Bimekizumab Maintained Efficacy Responses Through 52 Weeks in Biologic Disease-Modifying Antirheumatic Drug-Naive Patients with Psoriatic Arthritis Who Were Responders at Week 16: Results from BE OPTIMAL, a Phase 3, Active Reference Study

**Objective**
To report the maintenance of response in efficacy outcomes assessing joints and skin, including composite disease activity measures, in Week 16 responders to bimekizumab and active control arms who were responders at Week 52 in the BE OPTIMAL randomized, controlled study.

**Background**
Psoriatic arthritis (PsA) is a chronic, long-term condition, thus it is important that therapists sustain high levels of disease control.

Assessing the maintenance of response in patients that achieve treatment targets is of interest, particularly as patient experience use of response measures in long-term therapy.

Bimekizumab targets IL-17A and a monoclonal IgG antibody that selectively inhibits interleukin-17A (IL-17A), in addition to IL-17A, has demonstrated rapid, statistically significant and clinically meaningful efficacy responses at Week 16 among patients with PsA.

**Methods**

**Week 16 Responders**

Week 16 of the BE OPTIMAL study. 217/431 (50.3%) BKZ- and 164/431 (37.9%) ADA-treated patients were Week 16 responders, 86.8% (NRI) and 91.1% (OC) maintained ACR50 response at Week 52.

**Comparison**

**Week 52 Responders**

Robust maintenance of response up to 52 weeks, was assessed in bimekizumab-treated patients who achieved a response at Week 16 of the BE OPTIMAL study. 189/431 (43.9%) reported ACR20/50/70, Psoriasis Area and Severity Index (PASI)75/90/100, minimal and low disease activity (MDA).

**Week 52 Maintenance**

ACR50 PASI100

Table 1

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<th>Measures</th>
<th>Baseline ACR50</th>
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| Disease Activity index for Psoriatic Arthritis; DAPSA REM+LDA is defined as DAPSA total score ≥80 and DAPSA total score ≥75/90/100, respectively. DAPSA REM+LDA signifies the sum of SJC, TJC, patient pain (VAS 0–10), patient global assessment (VAS 0–10), and C-reactive protein (mg/L). DAPSA REM+LDA is defined as DAPSA total score ≥80 and DAPSA total score ≥75/90/100, respectively.

**Maintenance to Week 52**

ACR50 responses to Week 52, in Week 16 responders

**Week 52 Maintenance**

**Figure 1**

Maintenance of ACR50 responses to Week 52, in Week 16 responders (NRI, OC)

**Figure 2**

Maintenance of PASI100 and PASI90 responses to Week 16 responders (NRI, OC)

**Figure 3**

Maintenance of PASI100 and PASI90 responses to Week 16 responders (NRI, OC)

**Figure 4**

Maintenance of MDA to Week 52, in Week 16 responders (NRI, OC)

**Figure 5**

Maintenance of ACR50+PASI100 to Week 52, in Week 16 responders (NRI, OC)

**Conclusion**

A high proportion of patients who were responders at Week 16 maintained robust efficacy responses in Week 52. Efficacy measures spanned joints and skin, and composite clinical outcomes. The safety profile of bimekizumab was consistent with previous reports.

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