

## Atopic Dermatitis Media Factsheet

### About atopic dermatitis

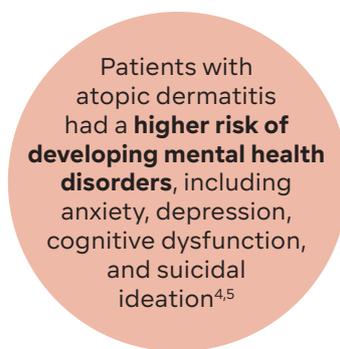
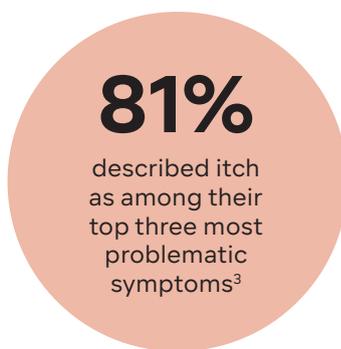
Atopic dermatitis is a common and chronic form of eczema characterized by persistent, disruptive itch (pruritus), inflammatory skin lesions and frequent skin infections.<sup>1,2</sup>

It affects **more than 230 million people worldwide**. Prevalence ranges from 1% to 25% of the population, depending on the geography and age range. It's estimated that between 41% and 75% of adult patients have moderate to severe atopic dermatitis.<sup>1</sup>

### Burden of disease

Atopic dermatitis has a **significant negative impact** on health-related quality of life.<sup>3,4,5</sup>

In studies reporting on the quality of life of adults living with moderate to severe atopic dermatitis:



Atopic dermatitis is also associated with loss of productivity at work, poor academic performance, and social stigma and isolation.<sup>4,5</sup>

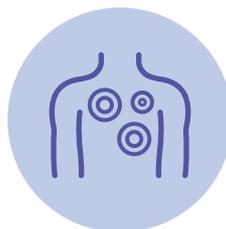
### The role of IL-31

**IL-31 is recognized as a central mediator in the pathogenesis of atopic dermatitis.**<sup>6</sup>

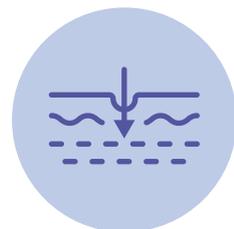
IL-31 is a **neuroimmune cytokine** that acts as a bridge between the immune and nervous systems.<sup>1</sup> It targets both structural skin cells and inflammatory cells, driving inflammation, itch, and skin abnormalities, by:



Triggering neuronal growth and branching of sensory neurons, resulting in increased density of the skin neuronal network. It may also increase sensitivity of these neurons to **itch-inducing stimuli**<sup>6</sup>



Activating immune cells to release proinflammatory cytokines and amplifying circuits between epithelial surfaces, nerves and immune cells resulting in **inflammation**<sup>6</sup>



Inhibiting the expression of filaggrin leading to **skin barrier dysfunction**<sup>6</sup>

### References:

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3. Silverberg JI, et al. Patient burden and quality of life in atopic dermatitis in US adults: a population-based cross-sectional study. Ann Allergy Asthma Immunol. 2018;121(3):340-347. doi:10.1016/j.anai.2018.07.006
4. Urban K, et al. The global, regional, and national burden of atopic dermatitis in 195 countries and territories: An ecological study from the Global Burden of Disease Study 2017. JAAD Int. 2021;2:12-18. doi:10.1016/j.jdin.2020.10.002
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6. Datsi A, et al. Interleukin-31: The "itchy" cytokine in inflammation and therapy. Allergy. 2021;76:2982-2997. doi: 10.1111/all.14791