

Comparative Effectiveness of Risankizumab Versus Tumour Necrosis Factor Inhibitors or Interleukin-17 Inhibitors on Joint Outcomes in Biologic-Naive Patients With Psoriatic Arthritis: A Global Real-World Study

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OBJECTIVE

To evaluate real-world effectiveness of risankizumab versus tumour necrosis factor inhibitors or interleukin-17A and 17A/F inhibitors on tender and swollen joint involvement in biologic-naive patients with PsA

CONCLUSIONS

Risankizumab provided similar effectiveness on joint involvement as TNF or IL-17 inhibitors in biologic-naive patients with PsA in the real-world

These findings support the use of risankizumab as a treatment option for peripheral joint involvement in biologic-naive PsA, including in patients with prior csDMARD exposure

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References

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INTRODUCTION

- Reducing peripheral arthritic disease activity, assessed by tender and swollen joint counts, is a key treatment goal for patients with psoriatic arthritis (PsA)
- Risankizumab (RZB), an interleukin (IL)-23 inhibitor, was approved for PsA in Europe in 2021 and in the United States in 2022, based on two phase 3 trials¹⁻²
- Additional approved advanced therapies for PsA include IL-17 inhibitors (IL-17i) and tumour necrosis factor inhibitors (TNFi)
- However, real-world data on comparative effectiveness of RZB versus TNFi or IL-17i in patients with PsA are limited, and patients in randomized controlled trials do not often reflect the types of patients in the real-world

RESULTS

Patients

- Patient demographics and disease characteristics are detailed in **Table 1**
- Among 676 patients included in the analysis, 163 initiated RZB, 352 initiated a TNFi, and 161 initiated an IL-17i
- Adalimumab was the most commonly used TNFi (62%), while secukinumab was the most used IL-17i (47%)
- Mean (SD) current treatment duration was 11.1 (4.79), 33.8 (40.31), and 23.0 (18.78) months for patients receiving RZB, TNFi, and IL-17i, respectively
- At initiation of current treatment, most patients had a physician-reported assessment of moderate/severe disease severity (RZB: 93%; TNFi: 92%; IL-17i: 94%)

Table 1. Baseline Demographics and Disease Characteristics

	RZB (N = 163)	TNFi (N = 352)	IL-17i (N = 161)
Age, mean (SD)	44.9 (10.06)	48.3 (12.83)	46.2 (13.29)
Male, n (%)	88 (54)	167 (47)	91 (57)
Time since PsA diagnosis, years, mean (SD)	3.6 (3.87)	5.2 (5.14)	4.6 (5.26)
Current advanced therapy, n (%)			
<i>Risankizumab</i>	163 (100)	-	-
<i>Adalimumab</i>	-	217 (62)	-
<i>Etanercept</i>	-	50 (14)	-
<i>Certolizumab pegol</i>	-	33 (9)	-
<i>Infliximab</i>	-	30 (9)	-
<i>Golimumab</i>	-	22 (6)	-
<i>Secukinumab</i>	-	-	75 (47)
<i>Ixekizumab</i>	-	-	73 (45)
<i>Bimekizumab</i>	-	-	13 (8)
Concurrent csDMARD use, n (%)	27 (17)	63 (18)	14 (9)
Ever prescribed a csDMARD, n (%)	96 (59)	238 (68)	103 (64)
Duration of current advanced therapy, months, mean (SD)	11.1 (4.79)	33.8 (40.31)	23.0 (18.78)
Moderate/severe disease severity at initiation of current treatment, n (%)	152 (93)	323 (92)	151 (94)
TJC at current treatment initiation, mean (SD)	4.9 (7.04)	6.2 (6.91)	6.3 (7.66)
SJC at current treatment initiation, mean (SD)	3.2 (5.58)	4.1 (5.59)	4.2 (5.65)

csDMARD, conventional synthetic DMARD; IL-17i, interleukin-17 inhibitor; PsA, psoriatic arthritis; RZB, risankizumab; SD, standard deviation; SJC, swollen joint count; TJC, tender joint count; TNFi, tumour necrosis factor inhibitor.

METHODS

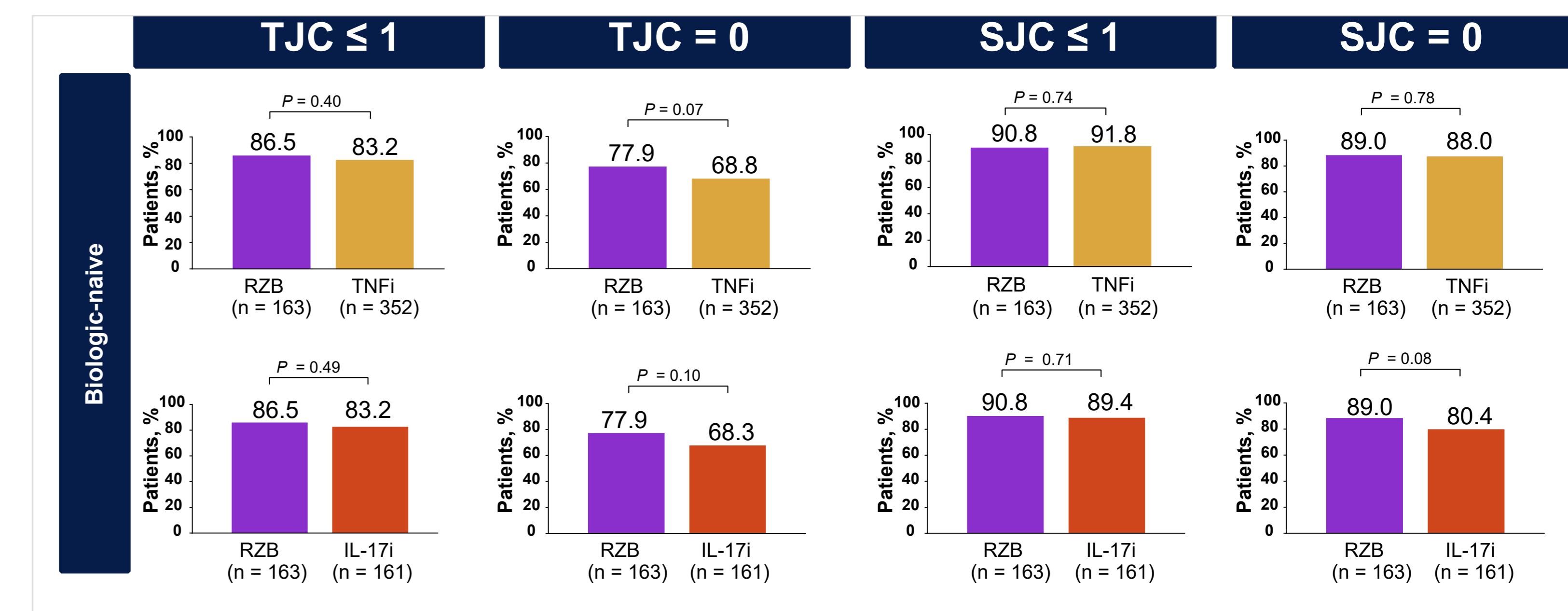
Data Source and Inclusion Criteria

- Data were drawn from the Adelphi Real World Spondyloarthritis (SpA) VI Disease Specific Programme™, a cross-sectional survey administered to physicians and their consulting patients in routine clinical practice in Germany, France, Italy, Spain, the United Kingdom, and the United States (June 2023 to June 2024)
- Adult biologic-naive patients with PsA who initiated RZB, a TNFi or an IL-17i were assessed overall and in a subgroup of patients with prior exposure to conventional synthetic (cs) DMARDs

Outcomes and Statistical Analysis

- Physician-reported outcomes at data collection included tender joint count (TJC) ≤ 1, TJC = 0, swollen joint count (SJC) ≤ 1, and SJC = 0, assessed ≥ 3 months after treatment initiation
- The RZB-treated population was compared separately with each of the TNFi and IL-17i populations using an entropy balancing (EB) approach
- With EB, the TNFi and IL-17i groups were weighted such that the means of the confounder variables match the means for the RZB group
- Weighted confounding variables include age, sex, disease severity, mean TJC and SJC at treatment initiation, and current treatment duration

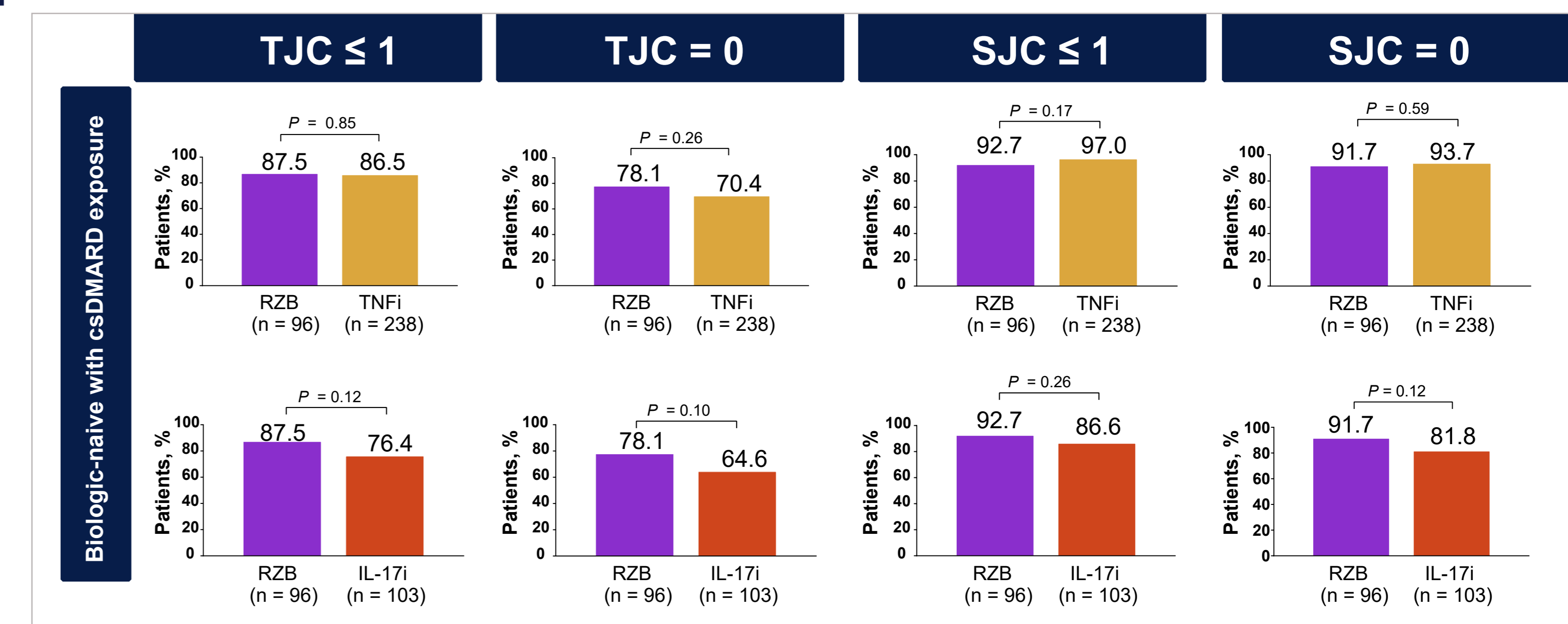
Figure 1. Comparison of Tender and Swollen Joint Count at Data Collection in Biologic-Naive Patients With PsA^a



^aComparisons between RZB versus TNFi and RZB versus IL-17i were conducted separately using an entropy balancing approach. IL-17i, interleukin-17 inhibitor; PsA, psoriatic arthritis; RZB, risankizumab; SJC, swollen joint count; TJC, tender joint count; TNFi, tumour necrosis factor inhibitor.

- In the overall biologic-naive population, the proportions of patients achieving physician-reported joint outcomes in the RZB group were similar to those in the TNFi group for TJC ≤ 1 (86.5% vs 83.2%, $P = 0.40$), TJC = 0 (77.9% vs 68.8%, $P = 0.07$), SJC ≤ 1 (90.8% vs 91.8%, $P = 0.74$), SJC = 0 (89.0% vs 88.0%, $P = 0.78$)
- Similar results were observed for RZB versus IL-17i for TJC ≤ 1 (86.5% vs 83.2%, $P = 0.49$), TJC = 0 (77.9% vs 68.3%, $P = 0.10$), SJC ≤ 1 (90.8% vs 89.4%, $P = 0.71$), SJC = 0 (89.0% vs 80.4%, $P = 0.08$)

Figure 2. Comparison of Tender and Swollen Joint Count at Data Collection in Biologic-Naive Patients With PsA With Prior csDMARD Exposure^b



^bComparisons between RZB versus TNFi and RZB versus IL-17i were conducted separately using entropy balancing approach. csDMARD, conventional synthetic DMARD; IL-17i, interleukin-17 inhibitor; PsA, psoriatic arthritis; RZB, risankizumab; SJC, swollen joint count; TJC, tender joint count; TNFi, tumour necrosis factor inhibitor.

- Comparable results were also observed for the biologic-naive population subgroup with prior csDMARD exposure
- The proportions of patients achieving joint-related outcomes were similar for the RZB versus the TNFi group (87.5% vs 86.5%, $P = 0.85$; 78.1% vs 70.4%, $P = 0.26$; 92.7% vs 97.0%, $P = 0.17$; 91.7% vs 93.7%, $P = 0.59$) and for the RZB versus IL-17i group (87.5% vs 76.4%, $P = 0.12$; 78.1% vs 64.6%, $P = 0.10$; 92.7% vs 86.6%, $P = 0.26$; 91.7% vs 81.8%, $P = 0.12$) for TJC ≤ 1, TJC = 0, SJC ≤ 1, and SJC = 0, respectively