Long-Term Safety Data for Dupilumab up to 4 Years in an Open-Label Extension Study of Adults With Moderate-to-Severe Atopic Dermatitis

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Background: Patients with moderate-to-severe atopic dermatitis (AD), a chronic systemic inflammatory disease requiring long-term management, often have an inadequate response to topical therapies. Long-term use of systemic immunosuppressants is not recommended due to safety concerns. Here, we extend the dupilumab safety profile in patients with moderate-to-severe AD from an open-label extension (OLE) study (NCT01949311) to 204 weeks.

Methods: Adults with moderate-to-severe AD who had participated in any dupilumab parent study (phase 1 to 3) were enrolled into the long-term, multicenter OLE study with an initial duration of 3 years and up to 5 years in certain countries. Following protocol amendments in June 2017 and January 2018, 114 and 272 patients re-entered the trial, respectively, and 103 and 207 patients having a treatment interruption of > 8 weeks between study Week 148 and Week 164. During the OLE, patients were treated with 300 mg dupilumab weekly (qw). In 2019, patients transitioned to 300 mg every 2 weeks (q2w) to align with approved dosage. Concomitant treatments for AD, including topical corticosteroid (TCSs) and topical calcineurin inhibitors (TCIs), were permitted. Because the OLE trial lacks a control arm, LIBERTY AD CHRONOS (NCT02260986) 52-week safety results for adults with moderate-to-severe AD receiving dupilumab 300 mg weekly 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, 1,065 up to Week 100, 557 up to Week 148, 362 up to Week 172 and 352 up to Week 204. 240 patients had

treatment duration > 204 weeks. Most withdrawals (810 [59.5%]) during the OLE study period were due to dupilumab approval and commercialization in the country in which the patient had enrolled, 114 (8.4%) patients withdrew due to adverse events and 58 (4.3%) withdrew due to lack of efficacy. Exposure-adjusted incidence rates of treatment-emergent adverse events (TEAEs) were lower in this OLE vs the 300 mg qw+TCS arm of the 1-year CHRONOS trial (167.5 vs 322.4 number of patients/100 patient-years). In this OLE, 10.4% of patients had \geq 1 serious TEAEs; 9.8%, \geq 1 severe TEAEs; 1.2%, \geq 1 serious TEAE related to study drug; with 3.7% \geq 1 TEAEs resulting in permanent drug discontinuation. The most common TEAEs observed were nasopharyngitis (28.9%) and conjunctivitis (20.0%, including conjunctivitis, conjunctivitis allergic/bacterial/viral, and atopic keratoconjunctivitis). Among the patients with conjunctivitis TEAEs, 95% were reported as mild/moderate, and 87% of conjunctivitis events were recovered/resolved.

Conclusions: Data from this OLE study of long-term dupilumab treatment in adult patients with moderate-to-severe AD extends the previously reported safety profile of dupilumab to 4 years.

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