

## **Psoriasis: New treatments can completely clear the rash**

Psoriasis is a very common skin disease that affects around 3.2% of adults in the US. People with psoriasis develop itchy and often chronic rashes that can be difficult to treat. Psoriasis can be a debilitating disease if the rash affects a large amount of the body or if the face, scalp, hands, feet or genital skin is involved. In addition to causing rashes, psoriasis can also lead to joint disease and this may result in long lasting disabling and disfiguring arthritis.

While psoriasis is a common skin disease, it has been resistant to treatment with conventional medications. For most patients, traditional older medications will not completely clear the rash. Topical creams and ointments are used when the rash involves only a small amount of skin, however when a large amount of skin is involved patients are usually treated with systemic treatments in the form of pills or injections.

Older approved treatments for psoriasis, such as methotrexate, do not target the specific molecules involved in the disease process, but rather target molecules that are involved in many different processes and have functions beyond just causing psoriasis. Because older treatments tend to inhibit molecules that are not limited to the psoriasis disease process but are also involved in normal biologic processes, these treatments can have unwanted side effects.

The cause psoriasis is a very active area of research and there have been many new and important developments in our understanding of this disease in recent years. Psoriasis has been found to be a disease caused by the immune system. This finding led to the development of a class of systemic psoriasis treatments commonly referred to as biologics, which are protein based large molecules that target specific immune-associated molecules. As our understanding of the detailed immune mediated process that causes psoriasis has developed, researchers have been able to produce ever more specific drugs for treating psoriasis.

Most recently, a growing body of knowledge has implicated a specific molecule from the immune system, Interleukin-17 (IL-17), as playing a central role in causing this disease both in the skin and joints. New treatments that specifically target IL-17 are being developed for the treatment of psoriasis. These medications include secukinumab, which was recently approved by the FDA for treating psoriasis, and ixekizumab and brodalumab, which are both currently being studied in psoriasis clinical trials. Because these medications target the specific molecule that causes psoriasis and do not affect other molecules that have important functions in normal biologic processes, these new medications are more effective and may be safer than older treatments.

The efficacy results for these new medications are very encouraging: between 86.3-91.0% of patients will have 75% of their rash resolve; 70.3-72.8% will have 90% resolve; and perhaps most impressive, between 38.9-44.4% will have 100% of their psoriasis resolve when treated with one of the IL-17 inhibitors. Compared to older treatments, a much larger percentage of people treated with IL-17 inhibitors will have complete or near complete resolution of their skin disease. The efficacy

results for treating psoriatic arthritis are similarly encouraging: between 51-54% of those treated with secukinumab, and 37-39% treated with brodalumab will have significant improvement of joint disease.

IL-17 inhibitors appear to have significantly fewer side effects when compared to older systemic psoriasis treatments, such as methotrexate and cyclosporine, and current evidence suggest that IL-17 inhibitors are just as safe if not safer than other biologics used in treating psoriasis. Further studies are needed to determine if IL-17 inhibitors are safer than older biologics. The most common side effects reported in patients taking IL-17 inhibitors include upper respiratory infection and headache.

The development of IL-17 inhibitors marks a major shift in the treatment goals for people with psoriasis: it is now possible for a significant proportion of people with moderate to severe psoriasis to be completely free of rashes. These new medications are likely to have a profoundly positive impact on the quality of life for people with psoriasis.

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## **Publication**

[Anti-IL-17 Medications Used in the Treatment of Plaque Psoriasis and Psoriatic Arthritis: A Comprehensive Review.](#)

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