

Baricitinib Provides Sustained Efficacy Through 1.5 Years and Consistent Safety Up to a Maximum of 2.5 Years of Treatment in Adolescents With Severe Alopecia Areata: BRAVE-AA-PEDS Trial Results

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OBJECTIVE

- To assess maintenance of efficacy through W76 and safety through up to 2.5 years of baricitinib treatment among adolescents with severe AA in the BRAVE-AA-PEDS trial

CONCLUSION

- Most adolescents randomized to BARI 4-mg who met responder criteria at W52 maintained their scalp hair regrowth responses through W76
- Among adolescents on BARI 4-mg achieving deep, multi-site response (SALT score ≤10 and no-or-minimal gaps in eyebrow and eyelash hair) at W52, nearly all maintained this response through W76
- Most adolescents on BARI 2-mg achieving deep, multi-site response at W52 also maintained this response, although maintenance rates were numerically lower than in the 4-mg arm
- No new safety signals were identified through a maximum 2.5 years of baricitinib treatment; growth trajectories were consistent with age-related expectations
- These durable efficacy outcomes and the absence of new safety signals support baricitinib as a long-term treatment option for adolescents with severe AA in clinical practice



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BACKGROUND

- BRAVE-AA-PEDS (NCT05723198), the first and largest Phase 3 study specifically designed to evaluate pediatric patients with severe alopecia areata (AA), is a randomized, double-blinded trial of baricitinib for children and adolescents with severe AA¹
- After 52 weeks of treatment with BARI 4-mg or 2-mg, adolescents in BRAVE-AA-PEDS had substantial hair regrowth, and safety outcomes were consistent with the known safety profile of baricitinib in adolescents²
- This analysis assessed maintenance of efficacy from W52 through W76 and longer-term safety of baricitinib in adolescents with AA

METHODS

Efficacy Analyses

- Response from W0 to W52: Patients randomized to baricitinib 2-mg or 4-mg at baseline (data pooled from Cohorts 1 and 2)
- Maintenance response from W52 to W76: Patients randomized to baricitinib 4-mg or 2-mg at baseline (data pooled from Cohorts 1 and 2) who met response criteria at W52 for continued treatment with same dose
 - Baricitinib 4-mg response criteria (responder): SALT score ≤20
 - Baricitinib 2-mg response criteria (deep, multi-site responder [DMR]): SALT score ≤10 *and* ClinRO EB™ (0,1) *and* ClinRO EL™ (0,1)
- Missing data approach: Non-responder imputation for W0 to W52 analysis; modified last observation carried forward for W52 to W76 analysis

Safety Analyses

- Two populations of patients who received ≥1 dose of baricitinib:
 - Extended-BARI AA: Continuously assigned to baricitinib 2-mg or 4-mg, censored at treatment change
 - All-BARI AA: Received ≥1 dose of baricitinib
- Reported as IRs per 100 PYE

Baseline Characteristics of W52 Responders

Characteristic	BARI 4-mg ^a (N=96)	BARI 2-mg ^b (N=42)
Race, %		
Asian	25.0	19.0
Black/African American	3.1	9.5
White	71.9	66.7
Weight, kg, median	54.1	53.2
AA duration, years, mean (SD)	5.9 (3.8)	5.35 (3.9)
Current episode duration, years, mean (SD)	2.9 (2.0)	2.6 (2.2)
Prior systemic therapy, %	45.8	42.9
Skinex-16 AA score, mean (SD)		
Symptoms	14.2 (12.8)	13.9 (15.0)
Emotions	40.8 (29.3)	46.5 (29.4)
Functioning	22.4 (27.1)	23.25 (22.0)
SALT score, mean (SD)	81.7 (19.6)	74.8 (17.4)
Very severe SALT (95-100), %	44.8	19.0
ClinRO EB 2-3, %	53.1	31.0
ClinRO EL 2-3, %	40.6	28.6

^aW52 BARI 4-mg responders, with 72 of them met the DMR criteria at W52; ^bW52 BARI 2-mg DMRs. There were an additional 19 patients who met the responder but not DMR criteria at W52.

Results

Safety Through Up to a Maximum 2.5 Years of Baricitinib Treatment

Adverse Events

- Most AEs were mild or moderate in severity
- AEs of special interest included serious infections, herpes zoster, and herpes simplex; one malignancy (myxoid liposarcoma) was reported, which had resolved by the time of analysis and was not attributed to study drug by the investigator
- No opportunistic infections, tuberculosis, non-melanoma skin cancer, major adverse cardiovascular events, thromboembolic events, or deaths were reported

Laboratory Findings – Extended-BARI AA

- Laboratory findings included hematologic abnormalities, lipid elevations, and elevated blood CPK, graded using CTCAE v5.0³
 - Hematologic: Neutrophil increase to CTCAE grade ≥3 (2-mg: n=4; 4-mg: n=7), lymphocyte increase to CTCAE grade ≥3 (2-mg: n=1; 4-mg: n=2), thrombocytosis (≤600 to >600 × 10⁹ L; 2-mg: n=1; 4-mg: n=1)
 - Lipid: Increases to high LDL cholesterol (2-mg IR, 10.4; 4-mg IR, 13.2), high triglycerides (2-mg IR, 11.5; 4-mg IR, 10.5)
 - Blood CPK: Increase to CTCAE grade ≥3 (2-mg IR, 4.7; 4-mg IR, 5.4)

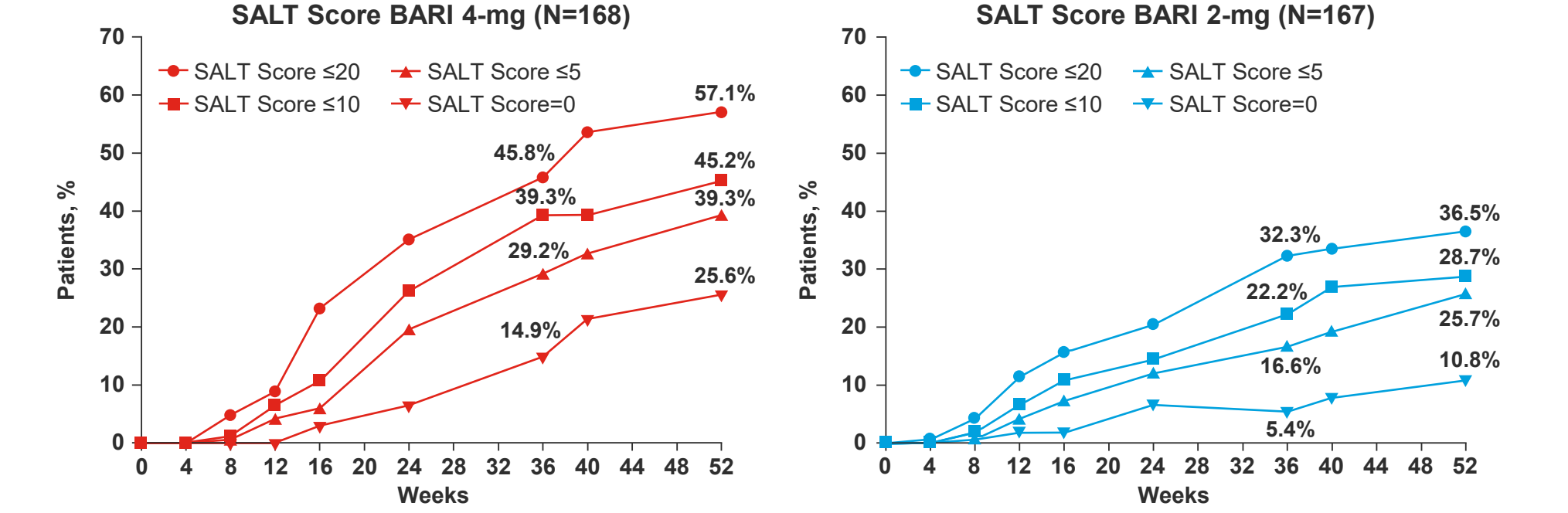
Growth

- Height, weight, and BMI trajectories were maintained

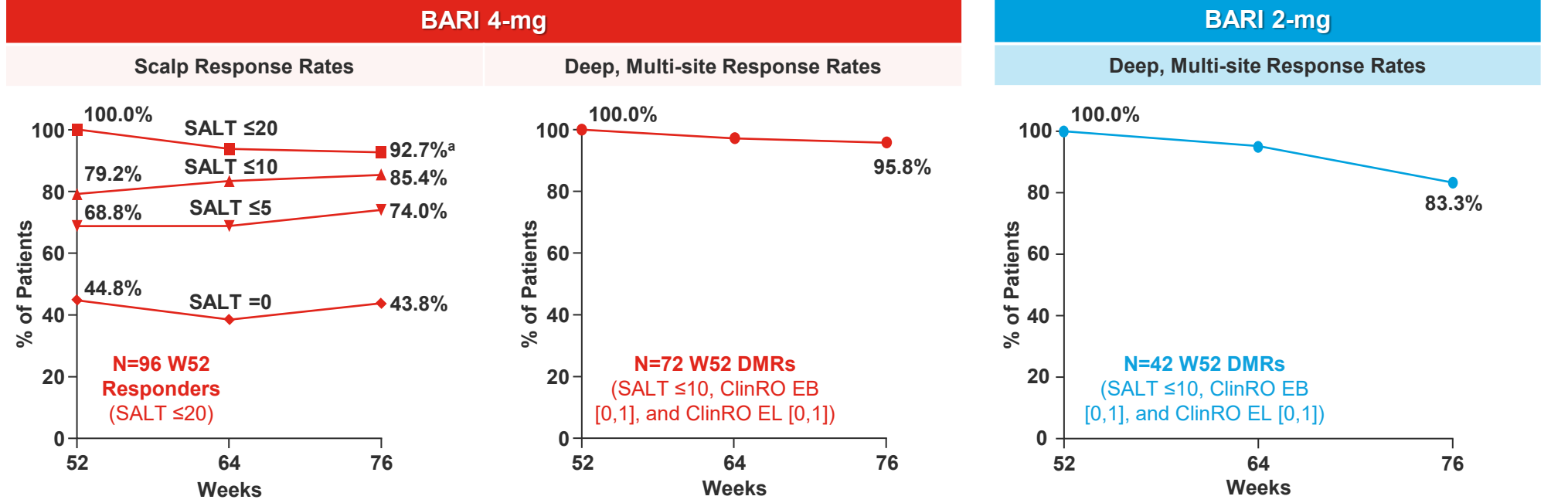
^aSerious infections were peritonsillar abscess, tonsillitis, pneumonia, and are also listed among the SAEs; ^bAll herpes zoster cases were localized, non-multi-dermal, mild, and all recovered; ^cSAEs comprised depression (n=2), major depression (n=1), somatic symptom disorder (n=1), suicide attempt (n=1), ligament sprain (n=1), lower limb fracture (n=1), upper limb fracture (n=1), toxicity to various agents (n=1), peritonsillar abscess (n=1), pneumonia (n=1), tonsillitis (n=1), epilepsy (n=1), headache (n=1), abdominal pain upper (n=1), gastroesophageal reflux disease (n=1), myxoid liposarcoma (n=1), allergic dermatitis (n=1), ovarian cyst (n=1), and supraventricular tachycardia (n=1).

KEY RESULTS

SALT Score Response Rates Through 1 Year of Treatment: Overall Adolescent Population, NRI



Response Rates Through W76: BARI 4-mg and 2-mg



- At W76, 92.7% of W52 SALT ≤20 responders maintained SALT ≤20, 85.4% achieved SALT ≤10, 74.0% achieved SALT ≤5, and 43.8% achieved SALT = 0
- Nearly all W52 DMRs maintained deep, multi-site response through W76
- Most W52 DMRs maintained deep, multi-site response through W76
- Among W52 DMR, 100.0% maintained SALT ≤20 and 90.5% maintained SALT ≤10 at W76

Exposure to BARI	Extended-BARI AA		All-BARI AA
	2-mg (N=166)	4-mg (N=168)	(N=415)
PYE	192.0	257.9	615.8
Median duration, weeks	52.29	84.43	80.57
Maximum duration, weeks	120.1	123.0	131.4
≥52-week exposure, n (%)	135 (81.3)	150 (89.3)	366 (88.2)
≥76-week exposure, n (%)	40 (24.1)	124 (73.8)	273 (65.8)

Limitations

- In the 2-mg arm, data on maintenance of response were only available from patients who achieved SALT ≤10 as well as ClinRO EB/EL [0,1] at W52

Abbreviations: AA=alopecia areata; AE=adverse event; BARI=baricitinib; BMI=body mass index; CPK=creatinine phosphokinase; CTCAE=Common Terminology Criteria for Adverse Events; ClinRO EB=ClinRO Measure for Eyebrow Hair Loss; ClinRO EL=ClinRO Measure for Eyelash Hair Loss; DC=discontinuation; DMR=deep, multi-site responder; DT=dose transition; EB=eyebrow; EL=eyelash; IR=incidence rate; LDL=low-density lipoprotein; N=number of patients in the analysis population; NRI=non-responder imputation; PBO=placebo; PYE=patient-years of exposure; SAE=serious adverse event; SALT=SALT Severity of Alopecia Tool; SD=standard deviation; TEAE=treatment-emergent AE; W=Week

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