Lebrikizumab Improves Signs and Symptoms of Moderate-to-Severe Atopic Dermatitis in Patients Not Adequately Controlled or Non-Eligible for Cyclosporine: A Placebo-Controlled, Randomized Phase 3 Clinical Study (ADVantage)

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Atopic dermatitis (AD) is a common, chronic and inflammatory skin disease characterized by intense pruritus and recurrent dry, red and excoriated patches.1,2 Lebrikizumab (LEB) is a novel monoclonal antibody that binds with high affinity and slows off-rate to interleukin (IL)-13, precisely blocking the downstream effects of IL-13 with high potency.3,4 LEB has previously demonstrated clinical efficacy and safety in adults and adolescents with moderate-to-severe AD in 3 randomized, placebo (PBO)-controlled, phase 3 trials.5

Cyclosporine A (CsA) is approved in the European Union (EU) for treatment of severe AD, but its efficacy may not be optimal in some patients and its safety limits long-term use.

OBJECTIVE

The objective is to report 16-week efficacy and safety of LEB combined with low- or mid-potency topical corticosteroids (TCS) in patients with moderate-to-severe AD not adequately controlled or non-eligible for CsA in the phase 3 ADVantage study(NCT05149313).

METHODS

Study Design

Endpoints (at Week 16)

Primary efficacy endpoint: percentage of patients who achieved 75% reduction from baseline in EASI (EASI 75).

Secondary efficacy endpoints: percentage of patients who achieved:
- EASI 90
- IGA (0,1) with ≥2-points improvement from baseline.
- At least a 4-point improvement in pruritus Numeric Rating Scale (NRS).

Secondary endpoint: Percentage of patients achieving EASI 90

Secondary endpoint: Percentage of patients achieving Pruritus NRS with at least a 4-point improvement from Baseline.

RESULTS

Baseline Demographic and Disease Characteristics

Endpoints (at Week 16)

Primary efficacy endpoint: percentage of patients who achieved 75% reduction from baseline in EASI (EASI 75).

Secondary efficacy endpoints: percentage of patients who achieved:
- EASI 90
- IGA (0,1) with ≥2-points improvement from baseline.
- At least a 4-point improvement in pruritus Numeric Rating Scale (NRS).

Safety: treatment-emergent adverse events (TEAE), serious adverse events (SAE) and TEAE leading to discontinuation.

Statistical analysis

Missing data due to lack of efficacy or data after rescue medication usage (high-potency TCS or systemic treatment) were imputed using non-responder imputation (NRI).

Other missing data were imputed using multiple imputation (MI).

CONCLUSIONS

At week 16, lebrikizumab 250 mg administered every 2 weeks with topical corticosteroids significantly improved signs and symptoms of atopic dermatitis (AD) in adults and adolescents with moderate-to-severe AD and history of inadequate response to Cyclosporine A, or for whom Cyclosporine A was not medically advisable.

Safety was consistent with the known profile of lebrikizumab.