

Race and ethnicity sub-groups of alopecia areata patients have differing clinical characteristics: TARGET-DERM AA

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Introduction

- Alopecia areata (AA) is a chronic autoimmune disease that disproportionately impacts select subgroups.¹
- Specifically, patients with skin of color seem have a higher prevalence of AA.²

Objective

- To assess clinical characteristics of AA patients by race and ethnicity subgroup.

Methods

- United States and Canadian clinics enrolled participants in the TARGET-DERM AA registry (December 2021 - June 2024, data collection ongoing).
- Inclusion criteria:
 - Enrolled in TARGET-DERM AA
 - Completed a patient questionnaire at enrollment
 - Had at least one clinician reported outcome at enrollment
- The patient questionnaire invites responses regarding comorbidities and the Patient Global Impression of Severity-AA (PGIS-AA).

- Clinician-reported outcomes collected: the Clinician's Global Impression of AA (CGI-AA), Severity of Alopecia Tool (SALT), Measure for Eyebrow and Eyelash Hair Loss.

- Patients were summarized using descriptive statistics and compared using the Fisher-Exact, Chi-square, or Kruskal-Wallis tests as appropriate.

Results

- Of the 267 AA patients, 61.4% were female; 53.2% were adults. (Table 1)
- 52.1% identified as Non-Hispanic (NH) White, 28.5% identified as Hispanic, 8.6% NH Black and 6.4% as NH Asian. (Figure 1)
- Of all subgroups, the NH Asian patients had the highest proportion (47.1%) with severe disease (SALT>50) followed by (Figure 2):
 - 34.8% of NH Black patients
 - 31.7% of NH White patients
 - 19.7% of Hispanic AA patients
- Across the subgroups HS Asian patients also had the highest proportion (47.1%) of patient-reported severe/very severe disease (PGIS-AA) followed by (Figure 2):
 - 41.9% of NH White patients
 - 39.1% of NH Black patients
 - 27.6% of Hispanic AA patients

- Eyebrow involvement was highest in NH White patients (44.6%), followed by NH Asian (41.2%), NH Black (34.8%), and Hispanic AA patients (26.3%, Figure 2)

Table 1. Demographic Characteristics at enrollment by race/ethnicity subgroup

	NH White (N=139)	NH Black (N=23)	NH Asian (N=17)	Hispanic (N=76)	NH White or NH Black or NH Asian or Hispanic (N=255)	p-value compares NH White, NH Black, NH Asian and Hispanic	Other/Not Reported (N=12)	All participants (N=267)
Adult Age						0.0019		
Mean (SD)	46.3 (16.2)	34.0 (11.9)	37.0 (10.9)	32.7 (12.6)	42.5 (16.0)		38.9 (17.8)	42.3 (16.0)
Median (n)	48.0 (93)	38.0 (11)	34.0 (11)	29.5 (20)	43.0 (135)		39.0 (7)	42.5 (142)
Min - Max	18.0 - 77.0	19.0 - 54.0	23.0 - 54.0	19.0 - 52.0	18.0 - 77.0		19.0 - 71.0	18.0 - 77.0
Sex, n (%)						0.8361		
Female	87 (62.6%)	13 (56.5%)	10 (58.8%)	45 (59.2%)	155 (60.8%)		9 (75.0%)	164 (61.4%)
Insurance, n (%)						<.0001		
n	139	23	17	76	255		12	267
Commercial/Private	120 (86.3%)	18 (78.3%)	15 (88.2%)	38 (50.0%)	191 (74.9%)		5 (41.7%)	196 (73.4%)
Medicaid	8 (5.8%)	5 (21.7%)	2 (11.8%)	37 (48.7%)	52 (20.4%)		6 (50.0%)	58 (21.7%)
Medicare	9 (6.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	9 (3.5%)		1 (8.3%)	10 (3.7%)
Uninsured	2 (1.4%)	0 (0.0%)	0 (0.0%)	1 (1.3%)	3 (1.2%)		0 (0.0%)	3 (1.1%)

Figure 1. Distribution by Race/Ethnicity subgroup

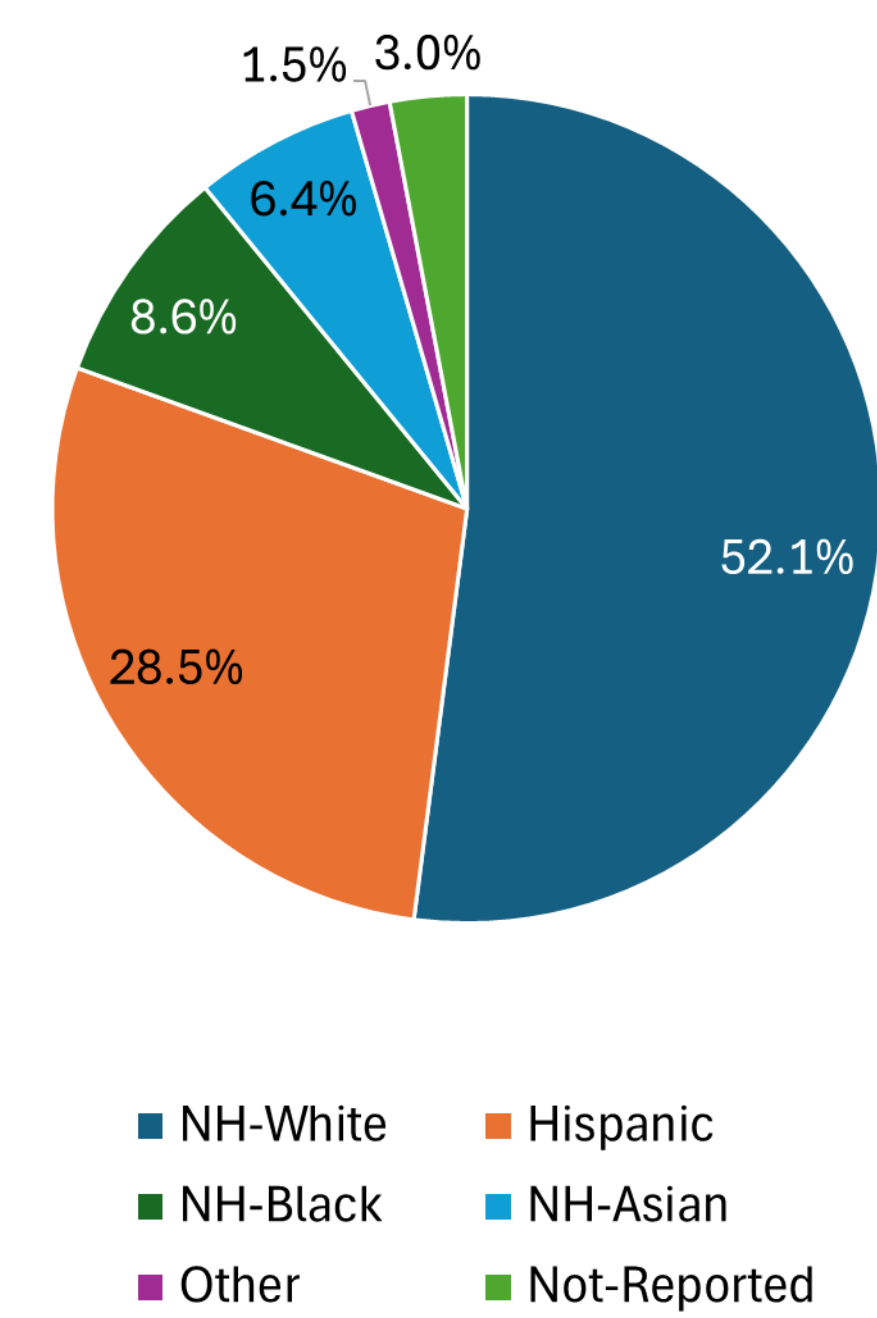


Figure 2. Proportion of patients in each subgroup with the named outcomes

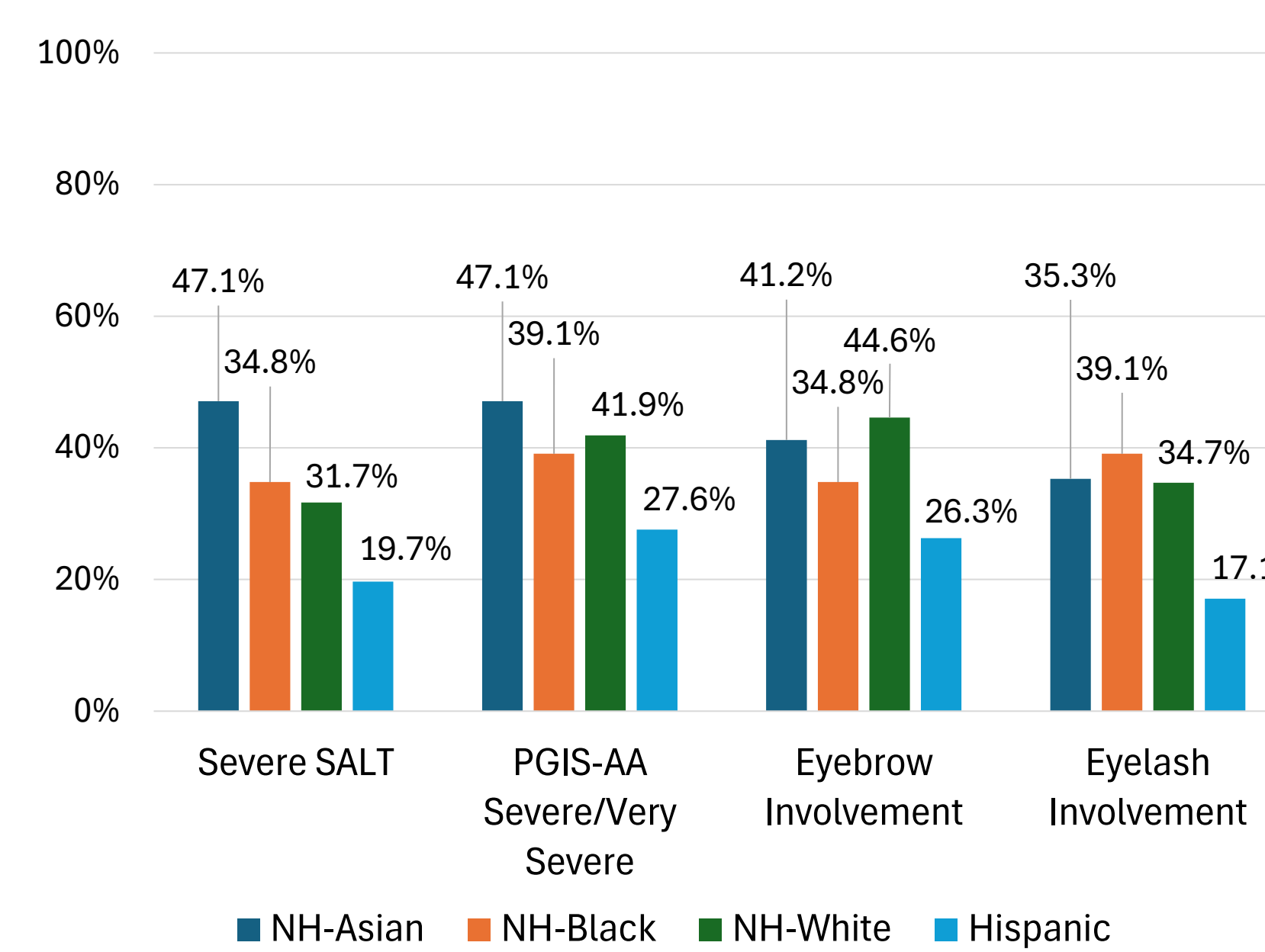


Table 2. Systemic therapy use at enrollment by race/ethnicity subgroup*

	NH White (N=139)	NH Black (N=23)	NH Asian (N=17)	Hispanic (N=76)	NH White or NH Black or NH Asian or Hispanic (N=255)	p-value compares NH White, NH Black, NH Asian and Hispanic	All participants (N=267)
Topical Corticosteroids, n (%)							
Fluocinolone	4 (2.9%)	3 (13.0%)	1 (5.9%)	3 (3.9%)	11 (4.3%)		12 (4.5%)
Betamethasone	6 (4.3%)	0 (0.0%)	2 (11.8%)	2 (2.6%)	10 (3.9%)		10 (3.7%)
Clobetasol	32 (23.0%)	1 (4.3%)	6 (35.3%)	25 (32.9%)	64 (25.1%)		67 (25.1%)
Topical Minoxidil	24 (17.3%)	4 (17.4%)	4 (23.5%)	13 (17.1%)	45 (17.6%)	0.5742	46 (17.2%)
Oral Minoxidil	24 (17.3%)	3 (13.0%)	3 (17.6%)	4 (5.3%)	34 (13.3%)	0.3623	36 (13.5%)
Baricitinib	20 (14.4%)	1 (4.3%)	2 (11.8%)	2 (2.6%)	25 (9.8%)	0.1325	26 (9.7%)
Tofacitinib	7 (5.0%)	1 (4.3%)	2 (11.8%)	1 (1.3%)	11 (4.3%)	0.6617	11 (4.1%)

* The column entitled "Other/Not-reported" (N=12) is not shown.

Table 3. Clinician-reported outcomes at enrollment by race/ethnicity subgroup

	NH White (N=139)	NH Black (N=23)	NH Asian (N=17)	Hispanic (N=76)	NH White or NH Black or NH Asian or Hispanic (N=255)	p-value compares NH White, NH Black, NH Asian and Hispanic	Other/Not Reported (N=12)	All participants (N=267)	NH White (N=139)
SALT						0.0284			
Mean (SD)	41.3 (37.3)	41.3 (43.7)	41.5 (43.2)	26.7 (32.3)	37.0 (37.3)		22.6 (30.3)	36.3 (37.1)	
Median (n)	28.0 (139)	19.3 (23)	10.0 (17)	11.9 (76)	21.0 (255)		8.3 (12)	19.8 (267)	
Min - Max	1.0 - 100	1.8 - 100	1.2 - 100	1.2 - 100	1.0 - 100		1.2 - 100	1.0 - 100	
CGI-AA						0.0610			
Mean (SD)	2.4 (1.1)	2.3 (1.3)	2.3 (1.3)	1.9 (1.0)	2.2 (1.1)		1.9 (1.0)	2.2 (1.1)	
Median (n)	2.0 (139)	2.0 (23)	2.0 (17)	2.0 (76)	2.0 (255)		2.0 (12)	2.0 (267)	
Min - Max	1.0 - 4.0	1.0 - 4.0	1.0 - 4.0	1.0 - 4.0	1.0 - 4.0		1.0 - 4.0	1.0 - 4.0	
Percent Hair loss						0.0120			
Mean (SD)	43.2 (35.9)	44.0 (42.3)	44.8 (41.9)	27.6 (31.6)	38.7 (36.3)		26.1 (28.7)	38.1 (36.0)	
Median (n)	30.0 (138)	23.0 (23)	25.0 (17)	15.0 (76)	25.0 (254)		17.5 (12)	24.0 (266)	
Min - Max	1.0 - 100	1.0 - 100	1.0 - 100	1.0 - 100	1.0 - 100		2.0 - 100	1.0 - 100	
Eyebrow						0.0375			
Mean (SD)	1.0 (1.3)	0.6 (0.9)	1.1 (1.4)	0.5 (0.9)	0.8 (1.2)		0.9 (1.2)	0.8 (1.2)	
Median (n)	0.0 (139)	0.0 (23)	0.0 (17)	0.0 (76)	0.0 (255)		0.0 (12)	0.0 (267)	
Min - Max	0.0 - 3.0	0.0 - 3.0	0.0 - 3.0	0.0 - 3.0	0.0 - 3.0		0.0 - 3.0	0.0 - 3.0	
Eyelash						0.0146			
Mean (SD)	0.9 (1.3)	0.8 (1.1)	0.9 (1.3)	0.4 (0.9)	0.7 (1.2)		0.3 (0.9)	0.7 (1.2)	
Median (n)	0.0 (139)	0.0 (23)	0.0 (17)	0.0 (76)	0.0 (255)		0.0 (12)	0.0 (267)	
Min - Max	0.0 - 3.0	0.0 - 3.0	0.0 - 3.0	0.0 - 3.0	0.0 - 3.0		0.0 - 3.0	0.0 - 3.0	

Table 4. Patient-Reported Outcomes by race/ethnicity subgroup

Characteristic	NH White (N=139)	NH Black (N=17)	NH Asian (N=8)	Hispanic (N=43)	NH White or NH Black or NH Asian or Hispanic (N=207)	p-value compares NH White, NH Black, NH Asian and Hispanic	Other/Not Reported (N=43)	All participants (N=267)
PGIS-AA, n (%)	136	17	8	43	204	0.4950	60	264
n	10 (7.4%)	1 (5.9%)	0 (0.0%)	4 (9.3%)	15 (7.4%)		4 (6.7%)	19 (7.2%)
1. None	31 (22.8%)	4 (23.5%)	1 (12.5%)	14 (32.6%)	50 (24.5%)		22 (36.7%)	72 (27.3%)
2. Mild	41 (30.1%)	5 (29.4%)	3 (37.5%)	14 (32.6%)	63 (30.9%)		13 (21.7%)	76 (28.8%)
3. Moderate	27 (19.9%)	2 (11.8%)	1 (12.5%)	8 (18.6%)	38 (18.6%)		14 (23.3%)	52 (19.7%)
4. Severe	27 (19.9%)	5 (29.4%)	3 (37.5%)	3 (7.0%)	38 (18.6%)		7 (11.7%)	45 (17.0%)
5. Very Severe	27 (19.9%)	5 (29.4%)	3 (37.5%)	3 (7.0%)	38 (18.6%)		7 (11.7%)	45 (17.0%)
PGIS-AA, n (%)	136	17	8	43	204	0.4581	60	264
None, Mild or Moderate	82 (60.3%)	10 (58.8%)	4 (50.0%)	32 (74.4%)	128 (62.7%)		39 (65.0%)	167 (63.3%)
Severe or Very severe	54 (39.7%)	7 (41.2%)	4 (50.0%)	11 (25.6%)	76 (37.3%)		21 (35.0%)	97 (36.7%)
AAPO - Hair loss	4.1 (2.9)	4.6 (4.1)	1.8 (0.5)	2.6 (2.1)	3.8 (2.9)	0.0513	3.0 (2.6)	3.7 (2.9)
Mean (SD)	4.0 (87)	2.5 (10)	2.0 (4)	2.0 (20)	3.0 (121)		2.5 (30)	3.0 (151)
Median (n)	0.0 - 12.0	1.0 - 11.0	1.0 - 2.0	0.0 - 8.0	0.0 - 12.0		0.0 - 12.0	0.0 - 12.0
AAPO - Emotional Symptoms	8.3 (4.8)	7.9 (5.7)	9.8 (3.1)	8.1 (4.8)	8.3 (4.8)	0.9192	8.7 (4.5)	8.4 (4.7)
Mean (SD)	8.0 (120)	4.0 (11)	9.0 (6)	8.0 (24)	8.0 (161)		8.0 (35)	8.0 (196)
Median (n)	0.0 - 16.0	2.0 - 16.0	6.0 - 14.0	0.0 - 14.0	0.0 - 16.0		0.0 - 16.0	0.0 - 16.0
AAPO - Activity Limitations	1.7 (2.5)	2.0 (2.9)	1.0 (1.5)	1.9 (2.6)	1.7 (2.5)	0.9906	1.7 (2.5)	1.7 (2.5)
Mean (SD)	0.0 (118)	0.5 (10)	0.5 (6)	0.0 (23)	0.0 (157)		0.5 (34)	0.0 (191)
Median (n)	0.0 - 9.0	0.0 - 9.0	0.0 - 4.0	0.0 - 6.0	0.0 - 9.0		0.0 - 9.0	0.0 - 9.0
PROMIS Anxiety	52.5 (9.1)	48.7 (11.7)	50.7 (13.7)	50.0 (9.4)	51.7 (9.5)	0.3761	49.9 (9.0)	51.3 (9.5)
Mean (SD)	52.5 (127)	50.5 (14)	53.7 (7)	49.8 (33)	51.2 (181)		49.1 (48)	51.2 (229)
Median (n)	33.5 - 73.3	33.5 - 71.2	33.5 - 69.3	33.5 - 64.5	33.5 - 73.3		33.5 - 67.3	33.5 - 73.3
PROMIS Depression	49.4 (9.1)	48.2 (10.8)	49.9 (13.3)	46.2 (8.0)	48.8 (9.2)	0.4903	47.5 (8.5)	48.5 (9.1)
Mean (SD)	49.0 (127)	47.3 (14)	49.0 (7)	45.5 (31)	49.0 (179)		47.4 (48)	49.0 (227)
Median (n)	35.2 - 76.5	35.2 - 69.4	35.2 - 67.5	35.2 - 65.7	35.2 - 76.5		35.2 - 69.3	35.2 - 76.5

Results

- Eyelash involvement was highest in NH Black patients, followed by NH White, NH Asian, and Hispanic patients (39.1%, 34.7%, 35.3%, and 17.1%, respectively, Figure 2).

- Across race/ethnicity subgroups at enrollment, there were no significant differences in the use of topical treatments or in the use of systemic Janus Kinase Inhibitors (Table 2).

Conclusion:

- In this large real-world cohort, we identified differences in clinician reported measures by race/ethnicity subgroup.
- NH-Asian patients represented the largest proportion of patients with patient and clinician-reported severe disease.
- Clinician-reported eyebrow hair loss was most prevalent in NH White patients, while eyelash hair loss was most prevalent in NH Black patients.
- Hispanic patients had the smallest proportion with severe SALT, eyebrow and eyelash involvement.
- Additional research is required to better characterize AA and health-related quality of life burden in non-White AA patients.

References

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