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

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Objective: To present real-world data on disease characteristics and quality-of-life impact in children with moderate-to-severe atopic dermatitis (AD) and their families by race.

Methods: PEDISTAD (NCT03687359) is an ongoing, international, observational study in 20 countries in patients aged 0.5–<12 years with moderate-to-severe AD inadequately controlled with topical therapies or for whom such therapies are inadvisable. Baseline measures of disease severity assessed include Eczema Area and Severity Index (EASI; 0–72), AD-affected body surface area (BSA; 0–100%); patient- or caregiver-reported Patient-Oriented Eczema Measure (POEM; 0–28); Infant's Dermatitis Quality of Life Index (IDQOL, age ≤3 years; 0–30), Children's Dermatology Life Quality Index (CDLQI, age 4 to <12 years; 0–30), and Dermatitis Family Impact (DFI; 0–30). Outcomes are reported descriptively by race in White, Asian, and Black children.

Results: Of 1,329 children enrolled in PEDISTAD, 751 (56.5%) were White, 301 (22.6%) Asian, 126 (9.5%) Black. Atopic comorbidities affected 57.0% (White) to 71.4% (Black) children; allergic rhinitis (Black: 46.8%; White: 32.2%) and food allergy (Asian: 38.9%) were the most common comorbidities. Systemic AD therapies were received by 15.0% (Asian) to 24.8% (White) children. Mean (SD) EASI ranged from 14.1 (9.8) (Asian) to 14.7 (11.5) (Black); BSA affected, 30.9% (19.9%) (Asian) to 34.4% (21.2%) (White); POEM, 15.1 (7.5) (Asian) to 15.7 (7.2) (White); IDQOL, 9.1 (6.1) (Asian) to 11.2 (6.3) (Black); CDLQI, 9.5 (5.9) (Asian) to 11.4 (6.8) (White); and DFI score, 9.3 (7.4) (Black) to 11.5 (7.4) (White).

Discussion: Despite similar disease scores across races, White children were more likely to receive systemic treatments. The baseline characteristics of children in PEDISTAD reflect a multidimensional disease burden across races as measured by atopic comorbidities, clinical signs, quality of life, and family impact, reflecting an unmet need for effective, safe therapies for pediatric populations of all races with moderate-to-severe AD.

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