

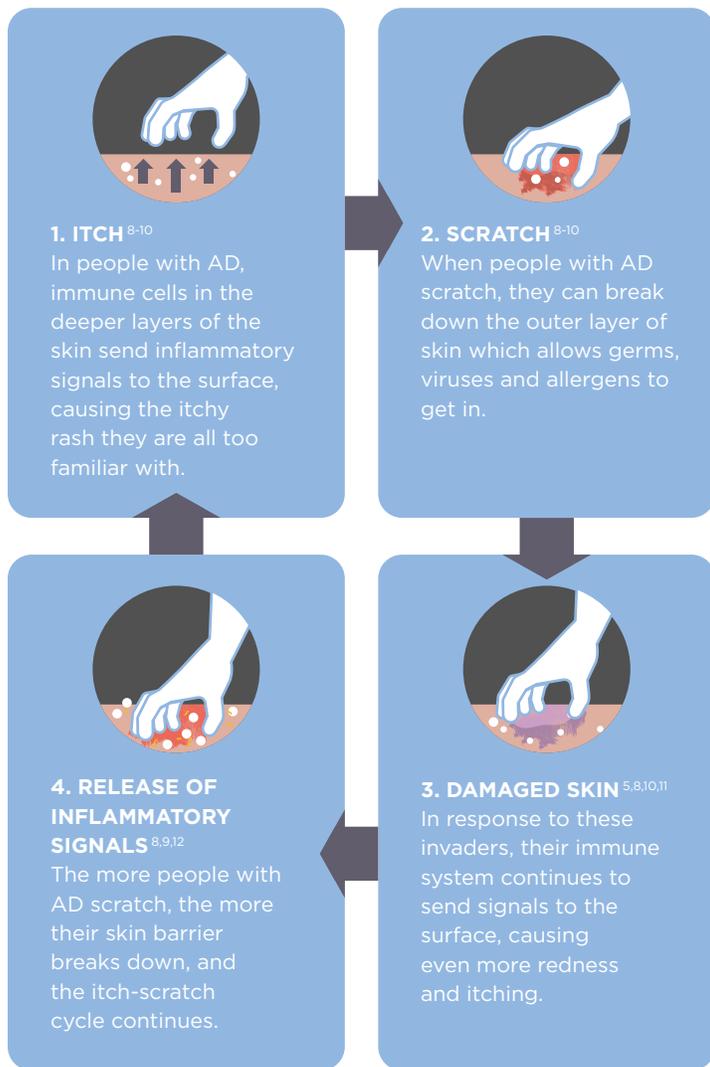
UNDERSTANDING ATOPIC DERMATITIS (AD)

Atopic dermatitis (AD), a form of eczema, is a chronic inflammatory disease with symptoms often appearing as a rash on the skin.¹⁻⁴

Caused, in part, by an underlying inflammation in the body that is believed to be driven by an overactive immune system,³ AD is a complex, systemic disease that has a significant physical and psychological impact.^{5,6}

Science Beneath the Skin⁷

Rashes are just the visible signs of what's going on much deeper underneath the skin. Even when skin looks clear, inflammation is still active under the surface.



Physical Symptoms⁸

- ▶ The rashes that characterize moderate-to-severe AD often cover much of the body, and can include intense, persistent itching and skin dryness, cracking, redness, crusting, and oozing.

Disease Impact¹³⁻¹⁶

- ▶ People with inadequately controlled moderate-to-severe AD experience debilitating symptoms despite available treatment options.
- ▶ Inadequately controlled AD can take control of people's lives, causing sleep disturbance, symptoms of anxiety and depression and feelings of isolation.
- ▶ Many people with moderate-to-severe AD feel that the disease negatively impacts all aspects of their life and influences important life decisions, both socially and professionally.

Did you know?^{5,13,17}

- ▶ During an exacerbation, people with AD report that 10% of their working time is affected.
- ▶ As of today, AD is an incurable, chronic disease that can place a heavy burden on families, health systems and society.
- ▶ Driven by underlying inflammation, AD starts from within the immune system and is commonly associated with other inflammatory conditions.

Regeneron and Sanofi are committed to investigating new approaches that address unmet medical needs in inflammatory and immunological diseases.

¹ Schneider et al, AAAI 2013, Practice Parameter Update, page 296. ² Eichenfield et al, AAD 2014, Guidelines of Care for Atopic Dermatitis, page 118. ³ European Dermatology Forum, Guidelines to treatment. <http://www.euroderm.org/edf/index.php/edf-guidelines/category/5-guidelines-miscellaneous?download=36:guideline-treatment-of-atopic-eczema-atopic-dermatitis>. Accessed December 23, 2016. ⁴ Gelmetti and Wolleberg, BJD 2014, Atopic dermatitis- all you can do from the outside. Page 19. ⁵ Leung D.Y.M, Nicklas R and Li J "Disease management of atopic dermatitis: an updated practice parameter. Joint Task Force on Practice Parameters." Ann Allergy Asthma Immunol, pp. 93(3 Suppl 2):S1-21, 2004. ⁶ Carroll C.L., et al. "The burden of atopic dermatitis: Impact on the Patient, family, and Society." Pediatric Dermatology pp. 22(3):192-9, 2005. ⁷ Bieber T. Mechanisms of disease: atopic dermatitis. N Engl J Med. 2008; 358:1483-9. ⁸ NIH "Handout on Health: Atopic Dermatitis (A type of eczema) 2013." [Online]. Available: http://www.niams.nih.gov/Health_Info/Atopic_Dermatitis/default.asp. [Accessed July 2017]. ⁹ Yosipovitch G, Papoiu ADP. What causes itch in atopic dermatitis? Curr Allergy Asthma Rep. 2008; 8:306-311. ¹⁰ Mollanazar NK, Smith PK, Yosipovitch G. Clin Rev Allergy Immunol. 2016 Dec ;51(3):263-292. Review. ¹¹ Darsoy U, Raap U, Stander S. Atopic Dermatitis. Itch: Mechanisms and Treatment. Boca Raton (FL): CRC Press/Taylor & Francis; 2014. Chapter 3. ¹² Wahlgren CF. Itch and atopic dermatitis: an overview. J Dermatol. 1999; 26(11):770-9. ¹³ Zuberbier T, Orlov SJ, Paller AS, et al. Patient perspectives on the management of atopic dermatitis. J Allergy Clin Immunol. 2006; 118:226-232. ¹⁴ J. Whiteley, B. Emir, R. Seitzman, G. Makinson, "The burden of atopic dermatitis in US adults: results from the 2013 National Health and Wellness Survey," Current Medical Research and Opinion, pp. 32(10):1645-51, 2016. (3):491-498, 2016. ¹⁵ J. Schmitt, F. Csotonyi and A. Bauer, "Determinants of treatment goals and satisfaction of patients with atopic eczema," J Dtsch Dermatol Ges, pp. 6(6):458-465, 2008. ¹⁶ A. Torrelo, J. Ortiz and A. Alomar, "Atopic dermatitis: impact on quality of life and patients' attitudes toward its management," Eur J Dermatol, pp. 22(1):97-105, 2012. ¹⁷ D. Fivenson, Arnold R, Kaniecki D, "The effect of atopic dermatitis on total burden of illness and quality of life on adults and children in a large managed care organization," J Manag Care Pharm, pp. 8(5):333-342, 2002.