Bimekizumab speed of response in patients with moderate to severe plaque psoriasis: Results from four phase 3/3b trials (BE VIVID, BE READY, BE SURE, and BE RADIANT)

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Objective

To evaluate early clinical and health-related quality of life (HRQoL) responses at Week 4 in patients with moderate to severe plaque psoriasis treated with bimekizumab (BKZ), adalimumab (ADA), ustekinumab (UST), and secukinumab (SEC) in four phase 3/3b trials.

Background

- Speed of response is an important treatment consideration for patients with plaque psoriasis;[1] 90% of patients in a recent cross-sectional survey ranked rapid response as high importance, with an average expectation of complete skin clearance within 4 weeks.[2]
- Improvement in HRQoL is also an important treatment goal, given that psoriasis is a chronic disease and can place a significant burden on patients' lives.[3,4]

Methods

- Data are reported in parallel from BE SURE, BE VIVID, BE RADIANT, and BE READY for patients who received BKZ 320 mg every 4 weeks (Q4W) or active comparators (**Figure 1**).[5–8]
- We report the proportion of patients achieving a ≥75% improvement from baseline in Psoriasis Area and Severity Index (PASI 75), PASI 90, PASI 100, and Dermatology Life Quality Index (DLQI) 0/1 at Week 4 in each trial.
- Missing data were accounted for using non-responder imputation (NRI).

Results

- These analyses include 478 patients from BE SURE (319 BKZ; 159 ADA), 484 patients from BE VIVID (321 BKZ; 163 UST), 743 patients from BE RADIANT (373 BKZ; 370 SEC), and 349 patients from BE READY (349 BKZ); baseline characteristics of these patients have been reported previously.[5–8]
- At Week 4, PASI 75, PASI 90, and PASI 100 were achieved by a greater proportion of BKZ-randomised patients vs active comparators (**Figure 2**).
- Furthermore, a greater proportion of patients randomised to BKZ vs active comparators achieved DLQI 0/1 at Week 4 (**Figure 2**).

Conclusions

At Week 4, after one dose of BKZ, greater levels of skin clearance and HRQoL benefits were observed compared with two doses of ADA, one dose of UST, and four doses of SEC.

Results were consistent across the four phase 3/3b trials.

Summary

Data are reported in parallel from the initial **4-week** treatment period of **BE SURE, BE VIVID, BE RADIANT,** and **BE READY**

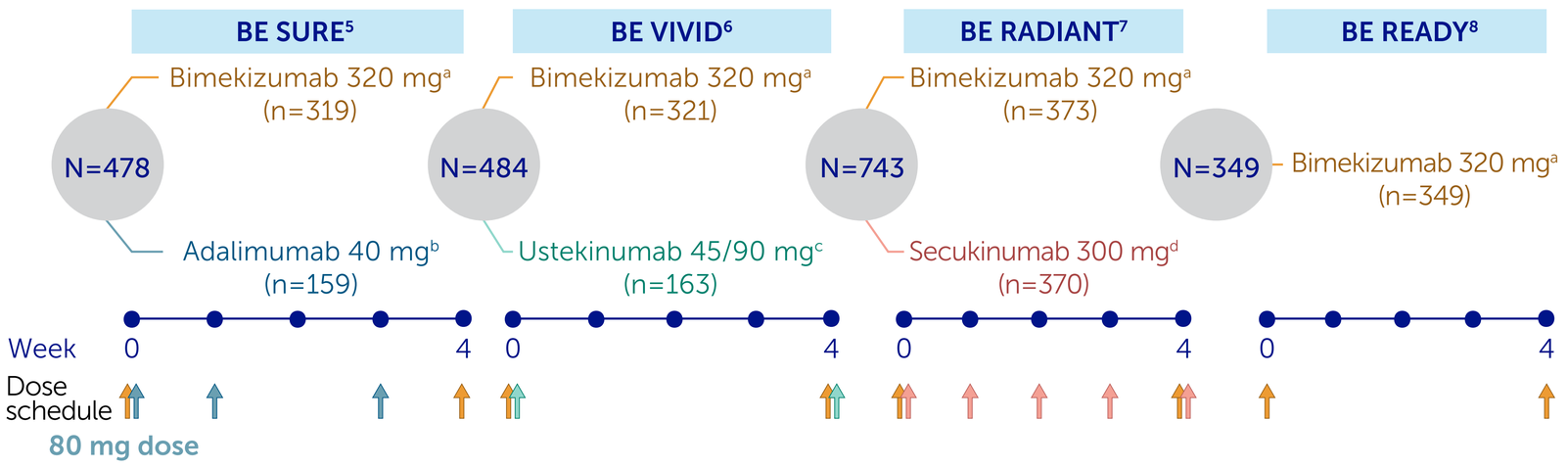
Bimekizumab vs **Adalimumab**, **Ustekinumab**, **Secukinumab**

At **Week 4**:

Greater **skin clearance** with **bimekizumab**; including higher rates of PASI 100

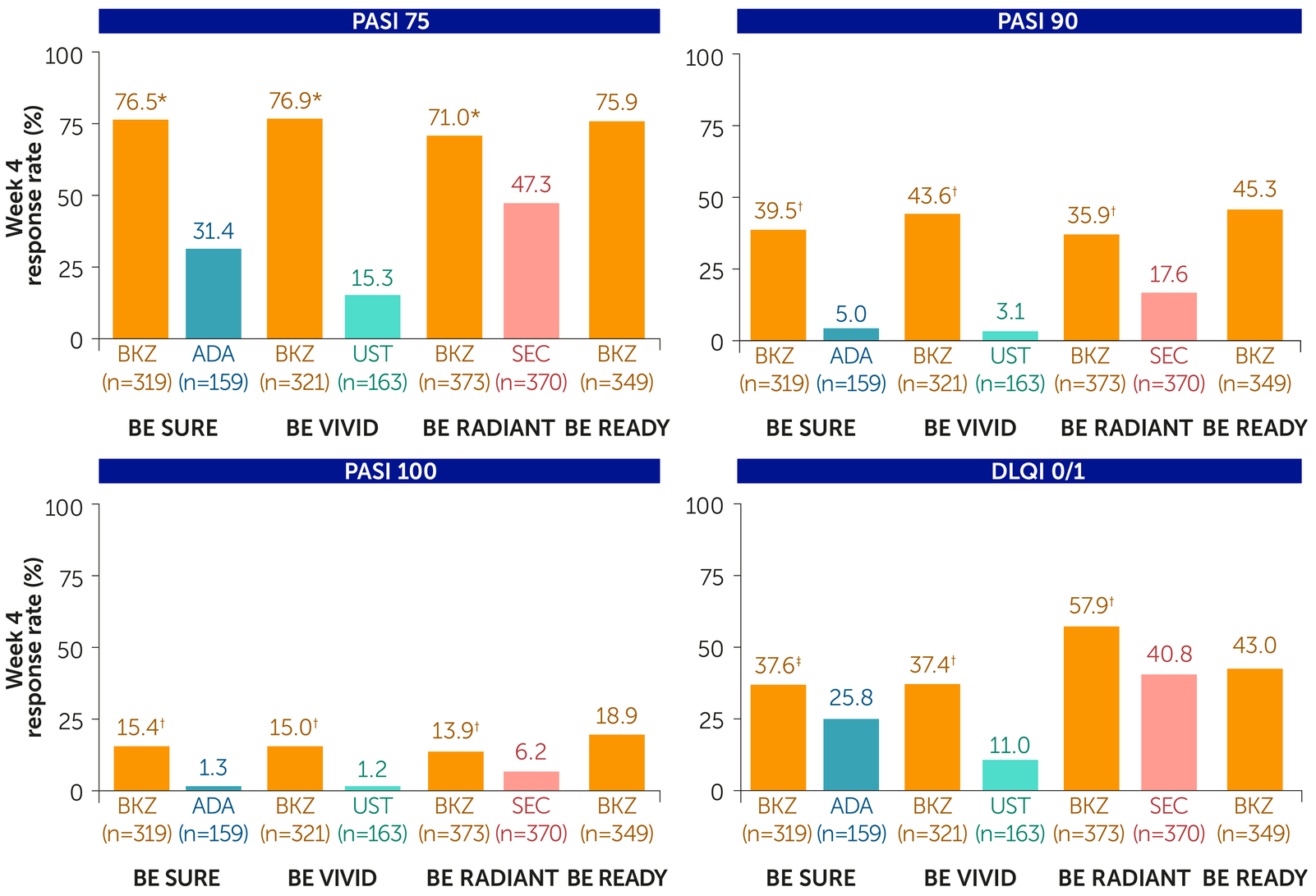
Health-related quality of life benefit with **bimekizumab** as measured by DLQI 0/1

Figure 1 Study design: Included patients



BE VIVID and BE READY included placebo arms which were not included in these analyses. [a]All patients randomised to bimekizumab received 320 mg Q4W; [b]All patients randomised to adalimumab in BE SURE received 80 mg at baseline, 40 mg at Week 1, then Q2W; [c]Patients in BE VIVID received ustekinumab at baseline, Week 4, then Q12W. Ustekinumab dosing was based on patient weight at baseline: patients weighing ≤100 kg received one ustekinumab 45 mg injection and one placebo injection, patients >100 kg received two ustekinumab 45 mg injections; [d]All patients randomised to secukinumab in BE RADIANT received 300 mg weekly to Week 4, then Q4W.

Figure 2 Week 4 PASI 75, PASI 90, PASI 100, and DLQI 0/1 responses in BE SURE, BE VIVID, BE RADIANT and BE READY (NRI)



p values for the comparison of treatment groups were based on the Cochran-Mantel-Haenszel test from the general association. In BE SURE, BE VIVID, and BE RADIANT, comparisons between BKZ and active comparators at Week 4 for PASI 90, PASI 100, and DLQI 0/1 were not pre-specified and therefore were not controlled for multiplicity; the corresponding p values are nominal for all trials. Comparisons for PASI 75 response at Week 4 were pre-specified and were controlled for multiplicity in all trials. *p<0.001 vs active comparator; †nominal p<0.001 vs active comparator; ‡nominal p=0.010 vs active comparator.

ADA: adalimumab; **BKZ:** bimekizumab; **DLQI:** Dermatology Life Quality Index; **HRQoL:** health-related quality of life; **NRI:** non-responder imputation; **PASI 75/90/100:** ≥75%/≥90%/100% improvement from baseline in Psoriasis Area and Severity Index; **Q2W:** every 2 weeks; **Q4W:** every 4 weeks; **Q12W:** every 12 weeks; **SEC:** secukinumab; **UST:** ustekinumab.

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