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.1,2

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.1

Burden of disease

Atopic dermatitis has a significant negative impact on health-related quality of life.3,4,5

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

- Patients with atopic dermatitis had a higher risk of developing mental health disorders, including anxiety, depression, cognitive dysfunction, and suicidal ideation4,5
- 81% described itch as among their top three most problematic symptoms3
- A majority reported experiencing sleep disturbance – considered one of the major factors leading to impaired quality of life4,5

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

The role of IL-31

IL-31 is recognized as a central mediator in the pathogenesis of atopic dermatitis.6

IL-31 is a neuroimmune cytokine that acts as a bridge between the immune and nervous systems; 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 stimuli6
- Activating immune cells to release proinflammatory cytokines and amplifying circuits between epithelial surfaces, nerves and immune cells resulting in inflammation6
- Inhibiting the expression of filaggrin leading to skin barrier dysfunction6

References: