Bimekizumab cumulative clinical benefit in patients with moderate to severe hidradenitis suppurativa through 1 year of the BE HEARD 1811 phase 3 trials

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Objective

To report the cumulative benefit of bimekizumab (BKZ) treatment on hidradenitis suppurativa (HS) clinical response (HiSCR) through 16 and 48 weeks using area under the curve (AUC) analyses.

Introduction

- HS is a chronic, inflammatory skin disease which has a significant impact on health-related quality of life (HRQoL).1
- BKZ is a humanised IgG1 monoclonal antibody that selectively inhibits interleukin (IL)-17F in addition to IL-17A.²
- Evaluating the cumulative benefit of treatment over time using AUC analyses captures the speed, level and durability of patients' responses and provides a more holistic assessment of patient's disease compared with assessment at specific timepoints only.³

Methods

- Pooled data from the randomised, double-blind, placebo (PBO)-controlled, multicentre BE HEARD I&II trials included an initial (Week 0–16) and maintenance (Week 16–48) treatment period (**Figure 1**).⁴
- Cumulative clinical benefit was estimated as the total AUC through Week 48 for patients achieving HiSCR50/75/90 (≥50/75/90% reduction in the total abscess and inflammatory nodule count from baseline with no increase from baseline in abscess or draining tunnel count).
- The estimated number of days for which patients achieved each response was calculated as the proportion of the total possible AUC for each outcome multiplied by the total number of days in the time period (Weeks 0–16: 112 days; Weeks 16-48: 224 days; Weeks 0-48: 336 days).
- Data are reported as observed case (OC).

Results

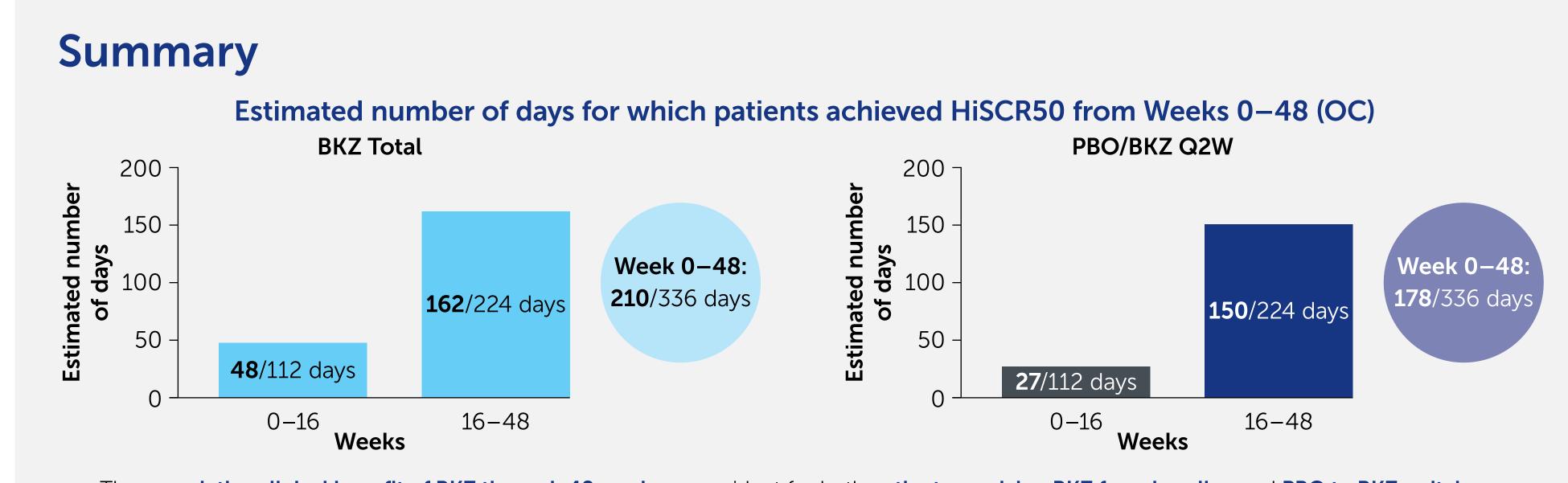
- Overall, 868 patients were randomised to receive BKZ (BKZ Q2W/Q2W: N=288, BKZ Q2W/Q4W: N=292, and BKZ Q4W/Q4W: N=288) and 146 patients were randomised to receive PBO/BKZ Q2W. Patients randomised to BKZ from baseline were included in the BKZ Total group.
- Through 16 weeks, the total number of days patients achieved HiSCR50/75/90 was approximately twice as high in the BKZ groups vs PBO (Figure 2).
- Clinically meaningful cumulative benefits in HiSCR50/75/90 were observed across the BKZ from baseline treatment arms through Week 48. Benefit was also demonstrated from Weeks 16–48 for Week 16 PBO to BKZ switchers (Figure 2).

Conclusions

Higher levels of cumulative clinical benefit were observed for patients who received BKZ through Week 16 compared with those who received PBO. Benefit increased substantially from Week 16 through Week 48 for both patients receiving BKZ from baseline and Week 16 PBO to BKZ switchers.

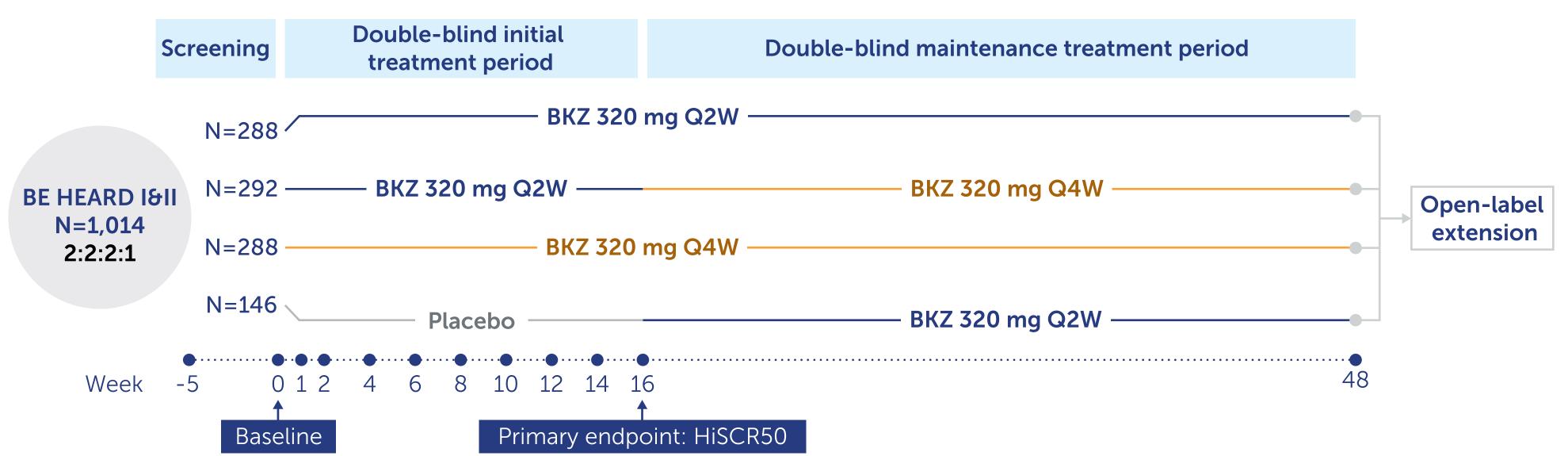
However, the total number of days of clinical outcome achievement remained higher in those on BKZ from baseline vs PBO to BKZ switchers.

While HS is characterised by significant fluctuations in course, these results demonstrate the rapid, high-level and durable responses that can be obtained with BKZ.



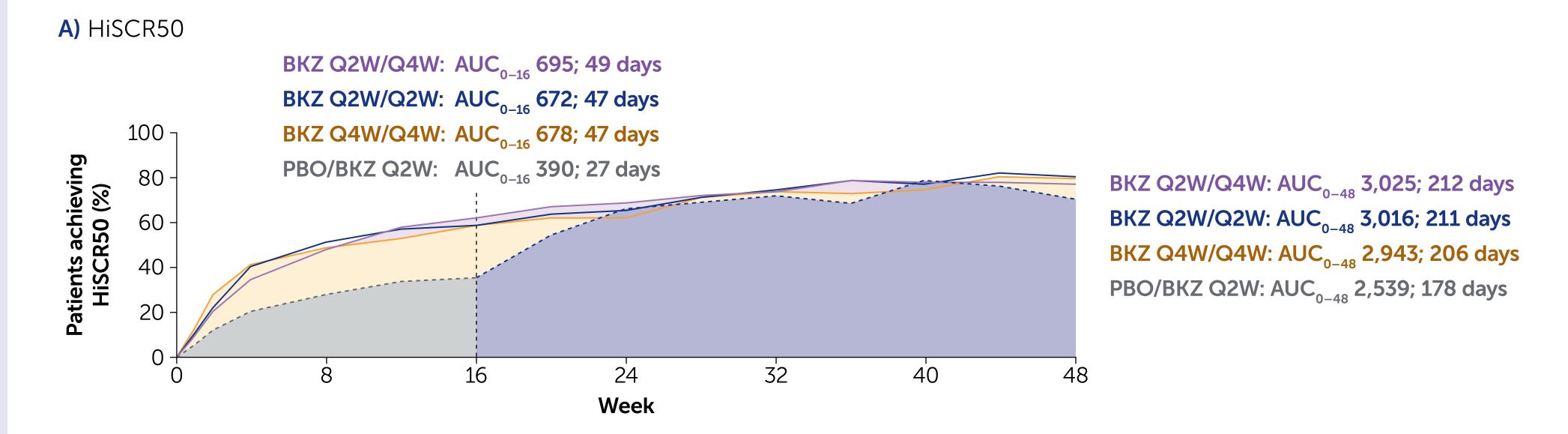
The cumulative clinical benefit of BKZ through 48 weeks was evident for both patients receiving BKZ from baseline and PBO to BKZ switchers. The total number of days of clinical outcome achievement remained higher in those on BKZ from baseline vs PBO to BKZ switchers, highlighting the importance of early treatment.

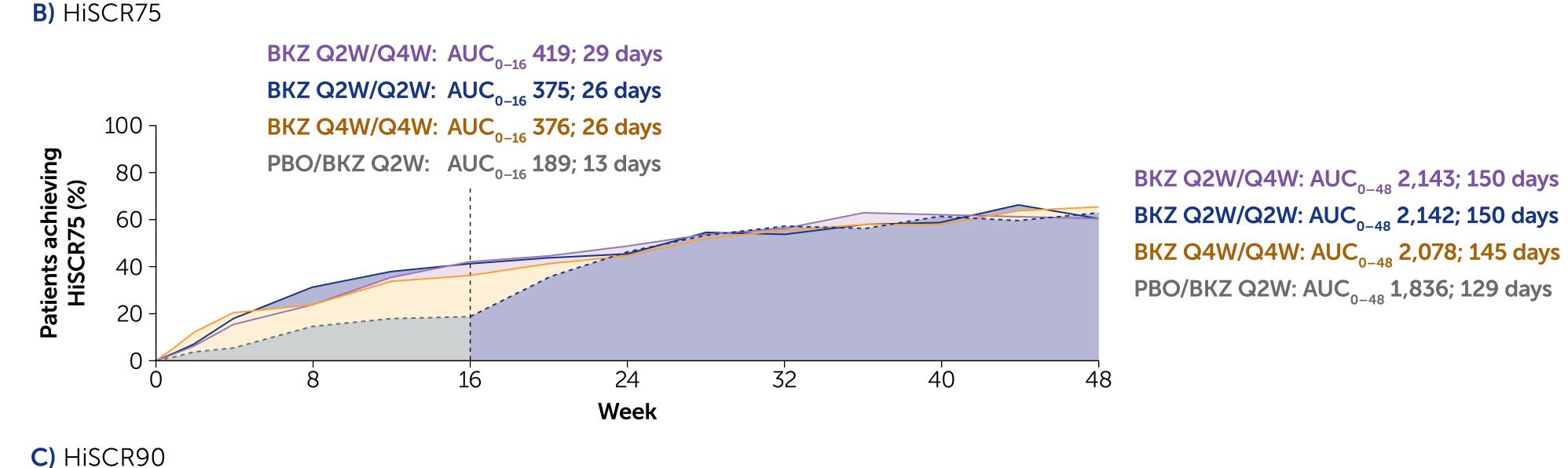
BE HEARD I&II study design Figure 1

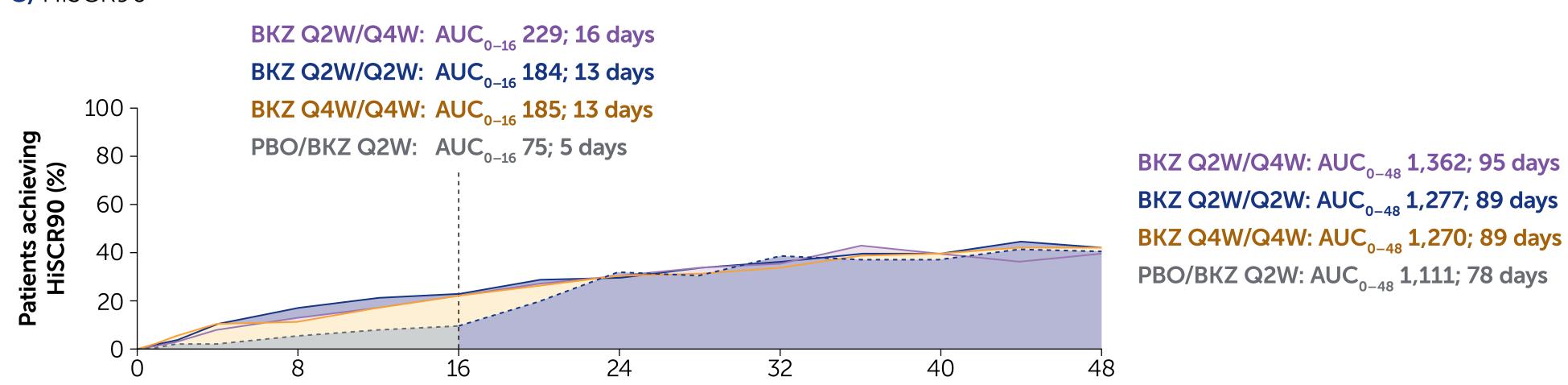


At baseline, 1,014 adult patients were randomised 2:2:2:1 (initial [Weeks 0-16]/maintenance [Weeks 16-48]) to receive BKZ 320 mg every 2 weeks (Q2W)/Q2W, BKZ Q2W/every 4 weeks (Q4W), BKZ Q4W/Q4W or PBO/BKZ Q2W.

Total AUC and cumulative benefit through 16 weeks and 48 weeks for clinical outcomes (OC) Figure 2 ----- PBO/BKZ Q2W (N=146) —— BKZ 320 mg Q2W/Q4W (N=292) —— BKZ 320 mg Q2W/Q2W (N=288) —— BKZ 320 mg Q4W/Q4W (N=288)







Data are presented as the total AUC and estimated mean number of days that patients achieved HiSCR50/75/90 through the stated intervals (0-16, 0-48). HiSCR50/75/90 was achieved at a given visit if there was a >50/75/90% reduction in the total abscess and inflammatory nodule count from baseline with no increase from baseline in abscess or draining tunnel count. OC: where N represents number of patients with a non-missing lesion count assessment in the given week, and percentages are calculated accordingly.

Week

AUC: area under the curve; BKZ: bimekizumab; HRQoL: health-related quality of life; HS: hidradenitis suppurativa; Hiscrib quality suppurativa

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