



ACNE

The Most Common Skin Condition in the U.S.

What is acne?

- » Acne is a common chronic inflammatory skin condition resulting from hair follicles being blocked with bacteria, oil or dead skin cells.^{1,2}
- » It appears on the face, neck, chest, back and shoulders.1
- » The condition can scar the skin and cause emotional distress such as poor self-image, depression and anxiety.³

Who is affected by acne?

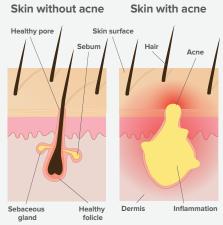
- » Up to 50 million Americans suffer from acne.3
- » Acne is the most common skin condition in the U.S., and while it is more common in teenagers, studies show an increase in post-adolescent acne and that people receive treatment for the disease well into their mid 40s.^{3,4}
- » It is estimated that acne affects 79% to 95% of adolescents and 40% to 54% of men and women older than 25 years. $^{\rm 5}$

How is acne diagnosed?

- » Acne severity is determined by the number and types of lesions present and body areas affected.
- » There is no universal system for classifying severity.6

How is acne treated?

- » The standard of care for moderate-to-severe acne are oral antibiotics such as minocycline, tetracycline and doxycycline^{2,3} or a combination of oral antibiotics and topical treatments.^{3,7}
- » Common topical treatments for acne include benzoyl peroxide, antibiotics, retinoids and salicyclic acid.³
- Mayo Clinic, Disease and conditions. Acne. 2015. http://www.mayoclinic.org/diseases-conditions/acne/basics/definition/con-20020580. Accessed April 21, 2017.
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- 3. American Academy of Dermatology. Acne. https://www.aad.org/media/stats/conditions. Accessed April 21, 2017.
- 4. Knaggs, H.E., Wood, E.J., Rizer, R.L., Mills, O.H. (2004). Post-adolescent acne. International Journal of Cosmetic Science. 26(3):129-38.
- 5. Cordain, L. et al. (2002). Acne Vulgaris: A Disease of Western Civilization. Arch Dermatol. 138: 1584-1590.
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- American Academy of Dermatology. Guidelines of care for the management of acne vulgaris. 2016.
- 8. Swanson, J.K. (2003). Antibiotic resistance of Propionibacterium acnes in acne vulgaris. *Dermatology Nursing*. 15(4):359-62.



Why is a new acne therapy needed?

- » Oral antibiotics are effective but have associated systemic exposure and side effects including dizziness, nausea and diarrhea.
- » Therapy with oral antibiotics can continue for years and this long-term treatment can lead to antibiotic resistance.8
- » Current topical treatments are typically less effective than oral treatments and present other side effects such as rashes, skin irritation and flaking.
- » A therapeutic solution that delivers low doses of effective antibiotic to a concentrated area is needed to minimize systemic exposure, unwanted side effects and the potential for systemic antibiotic resistance.