TWO-YEAR REAL-WORLD DRUG SURVIVAL OF BIMEKIZUMAB FOR ADULT PATIENTS WITH PLAQUE PSORIASIS: A MULTICENTER RETROSPECTIVE STUDY

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INTRODUCTION

- Bimekizumab is a novel interleukin (IL)-17A/IL-17F inhibitor approved for adult plaque psoriasis. Open-label extension studies have investigated the long-term efficacy and safety of bimekizumab but real-world data remains limited.[1,2]
- Expanding upon our previously published data, this study reports on real-world outcomes of 2-year bimekizumab use.[3,4]

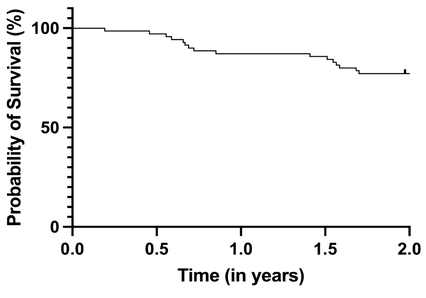
METHODS

- Our retrospective multicenter study included adult patients with plaque psoriasis from four Canadian institutions initiated on bimekizumab as per standard dosing.
- Effectiveness outcomes were measured at 104±8 weeks.
- Safety was assessed via treatment-related adverse events (AEs).
- A Kaplan-Meier analysis was conducted to estimate drug survival.
- A nonresponder imputation (NRI) analysis was used to account for missing data.

RESULTS

- This analysis included a total of 70 patients. The mean age was 44.9 (range: 19-74) years, with 61.4% (43/70) being male.
- At weeks 104±8: the real-world drug survival of bimekizumab was 77.1% (**Figure 1**).

Figure 1. Kaplan-Meier survival curve.



RESULTS (CONTINUED)

- IGA 0/1 was achieved by 75.7% (53/70); mean PASI, BSA, and IGAxBSA improvements from baseline were 75.6% (11.3 to 3.2), 75.4% (12.1 to 3.4), and 76.3% (37.8 to 9.9), respectively; 75.7% (53/70), 71.4% (50/70), and 62.9% (44/70) achieved 75%, 90%, and 100% improvements in PASI (PASI75, PASI90, and PASI100), respectively; 75.7% (53/70), 72.9% (51/70), and 67.1% (47/70) achieved absolute PASI scores ≤3, ≤2, and ≤1; and 71.4% (50/70) achieved BSA ≤1% (**Figure 2**).
- While biologic-naïve patients (n=25) had numerically higher responses than biologic-experienced patients (n=45) for IGA 0/1 (80% vs. 73.3%), PASI75 (80% vs. 73.3%), PASI90 (80% vs. 66.7%), PASI100 (72% vs. 57.8%), and absolute PASI outcomes ≤3 (80% vs. 77.8%), ≤2 (80% vs. 68.9%), and ≤1 (72% vs. 64.4%), these were not significant.
- In total, 21 treatment-related adverse events (AEs) occurred (30%, 21/70). The most common AEs were candidiasis (7.1%, 5/70) and bacterial folliculitis (4.3%, 3/70). Sixteen treatment discontinuations (22.9%) were noted (lack of efficacy [n=11]; AEs: anxiety [n=1], inflammatory bowel disease [n=1]; nasopharyngitis [n=1], recurrent respiratory infection [n=1]; and pregnancy [n=1]). No serious infections, suicidal ideation/behaviour, malignancies, hypersensitivity reactions, major adverse cardiac events, or hepatic abnormalities were observed over 139.3 patient-years of safety follow-up (**Table 1**).

Figure 2. Effectiveness outcomes at week 104±8

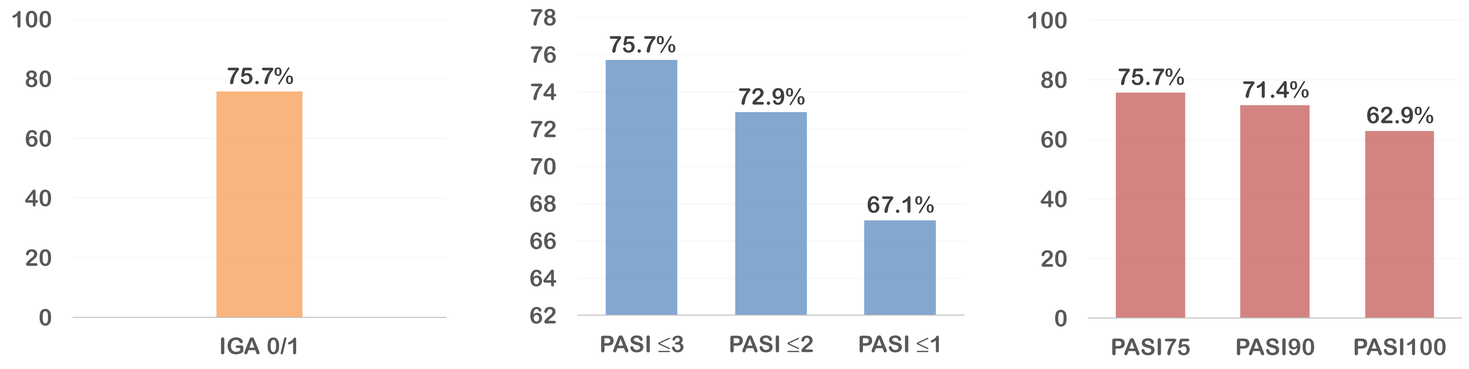


Table 1. Safety outcomes at week 104±8

Safety outcomes up to week 104±8	n/N (%)
Candidiasis	5/70 (7.1)
Oral candidiasis	4/70 (5.7)
Intertrigo	1/70 (1.4)
Folliculitis	3/70 (4.3)
Anxiety	1/70 (1.4)
Inflammatory bowel disease	1/70 (1.4)
Recurrent cellulitis	1/70 (1.4)
Recurrent upper respiratory tract infection	1/70 (1.4)
Recurrent urinary tract infection	1/70 (1.4)
Tinea versicolor	1/70 (1.4)

DISCUSSION

- To date, three open-label extension studies (BE RADIANT, BE BRIGHT, BE SURE) have evaluated bimekizumab 2-year outcomes (weeks 96 and 104).[1,2] In these studies, NRI outcomes for IGA 0/1, PASI90, and PASI100 ranged from 74.7%-85.9%, 76.6%-87%, and 64.6%-68.9%, respectively.
- Our real-world effectiveness outcomes are comparable to these results with no new safety signals.
- Overall, our study highlights the long-term effectiveness and safety of bimekizumab up to 2 years. Study limitations include its retrospective nature and small sample size.

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DISCLOSURES

Dr. Sood, Mr. Rimke, Dr. Rankin, Dr. Abduelmula, Dr. Georgakopoulos, Dr. Maliyar, and Dr. Bagit have no relevant disclosures; Ms. Fernejoy Leung has been an advisor, consultant, speaker and/or investigator for AbbVie, Arcutis, Bausch Health, BioScript Solutions, Incyte, Janssen, LEO Pharma, Novartis, and UCB; Ms. Lauren A. Stark has been an advisor, consultant, speaker and/or investigator for AbbVie, Arcutis, BioScript Solutions, Janssen, and Novartis; Dr. Alim R. Devani has been an advisor, consultant, speaker, and/or investigator for AbbVie, Amgen, AnaptysBio, Arcutis, Arena, Bausch Health, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Concert, Dermavant, Dermira, Eli Lilly, Galderma, GSK, Incyte, Janssen, LEO Pharma, Medexus, Nimbus Lakshmi, Novartis, Pediapharm, Pfizer, Regeneron, Reistone, Sanofi Genzyme, Sun Pharma, Takeda, Tribute, UCB, and Valeant; Dr. Ronald Vender has been an advisor, consultant, speaker, and/or investigator for AbbVie, Actelion, Amgen, Aralez, Arcutis, Astellas, Bausch Health, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Cipher, Centocor, Dermira, Dermavant, Eli Lilly, Galderma, GSK, Innovaderm, Janssen, Kabi-Care, LEO Pharma, Merck, Novartis, Palladin, Pfizer, Regeneron, Sandoz, Sun Pharma, Takeda, UCB, and Viatris-Mylan; Dr. Jensen Yeung has been an advisor, consultant, speaker, and/or investigator for AbbVie, Amgen, Anacor, Arcutis, Astellas, Bausche, Baxalta, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Centocor, Coherus, Dermira, Forward, Fresenius Kabi, Galderma, Incyte, Janssen, LEO Pharma, Medimmune, Merck, Novartis, Pfizer, Regeneron, Roche, Sanofi Genzyme, Sun Pharma, Takeda, UCB, and Xenon; Dr. Vimal H. Prajapati has been an advisor, consultant, and/or speaker for AbbVie, Actelion, Amgen, Apogee Therapeutics, Aralez, Arcutis, Aspen, Bausch Health/Valeant, BioScript Solutions, Boehringer Ingelheim, Bristol Myers Squibb, Canadian Psoriasis Network, Celgene, Cipher, Concert, CorEvitas, Eczema Society of Canada, Eli Lilly, Galderma, GlaxoSmithKline, Homeocan, Incyte, Janssen, LEO Pharma, Medexus, Novartis, Pediapharm, Pfizer, Sanofi Genzyme, Sun Pharma, Tribute, and UCB; investigator for AbbVie, AnaptysBio, Arcutis, Arena, Asana, Bausch Health/Valeant, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Concert, CorEvitas, Dermavant, Dermira, Eli Lilly, Galderma, Incyte, Janssen, LEO Pharma, Nektar Therapeutics, Nimbus Lakshmi, Novartis, Pfizer, Regeneron, RAPT Therapeutics, Reistone, Sanofi Genzyme, Sun Pharma, Takeda, and UCB; received grants from AbbVie, Bausch Health, Janssen, LEO Pharma, Novartis, and Sanofi Genzyme.