# **Original Research Paper**



## **Dermatology**

# ASSESSMENT OF TREATMENT RESPONSE IN ALOPECIA AREATA TO TOFACITINIB

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ABSTRACT Introduction: Tofacitinib has now been targeted in treating patients with Alopecia Areata. In this study we assess the efficacy of Tofacitinib in the management of Alopecia Areata.

Methods: Scalp hair loss severity was assessed by the investigators with the validated Severity of Alopecia Tool (SALT) score. Regrowth rate was (final SALT score) □ − □ initial SALT score) (initial SALT score) □ × □ 100.

Patients were discontinued from all other AA treatment protocols. Monthly assessment for monitoring the safety of treatment was scheduled. **Results:** Average regrowth 3 months post initiation of treatment was 52.7% with further improvement to 84.5% after successful completion of 6 months of treatment.

Conclusion: To facitinib is a relatively safe and effective drug in the management of mild to moderate Alopecia Areata.

## KEYWORDS: Alopecia Areata, SALT, Tofacitinib

#### INTRODUCTION:

Alopecia areata is an autoimmune disease affecting the hair follicles. It features non-scarring alopecic patches of the entire scalp and may even lead to total body hair loss [1]. Alopecia areata is known to be associated with depression and anxiety [2]. The JAK-STAT signaling pathway is implicated in the initiation and progression of Alopecia Areata [3]. JAK inhibitors may have a role in the treatment of Alopecia Areata [4]. Tofacitinib has now been targeted in treating patients with Alopecia Areata [5]. Most studies targeted extensive alopecia. In this study we assess the efficacy of Tofacitinib in the management of Alopecia Areata.

#### **MATERIALAND METHODS:**

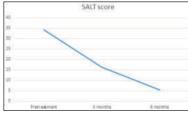
Previous work has shown that response in generally seen in patients receiving a minimum of 10mg Tofacitinib twice daily and this was incorporated in our protocol.

Scalp hair loss severity was assessed by the investigators with the validated Severity of Alopecia Tool (SALT) score. Regrowth rate was (final SALT score) – initial SALT score)/(initial SALT score)  $\square \times \square 100$ .

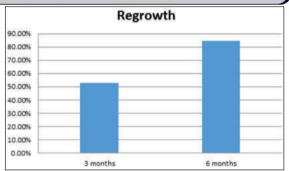
Study was conducted between June 2020 to December 2021. Patients with Alopecia universalis and Alopecia totalis were excluded from the study. Patients were discontinued from all other AA treatment protocols. Informed consent was obtained. 31 patient were enrolled in the study with 4 of the patients lost to discontinuation of treatment. Monthly assessment for monitoring the safety of treatment was scheduled.

### RESULTS:

Average SALT score prior to treatment was 34.3% and improved to 16.2% 3 months post initiation of treatment. Average SALT score further improved to 5.3% after successful completion of 6 months of treatment.



Average regrowth 3 months post initiation of treatment was 52.7%. Average regrowth rate further improved to 84.5% after successful completion of 6 months of treatment.



Due to small sample size investigators felt the assessment of variation of SALT and Regrowth scores based on demographic markers was not merited.

#### DISCUSSION:

Our study further proves the efficacy of Tofacitinib in the treatment of Alopecia areata. While most studies were focused on extensive alopecia, our study shows the role of Tofacitinib in Mild to moderate alopecia. The need for a minimum of 4-6 months of treatment was highlighted.

#### **CONCLUSION:**

To facitinib is a relatively safe and effective drug in the management of mild to moderate Alopecia Areata.

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