Dupilumab decreases concomitant therapy use in adults with atopic dermatitis in clinical practice: Subgroup analysis of Black/African American population from RELIEVE-AD

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BACKGROUND

- Dupilumab is a fully human anti-interleukin-4 receptor α monoclonal antibody approved for patients aged ≥6 months with moderate-to-severe atopic dermatitis (AD) inadequately controlled by topical therapies[1,2]
- The safety and efficacy of dupilumab have been demonstrated in phase 3 clinical trials[3-11]
- A prospective, real-world, longitudinal patient survey study, RELIEVE-AD, demonstrated that dupilumab treatment decreases concomitant medication use in adults with moderate-to-severe AD[12]
- A subgroup analysis of concomitant AD medication use was conducted in Black/African American adults with AD from the RELIEVE-AD study

OBJECTIVE

- **To evaluate the real-world impact of dupilumab on concomitant AD therapy use from the perspective of Black/African American patients, a population in which clinical study data are limited**

METHODS

- In the RELIEVE-AD study, adults with moderate-to-severe AD were identified through the US dupilumab patient support program and invited to participate in an online survey before (baseline) and after dupilumab initiation at Months 1, 2, 3, 6, 9, and 12[12]
- Based on a 4-week recall, surveys assessed concomitant AD therapy use, including oral/injectable steroids, immunosuppressants, prescription topical medications (steroids, calcineurin inhibitors, crisaborole), and ultraviolet therapy at baseline and throughout 1 year after treatment initiation
- A subgroup analysis of self-reported data from Black/African American population was performed

RESULTS

Patient Characteristics

- Of 64 Black/African American patients completing the baseline survey, 43 provided responses at Month 12, with a survey completion rate of 67.2%
- Among patients who completed the survey at Month 12 (N = 43), mean age at study initiation was 38.8 years and a majority of patients were female (**Table 1**)

Concomitant AD Medication Use

- The proportion of patients reporting no concomitant treatment use significantly increased from baseline (7.8%) to Month 12 (30.2%, $P<0.05$; **Figure 1**)
- A significant reduction in concomitant AD medication use across all categories from baseline to Month 12 was reported (**Figure 2**)
  - Use of prescription topical medication decreased from baseline (87.5%) to Month 12 (67.4%, $P<0.05$)
  - Use of systemic steroids and immunosuppressants reduced from baseline (32.8%) to Month 12 (14.0%, $P<0.05$)

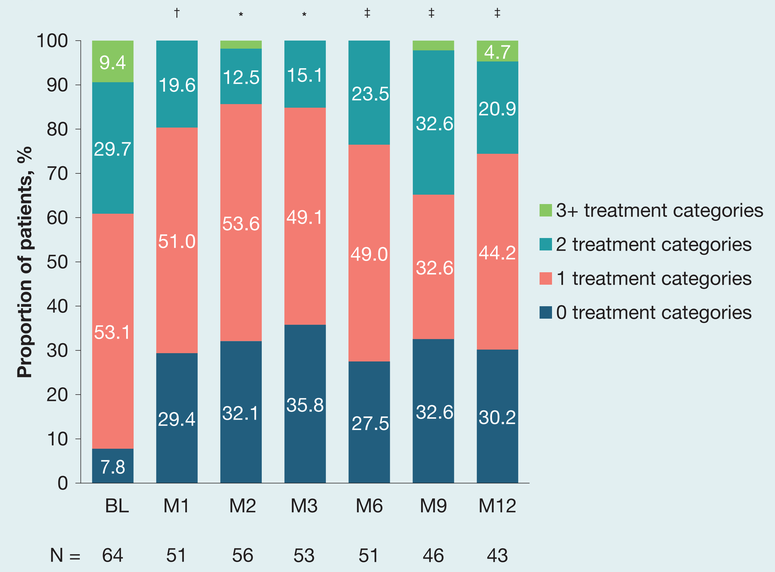
RESULTS (CONT.)

Table 1. Baseline Demographic and Clinical Characteristics of Black/African American Adults with AD

Variable	Baseline (N = 64)	Month 12 (N = 43)
Female, n (%)	55 (85.9)	37 (86.0)
Age, mean (SD)	38.2 (13.8)	38.8 (13.8)
Geographic region, n (%)		
Northeast	10 (15.6)	8 (18.6)
Midwest	7 (10.9)	4 (9.3)
South	40 (62.5)	25 (58.1)
West	7 (10.9)	6 (14.0)
Age at AD diagnosis, n (%)		
≤18 years	37 (57.8)	28 (65.1)
19–34 years	9 (14.1)	6 (14.0)
≥35 years	11 (17.2)	7 (16.3)
Don't remember	7 (10.9)	2 (4.7)
Education, n (%)		
High school diploma or equivalent	12 (18.8)	5 (11.6)
Some college or Associate's degree	30 (46.9)	18 (41.9)
College graduate/Bachelor's degree	14 (21.9)	13 (30.2)
Advanced degree (such as Master's degree, professional degree beyond undergraduate, or Doctorate degree)	8 (12.5)	7 (16.3)
Comorbidities,* n (%)		
Type 2 comorbid diseases (asthma or non-seasonal allergies)	39 (60.9)	27 (62.8)
Seasonal allergies	36 (56.3)	25 (58.1)
Non-seasonal allergies†	26 (40.6)	19 (44.2)
Asthma	24 (37.5)	15 (34.9)
Hypertension (high blood pressure)	16 (25.0)	13 (30.2)
Anxiety	15 (23.4)	8 (18.6)
Depression	11 (17.2)	7 (16.3)
Obesity	17 (26.6)	12 (27.9)
Sleep disorders	6 (9.4)	6 (14.0)
Anemia	18 (28.1)	12 (27.9)
Diabetes mellitus (type 1 or 2)	7 (10.9)	6 (14.0)

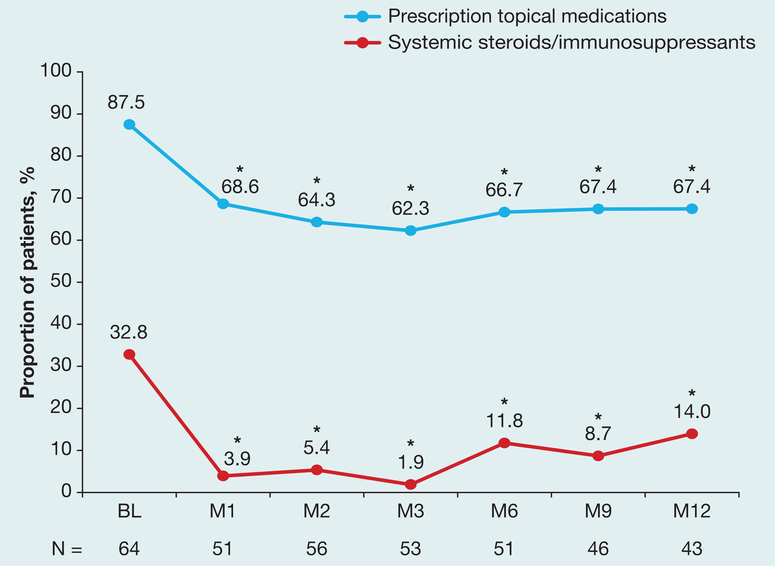
AD, atopic dermatitis; SD, standard deviation.
*Defined as ≥10% among all patients. Responses were not mutually exclusive.
†Allergic rhinitis, allergic conjunctivitis, food allergies, allergic urticarial or hives, and others.

Figure 1. Number of Concomitant Treatment Categories Used



BL, baseline; M, month.
Treatment categories do not include dupilumab and are based on the aggregation of prescribed treatments into 5 categories:1. Topical medicine (excluding crisaborole); 2. Crisaborole ointment; 3. Systemic steroids (oral, injection); 4. Systemic immunosuppressants (oral, injection); 5. Ultraviolet therapy.
*$P<0.0001$. †$P<0.001$. ‡$P<0.01$ vs BL.

Figure 2. Concomitant Therapies by Treatment Category



BL, baseline; M, month.
Prescription topical medications include calcineurin inhibitor creams or ointments (e.g. pimecrolimus, tacrolimus), crisaborole ointment, and steroid creams or ointments (e.g. hydrocortisone). Any systemic steroid use was defined as use of steroid pills or injections (e.g. prednisone, prednisolone, dexamethasone, methylprednisolone). Any systemic immunosuppressant use was defined as use of oral systemic immunosuppressants (excluding steroid pills; e.g. mycophenolate mofetil, azathioprine, cyclosporine, tacrolimus) or CellCept injections.
*$P<0.05$ vs BL.

CONCLUSIONS

- **In Black/African American adults with moderate-to-severe AD treated with dupilumab, concomitant AD medication use was significantly reduced in a real-world clinical practice setting**
- **Interpretation of the results of this subgroup analysis should account for the small sample size and attrition over the study period**

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