Bimekizumab for the Treatment of Moderate to Severe Plaque Psoriasis with Scalp, Nail, and Palmoplantar Involvement Through 52 Weeks: Post-Hoc Analysis from the BE VIVID Phase 3 Trial

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Objective
To compare the efficacy of bimekizumab with ustekinumab and placebo in patients with moderate to severe plaque psoriasis with scalp, palmoplantar, and nail involvement.

Background
• Psoriasis is an itchy T cell-driven disease, for which both interleukin (IL)-17A and IL-17F have emerged as pivotal drivers of inflammation.
• Bimekizumab is a monoclonal IgG1 antibody that selectively inhibits IL-17F in addition to IL-17A.
• In the BE VIVID phase 3 trial (NCT01737035), bimekizumab demonstrated superior clinical efficacy versus ustekinumab and placebo over 52 weeks of treatment (Psoriasis Area and Severity Index [PASI] 90: 75.3% versus 45.7% and 44.0%, respectively; p<0.001).

Methods
• Patients were enrolled in BE VIVID in a randomized, double-blinded, placebo- and active comparator (ustekinumab)-controlled study (Figure 1).
• These post-hoc analyses include patient subsets with scalp Investigator’s Global Assessment (IGA), palmoplantar (pp)-IGA ≥3, or modified Nail Psoriasis Severity Index (mNAPSI) >10 at baseline.

Results
Patient Population
• Baseline characteristics for all randomized patients are shown in Table 1.

Scalp, Nail, and Palmoplantar Outcomes
• Among patients with baseline scalp IGA ≥3 treated with bimekizumab, scalp response was rapid, with a higher proportion of patients achieving scalp IGA 0 at Week 16, compared with ustekinumab or placebo; scalp response was rapid, with a higher proportion of patients achieving scalp IGA 0 at Week 16, compared with ustekinumab or placebo.

Conclusions
Bimekizumab demonstrated high levels of efficacy in high-risk areas in patients with moderate to severe plaque psoriasis.

Synopsis

• Range of 0 to 4
• Analysis includes patients scoring 3 (moderate) or 4 (severe) at baseline
• Score of 0 = clear scalp

Table 1
Baseline characteristics
| | Bimekizumab (n=143) | Ustekinumab (n=143) | Placebo (n=14)
|---|---|---|---
| Age, mean (SD) | 45.2±14.0 | 46.0±13.6 | 49.7±11.5
| Sex, n (%) | 127 (89.4) 16 (10.6) | 125 (87.8) 18 (12.2) | 14 (100.0)
| Weight (kg), mean (SD) | 88.7±23.1 | 87.2±21.1 | 89.1±26.4
| Duration of PSO (years), mean (SD) | 15.8±10.8 | 17.3±11.6 | 20.0±12.5
| mNAPSI ≥10 | 0 (0.0) | 7 (4.9) | 5 (3.6)
| mNAPSI <10 | 143 (100.0) | 136 (95.3) | 14 (100.0)

Figure 1

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<thead>
<tr>
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<th>Study design</th>
<th>Interventions</th>
<th>Maintenance period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>Screening</td>
<td>Intention-to-treat period</td>
<td>Maintenance period</td>
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| | | | Bimekizumab 320 mg Q4W | Ustekinumab 45 mg Q12W | Placebo (n=14)
| Baseline | 16 | 52 | 52 | 52 | 52

Figure 2

Scalp, nail, and palmoplantar clearance through Week 52 (NRI)

Figure 3

Bimekizumab treatment examples over 52 weeks

References: