

Acne Pearls

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Outline

- Chronic disease
 - Guidelines are just guidelines
 - Isotretinoin – go to earlier
 - Have a maintenance plan
 - Spironolactone – younger and younger
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- **Listen**
 - **Latest pearl after listening to a friend**

See Acne as a Chronic Disease

- According to its clinical characteristics...
 - Acne can be defined as a chronic disease according to the **World Health Organization** criteria
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- Zouboulis C, Clin Dermatol. 2014 May-Jun;32(3):389-96

Guidelines of care for the management of acne vulgaris

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Background: Acne vulgaris commonly affects adults, adolescents, and preadolescents aged 9 years or older.

Objective: The objective of this study was to provide evidence-based recommendations for the management of acne.

Methods: A work group conducted a systematic review and applied the Grading of Recommendations, Assessment, Development, and Evaluation approach for assessing the certainty of evidence and formulating and grading recommendations.

Results: This guideline presents 18 evidence-based recommendations and 5 good practice statements. Strong recommendations are made for benzoyl peroxide, topical retinoids, topical antibiotics, and oral doxycycline. Oral isotretinoin is strongly recommended for acne that is severe, causing psychosocial burden or scarring, or failing standard oral or topical therapy. 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. 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.

Limitations: Analysis is based on the best available evidence at the time of the systematic review.

Conclusions: These guidelines provide evidence-based recommendations for the management of acne vulgaris. (J Am Acad Dermatol <https://doi.org/10.1016/j.jaad.2023.12.017>.)

Key words: Acne; acne vulgaris; adapalene; antiandrogens; antibiotics; azelaic acid; azithromycin; benzoyl peroxide; clascoterone; clindamycin; contraceptives; corticosteroids; *Cutibacterium acnes*; diet and acne; doxycycline; erythromycin; grading and classification of acne; guidelines; hormonal therapy; isotretinoin; light therapies; microbiological and endocrine testing; minocycline; retinoids; salicylic acid; sarecycline; spironolactone; tazarotene; treatment; tretinoin; trifarotene.

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Note: The "Executive summary: Guidelines of care for the management of acne vulgaris" is available as supplementary material.

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Reynolds RV, Yeung H, Cheng CE, Cook-Bolden F, Desai SR, Druby KM, Freeman EE, Keri JE, Stein Gold LF, Tan JKL, Tollefson MM, Weiss JS, Wu PA, Zaenglein AL, Han JM, Barbieri JS.

J Am Acad Dermatol. 2024 May;90(5):1006.e1-1006.e30. doi: 10.1016/j.jaad.2023.12.017. Epub 2024 Jan 30.

Isotretinoin

- Start Treatment Earlier
- I never tell patients it is a cure or a one-time treatment
- Use until at least no acne for 2 months¹
- Go to higher cumulative doses if possible 150mg-220mg/kg, even 290mg/kg²

• ¹Fallah, H, et al. Int J Dermatol. 2021 Apr;60(4):451-460.

• ²Cyrulnik AA, et al. Int J Dermatol. 2012 Sep;51(9):1123-30.

Isotretinoin Relapse – Anything New?

- 288 patients
- 67 (23.3%) relapse - needed prescription acne treatment including
 - 29 (10.1%) who received Isotretinoin
- Increased risk of relapse in patients who were:
 - Female(odds ratio [OR] = 2.81, P = .01)
 - Black or African American (OR = 6.60, P < .01)
 - Longer treatment duration (OR = 1.70, P = .01)
- The risk of relapse decreased with a higher average daily dose by weight (mg/kg/day) in the last 2 months of treatment (OR = 0.21, P = .03)
- Summers EG, Nguyen N, and Morrell D. Risk factors for acne relapse and isotretinoin retreatment after initial treatment of acne vulgaris with high-dose isotretinoin: A retrospective cohort study J Am Acad Dermatol. 2026 Jan;94(1):256-258.

Strong Finish?

- Providers should consider a “strong finish” (2 mg/kg/day) daily in the final 2 months of treatment.

Summers EG, Nguyen N, and Morrell D. Risk factors for acne relapse and isotretinoin retreatment after initial treatment of acne vulgaris with high-dose isotretinoin: A retrospective cohort study *J Am Acad Dermatol*. 2026 Jan;94(1):256-258.

Maintenance

Maintenance after Isotretinoin

- Adapalene/Benzoyl Peroxide – after isotretinoin¹
- Adapalene/Benzoyl Peroxide short contact – after isotretinoin²
- Tazarotene – after isotretinoin³

- 1 Bettoli V, Borghi A, Zauli et al. *Dermatology*. 2013;227(2):97-102.
- 2 Niesert AC, Guertler A, Reinholz M. *Dermatol Ther*. 2022 Apr;35(4):e15318.
- 3 Miranti SM. *J Clin Aesthet Dermatol*. 2024 Nov-Dec;17(11-12 Suppl 1):S14-S17.

Maintenance after Oral Antibiotics

- Tazarotene - after 12 weeks of minocycline¹
- Adapalene/Benzoyl Peroxide combination produce – after Doxycycline²
- Dapsone gel - after Doxycycline³

• ¹Leyden and Thiboutot, *Arch Dermatol*, 2006; 142(5), 605-612

• ²Tan et.al. *J.Drugs Derm.* 2012;11: 174-180

• ³Kircik LH. *J Drugs Dermatol.* 2016 Feb 1;15(2):191-5.

Use Maintenance Therapies to Prevent Relapses

Who relapses?

- The risk of relapse was 3.5 times higher among women not receiving antiandrogen therapy.

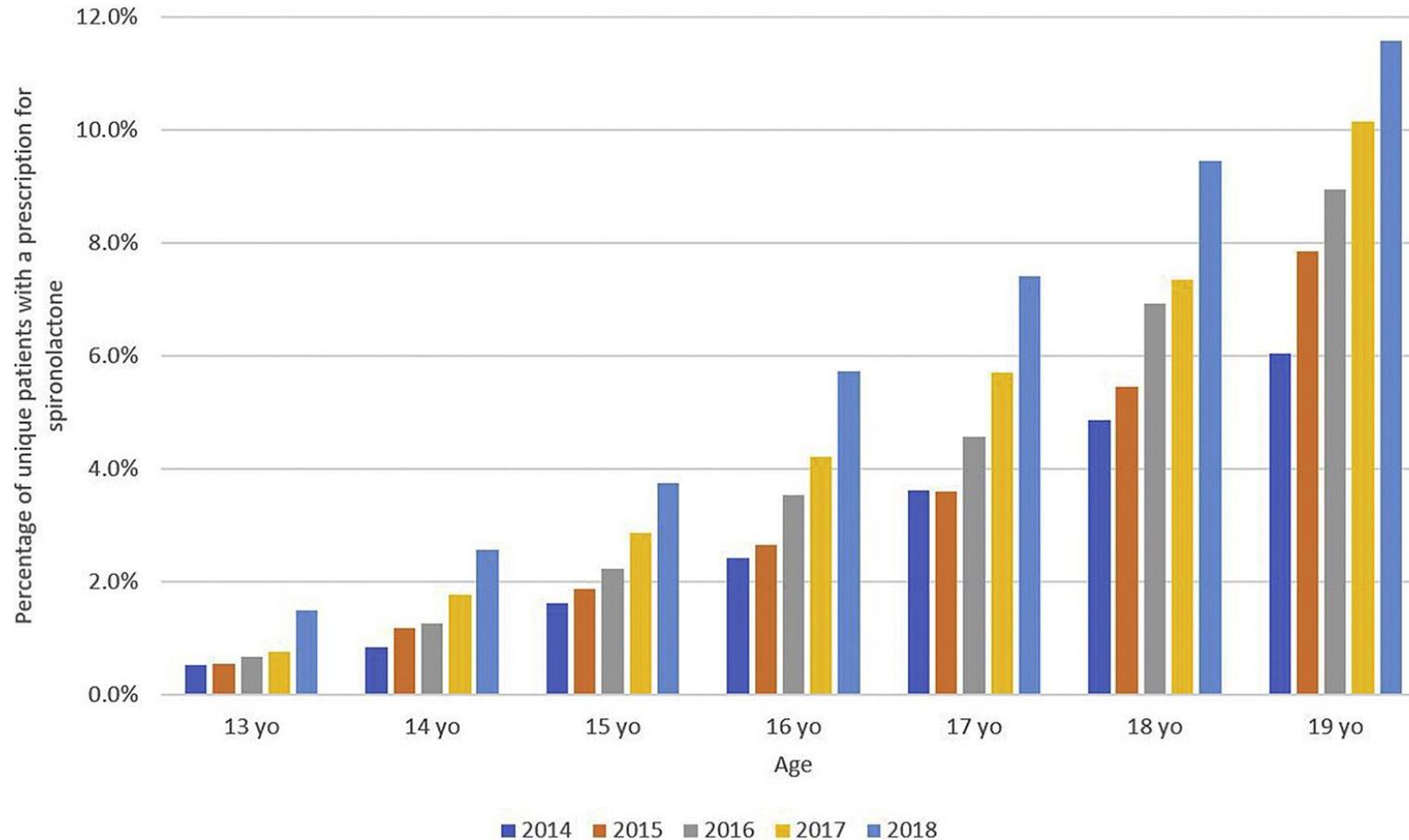
- Morales-Cardona CA, Sánchez-Vanegas G. Actas Dermosifiliogr. 2013 Jan;104(1):61-6.

Spirolactone

- Who to treat
 - Females with resistant acne not responding to other therapies
- When
 - As young as 12
- How much
 - 25-200mg/day
- How long
 - Long term, but I do start higher and WEAN to lowest does to keep clear
- Same time as Isotretinoin?
 - Yes, but I usually do at the end as MAINTENANCE
 - But I don't stop if on it at the beginning

Spironolactone Prescribing in Adolescents

Horissian M,
Maczuga S,
Barbieri JS,
Zaenglein A.
Trends in the
prescribing
pattern of
spironolactone
for acne and
hidradenitis
suppurativa in
adolescents. J
Am Acad
Dermatol. 2022
Sep;87(3):684-
686.



Spironolactone for ages 12-16?

- Consensus statement on the safety of contraceptive and spironolactone use in girls aged 12-16 within the next year
- PeDRA funded study
- **Preview:**
- Can be from age 12 up
- Should be at least 2 years after menarche

Spironolactone in Adolescent Females

- Safe for adolescents but doesn't work in everyone 
- Eighty patients (80) with a median age of 19 years (range, 14-20 years)
- Patients received spironolactone for a median duration of 7 months (range, 3-45 months), and the mean follow-up time was 16 months.
- The median dose of spironolactone was 100 mg daily (range, 25-200 mg).
- Approximately **15%-25% of pediatric patients with grade 3 to 4 acne had no response to spironolactone**
- **Small number of** pediatric patients (3.8%) had side effects from spironolactone and discontinued therapy (rash, breast tenderness, diarrhea, and headache)
- Roberts EE, Nowsheen S, Davis DMR, Hand JL, Tollefson MM, Wetter DA. Use of spironolactone to treat acne in adolescent females. *Pediatr Dermatol.* 2020 Oct 3.

Practical Pearls



GLP-1 RA Drug Interactions

- Some GLP-1 RA make combined oral contraceptives less effective 
- Product insert on:
- Tirzepatide (Mounjaro, Zepbound)

GLP-1 RA Drug Interactions

- Needs to be considered for patients using combined oral contraceptives on isotretinoin¹
- Data suggest roughly a third of individuals don't follow the pregnancy prevention recommendations²
- Increased rate of unassisted pregnancy in individuals with PCOS taking GLP1RAs compared to controls³

• ¹Zhu H, Hipp HS, W Blalock T.J *Drugs Dermatol.* 2025 Jun 1;24(6):638.

• ²Collins MK, et al. *J Am Acad Dermatol.* 2014;70(1):55-9.

• ³Zhou L, Qu H, et al. *BMC Endocr Disord.* 2023;23(1):245.

GLP-1 RA Drug Interactions

- No data on how many patients on GLP-1 RA and isotretinoin
- Consider having the patient hold the GLP-1
- Consider having the patient use another form of contraception, such as an IUD
- Counsel on need for 2 forms contraception, including importance of condom usage
 - **Manufacturer recommends using barrier contraception for 4 weeks after either the initiation or a dosage increase, or to switch to a non-oral contraception.**

Climate and Acne?

- Increase rate of sebum production with increased temperature¹
 - Increased visits for acne after wildfire air pollution²
-
- ¹Williams M., Cunliffe W.J., Williamson B., et al.: The effect of local temperature changes on sebum excretion rate and forehead surface lipid composition . Br J Dermatol 1973; 88 (3): pp. 257-262.
 - ²Ha A, GB, Fadadu R, et al. Increased clinic visits for acne vulgaris and variants are associated with short-term exposure to wildfire air pollution. American Academy of Dermatology Conference. March 7-11, 2025. Orlando (FL).
-
- Above reviewed in: Fernandez K, Zhong X, Belzer A, Wei ML. Climatic Factors and Inflammatory Skin Disorders. Dermatol Clin. 2026 Jan;44(1):1-25

Benzoyl Peroxide and Benzene Issue?

- Editorials^{1,2}
 - Keep Benzoyl Peroxide Cool (refrigerator)¹
 - Wear sunscreen on areas where Benzoyl Peroxide is applied¹
 - May want to document discussion²
-
- ¹Czyz S, Yang K, and Jafarian F. Benzoyl Peroxide in Acne Treatment: Balancing Efficacy and Emerging Safety Considerations. J Cutan Med Surg 2026; 22:12034754251411871 2026.
 - ²Barnawi G, Nukaly H, Lazarowitz R, Aldien AS, Awad E, Lipner SR. Safety and Legal Implications of Benzoyl Peroxide Prescriptions in Dermatology: Analysis of Legal Precedents. J Cutan Med Surg. 2026 Jan 21:12034754251410186.
-
- Veenstra J, Ozog D., and Stephens A. Response to Bunick et al, "Response to Veenstra et al's 'Benzoyl peroxide acne treatment shows no significant association with benzene-related cancers: A multicenter retrospective analysis' on statistical design". J Am Acad Dermatol. 2026 Feb;94(2):e129-e130.
 - Bunick CG, Yang K, Jafarian F, Barbieri JS. Response to Veenstra et al's "Benzoyl peroxide acne treatment shows no significant association with benzene-related cancers: A multicenter retrospective analysis" on statistical design. J Am Acad Dermatol. 2026 Feb;94(2):e125-e127.

THANK YOU!