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

Wine Lee¹, L, Knapp K², Munoz B², Perez A², Obi C³, Calimlim B³, Grada, A³, Silverberg J⁴

¹ Medical University South Carolina, Charleston South Carolina, USA; ² Target RWE, Durham North Carolina, USA; ³ AbbVie Inc, Mettawa IL, USA; ⁴ George Washington University, Washington DC, USA

TARGET RWE BETTER EVIDENCE • BETTER HEALTH

Introduction

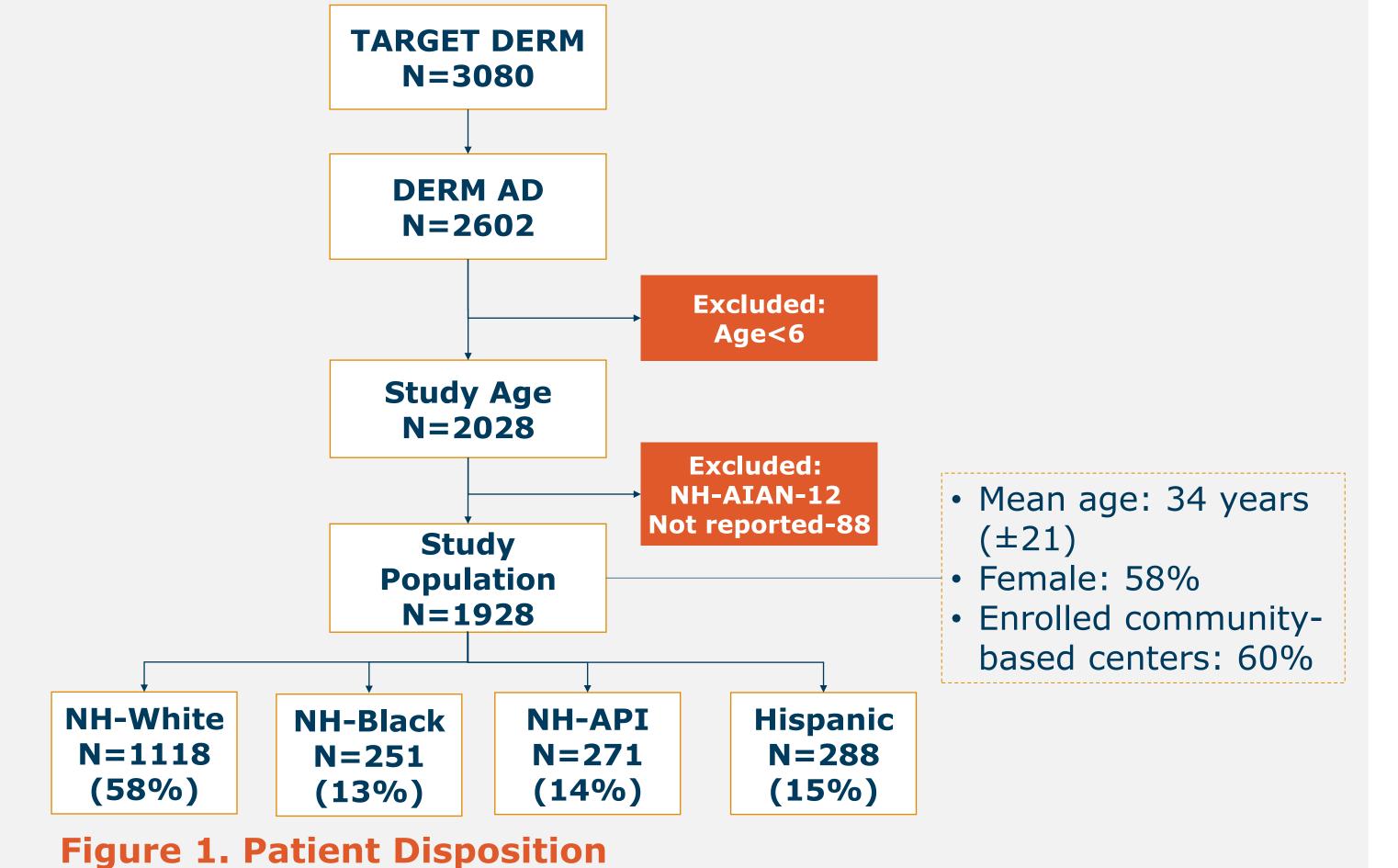
- Atopic dermatitis (AD) disproportionately affects diverse patient populations
- Complex factors may influence the burden of disease and access to treatment amongst different racial and ethnic groups
- The aim of this study is to evaluate health disparities and real-world management patterns by racial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



 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%)

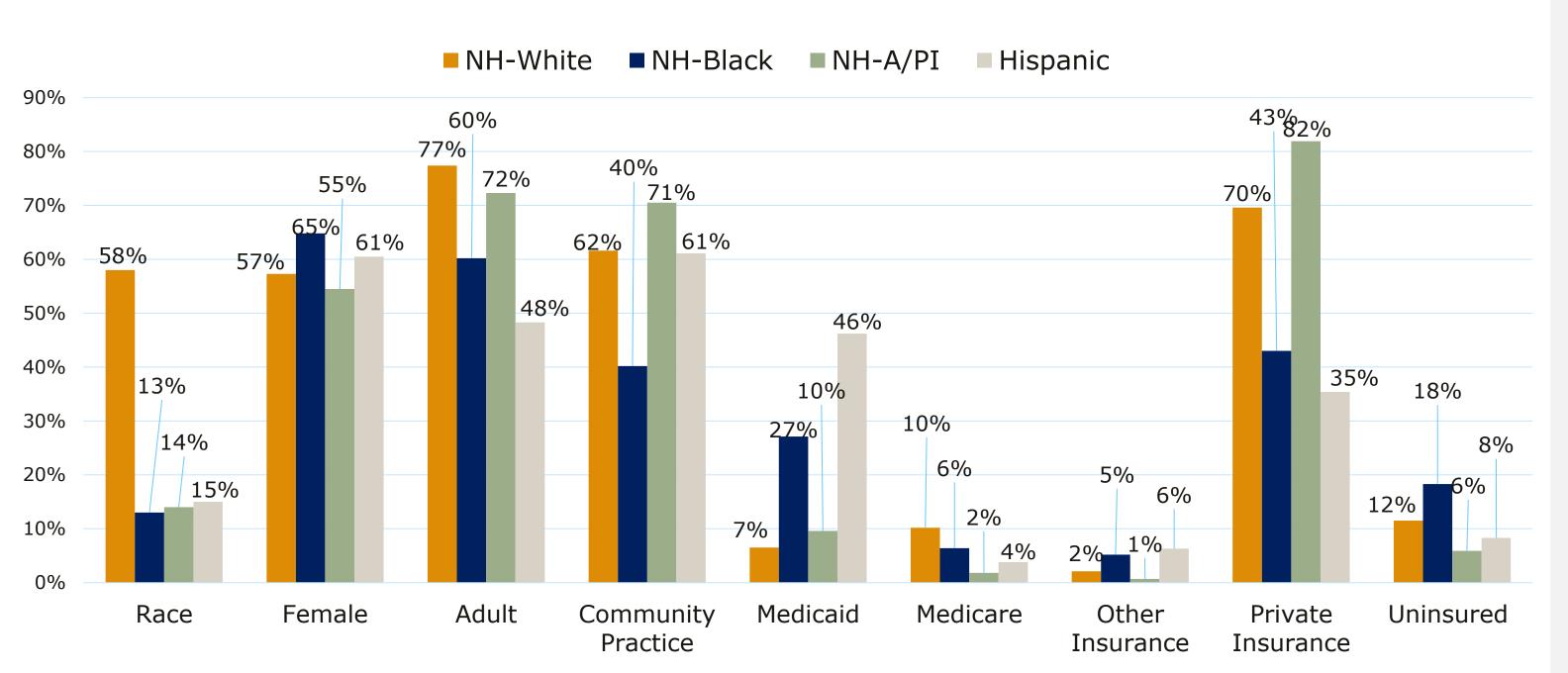


Figure 2. Patient Characteristics

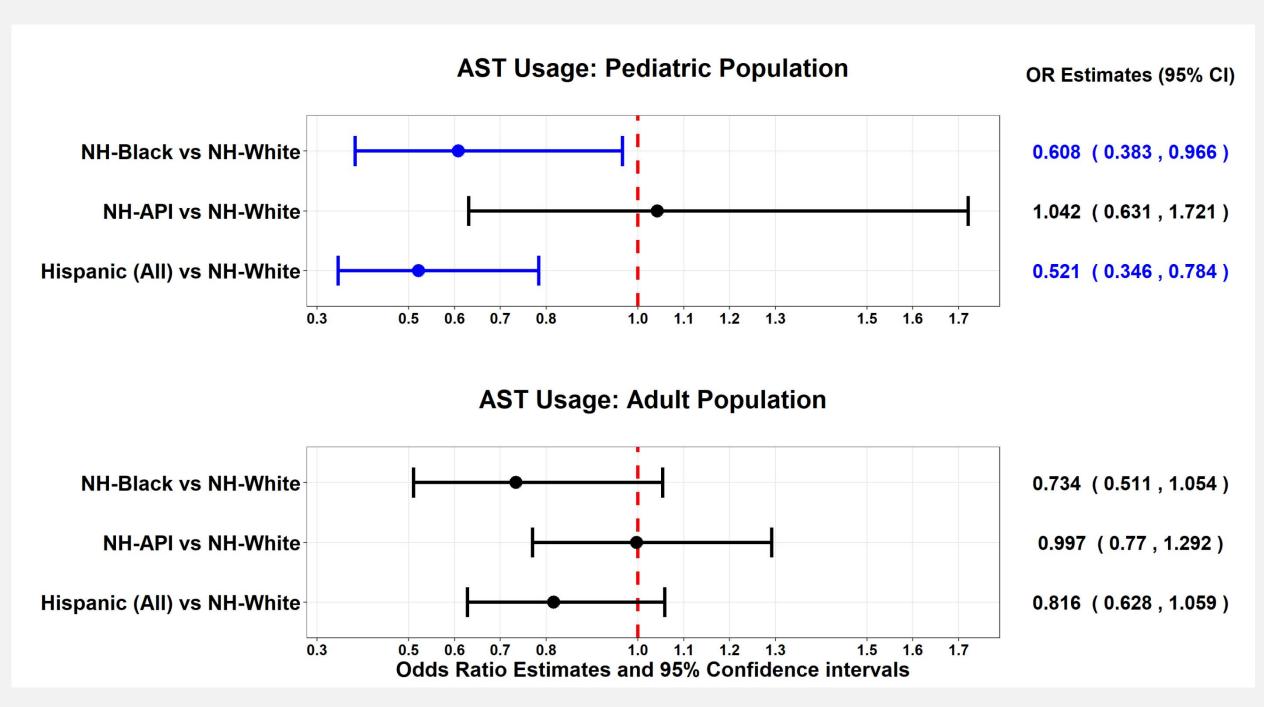
•All three clinical disease severity metrics at enrollment (vIGA-AD, TBSA and VxT) varied by race/ethnicity Table 1; p<0.0001. Clinical disease severity was lowest was among NH-Whites and generally most severe among NH-A/PIs

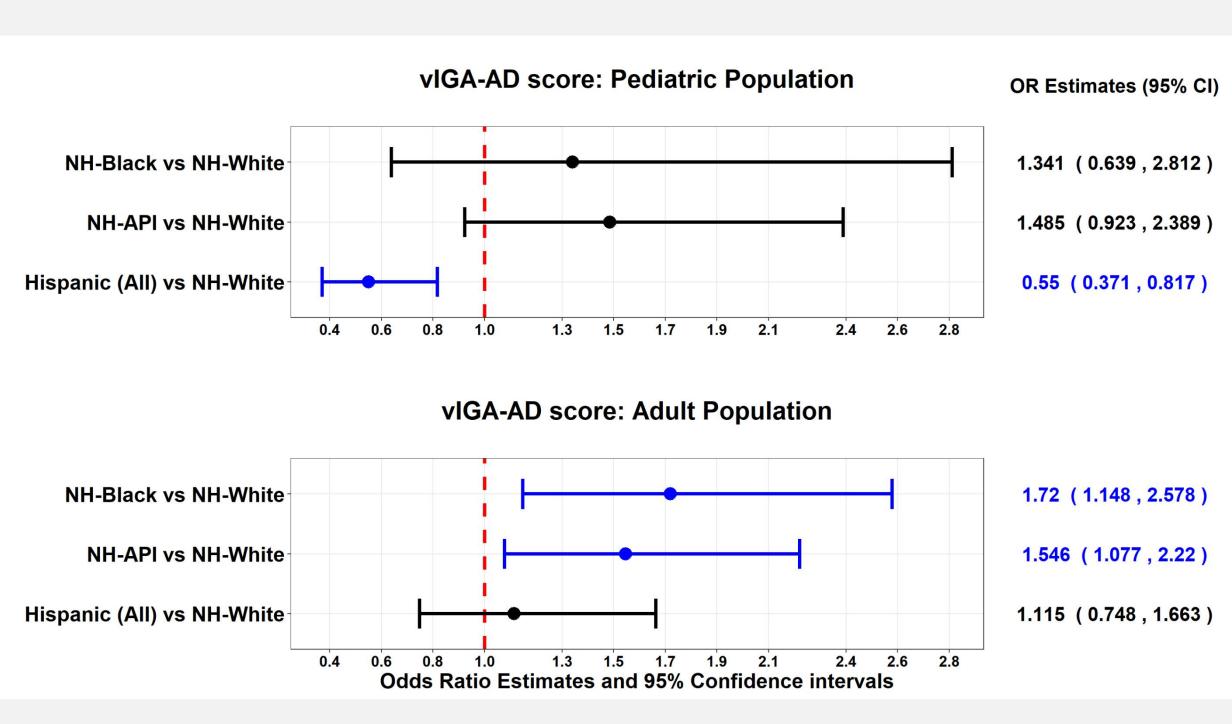
Race/ Ethnicity	vIGA-AD clear/almost clear (P<0.0001)	VxT clear/almost clear (P<0.0001)	Median TBSA (P<0.0001)
NH-Whites	25.9%	26.7%	5%
Hispanics	21.7%	18.2%	7%
NH-Blacks	15.7%	15.3%	10%
NH-A/PIs	10.7%	13.8%	8%

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)





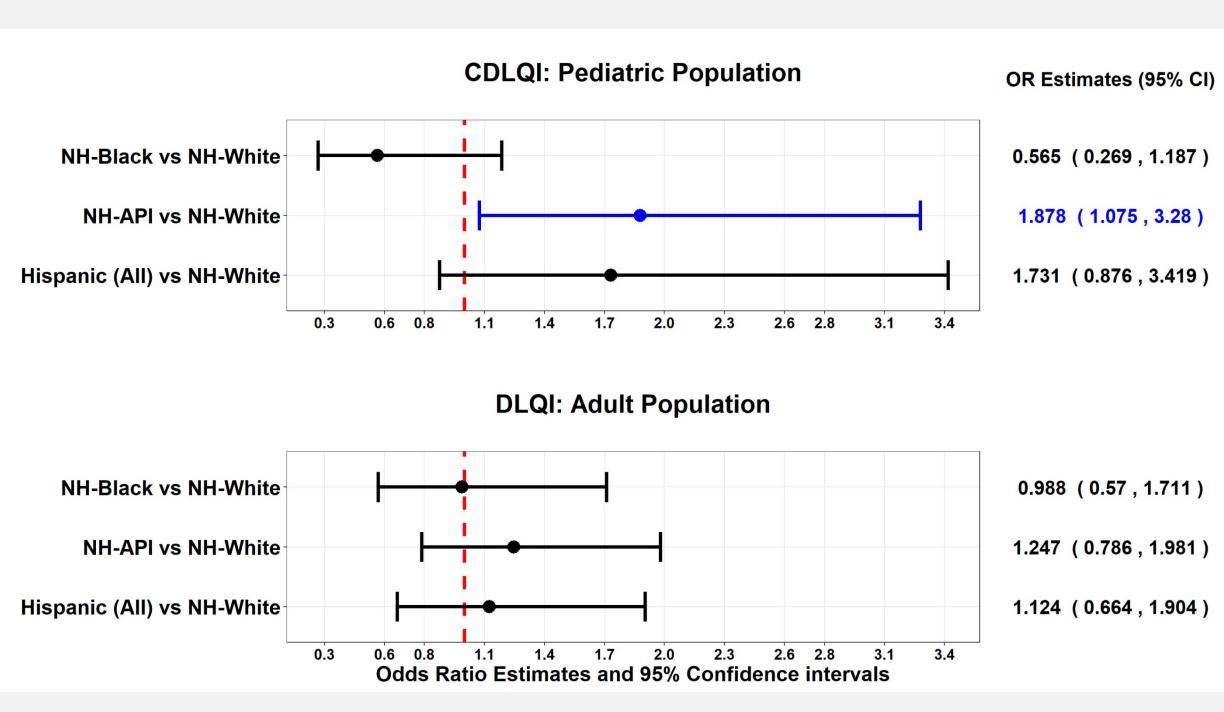


Figure 3. Odds Ratios for AST usage, elevated vIGA-AD score, and DLQI. Significant finding are in blue.

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

Acknowledgements and Disclosures: TARGET-DERM is a study sponsored by Target RWE. Target RWE is a health evidence solutions company headquartered in Durham, NC. The authors would like to thank all the investigators, participants, and research staff associated with TARGET-DERM. *TARGET-DERM Investigators are the participating investigators who provided and cared for study patients; they are authors and non-author contributors. For the complete list, please see ClinicalTrails.gov (NCT03661866).

LWL Castle Creek, Eli Lilly, Pfizer, Regeneron Pharmaceuticals, Inc. - advisory board; AbbVie, Amryt, Krystal Biotech, Novartis, Pyramid Bioscience - consultant; AbbVie, Amgen, Amryt, Arcutis, Castle Creek, Celgene, Eli Lilly, Galderma, Incyte Corp, Mayne Pharmaceuticals, Novartis, Pfizer, Regeneron Pharmaceuticals, Inc., Sanofi, Target Pharma, Trevi Therapeutics, UCB - investigator; Amryt - speaker; KK, BM, MF & AP work for TARGET RWE; AG, BO, & BC work for Abbvie Inc. JS has received honoraria as a consultant and/or advisory board member for Abbvie, Afyx, Aobiome, Arena, Asana, Aslan, BioMX, Biosion, Bluefin, Bodewell, Boehringer-Ingelheim, Cara, Castle Biosciences, Celgene, Connect Biopharma, Dermavant, Dermira, Dermtech, Eli Lilly, Galderma,

GlaxoSmithKline, Incyte, Kiniksa, Leo Pharma, Luna, Menlo, Novartis, Optum, Pfizer, RAPT, Regeneron, Sanofi-Genzyme, Shaperon, Sidekick Health, Union; speaker for Abbvie, Eli Lilly, Leo Pharma