Overview of Psoriasis

Psoriasis is a chronic, systemic, immune-mediated disease that appears on people’s skin and may cause itchy, red, scaly patches, everywhere on the body, including the nails. It develops when your own immune system mistakenly attacks and inflames or destroys healthy body tissue.\(^1,2,3\)

![Facts about Psoriasis](image)

The Role the Immune System Plays in Psoriasis

- The abnormal immune response in psoriasis is driven by immune cells and proteins that are released, known as cytokines.
- A cytokine called interleukin-23 (IL-23) is one of the key drivers of psoriasis. IL-23 activates and maintains several immune cells, like T-helper cells, and leads to the production of other cytokines including IL-17 and IL-22.

![IL-23, T-helper Cell, IL-17, IL-22](image)

Evaluating Psoriasis Severity

There are a wide range of tools available to measure psoriasis severity and skin clearance. The most widely used measure is the Psoriasis Area and Severity Index (PASI). In clinical trials, a meaningful measure of successful psoriasis treatment has historically been PASI 75, which is a 75% skin improvement from the initial PASI score.\(^8,9,10\) PASI 90 refers to “clear or almost clear skin” and is shorthand for a 90% improvement in PASI score. PASI 100 refers to completely clear skin.\(^9,10\)

Another tool is the static Physician’s Global Assessment (sPGA). sPGA is used as co-primary endpoint for clinical trials, since it is requested by some health authorities, e.g. the U.S. Food and Drug Administration.

Continued Need for Research in Psoriasis

Mild disease can often be managed with topical treatments, whereas people with moderate-to-severe plaque psoriasis may need biologic treatment.\(^11\) Biologics are different from traditional systemic drugs that impact the entire immune system. Biologics, instead, target specific parts of the immune system that are associated with inflammation.

Surveys have found that about 50% of patients are dissatisfied with their current treatment and 32% of patients report that their treatment is not effective enough.\(^12,15,16,17\) For many patients, existing treatments are either: not appropriate, ineffective or inaccessible due to cost and insurance.\(^14\) Treatments can even stop working over time, and it’s common for people with moderate-to-severe psoriasis to cycle through several approaches.

As new treatment approaches are being investigated, scientists and clinicians are setting higher treatment goals, such as PASI 90, to establish a standard of care that demonstrates clearer skin. Learn more at the [National Psoriasis Foundation](https://www.psoriasis.org) website.

Boehringer Ingelheim has a robust Immunology research and clinical program development, covering a wide range of immune diseases, including psoriasis, psoriatic arthritis, Crohn’s disease and lupus nephritis. Boehringer Ingelheim has a vision to transform the treatment of immune diseases and the lives of patients, supporting the families and physicians that care for them.
References: