Bimekizumab response maintenance to 48 weeks in patients with moderate to severe hidradenitis suppurativa: Pooled responder analysis from the phase 3, double-blind, placebo-controlled, randomized clinical trials BE HEARD I & II

BKZ 320 mg Q4W/Q4W

35.8 (11.6

175 (60.8

33.8 (7.9)

17.7 (20.9)

160 (55.6)

128 (44 4)

18 (6.3)

BKZ 320 mg Q4W/Q4W

34.8 (11.8

93 (61.2)

34.2 (8.4)

6.4 (6.3)

18.6 (24.9)

86 (56 6)

66 (43.4)

10.4 (6.6)

23 (15.1)

BKZ 320 mg Q4W/Q4W

34.6 (11.8

56 (64.4)

33.8 (8.6)

11.1 (10.0)

55 (63.2)

32 (36.8)

9.5 (6.6)

13 (14.9)

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Objective

To report maintenance of response over 48 weeks in patients with moderate to severe hidradenitis suppurativa (HS) who achieved clinical responses after 16 weeks of bimekizumab (BKZ) treatment from the phase 3 BE HEARD I & II studies.

Introduction

- HS is a chronic, relapsing, and painful inflammatory skin disease associated with significant comorbidities and poor quality of life.¹
- However, treatment options are limited.²
- BKZ, a monoclonal immunoglobulin G1 antibody which selectively inhibits interleukin (IL)-17F in addition to IL-17A, has demonstrated efficacy in patients with moderate to severe HS.²
- Here, we report maintenance of response through Week 48 from BE HEARD I & II.^{3,4}

Methods

- Data were pooled from BE HEARD I & II.^{3,4} These randomized, double-blinded, placebo (PBO)-controlled phase 3 studies were comprised of an initial (Weeks 0–16) and a maintenance (Weeks 16–48) treatment period (**Figure 1**).
- Maintenance of response is reported respectively as a) the percentage of BKZ-treated patients who achieved 50/75/90% HS Clinical Response (HiSCR50/75/90) or b) an abscess and inflammatory nodule (AN) count of 0, 1, or 2 at both Week 16 and Week 48.
- Data are reported as observed cases (OC) throughout; last observation carried forward (LOCF) data are provided in Table 2

Results

Baseline characteristics

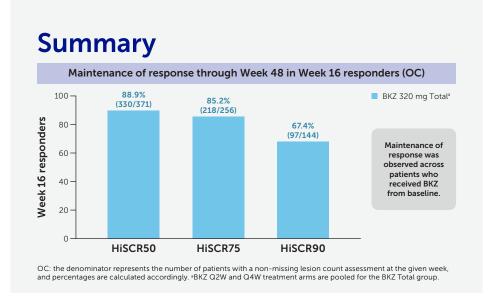
 Baseline demographics were comparable across treatment arms (Table 1).

Week 48 responders

- Among Week 16 HiSCR50 responders, 88.5–89.6% of patients maintained this response through Week 48, across treatment regimens (**Table 2**; **Figure 2**).
- Among Week 16 HiSCR75 responders, 80.9–88.3% of patients maintained this response through Week 48, across treatment regimens (**Table 2**; **Figure 3**).
- Among Week 16 HiSCR90 responders, 65.2–69.2% of patients maintained this response through Week 48, across treatment regimens (**Table 2**; **Figure 4**).
- Among patients with an AN count of 0, 1, or 2 at Week 16, 82.1%–88.0% of patients maintained this response through Week 48, across treatment regimens (Table 2; Figure 5).

Conclusions

Maintenance of response among Week 16 responders was high across the primary endpoint (HiSCR50) and more stringent clinical outcome measures for bimekizumabrandomized patients.



Baseline characteristics

Age, years, mean (SD)

BMI, kg/m², mean (SD

Duration of HS, years, mean (SD

Baseline AN count, mean (SD

DLQI total score, mean (SD

Baseline antibiotic use, n (%

Prior biologic use, n (%)

Age, years, mean (SD)

BMI, kg/m², mean (SD

Duration of HS, years, mean (SD)

Baseline AN count, mean (SD

DLQI total score, mean (SD

Prior biologic use, n (%)

Age, years, mean (SD)

BMI, kg/m², mean (SD

Duration of HS, years, mean (SD

Baseline AN count, mean (SD)

DLQI total score, mean (SD)

Baseline antibiotic use, n (%

Prior biologic use, n (%)

Sex, female, n (%)

Hurley stage, n (%)

Sex, female, n (%)

Hurley stage, n (%)

Sex, female, n (%)

Hurley stage, n (%)

PBO/BKZ 320 mg Q2W

37.3 (12.8

14.4 (10.0

79 (54.1)

67 (45 9)

PBO/BKZ 320 mg Q2W

36.4 (11.9

8.8 (9.3)

25 (52 1)

23 (47.9)

10.7 (6.6)

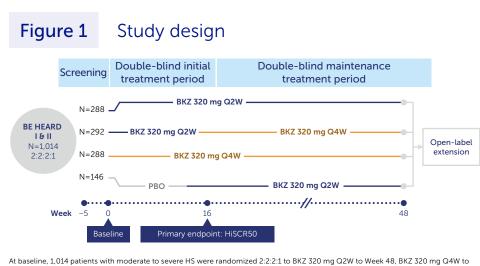
8 (16.7

PBO/BKZ 320 mg Q2W

31.8 (9.3)

13 (43.3)

3 (10.0)



Week 48, BKZ 320 mg Q2W to Week 16 then BKZ 320 mg Q4W to Week 48, or PBO to Week 16 then BKZ 320 mg Q2W to Week 4

BKZ 320 mg Q2W/Q2W

(N=288)

36.8 (12.4

7.6 (7.4)

166 (57.6)

122 (42.4)

BKZ 320 mg Q2W/Q2\

36.2 (12.8)

31.9 (8.3)

6.9 (7.1)

99 (61 9)

61 (38.1

10.9 (6.2)

35 (21.9

BKZ 320 mg Q2W/Q2W

31.6 (8.1)

72 (69.2)

32 (30.8)

10.4 (6.2)

14.7 (11.6

Overall

37.0 (12.4)

174 (59 6

8.3 (7.7)

17.2 (16.8)

160 (54.8)

132 (45.2)

10.8 (6.7)

Week 16 HiSCR50 Responders

36.7 (12.2)

31.9 (7.0)

7.8 (6.8)

15.5 (13.3)

95 (61.3)

60 (38.7)

10.6 (6.6)

28 (18.1)

Week 16 AN Count of 0, 1, or 2

BKZ 320 mg Q2W/Q4W

32.2 (6.9

9.8 (6.4)

72 (72.7)

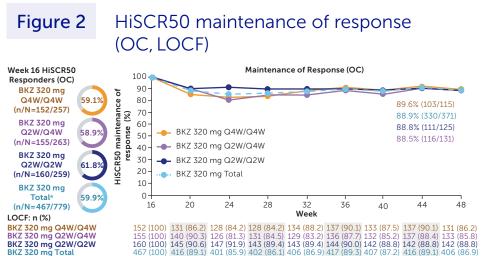
27 (27.3)

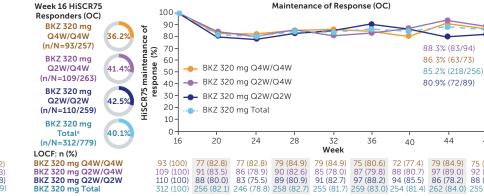
9.5 (6.4)

15 (15.2)

BKZ 320 mg Q2W/Q4\

BKZ 320 mg Q2W/Q4V





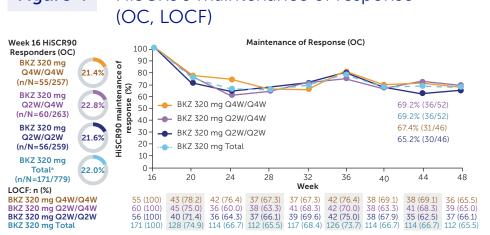
(OC, LOCF)

and percentages are calculated accordingly; The LOCF value is used when a patient has n prior to the visit; *BKZ Q2W and Q4W treatment arms are pooled for the BKZ Total group.

HiSCR75 maintenance of response

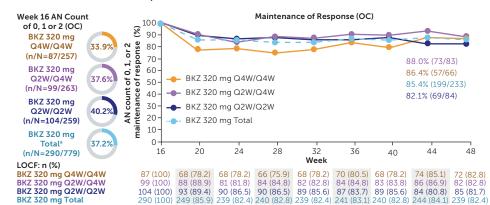
Randomized set; OC: the denominator represents the number of patients with a non-missing lesion count assessment at the and percentages are calculated accordingly; The LOCF value is used when a patient has missing data at the visit or disconting prior to the visit; BKZ Q2W and Q4W treatment arms are pooled for the BKZ Total group.

Figure 4 HiSCR90 maintenance of response



Randomized set; OC: the denominator represents the number of patients with a non-missing lesion count assessment at the given week, and percentages are calculated accordingly; The LOCF value is used when a patient has missing data at the visit or discontinues the study prior to the visit; PBKZ Q2W and Q4W treatment arms are pooled for the BKZ Total group.

Figure 5 AN count of 0, 1, or 2 maintenance of response (OC, LOCF)



Randomized set; OC: the denominator represents the number of patients with a non-missing lesion count assessment at the given weel and percentages are calculated accordingly; The LOCF value is used when a patient has missing data at the visit or discontinues the stud prior to the visit; *BKZ Q2W and Q4W treatment arms are pooled for the BKZ Total group.

Table 2

Maintenance of response through Week 48 (OC, LOCF)

		BKZ 320 mg Q4W/Q4W		BKZ 320 mg Q2W/Q4W		BKZ 320 mg Q2W/Q2W		BKZ 320 mg Total ^a	
		ос	LOCF	ос	LOCF	ос	LOCF	ос	LOCF
		n/N (%)	n (%)	n/N (%)	n (%)	n/N (%)	n (%)	n/N (%)	n (%)
Week 16 HiSCR50 responders	Week 32	116/131 (88.5)	134 (88.2)	120/141 (85.1)	129 (83.2)	121/135 (89.6)	143 (89.4)	357/407 (87.7)	406 (86.9)
	Week 48	103/115 (89.6)	131 (86.2)	116/131 (88.5)	133 (85.8)	111/125 (88.8)	142 (88.8)	330/371 (88.9)	406 (86.9)
Week 16 HiSCR75 responders	Week 32	70/82 (85.4)	79 (84.9)	79/99 (79.8)	85 (78.0)	77/92 (83.7)	91 (82.7)	226/273 (82.8)	255 (81.7)
	Week 48	63/73 (86.3)	75 (80.6)	83/94 (88.3)	92 (84.4)	72/89 (80.9)	88 (80.0)	218/256 (85.2)	255 (81.7)
Week 16 HiSCR90 responders	Week 32	32/49 (65.3)	37 (67.3)	39/55 (70.9)	41 (68.3)	32/45 (71.1)	39 (69.6)	103/149 (69.1)	117 (68.4)
	Week 48	31/46 (67.4)	36 (65.5)	36/52 (69.2)	39 (65.0)	30/46 (65.2)	37 (66.1)	97/144 (67.4)	112 (65.5)
		BKZ 320 mg Q4W/Q4W		BKZ 320 mg Q2W/Q4W		BKZ 320 mg Q2W/Q2W		BKZ 320 mg Total ^a	
		ос	LOCF	ос	LOCF	ос	LOCF	oc	LOCF
Week 16 AN count of 0, 1, or 2		n/N (%)	n (%)	n/N (%)	n (%)	n/N (%)	n (%)	n/N (%)	n (%)
	Week 32	58/75 (77.3)	68 (78.2)	75/87 (86.2)	82 (82.8)	75/88 (85.2)	89 (85.6)	208/250 (83.2)	239 (82.4)
	Week 48	57/66 (86.4)	72 (82.8)	73/83 (88.0)	82 (82.8)	69/84 (82.1)	85 (81.7)	199/233 (85.4)	239 (82.4)

Randomized set; OC: the denominator represents the number of patients with a non-missing lesion count assessment at the given week, and percentages are calculated accordingly; The LOCF value is used when a patient has missing data at the visit or discontinues the study prior to the visit: "BKZ Q2W and Q4W treatment arms are pooled for the BKZ Total group.

AN: abscess and inflammatory nodule; BKZ: bimekizumab; BMI: body mass index; DLQI: Dermatology Life Quality Index; HiSCR: HS clinical response; HiSCR50/75/90; eduction in the total abscess and inflammatory nodule; count with no increase from baseline in abscess and inflammatory nodule count with no increase from baseline in abscess and inflammatory nodule count with no increase from baseline in abscess or draining tunnel count; HS: hidradenitis suppurativa; IL: interleukin; LOCF: last observed case; PBO: placebo; Q2W: every 2 weeks; Q4W: every 4 weeks; Q4W: every 4 weeks; SD: standard deviation.

BKZ 320 mg Total^a

36.5 (12.1

33.1 (8.1)

7.7 (7.4)

16.6 (16.9)

486 (56.0)

382 (44.0)

11.2 (6.9)

75 (8.6)

BKZ 320 mg Total

35.9 (12.3)

32.7 (8.0)

7.0 (6.7)

280 (60 0)

187 (40.0)

10.6 (6.5)

86 (18.4)

BKZ 320 mg Total

163 (56.2

32.4 (7.9)

199 (68.6)

91 (31.4)

9.8 (6.4)

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