

The Impact of Moderate-to-Severe Atopic Dermatitis in Children Age <12 Years by Race: An Analysis of the Real-World PEDISTAD Study

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OBJECTIVE

- To describe the real-world burden of moderate-to-severe AD, including atopic comorbidities, and disease characteristics in patients aged <12 years enrolled in PEDISTAD (PEdiatric Study in Atopic Dermatitis; NCT03687359)

METHODS

- PEDISTAD is an ongoing, international, multicenter, 5-year, observational study in patients <12 years old with moderate-to-severe AD either on systemic therapies or inadequately controlled with topical therapies or for whom those therapies are not advisable (NCT03687359)¹
- All summaries presented are from baseline data of all patients enrolled in the study prior to dupilumab use (N = 1,329)
- Descriptive analyses were used for summarizing outcomes, only observed data were summarized

CONCLUSION

- The baseline disease characteristics of children in PEDISTAD demonstrate a multidimensional burden of moderate to severe AD in pediatric populations of all races, as measured by atopic comorbidities, clinical signs, quality of life and family impact, reflecting an unmet need for therapy.

RESULTS

Table 1. Demographics, comorbidities, and AD treatments at baseline.

	Asian (n = 301)	Black/African American (n = 126)	White (n = 751)	All (N = 1329)*
Age, years, mean (SD)	5.94 (3.11)	6.20 (3.04)	5.91 (3.24)	5.98 (3.18)
Sex, male, n/N1 (%)	177/301 (58.8)	55/126 (43.7)	398/751 (53.0)	702/1321 (53.1)
Any concomitant AD comorbidity, n (%)	197 (65.4)	90 (71.4)	428 (57.0)	803 (60.4)
Allergic conjunctivitis	42 (14.0)	17 (13.5)	69 (9.2)	149 (11.2)
Allergic rhinitis	103 (34.2)	59 (46.8)	242 (32.2)	448 (33.7)
Asthma	49 (16.3)	52 (41.3)	166 (22.1)	303 (22.8)
Eosinophilic esophagitis	0	1 (0.8)	6 (0.8)	8 (0.6)
Food allergy	117 (38.9)	42 (33.3)	237 (31.6)	450 (33.9)
Nasal polyposis	1 (0.3)	4 (3.2)	2 (0.3)	7 (0.5)
Anxiety	1 (0.3)	8 (6.3)	33 (4.4)	51 (3.8)
ADD/ADHD	7 (2.3)	7 (5.6)	28 (3.7)	47 (3.5)
Systemic treatments, n (%)	45 (15.0)	26 (20.6)	186 (24.8)	306 (23.0)
Cyclosporine	15 (5.0)	6 (4.8)	42 (5.6)	78 (5.9)
Methotrexate	7 (2.3)	11 (8.7)	53 (7.1)	87 (6.5)
Dupilumab	15 (5.0)	8 (6.3)	30 (4.0)	61 (4.6)
Non-systemic treatments, n (%)	248 (82.4)	118 (93.7)	646 (86.0)	1142 (85.9)
TCS	217 (72.1)	108 (85.7)	513 (68.3)	948 (71.3)
TCl	89 (29.6)	26 (20.6)	216 (28.8)	375 (28.2)
Crisaborole	1 (0.3)	11 (8.7)	26 (3.5)	43 (3.2)
UV therapy	11 (3.7)	3 (2.4)	18 (2.4)	37 (2.8)

AD, atopic dermatitis; ADD, attention deficit-disorder; ADHD, attention deficit hyperactivity disorder; SD, standard deviation; TCS, topical corticosteroids; TCl, topical calcineurin inhibitor.

Table 2. Baseline disease characteristics.

	Asian (n = 301)	Black/African American (n = 126)	White (n = 751)	All (N = 1329)*
Age at AD onset, median, years	0.40	0.60	0.70	0.60
Clinical and patient/caregiver assessments[†]				
EASI, (range: 0–72)	14.1 (9.8)	14.7 (11.5)	14.6 (11.3)	14.6 (11.0)
BSA affected by AD, %	30.9 (19.9)	31.5 (20.5)	34.4 (21.2)	33.1 (21.0)
POEM score, (range: 0–28)	15.1 (7.5)	15.2 (7.5)	15.7 (7.2)	15.5 (7.4)
CDLQI/IDQOL (range: 0–30) [‡]	9.4 (6.0)	10.3 (7.0)	11.4 (6.6)	10.9 (6.6)
Worst scratching during the previous 24 hours [†] , NRS*	5.8 (2.7)	6.6 (2.6)	5.8 (2.8)	5.9 (2.7)
Worst itching during the previous night [†] , NRS*	5.0 (2.7)	5.4 (2.7)	4.7 (3.0)	4.9 (2.9)
Worst itching during the current day [†] , NRS*	4.0 (2.7)	3.9 (2.7)	3.8 (2.8)	3.8 (2.8)
DFI score [‡] , (range: 0–30)	10.3 (7.3)	9.3 (7.4)	11.5 (7.4)	11.1 (7.4)

*Data represents mean (SD). [†]Includes non-missing data. [‡]Range 0–10, 0 being 'no itch', 10 being 'worst itch'. BSA, body surface area; CDLQI, Children's Dermatology Life Quality Index; DFI, Dermatitis Family Impact; EASI, Eczema Area and Severity Index; IDQOL, Infants' Dermatitis Quality of Life Index; NRS, Numerical Rating Scale; POEM, Patient-Oriented Eczema Measure.

Figure 1. Frequency of itching reported during the last week

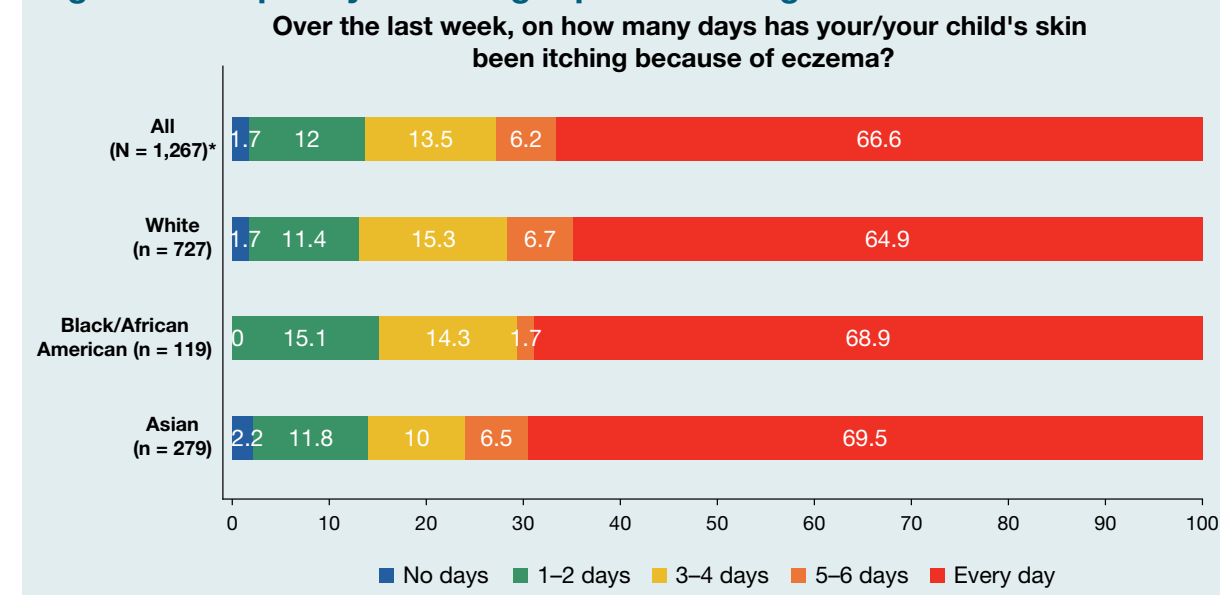


Figure 2. Example of patients enrolled in PEDISTAD



Figure 3. Mean POEM score by race and age group

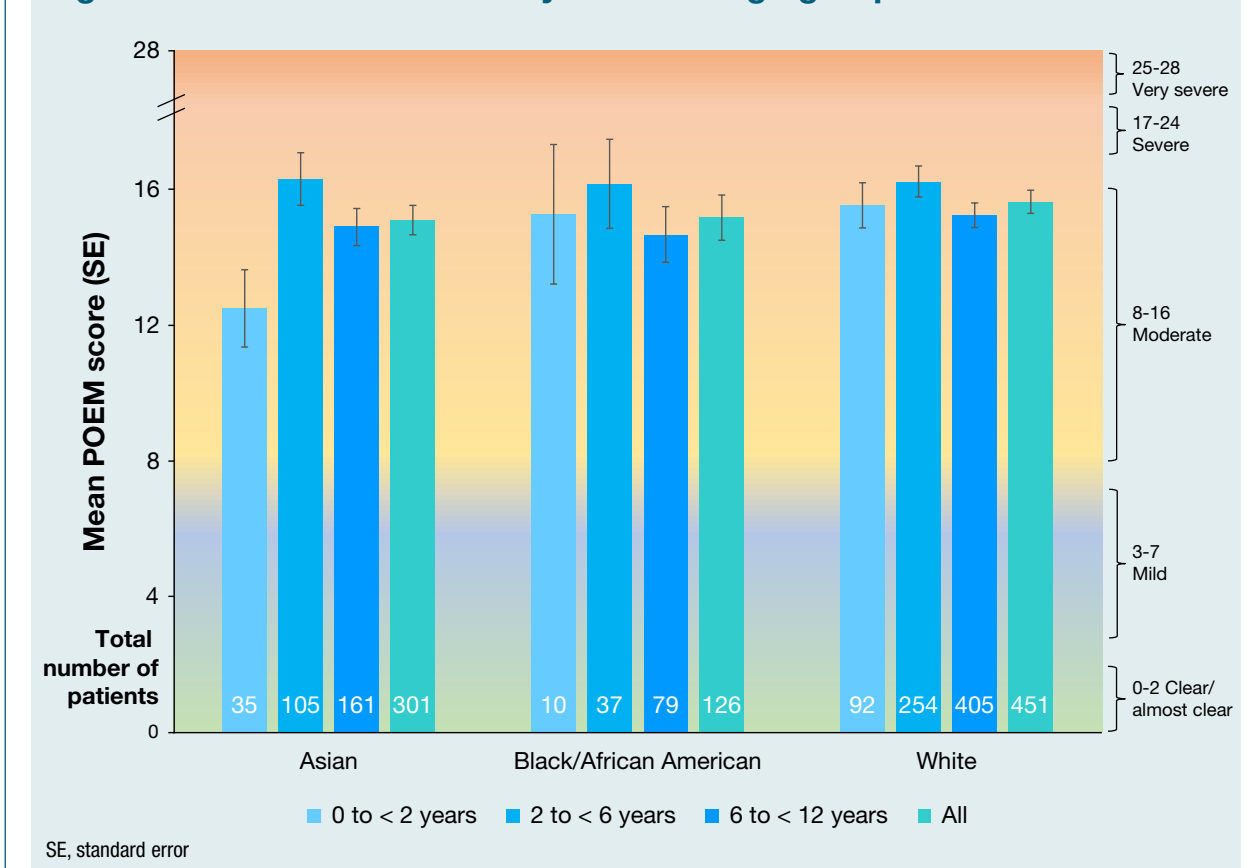
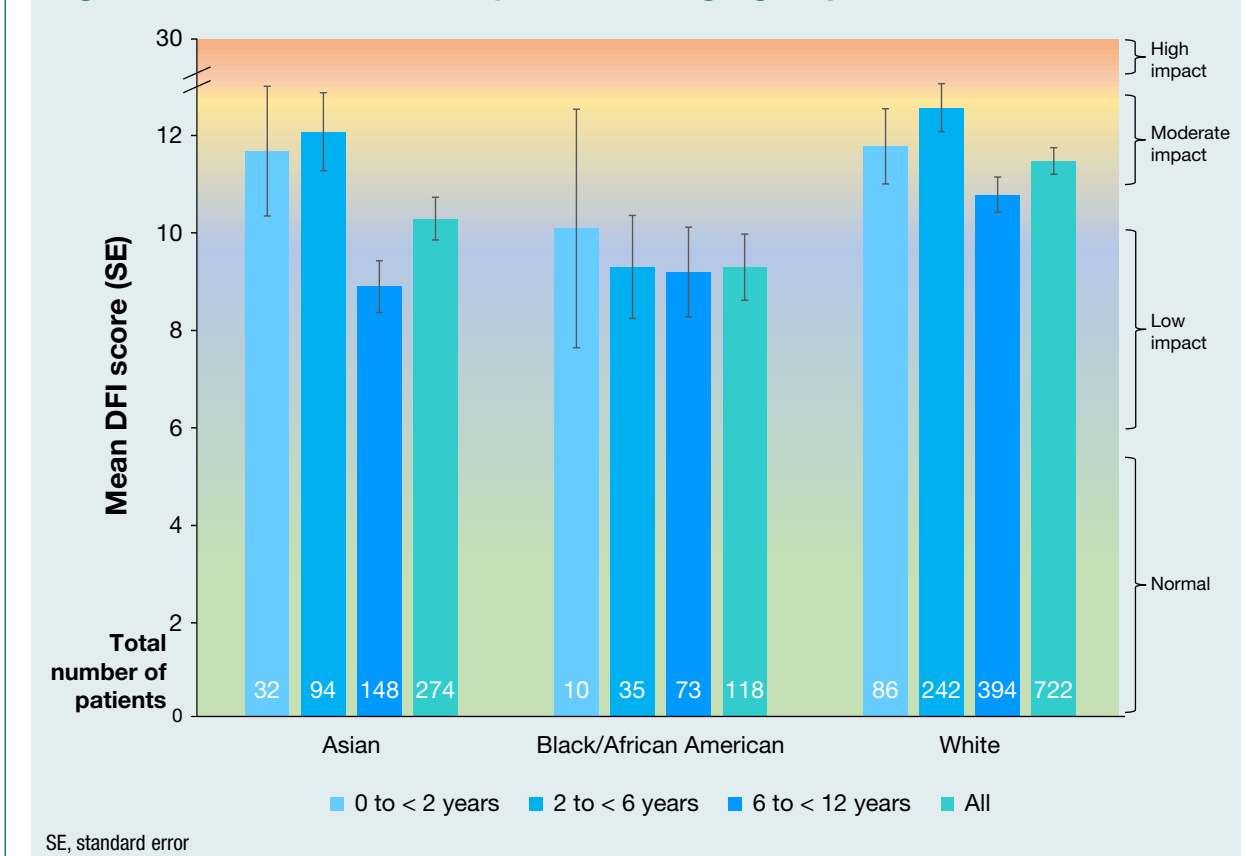


Figure 4. Mean DFI score by race and age group



References: 1. Paller AS, et al. BMJ Open 2020;10:e033507; *N for 'All' patients includes patients of other races.

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