



Persistence and Effectiveness Across PsA Patient Subgroups with Guselkumab and IL-17 Inhibitors: 6-Month Results of the PsABIOnd Observational Study

Laure Gossec,¹ Mohamed Sharaf,² Xenofon Baraliakos,³ Mitsumasa Kishimoto,³ Ruben Queiro Silva,⁵ Emnio Lubrano,⁶ Emmanouil Rampakakis,^{7,8} László Köleséri,⁹ Karissa Lozenci,¹⁰ Enrique R. Soriano,¹¹ Proton Rahman,¹² Frank Behrens,¹³ Stefan Siebert¹⁴

¹Sorbonne Université, Pitié-Salpêtrière Hospital, Paris France. ²Johnson & Johnson, Dubai, United Arab Emirates. ³Ruhr-University Bochum, Rheumazentrum Ruhrgebiet, Herne, Germany. ⁴Department of Nephrology and Rheumatology, Kyorin University School of Medicine, Tokyo, Japan. ⁵Rheumatology Division & ISPA Translational Immunology Division, Hospital Universitario Central de Asturias, Oviedo University, Oviedo, Spain. ⁶Vincenzo Tiberio Department of Medicine and Health Sciences, University of Molise, Campobasso, Italy. ⁷Department of Pediatrics, McGill University, Montreal, Quebec, Canada. ⁸Scientific Affairs, JSS Medical Research, Inc, Montreal, Quebec, Canada. ⁹Data Sciences Staffing Solutions, IQVIA, Inc, Budapest, Hungary. ¹⁰Johnson & Johnson, Horsham, PA, USA. ¹¹Rheumatology Section, Internal Medicine Service, Hospital Italiano de Buenos Aires and University Institute Hospital Italiano de Buenos Aires, Buenos Aires, Argentina. ¹²Faculty of Medicine, Division of Rheumatology, Memorial University of Newfoundland, St. Johns, Newfoundland and Labrador, Canada. ¹³Rheumatology and Fraunhofer IME - Translational Medicine and Pharmacology, Goethe University, Frankfurt, Germany. ¹⁴School of Infection & Immunity, University of Glasgow, Glasgow, UK.

Background

- Psoriatic arthritis (PsA) is a chronic and heterogeneous inflammatory disease that affects joints and skin
- Randomized controlled trials have demonstrated the efficacy of interleukin (IL)-23 inhibitors (i) and IL-17i in PsA; however, real-world data on their effectiveness in heterogeneous patient subgroups in routine care are limited
- Some subgroups, such as older, obese, or biologic-experienced patients, are of particular interest as patients in these groups report worse treatment outcomes¹
- PsABIOnd (NCT05049798) is a global (20 countries) observational study in participants with PsA starting guselkumab (GUS) and IL-17i as 1st-to-4th line of biologic therapy per their standard of care²
- Previous interim analysis of the PsABIOnd study showed similar 6-month GUS and IL-17i persistence and effectiveness across PsA domains³

Objectives

This analysis from the ongoing PsABIOnd study assessed treatment persistence and effectiveness across older, obese, or biologic-experienced participant subgroups at the 6-month visit in participants initiating either GUS or IL-17i in a real-world setting

Methods

PsABIOnd Study Design

Participant Selection

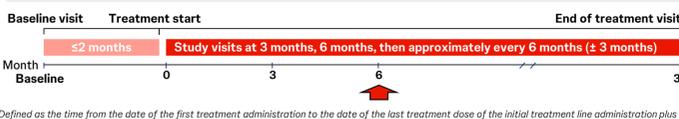
- Adults diagnosed with PsA
- Initiated GUS or an IL-17i as a 1st-to-4th line of biologic therapy (monotherapy or in combination with other agents) per standard of care
- Enrollment completed in May 2024 with 1314 participants from 20 countries

Study Objectives

- Primary:** Persistence on treatment over 36 months
- Secondary:** 36-month effectiveness via physician-completed assessments and ePROs, safety, predictors of response and persistence, patterns of treatment lines, etc

Current Interim Analysis

- As of June 14th, 2024, 1134 participants with over 6 months of follow up had available and analyzable data



Outcomes and Analysis

Persistence on treatment with GUS and IL-17i up to the 6-month visit

Kaplan-Meier analysis of treatment persistence

- Treatment persistence (i.e., no stop or switch)^a was assessed:
 - For the overall population
 - By subgroups defined by baseline age, biological sex, BMI category and prior biologic treatment experience
- Participants were analyzed by initial treatment line^b

Propensity score (PS) analysis

- Hazard ratio (HR) of stopping/switching GUS vs IL-17i prior to the 6-month visit, adjusting for baseline imbalances across cohorts
- Participants were analyzed by initial treatment line^b

Treatment effectiveness with GUS and IL-17i at the 6-month visit

Achievement Rates at Baseline and 6 months	
Outcome	Cut-off
cDAPSA LDA/REM	cDAPSA score ≤13
Mild psoriasis BSA	BSA <3%

Mean Scores at Baseline and 6 months

SJC66 (0-66)	
TJC68 (0-68)	
LEI (0-6)	
DLQI (0-30)	

Number of nails affected by psoriatic disease (0-20)

- Participants were analyzed by initial treatment line^b
- Dactylitis was not assessed due to its low prevalence at BL

^aDefined as the time from the date of the first treatment administration to the date of the last treatment dose of the initial treatment line administration plus 1 dosing interval or until start of subsequent treatment. ^bOnly participants receiving ≥1 dose of the index drug were included. BSA=body surface area, BMI=body mass index, cDAPSA=clinical disease activity index for PsA, DLQI=Dermatology Quality of Life Index, ePRO=Electronic patient-reported outcome, LDA=low disease activity, LEI=Leeds enthesitis index, PsO=psoriasis, REM=remission, SJC=swollen joint count, TJC=tender joint count.

Key Takeaways

- Six-month findings from the real-world, global, prospective PsABIOnd study of participants with PsA showed that with both GUS and IL-17i treatment:
 - Regardless of age, biological sex, BMI, or treatment history, and despite more 4th line treatment initiation in the GUS cohort:
 - Treatment persistence was comparable
 - Effectiveness was comparable
- These results support the real-world effectiveness of GUS and IL-17i across PsA subpopulations

Results

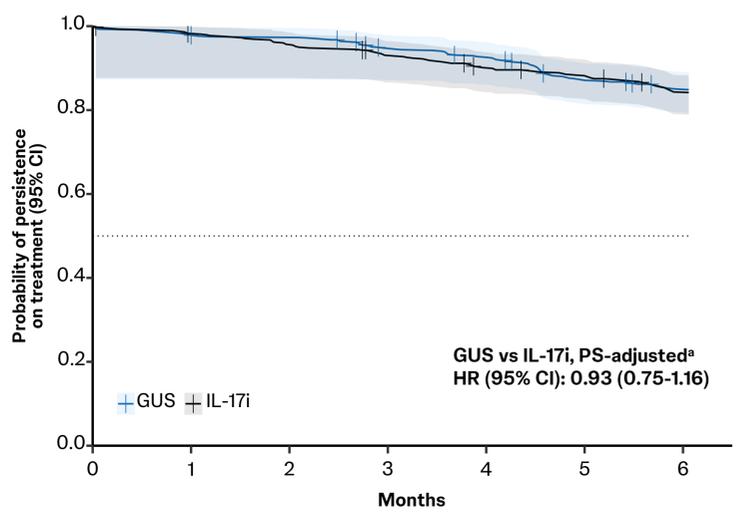
Baseline participant and disease characteristics were generally well balanced between cohorts

- A higher proportion of participants in the GUS cohort were initiating their 4th biologic treatment line

Baseline Characteristics	GUS (N=555)	IL-17i (N=579)
Demographics		
Age, yrs	53.2 (12.8)	53.5 (12.0)
Female	60%	59%
BMI, kg/m ²	30.1 (6.51) ^a	29.4 (6.32) ^b
Disease Characteristics		
PsA disease duration, yrs	8.0 (8.0) ^c	7.7 (9.2) ^d
cDAPSA (0-154)	24.5 (14.3) ^e	27.6 (17.2) ^f
TJC (0-68)	9.1 (9.8) ^g	10.9 (12.0) ^h
SJC (0-66)	3.8 (4.5) ^g	4.6 (5.8) ⁱ
Enthesitis	47% ^j	51% ^k
LEI (0-6)	2.4 (1.4) ^l	2.5 (1.5) ^m
Nails affected by PsO (0-20)	8.5 (6.3) ⁿ	8.4 (6.7) ^o
Psoriatic BSA		
<3%	52% ^h	60% ^p
3-10%	36% ^h	31% ^p
>10%	12% ^h	9% ^p
DLQI (0-30)	7.3 (7.21) ^q	6.2 (6.7) ^r
Line of bDMARD treatment		
1 st	37%	38%
2 nd	27%	36%
3 rd	21%	18%
4 th	15%	8%

Persistence on treatment was high with both GUS and IL17i at the 6-month visit

- 95% of participants in the GUS and 93% in the IL-17i cohorts remained on their initial treatment line up to the 6-month visit
- Reasons for initial treatment line discontinuation were consistent between treatment groups
- Persistence on GUS and IL-17i was also comparable among participant subgroups (data not shown)

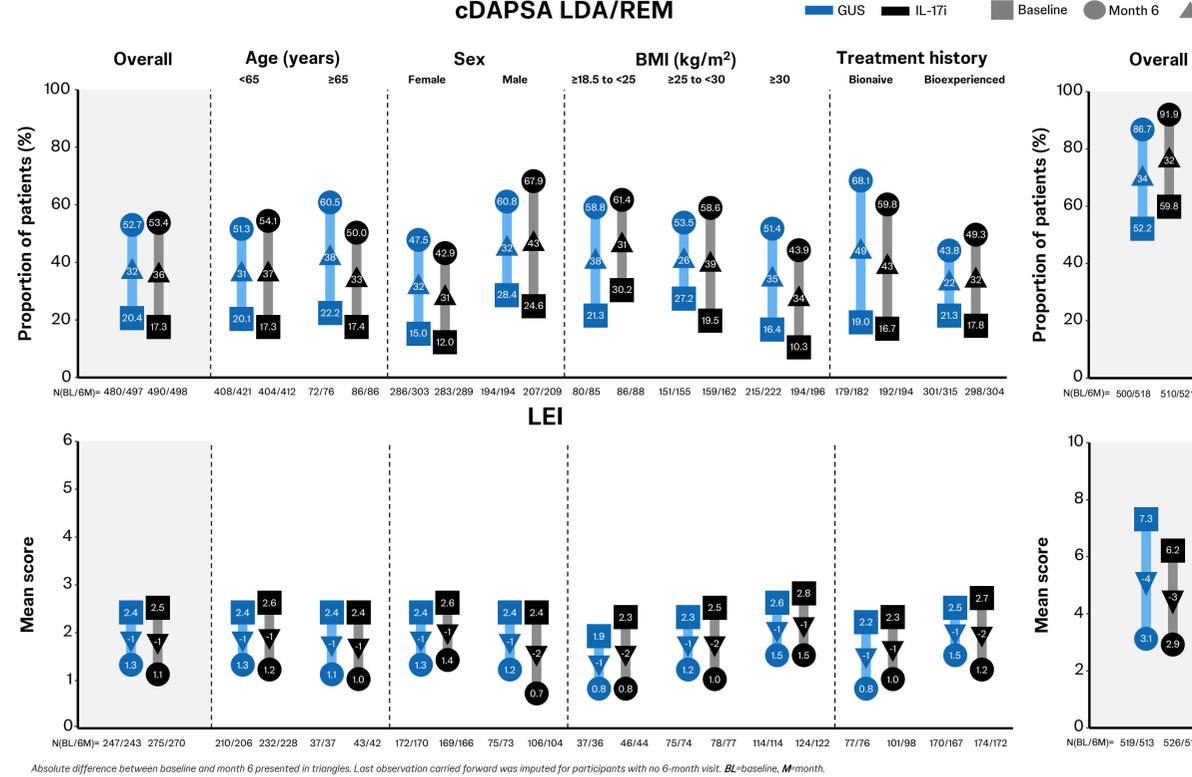


Number at risk

	GUS	555	545	540	521	509	477	461
	IL-17i	579	567	552	535	516	506	480

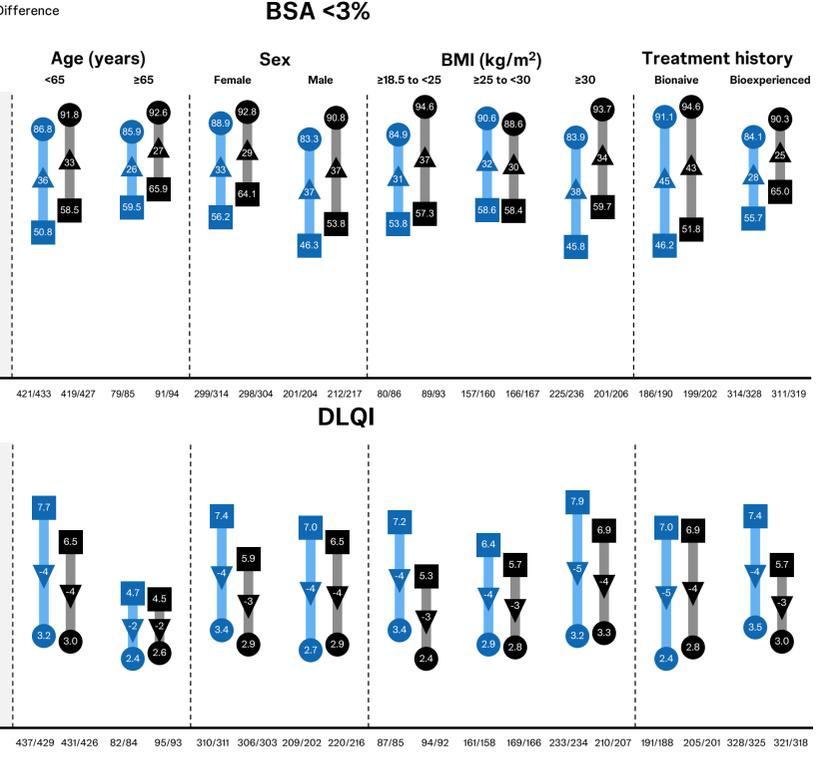
Improvements in PsA domains were comparable across subgroups with GUS and IL-17i at the 6-month visit

- Improvements in SJC66, TJC68, and nail psoriasis were also comparable across subgroups with GUS and IL-17i at 6 months



Improvements in PsA domains were comparable across subgroups with GUS and IL-17i at the 6-month visit

- Improvements in SJC66, TJC68, and nail psoriasis were also comparable across subgroups with GUS and IL-17i at 6 months



Data shown are mean (SD) unless otherwise indicated. *N=521, **N=525, ***N=518, ****N=536, *****N=480, ****N=490, ****N=487, ****N=500, ****N=501, ****N=529, ****N=538, ****N=88, ****N=109; ****N=225, ****N=230, ****N=510, ****N=519, ****N=526. bDMARD=biological disease-modifying antirheumatic drug.

^aAdjusted for potential confounders at baseline including initial bDMARD treatment line, among others. CI=confidence interval.

Absolute difference between baseline and month 6 presented in triangles. Last observation carried forward was imputed for participants with no 6-month visit. BL=baseline, M=month.