

The impact of JAK inhibitor treatment on anxiety and depression outcomes and the role of eyebrow and eyelash hair regrowth in alopecia areata: TARGET-DERM

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Disclosures and commercial support

- Target RWE is the sponsor of TARGET-DERM AA (the registry study).
- Dr. Meisenheimer has served as an investigator on trials for alopecia areata for Pfizer.
- Jasmine Levine has no relationships to disclose.
- Dr. Mesinkovska has served on advisory boards for AbbVie, Arcutis, Galderma, Incyte, Merck, L'Oréal, Nektar, Nutrafol, Sun Pharma, and Pfizer, as a speaker for Pfizer, Sun Pharma, and Lilly and as an investigator for AbbVie, Lilly, Pfizer, Sanofi, Galderma, Arcutis, Regeneron, and Sun Pharma.
- Dr. Ungar has served on advisory boards for AbbVie, Bristol Myers Squibb, Fresenius Kabi, Galderma, Johnson & Johnson, Leo Pharma, Lilly, Nektar Therapeutics, Pfizer, Primus Pharmaceuticals, Sanofi, Sun Pharma, UCB, and Veradermics, as a consultant for Apogee Therapeutics, Botanix Pharmaceuticals, Castle Biosciences, Ebla Holdco, and VRG Therapeutics and received grants and/or research funding from Incyte and Rapt Therapeutics.
- Dr. Hordinsky has served as an investigator on clinical trials for alopecia areata for Pfizer, Eli Lilly and Sun Pharmaceuticals.
- Julie Crawford has received salary as an employee of Target RWE.
- Brda Munoz has received salary as an employee of Target RWE.
- Keith Knapp has received salary as an employee of Target RWE.

Background

- Alopecia areata (AA) is an immune-mediated non-scarring hair loss, which can affect any hair-bearing location¹
- Loss of eyebrows and eyelashes can be particularly distressing for patients with AA²
- Janus Kinase pathway inhibitors (JAKi) have shown promise in treating eyebrow and eyelash hair loss, but real-world evidence is lacking²



Figure 1: Patient with alopecia universalis at a) baseline and b) after 11 weeks of upadacitinib and minoxidil with significant eyebrow regrowth. *Photograph provided courtesy of Dr. Benjamin Ungar.*³

Objectives

Assess for changes in **anxiety** or **depression** outcome measures in **AA** patients **6-months** after starting treatment with a **JAKi** using the TARGET-DERM AA patient registry

Describe **changes** from baseline in **eyebrow** or **eyelash** hair loss for patients with **AA** starting **JAKi** therapy using the TARGET-DERM AA patient registry

Methods

Participants enrolled in TARGET-DERM AA between 2021-2025 were evaluated for the following inclusion criteria:

- History of AA
 - Age >11 years old
 - JAKi naïve and starting a JAKi while enrolled in the study
 - Moderate to severe ClinROs within 6 months prior to JAKi initiation
- OR
- Moderate to severe PROs within 6 months prior to JAKi initiation
 - One additional ClinRO or PRO 12 months after JAKi initiation

PROs

- PROMIS-anxiety⁴
- PROMIS-depression⁴

ClinROs

ClinRO Measure for Eyebrow Hair Loss

Examine **both eyebrows** from **two feet away** and select the best response below.

- ☐₀ The eyebrows have full coverage and no areas of hair loss
- ☐₁ There are minimal gaps in eyebrow hair **and** distribution is even
- ☐₂ There are significant gaps in eyebrow hair **or** distribution is not even
- ☐₃ No notable eyebrow hair

ClinRO Measure for Eyelash Hair Loss

Examine the **upper and lower eyelashes** of **both eyes** and select the best response below.

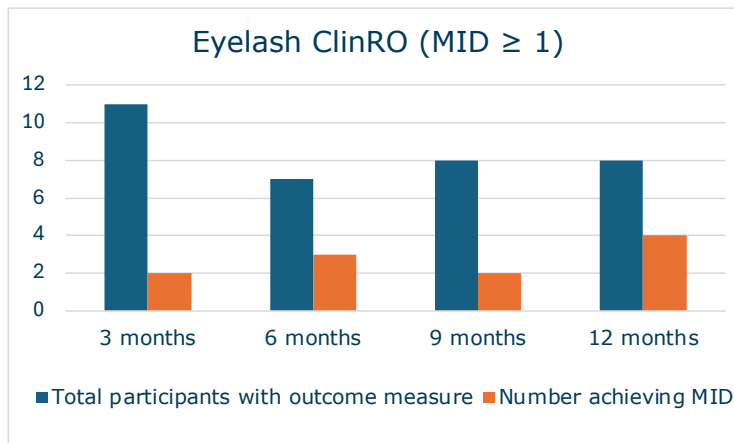
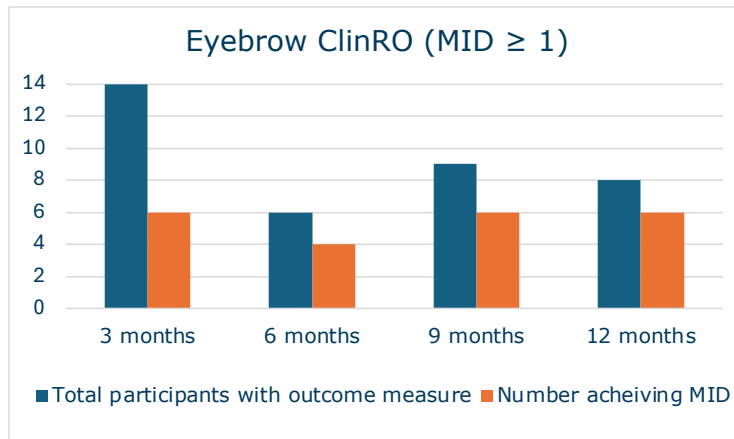
- ☐₀ The eyelashes form a continuous line along the eyelids on both eyes
- ☐₁ There are minimal gaps **and** the eyelashes are evenly spaced along the eyelids on both eyes
- ☐₂ There are significant gaps along the eyelids **or** the eyelashes are not evenly spaced along the eyelids
- ☐₃ No notable eyelashes

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Figure 2: Eyebrow and eyelash loss ClinROs⁵

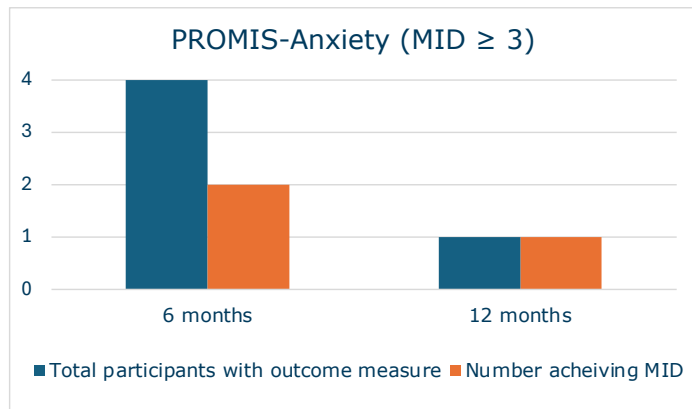
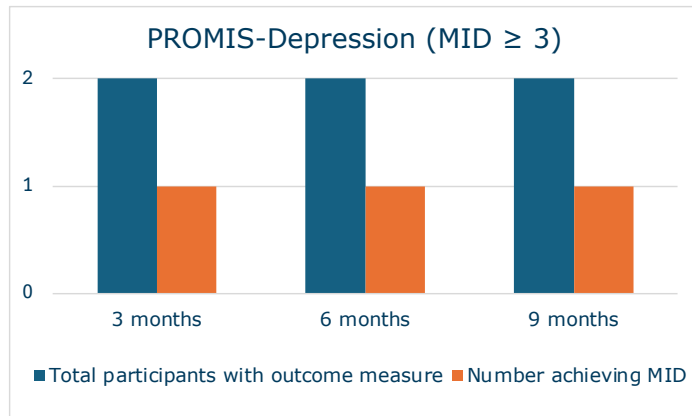
Results

- Of 884 AA patients in the registry, 36 met study inclusion criteria
- Six of eight (**75%**) participants with moderate to severe **eyebrow** loss achieved a change equal to or greater than the minimally important difference (**MID**) at **12 months**
- Four of eight (**50%**) participants with moderate to severe **eyelash** loss achieved **MID** at **12 months**



Participant characteristics	(N=36)
Age at therapy initiation	
Mean (SD)	33 (16)
Adults (18+)	27 (75.0%)
Pediatric (12-17)	9 (25.0%)
Sex, n (%)	
Male	19 (52.8%)
Female	17 (47.2%)
Race-Ethnicity, n (%)	
Not-Hispanic White	25 (69.4%)
Hispanic/Latino	5 (13.9%)
Not-Hispanic Black	0 (0.0%)
Other/Not Reported	6 (16.7%)
SALT score at index	
Mean (SD)	60 (36)
Median (IQR)	60 (30-100)
Time on treatment (days)	
Mean (SD)	487 (272)
Median (IQR)	436 (300-691)
JAKi used*, n (%)	
Baricitinib	21 (58.3%)
Ritlecitinib	10 (27.8%)
Tofacitinib	6 (16.7%)

Results



Conclusion

- At least **50%** of patients with **AA** treated with **JAKi** achieved a response greater than the **MID** for **ClinRO** and **PRO** outcomes by the last timepoint with outcome data
- Future studies with **larger sample** sizes would be beneficial to evaluate how **changes** in eyebrow and eyelash **ClinROs modulate anxiety** and **depression** symptoms

References and
supplemental
tables

