Conditional	Low
For patients with acne, we conditionally recommend azelaic acid.	Conditional	Moderate
For patients with acne, we recommend fixed dose combination of topical retinoid with topical antibiotic. Remark: Concomitant use of benzoyl peroxide is recommended to prevent the development of antibiotic resistance.	Strong	Moderate
For patients with acne, we recommend fixed dose combination topical retinoid with benzoyl peroxide.	Strong	Moderate
Systemic Antibiotics		
For patients with acne, we recommend doxycycline.	Strong	Moderate
For patients with acne, we conditionally recommend minocycline.	Conditional	Moderate
For patients with acne, we conditionally recommend sarecycline	Conditional***	High
For patients with acne, we conditionally recommend doxycycline over azithromycin.	Conditional	Low
For patients with acne, we recommend limiting use of systemic antibiotics, when possible, to reduce the development of antibiotic resistance and other antibiotic associated complications.	Good Practice Statement	N/A
It is recommended that systemic antibiotics are used concomitantly with benzoyl peroxide and other topical therapy.	Good Practice Statement	N/A
Hormonal Agents		
For patients with acne, we conditionally recommend combined oral contraceptive pills.	Conditional**	Moderate
For patients with acne, we conditionally recommend spironolactone. Remark: Potassium monitoring is not needed in healthy patients. However, consider potassium testing for those with risk factors for hyperkalemia (e.g., older age, medical comorbidities, medications).	Conditional	Moderate

For patients with larger acne papules or nodules, we recommend intralesional corticosteroid injections as an adjuvant therapy. Remark: Intralesional corticosteroid injections should be used judiciously for patients who are at risk of acne scarring and/or for rapid improvement in inflammation and pain. Using a lower concentration and volume of corticosteroid can minimize the risks of local corticosteroid adverse events.	Good Practice Statement	N/A
Isotretinoin		
For patients with severe acne or for patients who have failed standard treatment with oral or topical therapy, we recommend isotretinoin. Remark: Acne patients with psychosocial burden or scarring should be considered as having severe acne and to be candidates for isotretinoin. For patients undergoing treatment with isotretinoin, monitoring of LFTs and lipids should be considered, but CBC monitoring is not needed in healthy patients. Population-based studies have not identified increased risk of neuropsychiatric conditions or inflammatory bowel disease in acne patients undergoing treatment with isotretinoin. For persons of childbearing potential, pregnancy prevention is mandatory.	Good Practice Statement	N/A
For patients with severe acne, we conditionally recommend traditional daily dosing of isotretinoin over intermittent dosing of isotretinoin.	Conditional	Low
Physical Modalities		
For patients with acne, we conditionally recommend against adding pneumatic broadband light to adapalene 0.3% gel.	Conditional	Low
*Conditional recommendations were made for clascoterone and sarecycline due to high current cost of treatment that may impact equitable acne treatment access. **Conditional recommendation was made for combined oral contraceptive pills due to the variability in patient values and preferences related to contraception and hormonal medications. ***Sarecycline is currently not available to Oregon Health Plan members due to its current marketing status as non-rebatable.		
Abbreviations: N/A = not applicable		

After review, 2 clinical guidelines were excluded due to poor quality.[36,52]

New Formulations:

- In July 2021, the FDA approved a new combination formulation of tretinoin 0.1% and benzoyl peroxide 3% (TWYNEO) cream indicated for topical treatment of acne vulgaris in adults and pediatric patients 9 years of age and older.[12] The safety and efficacy of this combination product was evaluated in 2 vehicle-controlled RCTs (n=858) conducted over 12 weeks in people 9 years and older with moderate to severe facial acne vulgaris.[12] By week 12 the absolute change in inflammatory lesion count from baseline and IGA success (defined as a score of 0 [clear] or 1 [almost clear] were statistically significantly improved with tretinoin/benzoyl peroxide compared to vehicle.[12]

- In October 2023, the FDA approved a triple combination of clindamycin phosphate 1.2%, adapalene 0.15%, and benzoyl peroxide 3.1% (CABTREO) gel indicated for the topical treatment of acne vulgaris in adults and pediatric patients aged 12 years and older.[13] The safety and efficacy of this combination product was evaluated in 2 vehicle-controlled RCTs (n=363) conducted over 12 weeks in people 10 years and older with moderate to severe facial acne vulgaris.[13] By week 12, more patients treated with clindamycin/adapalene/benzoyl peroxide achieved statistically significant improvement in lesion count and treatment success on the Evaluator's Global Severity Score (EGSS) of clear (0) or almost clear (1) compared to vehicle.[13]

- A new oral formulation of minocycline 40 mg (EMROSI) received FDA approval in November 2024.[14] This is a tetracycline-class drug indicated to treat inflammatory lesions (papules and pustules) of rosacea in adults.[14] This minocycline formulation has not been evaluated in the treatment or prevention of infections.[14] To reduce development of drug-resistant bacteria and maintain effectiveness of other antibiotics, use minocycline 40 mg only as indicated.[14] The safety and efficacy of minocycline 40 mg extended-release capsules was assessed in 2 placebo-controlled RCTs (n=653) conducted over 16 weeks in adults with moderate to severe papulopustular rosacea.[14] By week 16 the absolute change in inflammatory lesion count from baseline and IGA success (defined as a score of 0 [clear] or 1 [almost clear] were statistically significantly improved with minocycline compared to placebo.[14]

New FDA Safety Alerts:

Table 1. Description of new FDA Safety Alerts[53]

Generic Name	Brand Name	Month / Year of Change	Location of Change (Boxed Warning, Warnings, CI)	Addition or Change and Mitigation Principles (if applicable)
Adapalene/Benzoyl Peroxide	EPIDUO FORTE	4/2022	Contraindications	EPIDUO FORTE is contraindicated in patients with a history of hypersensitivity reactions to benzoyl peroxide or any components of the formulation in EPIDUO FORTE.

Randomized Controlled Trials:

A total of 43 citations were manually reviewed from the initial literature search. After further review, 43 citations were excluded because of wrong study design (e.g., observational), comparator (e.g., no control or placebo-controlled), or outcome studied (e.g., non-clinical).

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Appendix 1: Current Preferred Drug List

ROSACEA PRODUCTS

Generic	Brand	Route	Form	PDL
azelaic acid	AZELAIC ACID	TP	GEL (GRAM)	Y
brimonidine tartrate	BRIMONIDINE TARTRATE	TP	GEL W/PUMP	
benzoyl peroxide	EPSOLAY	TP	CREAM (G)	
azelaic acid	FINACEA	TP	GEL (GRAM)	Y
azelaic acid	FINACEA	TP	FOAM	N
ivermectin	IVERMECTIN	TP	CREAM (G)	N
metronidazole	METROCREAM	TP	CREAM (G)	
metronidazole	METROGEL	TP	GEL (GRAM)	
metronidazole	METRONIDAZOLE	TP	LOTION	
metronidazole	METRONIDAZOLE	TP	GEL (GRAM)	
metronidazole	METRONIDAZOLE	TP	CREAM (G)	
metronidazole	METRONIDAZOLE	TP	GEL (GRAM)	
metronidazole	METRONIDAZOLE	TP	GEL W/PUMP	N
brimonidine tartrate	MIRVASO	TP	GEL W/PUMP	
oxymetazoline HCl	RHOFADE	TP	CREAM (G)	
metronidazole	ROSADAN	TP	GEL (GRAM)	
metronidazole	ROSADAN	TP	CREAM (G)	
metronidazole/skin cleanser 23	ROSADAN	TP	KIT CL-CRM	
metronidazole/skin cleanser 23	ROSADAN	TP	KIT CL-GEL	
ivermectin	SOOLANTRA	TP	CREAM (G)	N

ACNE PRODUCTS

Generic	Brand	Route	Form	PDL	OTC
adapalene	ADAPALENE	TOPICAL	CREAM (G)	Y	F
adapalene	DIFFERIN	TOPICAL	CREAM (G)	Y	F
adapalene	ADAPALENE	TOPICAL	GEL (GRAM)	Y	F
adapalene	ADAPALENE	TOPICAL	GEL (GRAM)	Y	O
adapalene	DIFFERIN	TOPICAL	GEL (GRAM)	Y	O
adapalene	ADAPALENE	TOPICAL	GEL W/PUMP	Y	F
adapalene	DIFFERIN	TOPICAL	GEL W/PUMP	Y	F
adapalene	DIFFERIN	TOPICAL	LOTION	Y	F
adapalene/benzoyl peroxide	ADAPALENE-BENZOYL PEROXIDE	TOPICAL	GEL W/PUMP	Y	F
azelaic acid	AZELAIC ACID	TOPICAL	GEL (GRAM)	Y	F
azelaic acid	FINACEA	TOPICAL	GEL (GRAM)	Y	F
benzoyl peroxide	BENZOYL PEROXIDE	TOPICAL	CLEANSER	Y	O
benzoyl peroxide	PANOXYL	TOPICAL	CLEANSER	Y	O
benzoyl peroxide	ACNE MEDICATION	TOPICAL	GEL (GRAM)	Y	O

benzoyl peroxide	BENZAC W 10	TOPICAL	GEL (GRAM)	Y	F
benzoyl peroxide	BENZAC W 2.5	TOPICAL	GEL (GRAM)	Y	F
benzoyl peroxide	BENZAC W 5	TOPICAL	GEL (GRAM)	Y	F
benzoyl peroxide	BENZOYL PEROXIDE	TOPICAL	GEL (GRAM)	Y	O
benzoyl peroxide	ACNE MEDICATION	TOPICAL	LOTION	Y	O
benzoyl peroxide	BENZOYL PEROXIDE	TOPICAL	LOTION	Y	O
clindamycin phos/benzoyl perox	CLINDAMYCIN PHOS-BENZOYL PEROX	TOPICAL	GEL (GRAM)	Y	F
clindamycin phos/benzoyl perox	CLINDAMYCIN-BENZOYL PEROXIDE	TOPICAL	GEL (GRAM)	Y	F
clindamycin phos/benzoyl perox	NEUAC	TOPICAL	GEL (GRAM)	Y	F
clindamycin phos/benzoyl perox	CLINDAMYCIN PHOS-BENZOYL PEROX	TOPICAL	GEL W/PUMP	Y	F
clindamycin phos/benzoyl perox	CLINDAMYCIN-BENZOYL PEROXIDE	TOPICAL	GEL W/PUMP	Y	F
clindamycin phosphate	CLINDACIN	TOPICAL	FOAM	Y	F
clindamycin phosphate	CLINDAMYCIN PHOSPHATE	TOPICAL	FOAM	Y	F
clindamycin phosphate	CLINDAMYCIN PHOSPHATE	TOPICAL	GEL (GRAM)	Y	F
clindamycin phosphate	CLEOCIN T	TOPICAL	LOTION	Y	F
clindamycin phosphate	CLINDAMYCIN PHOSPHATE	TOPICAL	LOTION	Y	F
clindamycin phosphate	CLINDACIN ETZ	TOPICAL	MED. SWAB	Y	F
clindamycin phosphate	CLINDACIN P	TOPICAL	MED. SWAB	Y	F
clindamycin phosphate	CLINDAMYCIN PHOSPHATE	TOPICAL	MED. SWAB	Y	F
clindamycin phosphate	CLINDAMYCIN PHOSPHATE	TOPICAL	SOLUTION	Y	F
clindamycin/tretinoin	CLINDAMYCIN PHOS-TRETINOIN	TOPICAL	GEL (GRAM)	Y	F
dapsone	DAPSONE	TOPICAL	GEL (GRAM)	Y	F
erythromycin base in ethanol	ERYTHROMYCIN	TOPICAL	GEL (GRAM)	Y	F
erythromycin base in ethanol	ERY	TOPICAL	MED. SWAB	Y	F
erythromycin base in ethanol	ERYTHROMYCIN	TOPICAL	SOLUTION	Y	F
erythromycin/benzoyl peroxide	ERYTHROMYCIN-BENZOYL PEROXIDE	TOPICAL	GEL (GRAM)	Y	F
isotretinoin	ABSORICA	ORAL	CAPSULE	Y	F
isotretinoin	AMNESTEEM	ORAL	CAPSULE	Y	F
isotretinoin	CLARAVIS	ORAL	CAPSULE	Y	F
isotretinoin	ISOTRETINOIN	ORAL	CAPSULE	Y	F
isotretinoin	ZENATANE	ORAL	CAPSULE	Y	F
sulfacetamide sodium	SULFACETAMIDE SODIUM	TOPICAL	SUSPENSION	Y	F
tretinoin	TRETINOIN	TOPICAL	CREAM (G)	Y	F
tretinoin	TRETINOIN	TOPICAL	GEL (GRAM)	Y	F
adapalene/benzoyl peroxide	ADAPALENE-BENZOYL PEROXIDE	TOPICAL	GEL W/PUMP	N	F
adapalene/benzoyl peroxide	EPIDUO FORTE	TOPICAL	GEL W/PUMP	N	F
azelaic acid	FINEVIN	TOPICAL	CREAM (G)	N	F
azelaic acid	FINACEA	TOPICAL	FOAM	N	F
benzoyl peroxide	BENZOYL PEROXIDE	TOPICAL	CLEANSER	N	O
benzoyl peroxide	BPO	TOPICAL	TOWELETTE	N	O

clascoterone	WINLEVI	TOPICAL	CREAM (G)	N	F
clindamycin phos/benzoyl perox	CLINDAMYCIN-BENZOYL PEROXIDE	TOPICAL	GEL W/PUMP	N	F
clindamycin phos/skin clnsr 19	CLINDACIN ETZ	TOPICAL	KIT	N	F
clindamycin phos/skin clnsr 19	CLINDACIN PAC	TOPICAL	KIT	N	F
clindamycin phosphate	CLINDAMYCIN PHOSPHATE	TOPICAL	GEL DAILY	N	F
clindamycin/benzoyl/emol cmb94	NEUAC	TOPICAL	CMB CR GEL	N	F
dapsone	DAPSONE	TOPICAL	GEL (GRAM)	N	F
dapsone	DAPSONE	TOPICAL	GEL W/PUMP	N	F
isotretinoin	ABSORICA	ORAL	CAPSULE	N	F
isotretinoin	ISOTRETINOIN	ORAL	CAPSULE	N	F
isotretinoin, micronized	ABSORICA LD	ORAL	CAPSULE	N	F
tazarotene	FABIOR	TOPICAL	FOAM	N	F
tazarotene	TAZAROTENE	TOPICAL	FOAM	N	F
tretinoin microspheres	TRETINOIN MICROSPHERE	TOPICAL	GEL W/PUMP	N	F
tretinoin/benzoyl peroxide	TWYNEO	TOPICAL	CREAM (G)	N	F
trifarotene	AKLIEF	TOPICAL	CREAM (G)	N	F
benzoyl peroxide	EPSOLAY	TOPICAL	CREAM (G)		F
salicylic acid	DERMACINRX ATRIX	TOPICAL	LIQUID		O

ORAL TETRACYCLINES

Generic	Brand	Route	Form	PDL
doxycycline hyclate	DOXYCYCLINE HYCLATE	ORAL	CAPSULE	Y
doxycycline monohydrate	DOXYCYCLINE MONOHYDRATE	ORAL	CAPSULE	Y
doxycycline hyclate	ED DOXY-CAPS	ORAL	CAPSULE	Y
doxycycline hyclate	MORGIDOX	ORAL	CAPSULE	Y
tetracycline HCl	TETRACYCLINE HCL	ORAL	CAPSULE	Y
doxycycline hyclate	VIBRAMYCIN	ORAL	CAPSULE	Y
doxycycline monohydrate	DOXYCYCLINE MONOHYDRATE	ORAL	SUSP RECON	Y
doxycycline hyclate	DOXYCYCLINE HYCLATE	ORAL	TABLET	Y
doxycycline hyclate	LYMEPAK	ORAL	TABLET	Y
doxycycline monohydrate	DOXYCYCLINE IR-DR	ORAL	CAP IR DR	N
doxycycline monohydrate	ORACEA	ORAL	CAP IR DR	N
doxycycline monohydrate	DOXYCYCLINE MONOHYDRATE	ORAL	CAPSULE	N
minocycline HCl	MINOCYCLINE HCL	ORAL	CAPSULE	N
minocycline HCl	MINOCYCLINE HCL ER	ORAL	TAB ER 24H	N
doxycycline hyclate	DOXYCYCLINE HYCLATE	ORAL	TABLET	N
doxycycline monohydrate	DOXYCYCLINE MONOHYDRATE	ORAL	TABLET	N
minocycline HCl	MINOCYCLINE HCL	ORAL	TABLET	N
omadacycline tosylate	NUZYRA	ORAL	TABLET	N

doxycycline hyclate	DORYX	ORAL	TABLET DR	N
doxycycline hyclate	DORYX MPC	ORAL	TABLET DR	N
doxycycline hyclate	DOXYCYCLINE HYCLATE	ORAL	TABLET DR	N
demeclocycline HCl	DEMECLOCYCLINE HCL	ORAL	TABLET	
tetracycline HCl	TETRACYCLINE HCL	ORAL	TABLET	

Appendix 2: Medline Search Strategy

Ovid MEDLINE(R) ALL <1946 to January 14, 2026>

1	Rosacea/	3614
2	Acne Vulgaris/	14547
3	Acne Conglobata/	27
4	Acne Fulminans.mp.	226
5	1 or 2 or 3 or 4	17841
6	Adapalene/	473
7	Adapalene, Benzoyl Peroxide Drug Combination/	26
8	azelaic acid.mp. or Dicarboxylic Acids/	4794
9	Benzoyl Peroxide/	1250
10	exp Clindamycin/	6406
11	Metronidazole/	14440
12	Anti-Bacterial Agents/ or Erythromycin/	464232
13	Sulfacetamide/	356
14	10 or 11 or 12 or 13	476497
15	Administration, Topical/	42104
16	14 and 15	3317
17	Tretinoin/	24322
18	tazarotene.mp. or Retinoids/	7146
19	trifarotene.mp.	77
20	clascoterone.mp.	79
21	Brimonidine Tartrate/	1640
22	Ivermectin/	8397
23	Oxymetazoline/	725
24	6 or 7 or 8 or 9 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23	50093
25	5 and 24	2462
26	limit 25 to (english language and humans and yr="2021 -Current")	300
27	limit 26 to (clinical trial, phase iii or comparative study or guideline or meta-analysis or "systematic review")	43

Appendix 3: Key Inclusion Criteria

Population	Adults and children with acne conglobata, acne fulminans, severe acne vulgaris, or rosacea
Intervention	Acne: Topical acne therapies and oral tetracyclines (see **Appendix 1**) Rosacea: topical metronidazole, azelaic acid, ivermectin, brimonidine, and oxymetazoline and oral tetracyclines
Comparator	Placebo or active treatment
Outcomes	Lesion reduction, improved symptoms, adverse reactions
Timing	12 weeks
Setting	Outpatient Therapy

Acne and Rosacea Medications

Goal(s):
- Ensure that medications for acne and rosacea are used appropriately for FDA-approved conditions for adults and children.
- Allow case-by-case review for members covered under the EPSDT program.

Length of Authorization:
- Up to 12 months

Requires PA:
- All non-preferred drugs in the Acne and Rosacea medications class

Covered Alternatives:
- Current PMPDP preferred drug list per OAR 410-121-0030 at www.orpdl.org
- Searchable site for Oregon FFS Drug Class listed at www.orpdl.org/drugs/

Approval Criteria		
1. What diagnosis is being treated?	Record ICD10 code.	
2. Is the request for an FDA-approved age and indication?	**Yes**: Go to #3	**No:** Pass to RPh. Deny; medical appropriateness
3. Is this a request for continuation of therapy previously approved by the FFS program?	**Yes:** Go to **Renewal Criteria**	**No:** Go to #4
4. Is the diagnosis funded by OHP? HERC guideline notes 65 and 132 describe funding status based on disease severity: https://www.oregon.gov/oha/HPA/DSI-HERC/SearchablePLdocuments//Prioritized-List-GN-132.docx https://www.oregon.gov/oha/HPA/DSI-HERC/SearchablePLdocuments//Prioritized-List-GN-065.docx	**Yes:** Go to #6	**No:** If not eligible for EPSDT review: Pass to RPh. Deny; not funded by the OHP If eligible for EPSDT review: Go to #5.

Approval Criteria		
5. Is there documentation that the condition is of sufficient severity that it impacts the patient's health (e.g., quality of life, function, growth, development, ability to participate in school, perform activities of daily living, etc.)?	**Yes:** Go to #6	**No:** Pass to RPh. Deny; medical necessity.
6. Is the request for a preferred product OR has the patient failed to have benefit with, or have contraindications or intolerance to, at least 2 preferred products for at least 12 weeks? Message: Preferred products are evidence-based reviewed for comparative effectiveness and safety by the Oregon Pharmacy & Therapeutics Committee.	**Yes:** Go to #7	**No:** Pass to RPh. Deny; medical appropriateness. Inform prescriber of covered alternatives in class and process appropriate PA.
7. Has a baseline assessment of acne or rosacea severity been documented using one of the following metrics: • Number of inflammatory lesions • Severity of acne or rosacea using Investigator's Global Assessment (IGA) as clear, almost clear, mild, moderate, or severe, or very severe or other assessment tool? • Patient's perception of quality of life using the Dermatology Life Quality Index (DLQI), Children's Dermatology Life Quality Index (CDLQI), or other assessment tool?	**Yes:** Approve for up to 12 months Document baseline assessment: _____	**No:** Pass to RPh. Deny; medical appropriateness.

Renewal Criteria		
1. Is the request to renew therapy for management of acne or rosacea?	**Yes:** Go to #2	**No:** Pass to RPh. Deny; medical appropriateness.

Renewal Criteria		
2. Have the patient's symptoms improved after using therapy as directed? • Reduction in inflammatory lesion count • At least 2-point improvement on the Investigators' Global Assessment score or a score of 0 (clear) or 1 (almost clear). • At least a 4-point reduction in the Dermatology Life Quality Index (DLQI) or Children's Dermatology Life Quality Index (CDLQI) from when treatment started. • Documented improvement using another assessment tool	**Yes**: Approve for 12 months	**No:** Pass to RPh. Deny; medical appropriateness

P&T/DUR Review: 4/26 (DM); 12/22; 02/21 (SF); 06/20; 11/18
Implementation: TBD; 1/1/23; 7/1/20; 1/1/1

Tetracyclines (Oral)-Quantity Limit

Goal(s):
- Restrict use of oral tetracyclines to OHP-funded diagnoses in adults. Allow case-by-case review for members covered under the EPSDT program.
- Prevent inappropriate use beyond two, 14-day supplies within a 3-month time period
- Approve long-term use only for indications supported by the medical literature.

Length of Authorization:
- Up to 12 months

Requires PA:
- Long-term use of oral tetracyclines beyond two, 14-day supplies in a 3-month timeframe

Covered Alternatives:
- Current PMPDP preferred drug list per OAR 410-121-0030 at www.orpdl.org
- Searchable site for Oregon FFS Drug Class listed at www.orpdl.org/drugs/

Approval Criteria		
1. What diagnosis is being treated?	Record ICD10 code	
2. Is this a request for continuation of therapy previously approved by the FFS program?	**Yes:** Go to **Renewal Criteria**	**No:** Go to #3
3. Is the request for an FDA-approved indication?	**Yes**: Go to #4	**No:** Pass to RPh. If clinic provides supporting literature: Go to #4 If not supported by literature: Deny; medical appropriateness
4. Is this an OHP-funded diagnosis?	**Yes**: Go to #5	**No:** If not eligible for EPSDT review: Pass to RPh. Deny; not funded by the OHP If eligible for EPSDT review: Go to #7.
5. Is the requested agent a preferred product?	**Yes:** Approve for duration of prescription or up to 6 months, whichever is less.	**No:** Go to #6
6. Will the prescriber consider a change to a preferred product? Message: Preferred products are evidence-based and reviewed for comparative effectiveness and safety by the P&T Committee.	**Yes**: Inform prescriber of covered alternatives in class.	**No**: Approve until anticipated formal review by the P&T committee, for 6 months, or for length of the prescription, whichever is less.
7. Is there documentation that the condition is of sufficient severity that it impacts the patient's health (e.g., quality of life, function, growth, development, ability to participate in school, perform activities of daily living, etc)?	**Yes:** Go to #8	**No:** Pass to RPh. Deny; medical necessity.

Approval Criteria		
8. Is the request for a preferred product OR has the patient failed to have benefit with, or have contraindications or intolerance to, at least 2 preferred products? Message: Preferred products are evidence-based reviewed for comparative effectiveness and safety by the Oregon Pharmacy & Therapeutics Committee.	**Yes:** Go to #9	**No:** Pass to RPh. Deny; medical appropriateness. Inform prescriber of covered alternatives in class and process appropriate PA.
9. Is the request for treatment of moderate to severe acne or rosacea?	**Yes:** Go to #10	**No:** Approve for duration of prescription or up to 6 months, whichever is less.
10. Has a baseline assessment of acne or rosacea severity been documented using one of the following metrics: • Number of inflammatory lesions • Severity of acne or rosacea using Investigator's Global Assessment (IGA) as clear, almost clear, mild, moderate, or severe, or very severe or other assessment tool? • Patient's perception of quality of life using the Dermatology Life Quality Index (DLQI), Children's Dermatology Life Quality Index (CDLQI), or other assessment tool?	**Yes:** Approve for up to 12 weeks Document baseline assessment:_____	**No:** Pass to RPh. Deny; medical appropriateness.

Renewal Criteria		
1. Is the request to renew therapy for acne or rosacea?	**Yes:** Go to #2	**No:** Pass to RPh. Deny; medical appropriateness.

Renewal Criteria		
2. Have the patient's symptoms improved after using therapy as directed? • Reduction in inflammatory lesion count • At least 2-point improvement on the Investigators' Global Assessment score or a score of 0 (clear) or 1 (almost clear). • At least a 4-point reduction in the Dermatology Life Quality Index (DLQI) or Children's Dermatology Life Quality Index (CDLQI) from when treatment started. • Documented improvement using another assessment tool.	**Yes**: Approve for up to 12 weeks	**No:** Pass to RPh. Deny; medical appropriateness

P&T / DUR Review: *4/26 DM); 12/22; 5/17 (MH)*
Implementation: *TBD; 1/1/23; 7/1/17*