Hepatic disorders were mostly transient, non-serious transaminase increases. Creatine phosphokinase elevations were reported more frequently with UPA 30 vs UPA 15; most were asymptomatic with no rhabdomyolysis reported. AEs of anemia, neutropenia, and lymphopenia were generally mild or moderate, non-serious. Except for rates of lymphopenia (higher with UPA 15), hepatic disorders, and neutropenia (both higher with ADA), lab-related TEAEs occurred at generally consistent rates between UPA 15 and ADA. Study drug discontinuation due to lab-related TEAEs was uncommon.

Conclusion: The safety profiles of UPA 15 and ADA were generally similar; the rates of most AEs were higher with UPA 30 compared with ADA. Through the cut-off date, the safety profile of UPA 15 and UPA 30 in PsA pts demonstrated consistent results compared to what has been observed with UPA in rheumatoid arthritis.³

REFERENCES:

- [1] McInnes IB et al. *Ann Rheum Dis*, 2020; 79:12.
- [2] Mease PJ et al. *Ann Rheum Dis*, 2020.
- [3] Cohen SB et al. *Ann Rheum Dis*, 2020.

Figure. Exposure-adjusted Event Rates of Treatment-emergent AEs Through the Cut-off Date

*MACE was defined as CV death, non-fatal MI, and non-fatal stroke.

†Excluding tuberculosis and herpes zoster.

‡VTE was defined as deep vein thrombosis and pulmonary embolism.

ADA, adalimumab; AEs, adverse events; CI, confidence interval; CPK, creatine phosphokinase; CV, cardiovascular; E, events; EAE, exposure-adjusted event rate; EOW, every other week; GI, gastrointestinal; MACE, major adverse cardiovascular event; MI, myocardial infarction; NMSC, non-melanoma skin cancer; PY, patient year; QD, once daily; TB, tuberculosis; UPA, upadacitinib; VTE, venous thromboembolism.

Figure 1

Acknowledgements: AbbVie and the authors thank the patients, study sites, and investigators who participated in this clinical trial. AbbVie, Inc was the study sponsor, contributed to study design, data collection, analysis & interpretation, and to writing, reviewing, and approval of final version. No honoraria or payments were made for authorship. Medical writing support was provided by Ramona Vlădeanu, PhD of AbbVie Inc.

Disclosure of Interests: Gerd Rüdiger Burmester Speakers bureau: AbbVie, Gilead, Lilly, Pfizer, Consultant of: AbbVie, Gilead, Lilly, Pfizer, Kevin Winthrop Consultant of: UCB Pharma, Pfizer, Bristol-Myers Squibb, Eli Lilly, AbbVie, Gilead, Galapagos, and Roche, Grant/research support from: UCB Pharma, Pfizer, Bristol-Myers Squibb, Eli Lilly, AbbVie, Gilead, Galapagos, and Roche, Ricardo Blanco Consultant of: AbbVie, Lilly, Novartis, Pfizer, Roche, Bristol-Myers, Janssen, and MSD, Grant/research support from: AbbVie, MSD and Roche, Peter Nash Consultant of: AbbVie, BMS, Roche, Pfizer, Janssen, Amgen, Sanofi-Aventis, UCB, Eli Lilly, Novartis, and Celgene, Grant/research support from: AbbVie, BMS, Roche, Pfizer, Janssen, Amgen, Sanofi-Aventis, UCB, Eli Lilly, Novartis, and Celgene, Philippe Goupille Consultant of: AbbVie, Amgen, Biogen, BMS, Celgene, Chugai, Janssen, Lilly, Medac, MSD, Nordic Pharma, Novartis, Pfizer, Sanofi and UCB, Grant/research support from: AbbVie, Amgen, Biogen, BMS, Celgene, Chugai, Janssen, Lilly, Medac, MSD, Nordic Pharma, Novartis, Pfizer, Sanofi and UCB, Valderilio F Azevedo Consultant of: AbbVie, BMS, Pfizer, Janssen, Amgen, Novartis, Eli Lilly, UCB, Celltrion and GSK, Grant/research support from: AbbVie, BMS, Pfizer, Janssen, Amgen, Novartis, Eli Lilly, UCB, Celltrion and GSK, Carlo Salvarani Consultant of: Roche, Sanofi-Genzyme, AbbVie, Pfizer, Lilly, Novartis, Amgen, Grant/research support from: Roche, Sanofi-Genzyme, AbbVie, Pfizer, Lilly, Novartis, Amgen, Andrea Rubbert-Roth Consultant of: AbbVie, BMS, Chugai, Roche, Gilead, Janssen, Lilly,

Sanofi, Amgen, Novartis, Grant/research support from: AbbVie, BMS, Chugai, Roche, Gilead, Janssen, Lilly, Sanofi, Amgen, Novartis, Elizabeth Lesser Shareholder of: AbbVie, Employee of: AbbVie, Reva McCaskill Shareholder of: AbbVie, Employee of: AbbVie, Jianzhong Liu Shareholder of: AbbVie, Employee of: AbbVie, Bosny Pierre-Louis Shareholder of: AbbVie, Employee of: AbbVie, Sandra Walko Shareholder of: AbbVie, Employee of: AbbVie, Ralph Lippe Shareholder of: AbbVie, Employee of: AbbVie, Apinya Lertratanakul Shareholder of: AbbVie, Employee of: AbbVie, Eric Ruderman Consultant of: AbbVie, Amgen, Gilead, Janssen, Lilly, Novartis, and Pfizer.

DOI: 10.1136/annrheumdis-2021-eular.395

AB0523

LONG-TERM SAFETY AND EFFECTIVENESS OF UPADACITINIB IN PATIENTS WITH PSORIATIC ARTHRITIS: RESULTS AT 56 WEEKS FROM THE SELECT-PsA 1 STUDY

I. McInnes¹, K. Kato², M. Magrey³, J. F. Merola^{4,5}, M. Kishimoto⁶, C. F. Pacheco Tena⁷, D. Haaland^{8,9}, L. Chen², Y. Duan², P. Zueger², J. Liu², R. Lippe¹⁰, A. Pangan², F. Behrens¹¹. ¹University of Glasgow, College of Medical Veterinary and Life Sciences, Glasgow, United Kingdom; ²AbbVie, Immunology, North Chicago, United States of America; ³MetroHealth Medical Center, Case Western Reserve University School of Medicine, Cleveland, United States of America; ⁴Harvard Medical School, Division of Rheumatology, Boston, United States of America; ⁵Brigham and Women's Hospital, Division of Rheumatology, Immunology and Allergy, Boston, United States of America; ⁶Kyorin University School of Medicine, Department of Nephrology and Rheumatology, Tokyo, Japan; ⁷Universidad Autonoma de Chihuahua, Facultad de Medicina, Chihuahua, Mexico; ⁸McMaster University, Hamilton, Canada; ⁹The Waterside Clinic, Barrie, Canada; ¹⁰AbbVie Deutschland GmbH & Co. KG, Immunology, Wiesbaden, Germany; ¹¹Goethe University & Fraunhofer IME-TMP and CIMD, Frankfurt, Germany

Background: In the SELECT-PsA 1 study, through 24 weeks (wks), once daily upadacitinib 15 mg (UPA15) and 30 mg (UPA30) showed improvements in musculoskeletal symptoms, psoriasis, physical function, pain, fatigue, and quality of life, as well as inhibition of radiographic progression in patients (pts) with psoriatic arthritis (PsA) and inadequate response or intolerance to ≥1 non-biologic disease-modifying antirheumatic drug (DMARD).¹

Objectives: To report the efficacy and safety of UPA vs adalimumab (ADA) up to 56 wks from the ongoing long-term extension of SELECT-PsA 1.

Methods: Pts received UPA15 or UPA30, ADA 40mg every other wk for 56 wks, or PBO through wk 24 switched thereafter to either UPA15 or UPA30 until wk 56. Efficacy endpoints as listed and defined in the Table 1 were analyzed at wk 56. Results for binary endpoints are based on non-responder imputation analysis; treatments were compared using the Cochran-Mantel-Haenszel test. Results for non-radiographic continuous endpoints are based on mixed model repeated measures model based on as observed data. Radiographic endpoints were analyzed based on linear extrapolation. Treatment-emergent adverse events (TEAEs) per 100 pt years (PY) were summarized for pts who received ≥1 dose of study drug.

Table 1. Efficacy Endpoints at Week 56

Endpoint	PBO → UPA15	PBO → UPA30	UPA15	UPA30	ADA
ACR20, %	73.0	74.1	74.4	74.7 [#]	68.5
ACR50, %	54.5	60.4	59.7 [*]	60.5 [#]	51.3
ACR70, %	29.9	35.8	40.6 [*]	43.7 [#]	31.2
Minimal Disease Activity, %	29.4	35.8	44.8	47.3 [#]	39.6
PASI75 ^a , %	58.3	60.2	65.4	63.3	61.1
PASI90 ^a , %	41.7	53.7	49.1	49.5	46.9
PASI100 ^a , %	22.3	38.9	34.6	39.5	31.3
Resolution of enthesitis by Leeds Enthesitis Index ^b , %	38.1	45.5	59.3	58.1	54.0
Resolution of dactylitis by Leeds Dactylitis Index ^c , %	47.7	59.0	75.0	74.8	74.0
Δ from BL in Bath Ankylosing Spondylitis Disease Activity Index ^d	-3.1	-3.1	-3.3	-3.2	-2.8
Δ from BL in modified total Sharp/van der Heijde Score (mTSS)	0.44 ^e	-0.05 [†]	0.02 [‡]	-0.06	

* and †, p ≤ 0.05; for UPA15 vs ADA and PBO, respectively; # and ‡, p ≤ 0.05; for UPA30 vs ADA and PBO, respectively. ^a for pts with psoriasis affecting ≥3% of body surface area at BL. ^b for pts with LEI > 0 at BL. ^c for pts with LDI > 0 at BL. ^d for pts with psoriatic spondylitis at BL. ^e pooled PBO.ACR20/50/70, ≥20%/50%/70% improvement in American College of Rheumatology criteria; ADA, adalimumab; BL, baseline; PASI75/90/100, ≥75%/90%/100% improvement in Psoriasis Area and Severity Index; PBO, placebo; pts, patients; UPA, upadacitinib.

Results: Of 1704 pts who received ≥1 dose of study drug, 1419 (83.2%) completed 56 wks of treatment on study drug. Across all treatment groups, the proportions of pts who had achieved ACR20/50/70, MDA, PASI75/90/100, resolution

of enthesitis, and resolution of dactylitis were maintained or further improved from wk 24¹ through wk 56; these proportions were generally greater for pts originally randomized to UPA vs ADA (Table 1). At wk 56, mean change from BL in mTSS was similar with UPA15, UPA30, and ADA. Improvements in pts who switched from PBO to UPA were generally similar to those originally randomized to UPA at wk 56. Through wk 56, the rates of TEAEs and serious AEs, including serious infections, were similar in the UPA15 and ADA arms and higher with UPA30 (Figure 1). The rate of herpes zoster was higher with UPA vs ADA in a dose-dependent manner. Malignancies were reported at similar rates among all treatment groups. Adjudicated venous thromboembolic events and major adverse cardiovascular events were reported in all groups with comparable rates. Two deaths were reported with UPA15, 2 with UPA30, and 1 with ADA; 1 death was reported with PBO during the 24-wk PBO-controlled period.

Conclusion: Efficacy responses were maintained or further improved with UPA15 and UPA30 over 56 wks and were numerically higher vs ADA. The inhibition of radiographic progression was maintained at wk 56 and was similar with UPA and ADA. At wk 56, improvements in efficacy were observed in pts who switched from PBO to UPA. No new safety findings were observed with longer exposure to UPA.

REFERENCES:

- [1] McInnes IB et al. *Ann Rheum Dis*, 2020; 79:12

Figure. Exposure-adjusted Event and Incidence Rates of Treatment-emergent AEs Through Week 56

ADA, adalimumab; AE, adverse event; CI, confidence interval; CPK, creatine phosphokinase; EAIR, exposure-adjusted incidence rate; ECDV, every other day; GI, gastrointestinal; MACE, major adverse cardiovascular events; defined as non-fatal myocardial infarction, nonfatal stroke, and cardiovascular death; NMSC, non-melanoma skin cancer; PY, patient-years; QD, once daily; UPA, upadacitinib; VTE, venous thromboembolism (defined as deep vein thrombosis [DVT] and pulmonary embolism [PE]).
^{*} Opportunistic infections excluding tuberculosis and herpes zoster. UPA15: one event each of candida urethritis, cryptococcal meningitis, and one fungal infection; UPA30: one event each of cryptococcal meningitis, cryptococcal meningitis, and one fungal infection; ADA: one event each of cryptococcal meningitis, cryptococcal meningitis, and one fungal infection.
[†] Herpes zoster: most events were mild or moderate in severity, limited to <10 dermatomes, and did not lead to study drug discontinuation.
[‡] UPA15: 4 cases of carcinoma, 2 squamous cell carcinoma of skin, and 1 event each of endometrial adenocarcinoma, lung adenocarcinoma, lung cancer metastatic, malignant melanoma, and adenocarcinoma; UPA30: 2 cases of carcinoma, 2 squamous cell carcinoma of skin, and 1 event each of adenocarcinoma of colon, B-cell lymphoma, breast cancer, clear cell renal cell carcinoma, invasive breast carcinoma, lung adenocarcinoma, and plasma cell myeloma; ADA: 2 cases of carcinoma, and 1 event each of colon cancer metastatic, ovarian cancer, pancreatic carcinoma metastatic, and adenocarcinoma; <1 VTE were reported in 1 patient; UPA15: 1 VTE; 1 on-treatment event of VTE and PE; UPA30: 1 VTE; ADA: 2 VTE.
[§] Deaths: UPA15: 1 due to metastatic lung cancer and 1 due to severe respiratory tract infection; UPA30: 1 due to coronavirus infection and 1 due to interstitial lung disease; ADA: 1 death was reported in the placebo group during the 24-week placebo-controlled period in a patient who was dying and experienced an unrelated event.

Figure 1

Acknowledgements: AbbVie and the authors thank the patients, study sites, and investigators who participated in this clinical trial. AbbVie, Inc was the study sponsor, contributed to study design, data collection, analysis & interpretation, and to writing, reviewing, and approval of final version. No honoraria or payments were made for authorship. Medical writing support was provided by Ramona Vladea, PhD of AbbVie Inc.

Disclosure of Interests: Iain McInnes Consultant of: AbbVie, Bristol-Myers Squibb, Celgene, Eli Lilly, Gilead, Janssen, Novartis, Pfizer, Sanofi Regeneron, UCB Pharma, Grant/research support from: AbbVie, Bristol-Myers Squibb, Celgene, Eli Lilly, Gilead, Janssen, Novartis, Pfizer, Sanofi Regeneron, UCB Pharma, Koji Kato Shareholder of: AbbVie, Employee of: AbbVie, Marina Magrey Consultant of: UCB, Novartis, Eli Lilly, Pfizer and Janssen, Grant/research support from: Amgen, AbbVie, and UCB Pharma, Joseph F. Merola Consultant of:

Merck, Bristol-Myers Squibb, AbbVie, Dermavant, Eli Lilly, Novartis, Janssen, UCB, Celgene, Sanofi, Regeneron, Arena, Sun Pharma, Biogen, Pfizer, EMD Sorono, Avotres and Leo Pharma, Mitsumasa Kishimoto Consultant of: AbbVie, Amgen-Astellas BioPharma, Asahi-Kasei Pharma, Astellas, Ayumi Pharma, BMS, Celgene, Chugai, Daiichi-Sankyo, Eisai, Eli Lilly, Gilead, Janssen, Kyowa Kirin, Novartis, Ono Pharma, Pfizer, Tanabe-Mitsubishi, Teijin Pharma, and UCB Pharma, Cesar Francisco Pacheco Tena Consultant of: Eli Lilly, AbbVie, Roche, Pfizer, Janssen, Astra-Zeneca, UCB, Gilead, R-Pharm, Sanofi Regeneron, Grant/research support from: Eli Lilly, AbbVie, Roche, Pfizer, Janssen, Astra-Zeneca, UCB, Gilead, R-Pharm, Sanofi Regeneron, Derek Haaland Speakers bureau: AbbVie, Amgen, AstraZeneca, Bristol-Myers Squibb, GlaxoSmithKline, Janssen, Novartis, Pfizer, Roche, Sanofi Genzyme, Takeda, Consultant of: AbbVie, Amgen, AstraZeneca, Bristol-Myers Squibb, Eli Lilly, GlaxoSmithKline, Janssen, Merck, Novartis, Pfizer, Roche, Sanofi Genzyme, Takeda, UCB, Grant/research support from: AbbVie, Adiga Life-Sciences, Amgen, Bristol-Myers Squibb, Can-Fite Biopharma, Celgene, Eli Lilly, Gilead, GlaxoSmithKline, Janssen, Novartis, Pfizer, Regeneron, Sanofi-Genzyme, UCB, Liang Chen Shareholder of: AbbVie, Employee of: AbbVie, Yuanyuan Duan Shareholder of: AbbVie, Employee of: AbbVie, Patrick Zueger Shareholder of: AbbVie, Employee of: AbbVie, Jianzhong Liu Shareholder of: AbbVie, Employee of: AbbVie, Ralph Lippe Shareholder of: AbbVie, Employee of: AbbVie, Aileen Pangan Shareholder of: AbbVie, Employee of: AbbVie, Frank Behrens Consultant of: Pfizer, AbbVie, Sanofi, Lilly, Novartis, Genzyme, Boehringer, Janssen, MSD, Celgene, Roche, Chugai, BMS, UCB Pharma, Grant/research support from: Pfizer, Janssen, Chugai, Celgene and Roche.

DOI: 10.1136/annrheumdis-2021-eular.397

AB0524

EFFICACY OF GUSELKUMAB ACROSS BASDAI COMPONENTS IN TREATING AXIAL-RELATED SYMPTOMS OF PSORIATIC ARTHRITIS: RESULTS FROM TWO PHASE 3, RANDOMIZED, PLACEBO-CONTROLLED STUDIES

F. Behrens¹, P. J. Mease², P. Helliwell³, M. Shawi⁴, W. Noel⁵, S. D. Chakravarty^{6,7}, A. Kollmeier⁸, X. L. Xu⁸, S. Xu⁹, Y. Wang⁹, X. Baraliakos¹⁰.
¹Goethe University, Rheumatology and Fraunhofer ITMP - Translational Medicine and Pharmacology, Frankfurt, United States of America; ²Swedish Medical Center/Providence St. Joseph Health and University of Washington, Rheumatology Research, Seattle, United States of America; ³University of Leeds, Leeds Institute of Rheumatic and Musculoskeletal Medicine, Leeds, United Kingdom; ⁴Janssen Global Services, LLC, Immunology, Horsham, United States of America; ⁵Janssen Scientific Affairs, LLC, Immunology, Brussels, Belgium; ⁶Janssen Scientific Affairs, LLC, Immunology, Horsham, United States of America; ⁷Drexel University College of Medicine, Medicine, Philadelphia, United States of America; ⁸Janssen Research & Development, LLC, Immunology, San Diego, United States of America; ⁹Janssen Research & Development, LLC, Biostatistics, Spring House, United States of America; ¹⁰Ruhr-University Bochum, Rheumazentrum Ruhrgebiet, Herne, Germany

Background: The monoclonal antibody guselkumab (GUS; anti-IL-23p19-subunit) is approved to treat psoriatic arthritis (PsA). Post hoc analyses of DISCOVER-1&2 suggested that GUS may be effective in improving symptoms of axial manifestation of PsA.

Objectives: Evaluate the efficacy of GUS across components of the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) in improving symptoms of axial manifestations of active PsA patients (pts) using data from Phase 3, randomized, placebo (PBO)-controlled studies.

Methods: DISCOVER-1&2 enrolled pts with active PsA; pts were randomized to subcutaneous injections of guselkumab 100 mg every 4 weeks (Q4W) or at Wk0, 4, and Q8W, or PBO. These post hoc analyses included pts who were identified by the investigator as having axial symptoms and sacroiliitis (prior X-ray or MRI or screening X-ray). BASDAI scores were assessed at Wks 0, 8, 16, 24, and 52. Mean BASDAI component scores through Wk52 are reported by treatment group. Pooled data from the two studies are reported. Mean BASDAI component scores are reported using observed data; total BASDAI scores with missing components were set to missing. The proportion of pts achieving ≥50% improvement in BASDAI (BASDAI 50) was also determined; pts with missing data or who met the treatment failure criteria (discontinued study agent or used prohibited medications) were considered nonresponders at all subsequent timepoints.

Results: These analyses included 312 pts from DISCOVER-1&2 (103 GUS Q4W, 91 GUS Q8W, 118 PBO); mean total BASDAI scores at Wk0 were 6.4, 6.5, and 6.6, respectively. Demographics and mean baseline BASDAI component scores (ie, fatigue, spinal pain, joint pain, enthesitis, qualitative morning stiffness, and quantitative morning stiffness) were similar across treatment groups (Table 1). In comparison with the total study population, this subgroup of pts had a higher mean C-reactive protein level at baseline and a higher proportion of pts with enthesitis and included a slightly higher proportion of males. Mean scores for all six BASDAI components, including spinal pain, decreased through