

Rapid and sustained improvements in itch and sleep with tralokinumab treatment in patients with moderate-to-severe Atopic Dermatitis, a post hoc analysis of pooled data from ECZTRA 1 and 2

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Background: Atopic dermatitis (AD) is a chronic skin disease associated with significant itch and sleep disturbances that profoundly affect patients' daily lives. Tralokinumab is a fully human, high-affinity, monoclonal antibody that specifically neutralizes the interleukin-13 cytokine, a key driver of AD signs and symptoms. In two pivotal phase 3 trials (ECZTRA 1, NCT03131648; ECZTRA 2, NCT03160885), tralokinumab monotherapy demonstrated superiority compared to placebo for each primary and secondary endpoint at Week 16.¹

Objective: To evaluate the timing and effect of tralokinumab on itch and sleep in patients with AD.

Methods: Post-hoc analyses were conducted of pooled data from 1596 adult patients with moderate-to-severe AD included in two identically designed, multinational, double-blind, randomized, placebo-controlled trials, ECZTRA 1 and ECZTRA 2. Patients were randomized 3:1 to subcutaneous tralokinumab 300 mg or placebo every 2 weeks for an initial 16 weeks. Prior to randomization, AD treatments were washed out: 4 weeks for systemic treatments and 2 weeks for TCS and other topical treatments. Rescue treatment could be used at the discretion of the investigator to control intolerable symptoms. Itch and sleep interference were recorded daily by patients using the worst daily pruritus Numeric Rating Scale (NRS) and eczema-related sleep interference NRS. Statistical analyses followed pre-specifications, ie Cochran-Mantel-Haenszel stratified by region, baseline Investigator's Global Assessment (IGA) and trial for binary endpoints, and mixed model for repeated measures with fixed effects of planned treatment, region, baseline IGA, trial and interactions between treatment and visit and baseline value and visit for continuous endpoints. Missing data or data after rescue medication (including TCS) were imputed as non-response for binary endpoints. For continuous endpoints, data after rescue medication or permanent discontinuation of trial treatment was set to missing. The worst daily itch and sleep NRS records were analyzed both as weekly averages (Baseline to Week 16) as well as the single worst daily measures (Baseline to Day 6).

Results: 802 and 794 patients were randomized in ECZTRA 1 and 2, respectively (tralokinumab, n=1196; placebo, n=400). Baseline demographics and clinical characteristics were well balanced between treatment groups.¹ Mean duration of AD was 28 years and 50% had IGA 4 (severe disease). At baseline, mean weekly averages for worst daily pruritus NRS and eczema related sleep NRS were 7.8 and 7.0, respectively. Significantly more patients achieved the primary endpoints of IGA 0/1 (tralokinumab 19.0%; placebo 9.0%; $p<0.001$)

and a 75% reduction in Eczema Area and Severity Index (EASI-75; tralokinumab 29.0%, placebo 12.1%; $p<0.001$) at Week 16 with tralokinumab versus placebo.

At Week 16, tralokinumab had a greater adjusted mean percentage improvement from baseline in weekly average of worst daily pruritus NRS (tralokinumab 35.5%, placebo 21.4%; $p<0.001$) and eczema-related sleep interference (tralokinumab 39.7%, placebo 18.4%; $p<0.001$) compared to placebo. A greater improvement from baseline was seen in worst daily pruritus NRS from Day 2 ($p= 0.001$), and in eczema-related sleep interference from Day 1 ($p<0.05$) with tralokinumab compared to placebo.

Conclusions: Tralokinumab monotherapy showed rapid and sustained improvements from baseline in itch and sleep interference relative to placebo, starting from Day 2 after the first dose.

References:

1. Wollenberg A, et al. Br J Dermatol. 2021;184:437–449

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Disclosures:

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