Upadacitinib vs Dupilumab in Adults With Moderate-to-Severe Atopic Dermatitis: Analysis of the Heads Up Phase 3 Trial

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Objective: Patients with moderate-to-severe atopic dermatitis (AD) may benefit from treatment with dupilumab, an IL-4/IL-13 antagonist. We compared the efficacy and safety of upadacitinib (a JAK1/JAK2 inhibitor) with dupilumab in a phase 3 study of adult patients with moderate-to-severe AD.

Methods: This was a randomized, double-blind, double-dummy, active-controlled trial in adults with moderate-to-severe AD. Participants with AD for at least 6 months were randomized to upadacitinib (30 mg once daily, 15 mg once daily) or dupilumab for 24 weeks. The primary endpoint was achievement of EASI 75 at Week 24. Efficacy endpoints included changes in Eczema Area and Severity Index (EASI) and Numerical Rating Scale (NRS) assessments at Week 24, and safety was assessed by adverse events.

Results: Of 348 participants who received active treatment, the primary endpoint was met: 51.9% of upadacitinib-treated patients achieved EASI 75 at Week 24, compared with 40.6% of dupilumab-treated patients. At Week 16, significantly more upadacitinib-treated patients achieved EASI 100 (5.3% vs 1.7%, P < 0.001). Significantly greater achievement of EASI 100, compared with dupilumab, was demonstrated at Week 24 (8.3% vs 2.9%, P < 0.001) and Week 16 (4.6% vs 1.6%, P < 0.001). Rates of serious adverse events, including infections, were generally similar between groups (upadacitinib; 3.2%, dupilumab; 3.4%). No cases of serious cutaneous adverse events were reported.

Conclusions: Upadacitinib provided significantly greater improvements in both investigator- and patient-reported outcomes compared with dupilumab in patients with moderate-to-severe AD. Further research is needed to determine if this effect is durable and if the drug is safe for long-term use.

References: