

Psoriasis Treatments Are Getting More Personalized

The more scientists learn about psoriasis, the more therapeutic options are becoming available for patients with this skin disease.

“As we better understand the disease, researchers know more about what specific factors to target in order to develop effective treatments,” says Melinda L. McCord, M.D., a dermatologist at the Food and Drug Administration.

The treatment for psoriasis has changed from the previous gradual step-by-step approach. Today, doctors seek to optimize treatment from the first visit—whether with phototherapy or systemic therapies—based on the specific needs of each patient.

“Tomorrow’s treatments will become even more personalized because the drugs in development now are targeting different aspects of the immune system,” McCord notes.

Personalized Medicine and Psoriasis

Psoriasis is an immune system disorder characterized by inflammation and the rapid overproduction of skin cells, creating scaling, pain, swelling, heat and redness. About 7.5 million Americans have psoriasis, a skin condition that can create significant physical and emotional discomfort.

Therapies for psoriasis include:

- Medicines applied to the skin (topical treatment)



- Light treatment (phototherapy)
- Drugs taken by mouth or injection (systemic therapy)

There is no cure for psoriasis, so the main goals of treatment are to reduce inflammation and to stop the skin cells from growing so quickly.

In the past, doctors treated psoriasis using a “step-wise approach.” Patients with mild to moderate psoriasis would start with topical therapies and, if they did not respond well to that, move on to other treatments, such as systemic therapy or phototherapy. This approach called for treating people with moderate to severe psoriasis with phototherapy

or traditional systemic therapies—drugs such as methotrexate and cyclosporine—before offering them biologic therapies (a type of treatment that works with your immune system).

That strategy has changed to a more patient-specific approach. Today, patients and their doctors can choose a treatment based on its effectiveness, the severity of their disease, lifestyle considerations, risk factors, and associated diseases (co-morbidities).

The most recent biologic product approved by the FDA for the treatment of psoriasis is Stelara (ustekinumab) (<http://www.accessdata.fda.gov/scripts/cder/drugsatfda/>). Ustekinumab con-

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tains an antibody that’s produced in a laboratory and designed to bind to a specific target in the immune system. “When given to patients, this antibody blocks the action of two proteins (interleukin 12 and 23) that contribute to the inflammation and the overproduction of skin cells. By targeting these proteins, ustekinumab can interrupt the inflammatory pathway,” McCord says.

“Looking forward, the drugs in development are targeting different pathways in the immune system that lead to inflammation. Researchers are exploring the importance of interleukin 17,” McCord says. “They’re also looking at proteins and molecules that can interrupt cellular signaling, which can increase the spreading of the inflammation.”

“As we learn more about the immune pathways that lead to the development of psoriasis, we can target specific molecules for treatment and make more therapeutic options available to patients,” McCord says. “Understanding the disease gives us the opportunity to target specific factors.”

A Long-Term Strategy

McCord recommends a team approach to treating psoriasis. Patients, families and their health care providers need to work together to address the multiple diseases that may occur in association with psoriasis, including the risk of developing metabolic syndrome (the occurrence of obesity, high

blood pressure, high cholesterol and diabetes in one patient), lymphoma, heart disease and/or depression. “We do not completely understand the relationship of these co-morbidities to psoriasis, but it is an area of active research,” she adds.

Because psoriasis is a chronic disease with no cure, patients may need to use treatments for a long time. Many therapies approved by FDA have been evaluated for extended time periods.


Psoriasis has environmental and genetic components. It is more common in adults and can run in families. What triggers it? A virus? Bacteria? Stress? Other environmental factors? “We just don’t know,” McCord says.

The good news is that patients can treat some of the signs and symptoms of psoriasis with simple measures. For example, regular use of moisturizers may improve the itching and scaling. Reducing or limiting tobacco use and alcohol consumption may decrease the number of flares of psoriasis. Lifestyle changes—such as maintaining a healthy weight and being physically active—may help lessen or prevent the development of associated diseases.


McCord advises patients to seek treatment early from a doctor experienced with the disease. A dermatologist can provide patients with the correct diagnosis and information to manage the disease. “If you are diagnosed and treated

early, you may avoid the pitfalls of ineffective and inappropriate therapy,” she adds.

Some patients become easily discouraged about treatments, but newer therapies may make them more comfortable. That’s why McCord says patients should investigate treatment options early and educate themselves about their condition. Even if patients have a mild case of psoriasis and decide they don’t want a particular treatment option, there are ways they can decrease their symptoms.

“Psoriasis has a great emotional impact on some patients. But it doesn’t have to, given the right care and treatment,” she says. 

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