

LETTER TO THE EDITOR

USE OF RITLECITINIB FOR THE TREATMENT OF ALOPECIA
AREATA

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Dear Editor,

Alopecia areata, an autoimmune condition, causes either patchy or complete hair loss from the body¹ and occurs because the immune system attacks the hair follicles. It could present in severe forms as either alopecia totalis which is complete hair loss from the scalp or alopecia universalis which is hair loss from the whole body. Alopecia areata affects about 160 million people worldwide as reported by the National Alopecia Areata Foundation. Alopecia areata significantly affects the quality of life of the patients suffering from it as it is reported that the patients with alopecia areata were likely to have 30–38% increased chances of depression.²

A large number of research projects are underway to discover an effective treatment for this disease. In June 2023, the FDA approved Ritlecitinib (LITFULO) for the treatment of alopecia areata. Previously Baricitinib was discovered in June 2022 as a drug for alopecia areata but it was not safe to use in adolescents under 18. The benefit of Ritlecitinib over Baricitinib is that it can be used in young patients of 12 years of age and older. It is a significant discovery as many children suffer from this condition and are not willing to undergo invasive treatment options like intralesional steroids, platelet-rich plasma, and hair transplants.

Ritlecitinib is a JAK3 and TEC inhibitor that acts by blocking the cytokines and T cells that are involved in causing the alopecia areata.³ This is supported by the randomised, double-blind ALLEGRO Phase 2b/3 trial in which patients who were treated with Ritlecitinib in a dose of 50 mg, once daily, for 24 weeks had 80% or more hair coverage of

the scalp after six months of treatment compared to the placebo group.⁴

The most common side effects reported by Ritlecitinib are headache, upper respiratory tract infection, gastrointestinal upset, acne, folliculitis, dizziness, an increase in creatinine phosphokinase, and a decrease in red blood cell count.⁵

Ritlecitinib is a potential drug for the treatment of alopecia areata for those who are candidates for systemic therapy and has a lower side effect profile as it only blocks JAK3 as compared to other therapies which block JAK1/JAK2/all-JAK. Ritlecitinib would not only ease the treatment strategy for patients but will also help to reduce the chances of the side effects related to the invasive therapy like infection, bleeding, and scarring.

REFERENCES

1. Islam N, Leung PSC, Huntley AC, Gershwin ME. The autoimmune basis of alopecia areata: a comprehensive review. *Autoimmun Rev* 2015;14(2):81–9.
2. Macbeth AE, Holmes S, Harries M, Chiu WS, Tziotziou C, De Lusignan S, *et al.* The associated burden of mental health conditions in alopecia areata: a population-based study in UK primary care*. *Br J Dermatol* 2022;187(1):73–81.
3. Xing L, Dai Z, Jabbari A, Cerise JE, Higgins CA, Gong W, *et al.* Alopecia areata is driven by cytotoxic T lymphocytes and is reversed by JAK inhibition. *Nat Med* 2014;20(9):1043–9.
4. Hordinsky MK, Hebert A, Gooderham M. 33180 Efficacy and safety of the oral JAK3/TEC inhibitor ritlecitinib in adolescents with alopecia areata: Results from the ALLEGRO Phase 2b/3 randomized, double-blind, placebo-controlled trial. *J Am Acad Dermatol* 2022;87(3):AB51.
5. King B, Zhang X, Harcha WG, Szepletowski JC, Shapiro J, Lynde C, *et al.* Efficacy and safety of ritlecitinib in adults and adolescents with alopecia areata: a randomised, double-blind, multicentre, phase 2b–3 trial. *Lancet* 2023;401(10387):1518–29.

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