

The JAK inhibitors in Alopecia Areata: Larger Studies Support Benefits Dr. Jeff Donovan, Medical Advisor, CANAAF.

STUDIES

Mackay-Wiggan J et al. Oral ruxolitinib induces hair growth in patients with moderate-to-severe alopecia areata. JCI Insight 2016

Kennedy Crispin M et al. Safety and efficacy of the JAK inhibitor tofacitinib citrate in patients with alopecia areata. JCI Insight 2016.

A group of medications known as the JAK inhibitor drugs came into the spotlight a few years ago with reports that they could benefit patients with alopecia areata. Tofacitinib (also called Xeljanz) is an oral medication originally used to treat rheumatoid arthritis. Studies in a single patient reported benefits. Ruxolitinib (also called Jakavi) is an oral cancer drug originally used to treat a type of bone marrow cancer. Previous studies at the time in 3 patients showed benefits.

These studies were small in size and more data was needed in order for these medications to be more convincing. Today, I'd like to share larger studies in both drugs that suggested they are helpful.

US researchers reported results of a study of 66 patients with advanced alopecia areata (including totalis and universalis). Patients received tofacitinib 5 mg twice daily for three months. The study showed that individuals with alopecia totalis and universalis were less responsive to treatment compared to those with alopecia areata but overall about one-third of individuals with advanced forms of alopecia experienced significant growth. Importantly, patients relapsed very quickly when the medication was stopped – losing hair within 8.5 weeks of stopping.

A new study was also reported in a trial of 12 patients with moderate to severe alopecia areata using the drug ruxolitinib. The dose was 20 mg twice daily for 3-6 months followed by 3 months off the drug. 9 of 12 patients reported hair growth with no serious adverse events.

Comment: These studies are important for many reasons. They provide evidence with larger numbers of patients that the medication can help. More importantly though, they provide evidence for a fairly good safety profile. It's important to keep in mind that these drugs are treatments rather than cures – and hair loss occurs once the drug is stopped. I mentioned a while back that we'll be hearing more about these drugs in the future – and that's a key conclusion now as well. Even in our clinic, we're seeing benefits for some patients with advanced forms of alopecia areata that we were unable to achieve with traditional treatments such as DPCP, and other oral immunosuppressive medications like methotrexate and cyclosporine.