

Safety of long-term dupilumab treatment in adults with moderate-to-severe atopic dermatitis: results from an open-label extension trial up to 5 years

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Introduction/Background: Atopic dermatitis (AD) is a chronic inflammatory skin disease requiring long-term management; however, sustained AD treatment with systemic immunosuppressants is not recommended due to safety concerns. Dupilumab is a fully human monoclonal antibody that blocks the shared receptor component for interleukin (IL)-4 and IL-13, inhibiting the signaling of these key and central drivers of type 2 inflammation in multiple diseases. Data from the open-label extension (OLE) study, LIBERTY AD OLE, (NCT01949311) previously demonstrated acceptable dupilumab safety in adult patients up to 204 weeks (approximately 4 years), consistent with the known safety profile in parent studies.

Objective: To assess the long-term safety of dupilumab administered in adult patients with AD up to 5 years (the end of this OLE study).

Methods: Adults with moderate-to-severe AD who had participated in any dupilumab parent study (phase 1 through phase 3) were enrolled into the long-term, multicenter OLE trial with a duration of up to 5 years. During the OLE, patients were treated with 300 mg dupilumab weekly (qw). In 2019, patients

transitioned to 300 mg every 2 weeks to align with approved dosage. Concomitant treatments for AD were permitted, including topical corticosteroids (TCS) and topical calcineurin inhibitors. Because the OLE trial lacked a control arm, LIBERTY AD CHRONOS (NCT02260986) 52-week safety results for adults with moderate-to-severe AD receiving dupilumab 300 mg qw plus TCS were provided as a comparison. Data shown are for the overall study population (N=2,677).

Results: Of the 2,677 patients who enrolled, 2,207 completed treatment up to Week 52, 362 up to Week 172, and 334 up to Week 260. The most common reason for study withdrawals during the OLE study period was dupilumab approval and commercialization in the patient's country of enrollment (708 [51.3%]). The exposure-adjusted incidence rate (EAIR) of patients with ≥ 1 treatment-emergent adverse event (TEAE) was lower in this OLE vs the 300 mg qw + TCS arm of the 52-week CHRONOS trial (166.0 vs 322.4 number of patients/100 patient-years). Over this 5-year OLE, 10.6% of patients had ≥ 1 serious TEAE, 10.0% had ≥ 1 severe TEAE, 1.2% had ≥ 1 serious TEAE related to the study drug, and 3.8% of patients experienced a TEAE resulting in permanent drug discontinuation. The most common TEAEs observed were nasopharyngitis (28.9%) and conjunctivitis (20.0%, using a narrow customized MedDRA query [CMQ] containing conjunctivitis and related terms conjunctivitis allergic/bacterial/viral, and atopic keratoconjunctivitis). Of the patients under narrow CMQ, 95.0% reported mild/moderate conjunctivitis TEAEs and 87.7% of conjunctivitis events were recovered/resolved.

Conclusions: The safety profile observed in this OLE trial up to 5 years is acceptable and consistent with the known safety profile of dupilumab observed in controlled studies. EAIRs of TEAEs overall did not increase over time and were lower than previously reported in the 3- and 4-year analyses of this OLE trial^{1,2} and an earlier 52-week placebo-controlled trial.

Keywords: safety, atopic dermatitis, open-label extension, adult, long-term

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References:

1. Beck LA, et al. Am J Clin Dermatol. 2020;21:567-77.
2. Beck LA, et al. Am J Clin Dermatol. 2022;23 Suppl 1:393-408.

Disclosures:

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