

ABSTRACT NUMBER: 2585

Guselkumab and IL-17 Inhibitors Improve Patient-perceived Impact of Psoriatic Arthritis Similarly: 6-month Interim Results of the PsABIOnD Observational Cohort Study

Stefan Siebert¹, Mohamed Sharaf², Carlo Selmi³, Proton Rahman⁴, Mitsumasa Kishimoto⁵, Enrique R. Soriano⁶, Emmanouil Rampakakis⁷, László Köleséri⁸, Minni Koivunen⁹, Frederic Lavie¹⁰, Ruben Queiro Silva¹¹, Frank Behrens¹², Ennio Lubrano¹³ and Laure Gossec¹⁴, ¹School of Infection and Immunity, College of Medical, Veterinary and Life Sciences, University of Glasgow, Glasgow, United Kingdom, ²Johnson & Johnson, Middle East FZ LLC, Dubai, UAE, Dubai, United Arab Emirates, ³Department of Biomedical Sciences, Humanitas University, Rozzano, Italy, ⁴Memorial University of Newfoundland, Faculty of Medicine, Division of Rheumatology, St. John's, Canada, ⁵Department of Nephrology and Rheumatology, Kyorin University School of Medicine, Tokyo, Japan, ⁶Hospital Italiano de Buenos Aires, Buenos Aires, Argentina, ⁷McGill University, Department of Pediatrics / Scientific Affairs, JSS Medical Research Inc., Montreal, QC, Canada, ⁸Data Sciences Staffing Solutions, IQVIA, Inc, Budapest, Hungary, ⁹Janssen Cilag Oy, Espoo, Finland, Espoo, Finland, ¹⁰Janssen Cilag Global Medical Affairs, Immunology Global Medical Affairs, Issy les Moulineaux, France, ¹¹Rheumatology Division, Hospital Universitario Central de Asturias, Oviedo University School of Medicine, Oviedo, Spain, ¹²University Hospital Goethe University Frankfurt and Fraunhofer Institute for Translational Medicine and Pharmacology ITMP, Frankfurt, Germany, ¹³Vincenzo Tiberio Department of Medicine and Health Sciences, University of Molise, Campobasso, Italy, ¹⁴Sorbonne Université, Paris, France

Meeting: [ACR Convergence 2024](#)**Keywords:** [Biologicals](#), [Interleukins](#), [Psoriatic arthritis](#)

SESSION INFORMATION

Date: [Monday, November 18, 2024](#)**Session Type:** Abstract Session**Title:** [Abstracts: SpA Including PsA – Treatment II](#)**Session Time:** 1:00PM-2:30PM

Background/Purpose: PsA leads to significant patient-perceived burden of disease. Targeted drugs have demonstrated efficacy in randomised controlled trials including in aspects of patient-reported impact. However, comparison data from observational studies are scarce, particularly for IL-23 and IL-17 inhibitors (i). As part of the 6 month (M) interim analysis of the first ≥600 participants (pts) enrolled in the PsABIOnD observational study of PsA, we assessed changes from baseline (BL) in PsA Impact of Disease-12 (PsAID-12) following biologic treatment initiation.

Methods: PsABIOnD (NCT05049798) is an ongoing international, prospective, observational cohort study in 1300 planned PsA pts starting guselkumab (GUS) or IL-17i as first- to fourth-line of biologic therapy (monotherapy or in combination with other agents) per standard clinical practice [1]. All enrolled pts with available PsAID-12 data at BL and the 6M visit (+/-3M) were analysed according to their treatment group (regardless of later switches). Impact of PsA was assessed with PsAID-12

comprising 12 items (pain, fatigue, skin problems, work/leisure participation, function, discomfort, sleep, coping, fear, embarrassment, social participation and depression) scored 0-10, with higher values indicating a worse state. Mean change from BL in PsAID-12 subdomain and total scores, and proportions of pts achieving minimal clinically important improvement (MCII, ≥ 1.4) at the 6M visit in both cohorts were determined. Propensity score (PS) analysis evaluated treatment effect for the change in PsAID-12 total score and MCII (using nonresponder imputation), adjusting for BL variable imbalances across cohorts. Subdomain analyses were descriptive.

Results: At the Jan 2024 cutoff date, 323 and 296 pts receiving GUS or IL-17i, respectively, with PsAID-12 data available at BL and the 6M visit were analysed. In both cohorts, PsAID-12 subdomains with highest impact at BL were pain, fatigue, and discomfort. At the 6M visit, mean (95% confidence interval [CI]) changes from BL in PsAID-12 total score were similar in the GUS (-1.5 [-1.7; -1.3]) and IL-17i (-1.6 [-1.8; -1.3]) cohorts (**Fig 1A**). PS-adjusted treatment effect (regression coefficient [95% CI]) for GUS vs IL-17i in change from BL in PsAID-12 total score was not significant (0.2 [-0.3; 0.6]). Proportions of pts achieving MCII in PsAID-12 total score at the 6M visit were 53% and 48% in the GUS and IL-17i cohorts, respectively (**Fig 1B**), with a non-significant PS-adjusted treatment effect (odds ratio [95% CI]: 1.2 [0.8; 1.8]). At the 6M visit, mean changes from BL in subdomain scores were similar across cohorts, ranging from -0.8 (-1.1; -0.5) for depression to -2.3 (-2.7; -2.0) for skin problems in the GUS cohort, and -0.8 (-1.1; -0.5) for depression to -1.9 (-2.2; -1.5) for discomfort in the IL-17i cohort (**Fig 2**).

Conclusion: By 6M of treatment, clinically meaningful improvements in PsAID-12 total score were seen in around half of pts treated with GUS or IL-17i, with similar magnitudes of effect across subdomains in both cohorts. These results may be useful in shared treatment decision-making.

References

1. Siebert. Rheumatol Ther 2023; 10:489

Figure 1: Mean change from baseline (A) and achievement of MCII (B) in PsAID-12 total score with guselkumab and IL-17i at the 6M visit

(A) Last observation carried forward was imputed for participants with no 6M visit.

(B) Achievement of MCII in PsAID-12 total score was assessed among participants with baseline PsAID-12 score ≥ 1.4 .

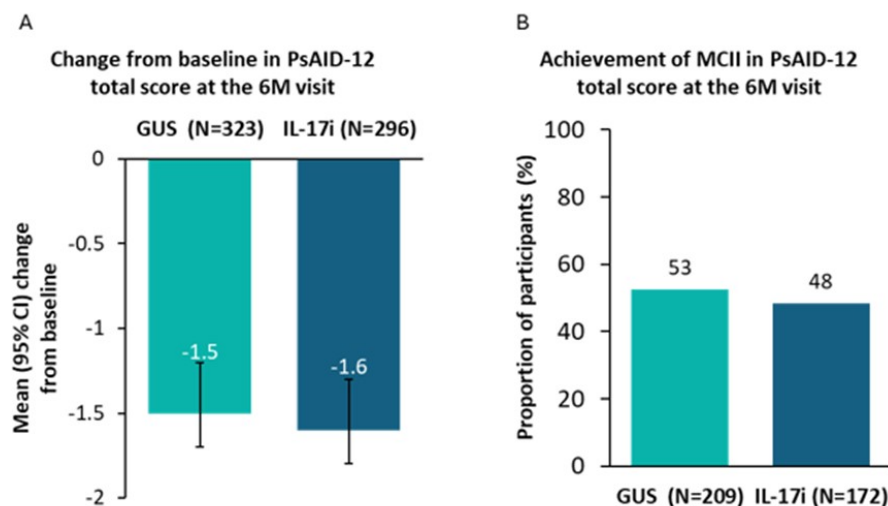
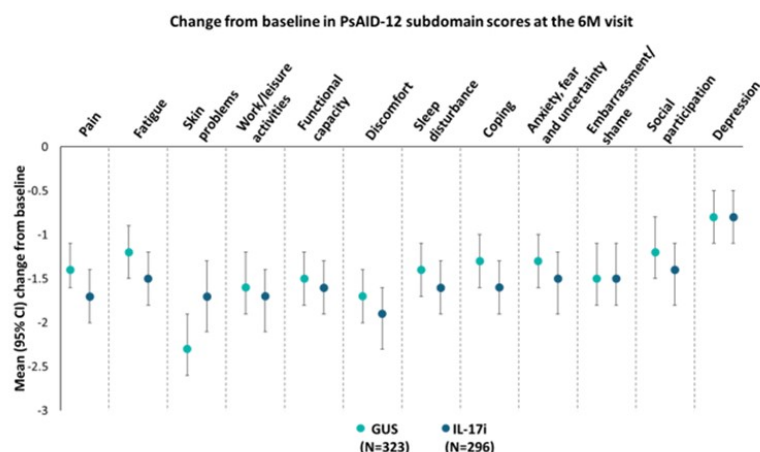


Figure 2: Mean change from baseline in PsAID-12 subdomain scores with guselkumab and IL-17i at the 6M visit

Last observation carried forward was imputed for participants with no 6M visit. Propensity score-adjusted

treatment effect (regression coefficient [95% CI]) for GUS vs IL-17i for pain; fatigue; skin problems; work/leisure activities; functional capacity; discomfort; sleep disturbance; coping; anxiety, fear and uncertainty; embarrassment/shame; social participation; and depression were: 0.4 (-0.2, 0.9); 0.1 (-0.5, 0.6); -0.1 (-0.8, 0.6); 0.1 (-0.6, 0.7); 0.1 (-0.5, 0.7); 0.3 (-0.3, 1.0); 0.2 (-0.4, 0.9); 0.4 (-0.3, 1.0); 0.1 (-0.5, 0.7); -0.01 (-0.7, 0.6); 0.1 (-0.6, 0.8); and -0.1 (-0.6, 0.5), respectively. For participants who switched/stopped initial treatment, data occurring after the switch or stop was excluded from the analysis.



Disclosures: **S. Siebert:** AbbVie, 6, Amgen, 6, AstraZeneca, 6, Boehringer-Ingelheim, 5, Bristol-Myers Squibb, 5, Eli Lilly, 5, GlaxoSmithKline, 5, Janssen, 5, 6, Teijin Pharma, 6, UCB, 5; **M. Sharaf:** Janssen Pharmaceutical Companies of Johnson & Johnson, 3, Johnson & Johnson, 11; **C. Selmi:** AbbVie, 2, 5, Alfa-Wasserman, 2, Amgen, 2, 5, Biogen, 2, Eli Lilly, 2, EUSA, 2, Galapagos, 2, Janssen, 2, Novartis, 2, Pfizer, 5, SOBI, 2; **P. Rahman:** AbbVie, 2, Amgen, 2, Bristol Myers Squibb, 2, Celgene, 2, Eli Lilly, 2, Janssen, 2, 5, 12, Meeting attendance/travel support, Novartis, 2, 5, Pfizer, 2, UCB, 2; **M. Kishimoto:** AbbVie, 2, 6, Amgen, 2, 6, Asahi-Kasei Pharma, 2, 6, Astellas, 2, 6, Ayumi Pharma, 2, 6, Bristol Myers Squibb, 2, 6, Chugai, 2, 6, Daiichi-Sankyo, 2, 6, Eisai, 2, 6, Eli Lilly, 2, 6, Gilead, 2, 6, Janssen, 2, 6, Novartis, 2, 6, Pfizer, 2, 6, Tanabe-Mitsubishi, 2, 6, UCB, 2, 6; **E. Soriano:** AbbVie, 2, 5, 6, Amgen, 6, Bristol Myers Squibb, 6, Eli Lilly, 6, Janssen, 2, 5, 6, Novartis, 2, 5, 6, Pfizer, 5, 6, Roche, 2, 5, 6, UCB, 5, 6; **E. Rampakakis:** Janssen, 2, JSS Medical Research, 3; **L. Köleséri:** IQVIA, 3, Janssen, 2; **M. Koivunen:** Janssen Pharmaceutical Companies of Johnson & Johnson, 3, Johnson & Johnson, 11; **F. Lavie:** Immunology Global Medical Affairs, Janssen Pharmaceutical Companies of Johnson & Johnson, 3, Johnson & Johnson, 11; **R. Queiro Silva:** AbbVie, 2, 5, 6, Amgen, 2, 6, Celgene, 2, 6, Eli Lilly, 2, 6, Janssen, 2, 5, 6, Novartis, 2, 5, 6, Pfizer, 2, 6; **F. Behrens:** AbbVie, 2, 6, Boehringer Ingelheim, 2, 6, Bristol Myers Squibb, 2, 6, Celgene, 2, 5, 6, Chugai, 2, 5, 6, Eli Lilly, 2, 6, Galapagos, 2, 6, Genzyme, 2, 6, Gilead, 2, 6, Janssen, 2, 5, 6, MSD, 2, 6, Novartis, 2, 6, Pfizer, 2, 5, 6, Roche, 2, 5, 6, Sanofi, 2, 6, UCB, 2, 6; **E. Lubrano:** AbbVie, 6, Amgen, 6, Eli Lilly, 6, GlaxoSmithKline, 6, Janssen, 6, Novartis, 6, UCB, 6; **L. Gossec:** AbbVie, 2, 5, Amgen, 2, Biogen, 5, Bristol-Myers Squibb (BMS), 2, Celltrion, 2, Eli Lilly, 2, 5, Galapagos, 2, Janssen, 2, MSD, 2, Novartis, 2, 5, Pfizer, 2, Sandoz, 2, UCB, 2, 5.

To cite this abstract in AMA style:

Siebert S, Sharaf M, Selmi C, Rahman P, Kishimoto M, Soriano E, Rampakakis E, Köleséri L, Koivunen M, Lavie F, Queiro Silva R, Behrens F, Lubrano E, Gossec L. Guselkumab and IL-17 Inhibitors Improve Patient-perceived Impact of Psoriatic Arthritis Similarly: 6-month Interim Results of the PsABIONd Observational Cohort Study [abstract]. *Arthritis Rheumatol*. 2024; 76 (suppl 9). <https://acrabstracts.org/abstract/guselkumab-and-il-17-inhibitors-improve-patient-perceived-impact-of-psoriatic-arthritis-similarly-6-month-interim-results-of-the-psabiond-observational-cohort-study/>. Accessed November 18, 2024.

ACR Meeting Abstracts - <https://acrabstracts.org/abstract/guselkumab-and-il-17-inhibitors-improve-patient-perceived-impact-of-psoriatic-arthritis-similarly-6-month-interim-results-of-the-psabiond-observational-cohort-study/>