Bimekizumab Reduced MRI Inflammatory Lesions in Patients with Axial Spondyloarthritis: Week 52 Results from the BE MOBILE 1 and 2 Phase 3 Studies

**Objective**
To evaluate the impact of bimekizumab on MRI inflammatory lesions of the sacroiliac joints and spine in Week 52 in two phase 3 studies.

**Background**
- Inflammatory lesions of the sacroiliac joints (SIJ) and spine are a key feature of axial spondyloarthritis (axSpA).1
- Bimekizumab, a humanized anti-IL-17 antibody, has demonstrated consistent and superior efficacy up to Week 52 across the full disease spectrum of axSpA (non-radiographic axSpA [nr-axSpA] and radiographic axSpA [r-axSpA]).

**Methods**
- **BE MOBILE 1** (NCT03128704) and **BE MOBILE 2** (NCT03101874) studies designed to be identical to the BE MOBILE Phase 1 and 2 studies.
- Both consisted of a 52-week double-blind placebo (PBO)-controlled period followed by a 56-week maintenance period.2
- Inclusion criteria: axial spondyloarthritis patients with nr-axSpA or r-axSpA, assessed via central reading by two independent expert readers.
- Patients received subcutaneous BKZ 160 mg every 4 weeks (Q4W).

**Results**
- **Baseline Characteristics:**
  - In total, 1173 patients were enrolled: 506 nr-axSpA and 667 r-axSpA (42.3% females, mean age 49.1 years, mean disease duration 15.5 years).
- **Randomised Set:**
  - N=331 patients were randomised: 82 nr-axSpA and 48 r-axSpA in the placebo arm, 90 nr-axSpA and 70 r-axSpA in the BKZ arm.

**Baseline MRI Inflammation Scores**
- Mean MRI inflammation scores were lower in the BKZ arm than in the PBO arm at Week 52 (6.5 vs 6.9).

**Proportion of Patients Achieving MRI Remission**
- **Week 52:**
  - 76.8% of patients in the BKZ arm achieved MRI remission, compared to 45.5% in the PBO arm.

**Conclusion**
- Bimekizumab significantly reduced MRI inflammatory lesions in patients with axSpA, leading to a greater proportion of patients achieving MRI remission at Week 52.