Comparative Effectiveness of Bimekizumab and Risankizumab in Patients with Psoriatic Arthritis at 52- Weeks Assessed Using a Matching-Adjusted Indirect Comparison

Supplementary Information

Philip J. Mease[1], Richard B. Warren[2], Peter Nash[3], Jean-Marie Grouin[4], Nikos Lyris[5], Damon Willems[6], Vanessa Taieb[7], Jason Eells[5], Iain B. McInnes[8]

[1]Swedish Medical Center/Providence St. Joseph Health and University of Washington, Seattle, WA, USA; [2]Dermatology Centre, Northern Care Alliance NHS Foundation Trust, The University of Manchester, Manchester Academic Health Science Centre, NIHR Manchester Biomedical Research Centre, Manchester, UK; [3]School of Medicine, Griffith University School of Medicine, Brisbane, Queensland, Australia; [4]University of Rouen, Rouen, France; [5]UCB Pharma, Slough, UK; [6]UCB Pharma, Brussels, Belgium; [7]UCB Pharma, Colombes, France; [8]University of Glasgow, College of Medical Veterinary and Life Sciences, Glasgow, UK

Correspondence to: Philip J. Mease (pmease@phillipmease.com)
Swedish Medical Center and Providence St. Joseph Health
601 Broadway
Seattle, WA 98122

Table S1. Unadjusted and adjusted response rates for bimekizumab (BE OPTIMAL) vs risankizumab (KEEPsAKE-1) at Week 52 (bDMARD-naïve patient subgroup)

BKZ 160 mg Q4W	ACR20	ACR50	ACR70	MDA
vs. RIS 150 mg Q12W				
RIS response rate – % (95% CI) (N=483)	69.98 (65.88, 74.08)	43.27 (38.84, 47.70)	25.88 (21.96, 29.80)	37.89 (33.55, 42.23)
BKZ unadjusted response rate - % (95% CI) (N=431)	71.23 (66.94, 75.52)	54.52 (49.81, 59.24)	39.21 (34.59, 43.83)	54.99 (50.28, 59.70)
Unadjusted OR (95% CI)	1.06 (0.80, 1.41)	1.57 (1.21, 2.04)	1.85 (1.39, 2.45)	2.00 (1.54, 2.61)
BKZ ESS	231.00	231.00	231.00	231.00
BKZ adjusted response rate - % (95% CI)	70.37 (65.29, 75.46)	53.75 (48.20, 59.30)	38.55 (33.13, 43.96)	44.99 (39.45, 50.53)
Adjusted OR (95% CI)	1.02 (0.72, 1.45)	**1.52 (1.11, 2.09)**	**1.80 (1.29, 2.51)**	1.34 (0.98, 1.84)
p-value	0.916	**0.009**	**<0.001**	0.068

Trial populations adjusted for: age, sex, BSA≥3%, HAQ-DI, MTX, SJC, TJC.
Note: Significant ORs are highlighted in bold.
ACR, American College of Rheumatology; ACR20/50/70, at least a 20/50/70% improvement according to the ACR response criteria; BKZ, bimekizumab; BSA, body surface area; CI, confidence interval; ESS, effective sample size; HAQ-DI, Health Assessment Questionnaire Disability Index; MDA, minimal disease activity; MTX, methotrexate; OR, odds ratio; Q4W, every 4 weeks; Q12W, every 12 weeks; RIS, risankizumab; SJC, swollen join count; TJC, tender joint count.

Table S2. Unadjusted and adjusted response rates for bimekizumab (BE COMPLETE/BE VITAL) vs risankizumab (KEEPsAKE-2) at Week 52 (TNFi-IR patient subgroup)

BKZ 160 mg Q4W	ACR20	ACR50	ACR70	MDA
vs. RIS 150 mg Q12W				
RIS response rate – % (95% CI) (N=106)	49.06 (39.43, 58.68)	21.70 (13.76, 29.64)	10.38 (4.50, 16.25)	18.87 (11.33, 26.40)
BKZ unadjusted response rate - % (95% CI) (N=267)	68.16 (62.55, 73.78)	51.69 (45.66, 57.71)	35.58 (29.81, 41.35)	47.19 (41.18, 53.21)
Unadjusted OR (95% CI)	2.22 (1.40, 3.53)	3.86 (2.29, 6.51)	4.77 (2.43, 9.38)	3.84 (2.23, 6.63)
BKZ ESS	161.91	161.91	161.91	161.91
BKZ adjusted response rate - % (95% CI)	63.20 (56.63, 69.77)	45.77 (38.99, 52.56)	29.92 (23.69, 36.16)	36.12 (29.58, 42.66)
Adjusted OR (95% CI)	**1.78 (1.08, 2.96)**	**3.05 (1.74, 5.32)**	**3.69 (1.82, 7.46)**	**2.43 (1.37, 4.32)**
p-value	**0.025**	**<0.001**	**<0.001**	**0.003**

Trial populations adjusted for: age, sex, BSA≥3%, HAQ-DI, MTX, SJC, TJC.
Note: Significant ORs are highlighted in bold.
ACR, American College of Rheumatology; ACR20/50/70, at least a 20/50/70% improvement according to the ACR response criteria; BKZ, bimekizumab; BSA, body surface area; CI, confidence interval; ESS, effective sample size; HAQ-DI, Health Assessment Questionnaire Disability Index; MDA, minimal disease activity; MTX, methotrexate; OR, odds ratio; Q4W, every 4 weeks; Q12W, every 12 weeks; RIS, risankizumab; SJC, swollen join count; TJC, tender joint count.