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Published in:
SKIN: Journal of Cutaneous Medicine

DOI:
10.25251/skin.6.supp.s29

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2022

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA):
Efficacy and safety of tralokinumab in adolescents with moderate-to-severe atopic dermatitis: results of the phase 3 ECZTRA 6 trial

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8 Oregon Health & Science University, Portland, OR, USA

Introduction

• Atopic dermatitis (AD) is a chronic, pruritic, inflammatory skin disease that can negatively impact quality of life in adolescents.1
• Negative impacts of AD include effects on school performance, social relationships, participation in sports and increased rates of anxiety, depression, and suicidal ideation.1
• Tralokinumab is a fully human, high-affinity, monoclonal antibody that specifically neutralizes interleukin-13, a key driver of skin barrier dysfunction, inflammation, and dysbiosis in AD.2

Objectives

To evaluate the efficacy and safety of tralokinumab in adolescents with moderate-to-severe AD in the phase 3 ECZTRA 6 trial (NCT03548818).

Materials and Methods

Study design (Figure 1)

• Adolescent patients were randomized 1:1 to subcutaneous tralokinumab 150 mg or 300 mg every 2 weeks (Q2W) or placebo for an initial treatment period of 16 weeks.
• Co-primary endpoints were Investigator’s Global Assessment (IGA) score 0/1 and ≥75% improvement in Eczema Area and Severity Index (EASI) at Week 16.
• Patients achieving primary endpoints without rescue treatment were randomized to tralokinumab Q2W or Q4W (every 4 weeks) or placebo at their same initial dose for 36 weeks of maintenance treatment as shown in Figure 1.
• Patients not achieving primary endpoints at Week 16, those receiving rescue treatment from Week 2 to Week 16, and those meeting other specific criteria were transitioned to open-label treatment of tralokinumab 300 mg Q2W plus placebo B to moderate-to-severe topical corticosteroids (TCS).

Key inclusion criteria

• Age: 12–17 years
• History of AD for ≥1 year
• ISA involvement ≥10% of screening and baseline
• IGA score ≥2 at screening and baseline
• History of TCS and/or topical corticosteroid inhibitor treatment failure, or subjects for whom these treatments are medically inappropriate
• Stable dose of emollient ≥2 times daily for ≥3 days before randomization

Week 16 Efficacy Analyses

• At Week 16, significantly greater proportions of patients receiving tralokinumab achieved the primary endpoints of IGA 0/1 and EASI ≥75% without use of rescue compared to those receiving placebo (Figure 2A, B).
• Significantly greater proportions of patients receiving tralokinumab in placebo at Week 16 without use of rescue (Figure 2C).
• Tralokinumab treatment was associated with greater improvement than placebo in SCORAD and CDLQI from baseline to Week 16 (Figure 2D, E).

Week 16 Safety

• Treatment-emergent adverse events (TEAEs) were reported in 58% of patients receiving tralokinumab 300 mg Q2W and 59% of patients receiving tralokinumab 150 mg Q2W. TEAEs were generally considered mild or moderate in severity.

Table 1. Baseline characteristics

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Placebo (n=93)</th>
<th>Tralokinumab 150 mg Q2W (n=98)</th>
<th>Tralokinumab 300 mg Q2W (n=97)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age, years</td>
<td>14.6 (4.4)</td>
<td>14.6 (4.4)</td>
<td>14.6 (4.4)</td>
</tr>
<tr>
<td>Race/ethnicity, n (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>33 (58.6%)</td>
<td>33 (68.4%)</td>
<td>33 (55.6%)</td>
</tr>
<tr>
<td>Black or African American</td>
<td>10 (17%)</td>
<td>7 (14.3%)</td>
<td>13 (22.4%)</td>
</tr>
<tr>
<td>Hispanic or Other</td>
<td>5 (8.9%)</td>
<td>5 (10.2%)</td>
<td>5 (8.3%)</td>
</tr>
<tr>
<td>Mean duration of AD, years</td>
<td>12.7 (3.5)</td>
<td>12.1 (3.5)</td>
<td>12.1 (3.3)</td>
</tr>
<tr>
<td>IGA at screening and baseline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IGA 0/1</td>
<td>2 (2.1%)</td>
<td>28 (28.6%)</td>
<td>31 (32.1%)</td>
</tr>
<tr>
<td>Mean SCORAD (SD)</td>
<td>27.8 (9.5)</td>
<td>27.8 (9.5)</td>
<td>27.8 (9.5)</td>
</tr>
<tr>
<td>Mean CDLQI (SD)</td>
<td>4.3 (1.0)</td>
<td>4.3 (1.0)</td>
<td>4.3 (1.0)</td>
</tr>
<tr>
<td>Mean weekly average worst daily pruritus NRS (SD)</td>
<td>7.0 (2.0)</td>
<td>7.0 (2.0)</td>
<td>7.0 (2.0)</td>
</tr>
</tbody>
</table>

Week 16 Efficacy Analyses

• At Week 16, significantly greater proportions of patients receiving tralokinumab achieved the primary endpoints of IGA 0/1 and EASI ≥75% without use of rescue compared to those receiving placebo (Figure 2A, B).
• Significantly greater proportions of patients receiving tralokinumab in placebo at Week 16 without use of rescue (Figure 2C).
• Tralokinumab treatment was associated with greater improvement than placebo in SCORAD and CDLQI from baseline to Week 16 (Figure 2D, E).

Table 2. Summary of AEs from Week 0 to 16

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Placebo (n=93)</th>
<th>Tralokinumab 150 mg Q2W (n=98)</th>
<th>Tralokinumab 300 mg Q2W (n=97)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEAEs (%)</td>
<td>58 (64.1%)</td>
<td>58 (61.8%)</td>
<td>58 (61.2%)</td>
</tr>
<tr>
<td>AEs leading to discontinuation</td>
<td>0</td>
<td>1 (1.0%)</td>
<td>0</td>
</tr>
<tr>
<td>Severe (%)</td>
<td>6 (6.6%)</td>
<td>6 (6.2%)</td>
<td>5 (5.3%)</td>
</tr>
</tbody>
</table>

Week 16 Safety

• Treatment-emergent adverse events (TEAEs) were reported in 58% of patients receiving tralokinumab 300 mg Q2W and 59% of patients receiving tralokinumab 150 mg Q2W. TEAEs were generally considered mild or moderate in severity.

References


Acknowledgements

• The ECZTRA 6 clinical trial was sponsored by Palau Therapeutics, Inc., Redmond, Washington.
• Medical writing and editorial services were provided by ICS Insight (Cary, North Carolina). E. Maruho, 2021
• This work was previously presented at the 2021 Clinical Dermatology Conference, Oct 21–23, 2021.