Guselkumab and IL-17 Inhibitors Show Comparable Treatment Persistence and Effectiveness in Psoriatic Arthritis: 12-month Results of the PsABIOnd Observational Study

Stefan Siebert[1], Mohamed Sharaf[2], Frank Behrens[3], Proton Rahman[4], Mitsumasa Kishimoto[5], Enrique R. Soriano[6], Emmanouil Rampakakis[7,8], László Köleséri[9], Karissa Lozenski[10], Minni Koivunen[11], Ruben Queiro Silva[12], Ennio Lubrano[13], Daniel Aletaha[14], Laure Gossec[15]

[1]School of Infection & Immunity, University of Glasgow, Glasgow, UK. [2]Johnson & Johnson, Dubai, United Arab Emirates. [3]Rheumatology and Fraunhofer IME - Translational Medicine and Pharmacology, Goethe University, Frankfurt, Germany. [4]Faculty of Medicine, Division of Rheumatology, Memorial University of Newfoundland, St. Johns, Canada. [5]Department of Nephrology and Rheumatology, Kyorin University School of Medicine, Tokyo, Japan. [6]Rheumatology Section, Internal Medicine Service, Hospital Italiano de Buenos Aires and University Institute Hospital Italiano de Buenos Aire, Argentina. [7]Department of Pediatrics, McGill University, Montreal, Canada. [8]Scientific Affairs, JSS Medical Research, Inc, Montreal, Canada. [9]Data Sciences Staffing Solutions, IQVIA, Inc, Budapest, Hungary. [10]Johnson & Johnson, Horsham, PA, USA. [11] Former Johnson & Johnson Employee. [12]Rheumatology Division & ISPA Translational Immunology Division, Hospital Universitario Central de Asturias, Oviedo University, Oviedo, Spain. [13]Vincenzo Tiberio Department of Medicine and Health Sciences, University of Molise, Campobasso, Italy. [14]Department of Medicine III, Division of Rheumatology, Medical University of Vienna, Vienna, Austria. [15]Sorbonne Université, Pitie-Salpetriere Hospital, Paris France

P3828

Key Takeaways

- **Interim findings from the real-world, global, prospective PsABIOnd study showed that participants with PsA had comparable 12-month treatment persistence with GUS or IL-17i over 1-year**
  - ✓ **Persistence was similar across biologic treatment history and biological sex subgroups**
- **GUS and IL-17i effectiveness was similar across key PsA domains at 12 months**
- **These results add to real-world evidence of the long-term effectiveness of GUS and IL-17i, supporting efficacy data from RCTs**

Background

- Psoriatic arthritis (PsA) is a chronic, heterogenous inflammatory disease affecting joints and skin[1]
- Interleukin (IL)-23 inhibitors (i) and IL-17i have shown significant early and durable efficacy in randomized controlled trials (RCTs) in PsA; however, real-world long-term data are limited
- PsABIOnd (NCT05049798) is an ongoing, global, observational study in participants with PsA aimed to evaluate treatment persistence, effectiveness and safety of guselkumab (GUS) or IL-17i in a real-word setting[2]
- Previous interim analysis of the PsABIOnd study showed similar 6-month GUS and IL-17i persistence and effectiveness across PsA domains[3]

Objectives

This analysis of a partial population (1015 out of 1313) from the ongoing PsABIOnd study assessed the treatment persistence and effectiveness at the 12-month visit in participants initiating either GUS or an IL-17i in a real-world setting

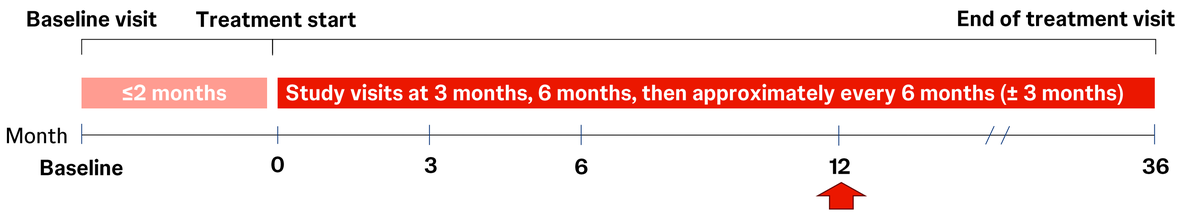
Methods

PsABIOnd Study Design

Participant Selection
- Adults diagnosed with PsA
- Initiating 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 1313 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 14 June 2024, 1015 out of 1313 participants had available and analyzable 12-month visit data



ePRO=electronic patient-reported outcome.

Outcomes and Analyses

Persistence on treatment with GUS and IL-17i over 12 months

Kaplan-Meier analysis of treatment persistence
- Treatment persistence (i.e., no stop/switch)[a] was assessed for the overall population and by subgroups of prior biologic treatment experience and biological sex
- Participants were analyzed by initial treatment line[b]

Propensity score (PS) analysis
- Hazard ratio of stopping/switching GUS vs IL-17i prior to the 12-month visit, adjusting for baseline imbalances across cohorts
- Participants were analyzed by initial treatment line[b]

Achievement of PsA composite clinical outcomes with GUS and IL-17i at the 12-month visit (±3 months)

Clinical Response	
Outcome	**Cut-off**
cDAPSA MCII	cDAPSA score improvement ≥5.7[c]
cDAPSA LDA/REM	cDAPSA score ≤13[d]
cDAPSA REM	cDAPSA score ≤4[d]
MDA achievement	Achievement of 5 out of 7 criteria[e,f]
Mild psoriasis BSA	BSA <3%[c]
DLQI MCII	DLQI improvement ≥4[c]

- Descriptive unadjusted data were analyzed
- Participants were analyzed by initial treatment line[b]
- Treatment comparison was based on 95% CI

*[a]Defined 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. [b]Only participants receiving ≥1 dose of the index drug were included. [c]Among participants with baseline score ≥cut-off. [d]Among participants with baseline score >cut-off. [e]Criteria include tender joint count ≤1, swollen joint count ≤1, BSA <3%, patient pain ≤15mm, PtGA ≤20mm, HAQ-DI ≤0.5, and total pain/tenderness enthesitis score ≤1 (or no enthesitis). [f]Among non-MDA achievers at baseline. **BSA**=body surface area, **cDAPSA**=Clinical Disease Activity Index for PsA, **CI**=confidence interval, **DLQI**=Dermatology Quality of Life Index, **HAQ-DI**=Health Assessment Questionnaire – Disability Index, **LDA**=low disease activity, **MCII**=minimal clinically important improvement, **MDA**=minimal disease activity, **PtGA**= patient global disease activity, **REM**=remission.*

Results

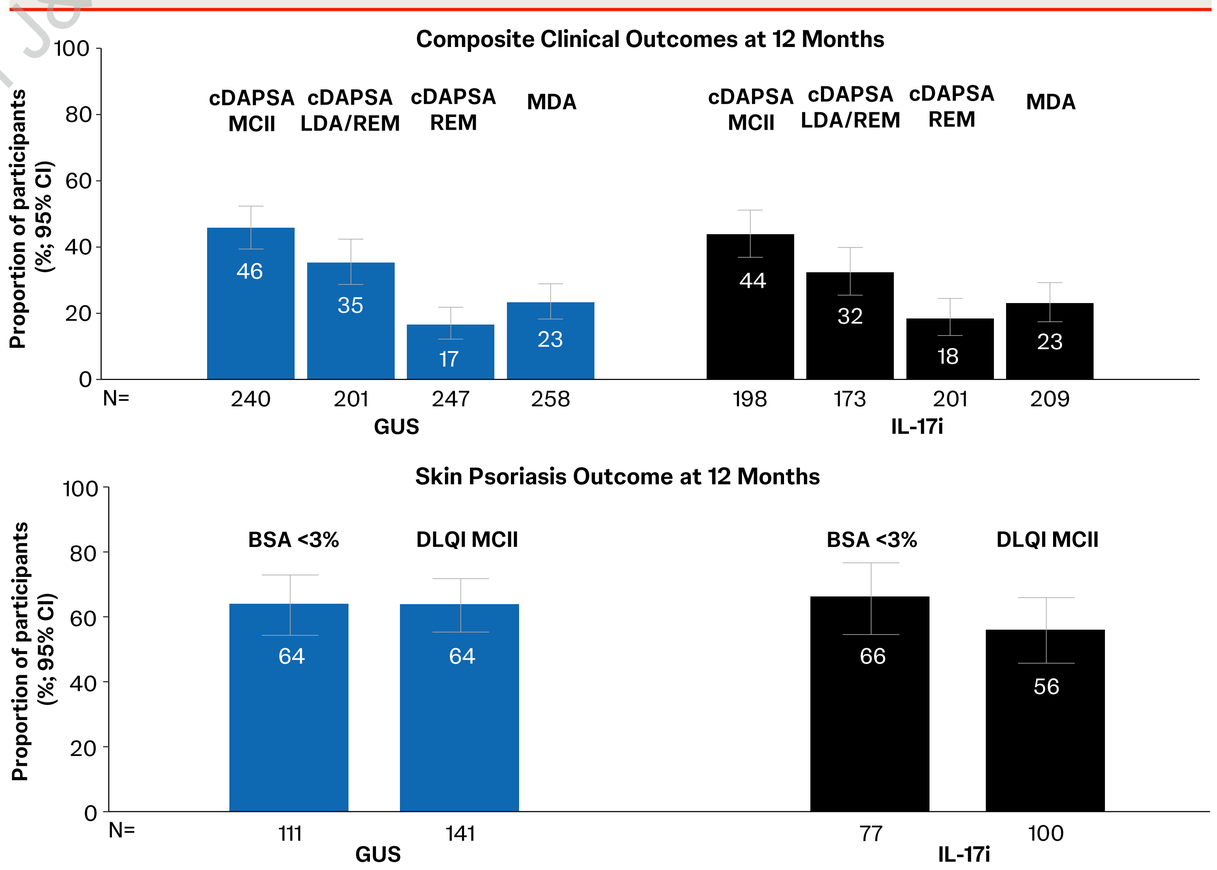
Baseline participant and disease characteristics were generally well balanced between cohorts

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

Baseline Characteristics		GUS (N=511)	IL-17i (N=504)
Demographics			
	Age, yrs	53.0 (12.9)	53.7 (11.9)
	Females	61%	60%
	BMI, kg/m²	30.0 (6.4)[a]	29.5 (6.3)[b]
Characteristics			
	PsA disease duration, yrs	7.9 (8.2)[c]	7.4 (8.5)[d]
	cDAPSA (0-154)	24.9 (14.6)[e]	27.2 (16.8)[f]
	Enthesitis	48%[g]	48%[h]
	Dactylitis	16%[g]	20%[h]
	% of BSA with PsO		
	3-10%	36%[i]	32%[j]
	>10%	12%[i]	9%[j]
Patient-reported outcomes			
	DLQI (0-30)	7.5 (7.30)[k]	6.1 (6.7)[l]
	HAQ-DI (0-3)	1.1 (0.7)[a]	1.1 (0.7)[l]
	PtGA (0-100)	59.4 (22.1)[a]	60.7 (23.3)[m]
Initial bDMARD treatment line			
	1st	37%	37%
	2nd	27%	36%
	3rd	20%	19%
	4th	16%	8%

*Data shown are mean (SD) unless otherwise indicated. [a]N=479. [b]N=453. [c]N=502. [d]N=503. [e]N=439. [f]N=432. [g]N=489. [h]N=476. [i]N=459. [j]N=449. [k]N=477; [l]N=465; [m]N=464. **BMI**=body mass index, **bDMARD**=biological disease-modifying antirheumatic drug, **SD**=standard deviation.*

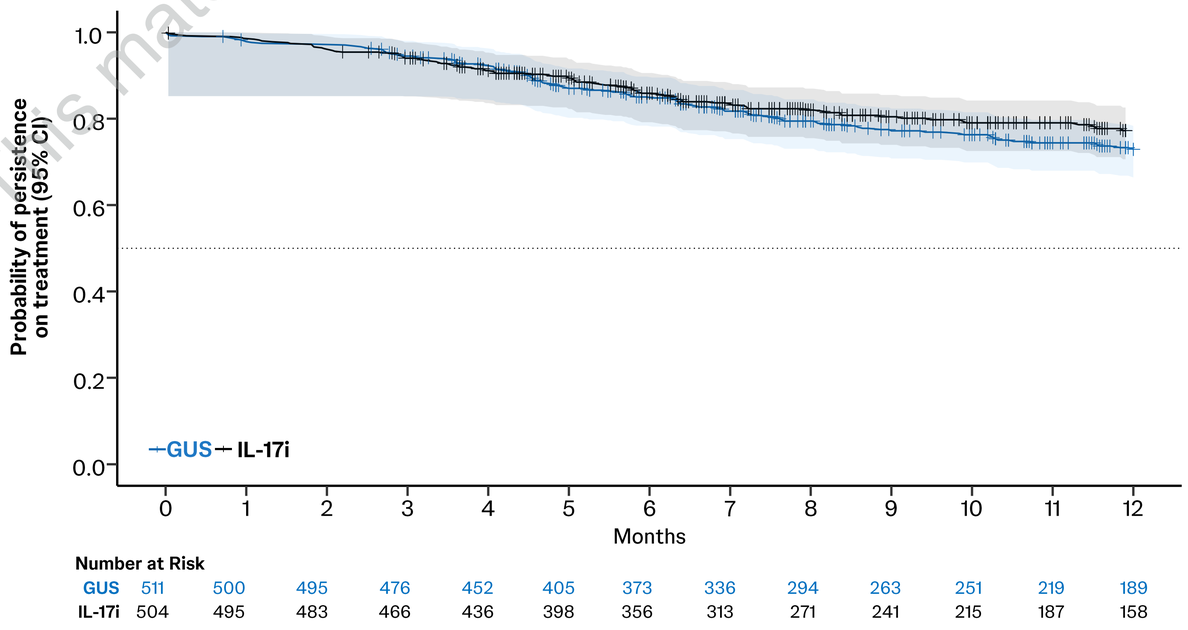
Treatment effectiveness was similar with GUS and IL-17i across PsA outcomes at the 12-month visit



Number of participants (N) indicated under the x-axis correspond to the number of participants included in each respective analysis (see Methods).

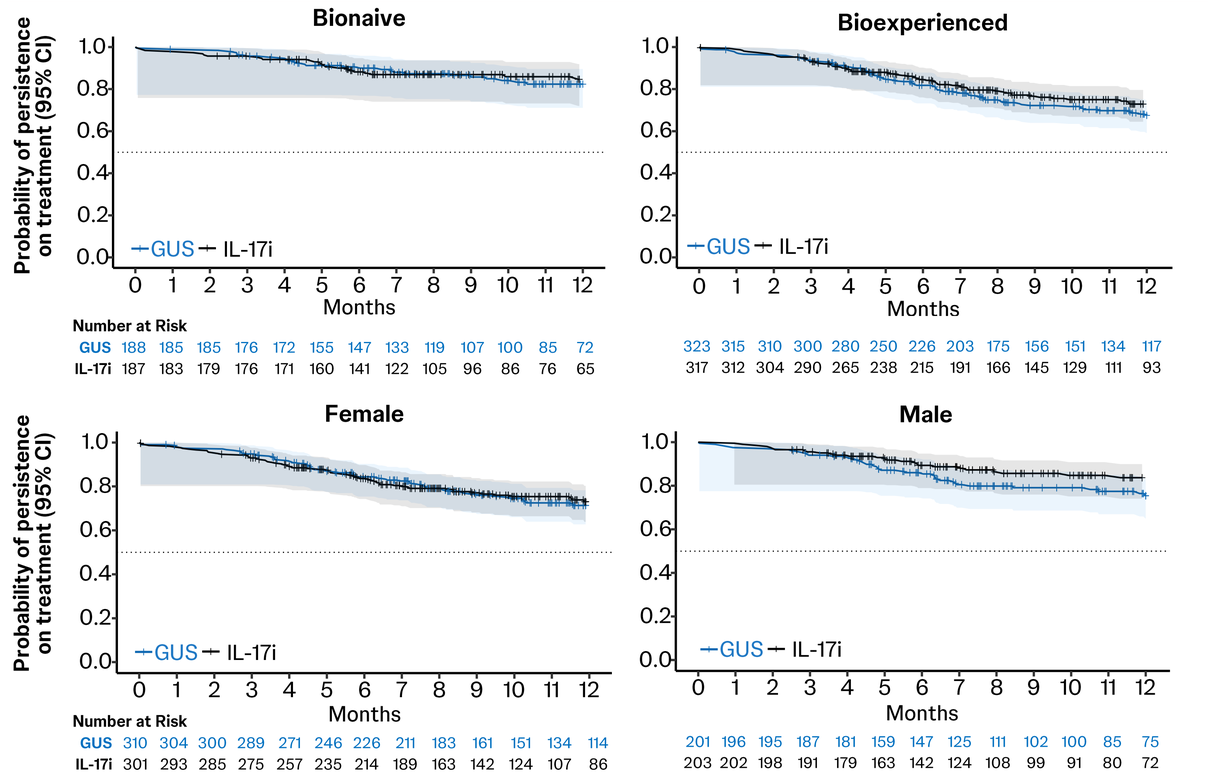
Persistence on treatment was high with both GUS and IL-17i at the 12-month visit

- Approximately 80% GUS and 83% IL-17i participants remained on their initial treatment line up to the 12-month visit
- PS-adjusted[a] hazard ratio (95% CI) of GUS vs IL-17i stop/switch was 1.11 (0.85-1.44)
- Reasons for initial treatment line discontinuation were consistent between cohorts



[a]Adjusted for potential confounders at baseline including initial bDMARD treatment line, among others.

Persistence on GUS and IL-17i was comparable across participant subgroups at the 12-month visit



PRESENTED AT: EADV 2025; September 17-20, 2025; Paris, France. Previously presented at APLAR 2025; September 3-7, 2025; Fukuoka, Japan. **REFERENCES:** 1. FitzGerald, O. Nat Rev Dis Primers. 2021;7:59. 2. Siebert S, et al. Rheumatol Ther. 2023;10:489-505. 3. Gossec L, et al. Arthritis Rheumatol. 2024;76 (suppl 9). **ACKNOWLEDGMENTS:** Medical writing support was provided by JSS Medical Research, Inc, under the direction of the authors in accordance with Good Publication Practice guidelines (Ann Intern Med. 2022;175:1298-1304). Sponsored by Johnson & Johnson. **DISCLOSURES:** SS: Grant/research support: Boehringer Ingelheim, Bristol Myers Squibb, Eli Lilly, GlaxoSmithKline, Johnson & Johnson, and UCB; honoraria/speaker fees: AbbVie, Amgen, AstraZeneca, Johnson & Johnson, Novartis, Pfizer, Syncona, Teijin Pharma, and UCB. MS: Employee: Johnson & Johnson, Dubai, United Arab Emirates; Owns stock: Johnson & Johnson. FB: Research grants: Celgene, Chugai, Johnson & Johnson, Pfizer, and Roche; consultant/speaker fees: AbbVie, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Chugai, Eli Lilly, Galapagos, Genzyme, Gilead, Johnson & Johnson, MSD, Novartis, Pfizer, Roche, Sanofi, and UCB. PR: Consultant: AbbVie, Amgen, Bristol Myers Squibb, Celgene, Eli Lilly, Johnson & Johnson, Merck, Novartis, Pfizer, and UCB; Meeting attendance/travel support: Johnson & Johnson; Research grants: Johnson & Johnson and Novartis. MK: Consultant/speaker fees: AbbVie, Amgen, Asahi-Kasei Pharma, Astellas, Ayumi, Bristol Myers Squibb, Chugai, Daiichi-Sankyo, Eisai, Eli Lilly, Gilead, Johnson & Johnson, Novartis, Pfizer, Tanabe-Mitsubishi, and UCB. ES: Speaker's bureau: AbbVie, Amgen, Bristol Myers Squibb, Eli Lilly, Johnson & Johnson, Novartis, Pfizer, Roche, and UCB; Consultant: AbbVie, Johnson & Johnson, Novartis, and Roche; Grant/research support: AbbVie, Johnson & Johnson, Novartis, Pfizer, Roche, and UCB. ER: Employee: JSS Medical Research; Consultant: Johnson & Johnson. LK: Employee: IQVIA; Consultant: Johnson & Johnson. KL: Employee: Johnson & Johnson; Owns stock: Bristol Myers Squibb, and Johnson & Johnson. MKo: Former Employee: Johnson & Johnson; Owns stock: Johnson & Johnson. RQS: Speaker and/or consultancy fees: AbbVie, Amgen, Celgene, Johnson & Johnson, Ely Lilly, MSD, Novartis, and Pfizer. Restricted research grants: AbbVie, Johnson & Johnson, and Novartis. EL: Honoraria: AbbVie, Amgen, Eli Lilly, GlaxoSmithKline, Johnson & Johnson, Novartis, and UCB. DA: Grants, speaker fees, or consultancy fees: Abbvie, Gilead, Galapagos, Eli Lilly, Johnson & Johnson, Merck, and Novartis. LG: Research grants: AbbVie, Biogen, Eli Lilly, Novartis, and UCB; Consulting fees: AbbVie, AlfaSigma, Amgen, Bristol Myers Squibb, Celltrion, Johnson & Johnson, Eli Lilly, MSD, Novartis, Pfizer, Stada, and UCB.

Encore poster