

Healthcare Disparities in Atopic Dermatitis: Insights from the TARGET-DERM Registry



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Introduction

- Atopic dermatitis (AD) disproportionately affects diverse patient populations
- Complex factors may influence the burden of disease and access to treatment amongst different racial and ethnic groups
- The aim of this study is to evaluate health disparities and real-world management patterns by racial and ethnic groups treated for AD in routine clinical practice

Methods

- TARGET-DERM AD is an ongoing, longitudinal, observational study of 2,600+ patients managed in clinical practice at 43 North American sites (22 community/21 academic)
- Inclusion criteria:
 - ≥age 6
 - Informed consent completed
 - Managed for atopic dermatitis
- Participants were classified in 4 race/ethnicity groups as reported at enrollment;
 - Non-Hispanic (NH) White
 - Non-Hispanic Black
 - Non-Hispanic Asian/Pacific Islander (NH-API)
 - Hispanic
- Advanced Systemic Therapies (AST) for this study: dupilumab, tralokinumab, upadacitinib, abrocitinib
- Both descriptive analytics and multivariate analysis (adjusted for race/ethnicity, age, sex, insurance status, comorbidities, vIGA, treatment status) were utilized
- Variables of interest included:
 - Patient demographics
 - Clinical characteristics
 - Disease severity metrics:
 - vIGA-AD: Validated Investigator Global Assessment scale for Atopic Dermatitis
 - TBSA: Total Body Surface Area
 - VxT: vIGA-AD x TBSA

Patient reported outcomes:

- cDLQI: Children's Dermatology Life Quality Index
- DLQI: Dermatology Life Quality Index
- NRS-Pain: Numeric Rating Scale – Pain
- NRS-Sleep: Numeric Rating Scale – Sleep
- PROMIS
- WPAI: Work Productivity and Activity Impairment questionnaire

Results

Patient disposition and summary statistics are presented in Figure 1

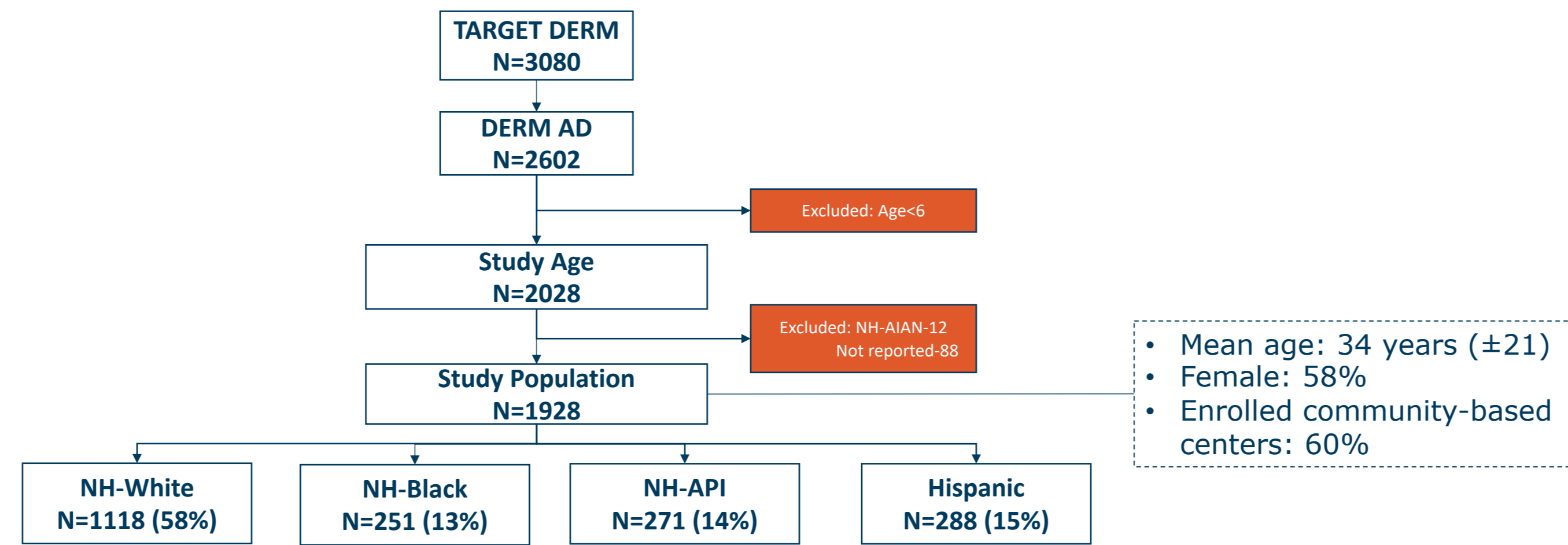


FIGURE 1. Patient Disposition

- Alaskan and American Indian populations had insufficient sample size to allow further analysis
- Patient demographics by race/ethnicity are presented in Figure 2

- Most (71%) had a medical comorbid condition with 30% having ≥3 conditions
- Insurance:
 - Private insurance was highest among NH-APIs (82%) and NH-Whites (70%)
 - Medicaid was highest among Hispanics (46%) and NH-Blacks (27%)
 - Uninsured was highest among NH-Blacks (18%) and NH-Whites (12%)

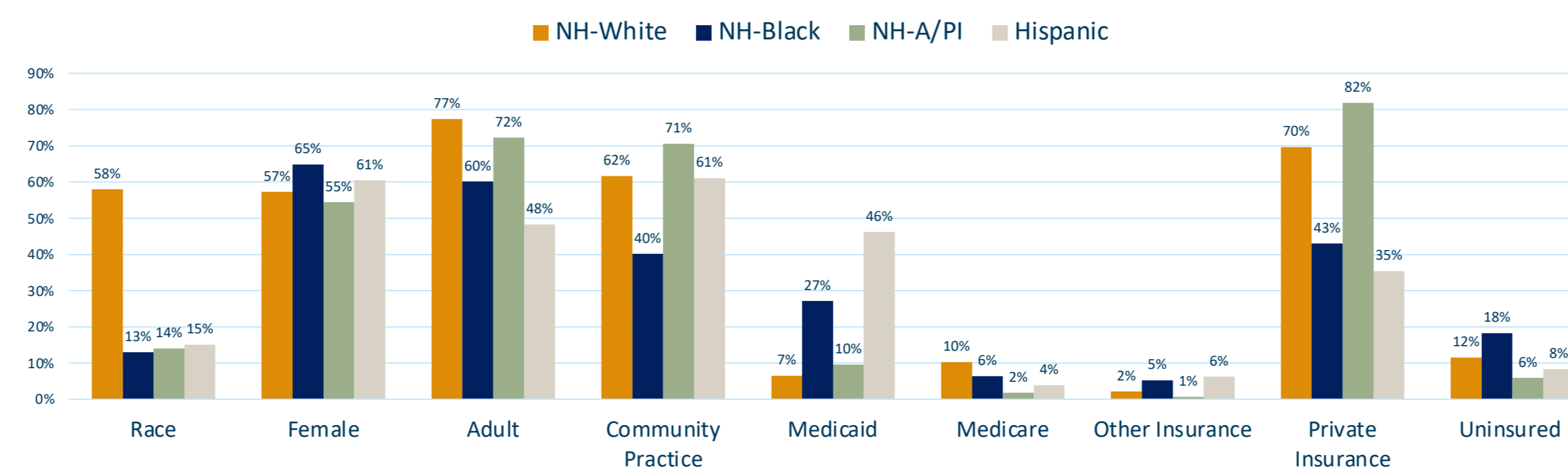


FIGURE 2. Patient Characteristics

- All three clinical disease severity metrics at enrollment (vIGA-AD, TBSA and VxT) varied by race/ethnicity Table 1; $p < 0.0001$. Clinical disease severity was lowest was among NH-Whites and generally most severe among NH-APIs

Race/Ethnicity	vIGA-AD clear/almost clear (P<0.0001)	VxT clear/almost clear (P<0.0001)	Median TBSA (P<0.0001)
NH-Whites	25.9%	26.7%	5%
Hispanics	21.7%	18.2%	7%
NH-Blacks	15.7%	15.3%	10%
NH-APIs	10.7%	13.8%	8%

TABLE 1. Distribution of Clinical Disease Severity Metrics

- Descriptive comparison of patient-reported outcome distributions identified no significant differences ($p > .12$).
- Multivariate Analysis
 - Treatment with traditional systemic therapies:** No statistically significant differences by race/ethnicity groups were identified
 - Treatment with ASTs in children:** NH-Black and Hispanics were less likely than NH-Whites to be treated with ASTs (odds ratio [OR] 0.61 and 0.52 respectively, $p < 0.05$)
 - vIGA-AD in children:** Hispanics were less likely than NH-Whites to have higher vIGA-AD scores (OR=0.55, $p < 0.01$)
 - vIGA-AD in adults:** NH-APIs and NH-Blacks were more likely than NH-Whites to have higher vIGA-AD scores (OR=1.55, 1.72 respectively; $p < 0.01$)
 - Quality of life in children:** NH-APIs more likely than NH-Whites were more likely to experience a greater quality of life impact as assessed by the Children's DLQI (OR=1.88, $p < 0.05$)

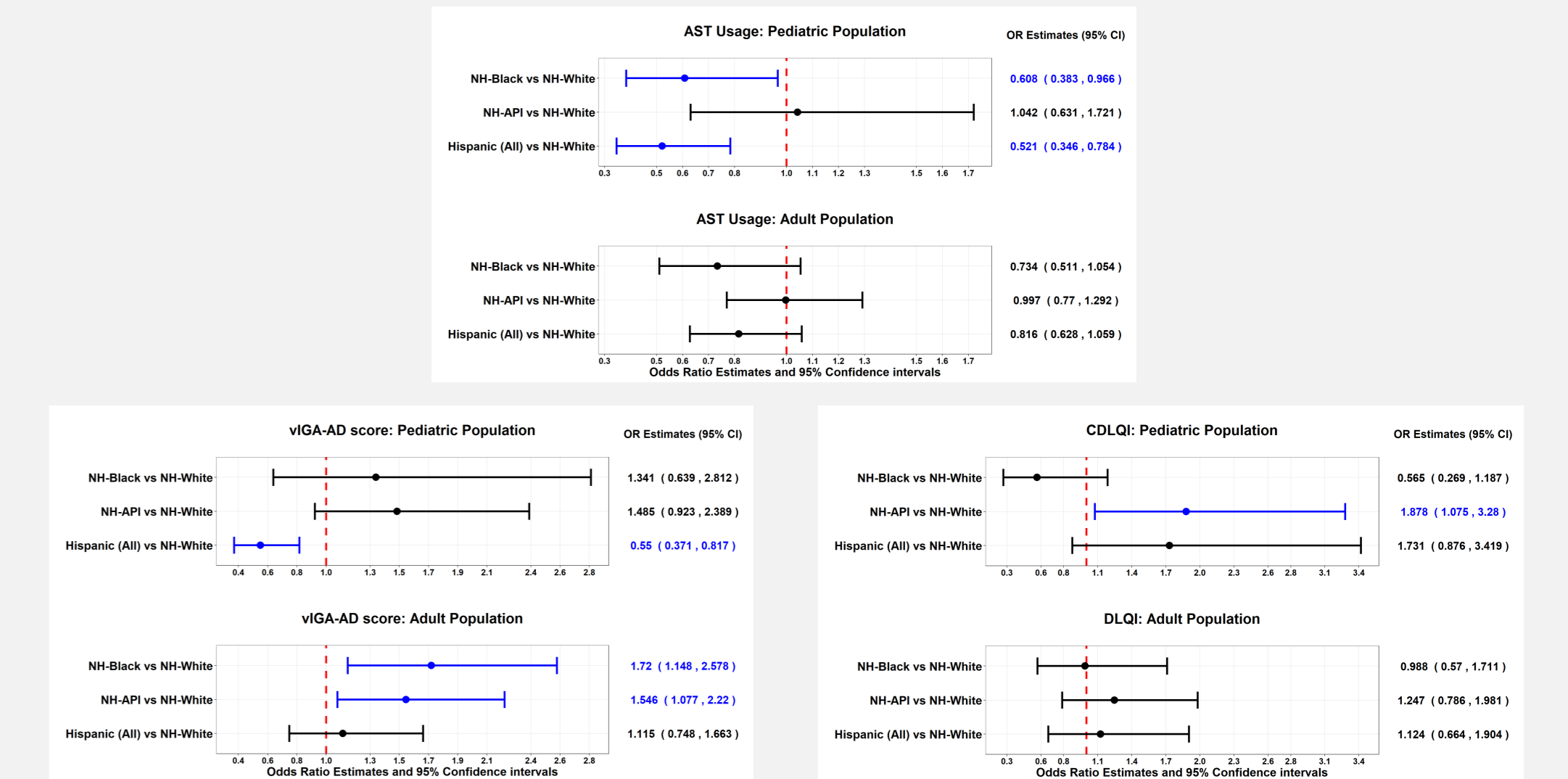


FIGURE 3. Odds Ratios for AST usage, elevated vIGA-AD score, and DLQI. Significant finding are in blue.

Conclusion

- Clinical disease severity metrics at enrollment (vIGA-AD, TBSA and VxT) favored whites compared to all other groups suggesting healthcare disparities.
- Despite presenting with more severe disease, Blacks and Hispanics have significantly lower odds of being treated with advanced systemic therapy relative to NH-Whites, which may lead to disparities in disease control. These disadvantages persist after adjusting for an array of characteristics.
- More efforts are needed by stakeholders to recognize and address health disparities among AD patients, specifically skin of color patients

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