Dermatology Practical & Conceptual

Real-life Experience of Bimekizumab in 27 Obese Patients with Plaque-type Psoriasis: A 24-week Multicenter Retrospective Study

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Introduction

Psoriasis is frequently linked to metabolic disorders such as diabetes, dyslipidemia, and obesity [1-4]. Obesity affects around 25% of psoriasis patients and is often associated with poorer responses to biologic therapies, especially TNF-α and interleukin (IL)-17-inhibitors [1-5].[1-4] Bimekizumab (BKZ), a monoclonal antibody targeting both IL-17A and IL-17F, has shown promising results in the treatment of moderate to severe psoriasis in both clinical trials and real-world studies [6], yet specific data in obese patients are scarce.

Case Presentation

This 24-week retrospective study, conducted at 2 Italian dermatological centers (Udine and Brescia), aims to evaluate the efficacy and safety of BKZ in obese patients with plaque-type psoriasis. Consecutive obese patients (body mass index [BMI] ≥30) with plaque-type psoriasis of moderate-to-severe entity (Psoriasis Area and Severity Index ([PASI]) >10)] or involving "sensitive areas" (scalp, genitalia, palms/soles) treated with BKZ (standard dosing regimen) were considered; those lacking 24-week follow-up or on concomitant anti-psoriatic therapies were excluded. Demographic and medical information was collected (gender, age, BMI, psoriasis duration, comorbidities and previous/current systemic treatments). Treatment efficacy was evaluated using PASI score at baseline, Week 4, Week 16 and Week 24; percentage improvement compared to baseline was also considered (PASI75, 90 and 100) at each time point. Safety profile was assessed by monitoring incidence and severity of adverse events (AEs). The patients in this manuscript provided informed consent for the publication of case details, and institutional approval was not required, as the study was based

on data retrospectively collected in a routine clinical setting. This study complies with the Declaration of Helsinki and no ethical approval was required as it results from clinical routinary activity.

A total of 27 obese patients with psoriasis met our inclusion criteria, with a mean age of 50.0 ± 12.1 years and mean BMI of 33.4 ± 3.6 kg/m2. The mean duration of psoriasis was 16.9 ± 8.8 years. At baseline, the mean PASI was 13.3 ± 8.2, with 74.1% of patients having at least 1 difficult-to-treat area affected (genitalia, scalp, palms/soles), and 40.7% with nail involvement. Most patients (81.5%) had been previously treated with at least 1 conventional therapy, and 66.7% had received at least 1 biologic therapy. The most common comorbidity was arterial hypertension (40.7%). All baseline demographic and clinical data of included patients are summarized in Table 1. During the follow-up, the mean PASI score decreased from 13.3 ± 8.1 at baseline to 2.3 ± 2.4 at Week 4, 1.0 ± 1.7 at Week 16, and 0.6 ± 1.5 at Week 24 (Figure 1). The percentage of patients achieving PASI75, PASI90, and PASI100 improved steadily over the study period: Week 4: PASI75 (74.1%), PASI90 (37.0%), PASI100 (25.9%); Week 16: PASI75 (88.9%), PASI90 (70.4%), PASI100 (55.6%); and Week 24: PASI75 (96.3%), PASI90 (85.2%), PASI100 (74.1%). BKZ was generally well-tolerated, with only 1 patient (3.7%) discontinuing treatment at Week 12 due to axillary candidiasis and urinary tract infection, which were treated successfully, allowing BKZ treatment to resume without further adverse events (AEs); no other significant AEs were reported.

Conclusions

In conclusion, this 24-week real-life study indicates that BKZ is an effective treatment for moderate-to-severe/difficult-to-treat plaque-type psoriasis in obese patients. The treatment resulted in substantial PASI improvements, with 20 and 23 patients respectively achieving complete and nearly complete responses (described as PASI100 and PASI90 respectively). BKZ efficacy in this cohort was greater than both anti-IL-17 secukinumab (which yielded a worse mean PASI decrease from baseline to week 24) and brodalumab (Week 24 PASI75, PASI90, PASI100 of 88.07%, 74.31% and 53.32% respectively) and anti-IL-23 agents guselkumab (Week 24 PASI75, PASI90, PASI100 of 89.5%, 73.3% and 50% respectively) and risankizumab (Week 16 PASI75, PASI90, PASI100 of 66%, 40%, 28% respectively and Week 28 PASI75, PASI90, PASI100 of 87%, 72%, 58% respectively) in the same subset of patients in real life [1-4]. Despite multiple comorbidities typical of obese populations, BKZ demonstrated a favorable safety profile. These findings suggest that BKZ could be considered as an optimal biologic

Table 1. Demographic and Clinical Data of Study Population*

Study population	
Patients, N	27
Age, years	50.0 ± 12.1
Sex, male	19 (70.4%)
Body Mass Index, kg/m^2	33.4 ± 3.6
Psoriasis duration, years	16.9 ± 8.8
Psoriasis family history, N (%)	10 (37.0%)
Psoriatic Arthritis, N (%)	5 (18.5%)
Psoriatic Arthritis duration, years	5.2 ± 4.2
Involvement of difficult to treat areas, N (%) Scalp Genitals Palms and soles	20 (74.1%) 12 (44.4%) 13 (48.1%) 4 (14.8%)
Nail involvement, N (%)	11 (40.7%)
PASI Baseline W4 W16 W24	 13.3 ± 8.2 2.3 ± 2.4 1.0 ± 1.7 0.6 ± 1.5
Comorbidities or associated disease, N (%): Hypertension Diabetes Hyperuricemia Chronic Kidney Disease	 11 (40.7%) 9 (33.3%) 4 (14.8%) 2 (7.4%)
Previous conventional treatments, N (%): Cyclosporin Phototherapy Methotrexate Acitretin	22 (81.5%) 11 (40.7%) 10 (37.0%) 10 (37.0%) 7 (25.9%)
Biologics, N (%): Naive Adalimumab Secukinumab Ustekinumab Guselkumab Ixekizumab Brodalumab Etanercept Golimumab Risankizumab Tildrakizumab	18 (66.7%) 9 (33.3%) 13 (48.1%) 7 (25.9%) 4 (14.8%) 2 (7.4%) 2 (7.4%) 1 (3.7%) 1 (3.7%) 1 (3.7%) 1 (3.7%) 1 (3.7%)
Biologics failure, N (%): 1 failure 2 failures 3+ failures	 10 (37.0%) 2 (14.8%) 2 (14.8%)
Adverse Events, N (%): Axillary Candidiasis	1 (3.7%) 1 (3.7%)

PASI: Psoriasis Area and Severity Index; W: Week.
*Mean and SD are specified for all the quantitative variables.

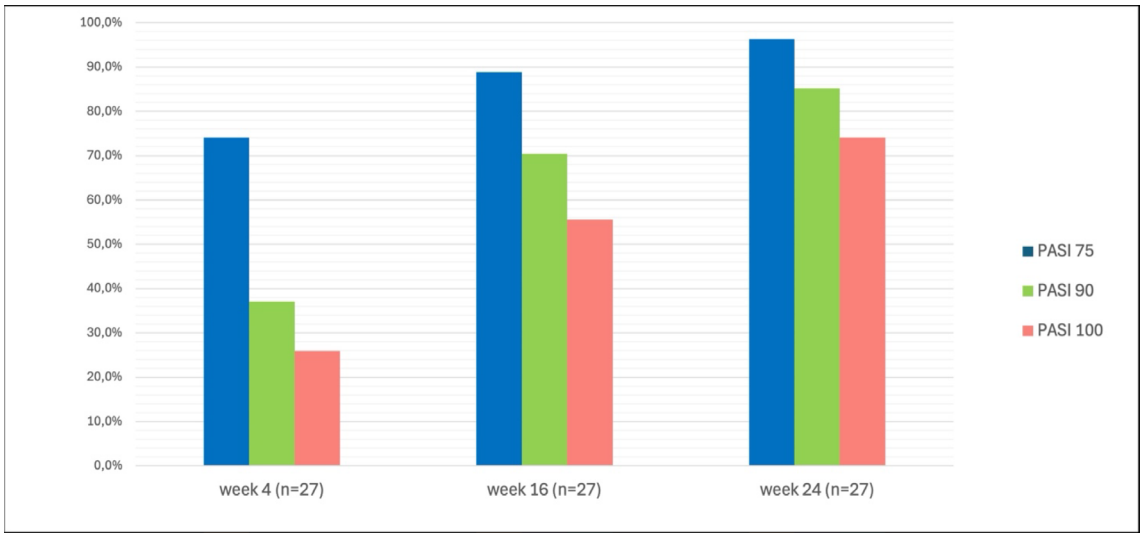

Figure 1. Psoriasis Area Severity Index (PASI) responses at follow-up visits. PASI 75, 90 and 100 responses after 4, 16 and 24 weeks of bimekizumab treatment.

therapy for obese patients with moderate-to-severe/difficult-to-treat psoriasis. Future studies with larger cohorts and longer follow-up periods are necessary to further validate these results.

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