SUSTAINED GUSELKUMAB RESPONSE IN PATIENTS WITH ACTIVE PSORIATIC ARTHRITIS REGARDLESS OF BASELINE DEMOGRAPHIC AND DISEASE CHARACTERISTICS: POOLED RESULTS THROUGH WEEK 52 OF TWO PHASE 3, RANDOMIZED, PLACEBO-CONTROLLED STUDIES

¹University of Rochester Medical Center, Rochester, Department of Medicine - Allergy/Immunology and Rheumatology, Rochester, United States of America; ²Swedish Medical Center/Providence St. Joseph Health and University of Washington, Rheumatology Research, Seattle, United States of America; ³Geneva University Hospitals, Dermatology, Geneva, Switzerland; ⁴Arizona Arthritis and Rheumatology Associates, Rheumatology, Phoenix, United States of America; ⁵Michigan Medicine Rheumatology Clinic, Rheumatology & Internal Medicine, Ann Arbor, United States of America; ⁶Janssen Scientific Affairs, LLC, Immunology, Horsham, United States of America; ⁷Drexel University College of Medicine, Rheumatology, Philadelphia, United States of America; ⁸Janssen Research & Development, LLC, Immunology, Spring House, United States of America; ⁹University of Pennsylvania Medical Center, Rheumatology, Philadelphia, United States of America; ¹⁰Janssen Global Services, LLC, Immunology, Horsham, United States of America; ¹¹Janssen Research & Development, LLC, Biostatistics, Spring House, United States of America; ¹²Brigham and Women’s Hospital, Harvard Medical School, Department of Dermatology, and Department of Medicine, Division of Rheumatology and Immunology, Boston, United States of America; ¹³Janssen Scientific Affairs, LLC, Immunology, Horsham, United States of America; ¹⁴Oregon Health & Science University, Division of Arthritis and Rheumatic Diseases, Portland, United States of America

Background: In the Phase 3 DISCOVER-¹¹ & DISCOVER-²² trials, guselkumab (GUS), a human monoclonal antibody targeting the IL-23p19-subunit, was effective in psoriatic arthritis (PsA) across joint & skin endpoints. At Week 24 (W24), GUS benefit was consistent regardless of baseline (BL) demographic & disease characteristics.³

Objectives: We assessed whether GUS efficacy was sustained through W52 in pooled DISCOVER-1-2 patients (pts) across select BL subgroups.

Methods: Adults with active PsA despite standard therapies were enrolled in DISCOVER-1 (swollen [SJC] ≥3 & tender/joint count [TJC] ≥3, C-reactive protein [CRP] ≥0.3 mg/dL) & DISCOVER-2 (SJC ≥5 & TJC ≥5, CRP ≥0.6 mg/dL). 31% of DISCOVER-1 pts had received 1-2 prior tumor necrosis factor inhibitors; DISCOVER-2 pts were biologic naïve. Pts were randomized 1:1:1 to GUS 100 mg Q4W & Q8W (80%) & placebo (PBO). Pts randomized to PBO received GUS 100 mg Q4W starting at W24 & were excluded from these analyses assessing maintenance of effect from W24 to W52. GUS effects on joint (American College of Rheumatology [ACR]20/50/70) & skin (Investigator’s Global Assessment [IGA=0/1 + ≥2-grade reduction from W0]) endpoints were evaluated by pt BL, TJC, VAS, & % BSA with psoriasis.

Results: BL pt characteristics in DISCOVER-1 (N=381) & DISCOVER-2 (N=739) were well balanced across randomized groups. ³ Among 1120 pooled pts, mean SJC was 11, mean TJC was 21, & 68% used csDMARDs (primarily methotrexate [MTX]). At W24, 62% (232/373) & 60% (225/375), respectively, of GUS Q4W- & Q8W-treated pts achieved ACR20 vs 29% (109/372) of PBO, with GUS effect consistently observed across BL subgroups (Figure 1). ACR20 response rates were sustained or increased at W52 in the GUS Q4W (72%) & Q8W (70%) groups & across SJC (61-79%), TJC (68-76%), & csDMARD use (68-80%) subgroups (Table 1) & pt subgroups defined by BL BMJ, PtsA duration, & % BSA with psoriasis (data not shown). ACR50 & 70 response patterns were similar to ACR20 (Table 1). In pts with ≥3% BSA psoriasis & IGA ≥2 at BL, 71% (193/273) & 66% (171/258) of GUS Q4W- & Q8W-treated pts, respectively, vs 18% (47/261) of PBO, achieved IGA 0/1 at W24, with GUS effect consistently observed across BL subgroups (Figure 1). IGA 0/1 response rates were also sustained or increased at W52 in the GUS Q4W (80%) & Q8W (71%) groups & across % BSA with psoriasis (67-87%) & csDMARD use (68-87%) subgroups (Table 1) & pt subgroups defined by BL BMJ & PtsA duration (data not shown).

Conclusion: Treatment with GUS 100 mg Q4W & Q8W resulted in sustained improvement in signs & symptoms of active PsA through W52 regardless of pt BL characteristics.

REFERENCES:
Background: In patients (pts) with psoriatic arthritis (PsA), fatigue is a major driver of perceived impact of disease and has been identified as an important domain to be assessed in clinical trials. The association between fatigue and other PsA domains (eg, physical function) or clinical response is not well understood.

Objectives: Fatigue was measured with the Functional Assessment of Chronic Illness Therapy (FACIT)-Fatigue questionnaire in PsA during DISCOVER-1 and DISCOVER-2 Phase 3 studies of guselkumab (GUS) vs placebo (PBO). This post hoc analysis explores the correlation between FACIT-Fatigue and physical function and clinical response in the DISCOVER program.

Methods: This analysis used pooled data from pts (N=1120) treated with GUS 100 mg Q4W and 100 mg Q8W or PBO. FACIT-Fatigue (range 0–78) was assessed at Week 0, W4, then Q8W; or PBO. PBO pts switched to GUS 100 mg Q4W at Week 24. Physical function was evaluated with the Health Assessment Questionnaire-Disability Index (HAQ-DI). HAQ-DI response was defined as a decrease of ≥0.35 from baseline. Physical function was defined as an increase of ≥4 points from baseline. Physical function was assessed at Week 0, W4, then at Q8W; or PBO.

Results: Significant correlations (r-values) were observed between FACIT-Fatigue and physical function and clinical response in the DISCOVER program.

Disclosure of Interests: Christopher T. Ritchlin Consultant of: AbbVie, Amgen, Gilead, Janssen, Eli Lilly, Novartis, Pfizer, and UCB Pharma, Grant/research support from: AbbVie, Amgen, and UCB Pharma, Philip J Mease Consultant of: AbbVie, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Eli Lilly, Galapagos, Gilead, GlaxoSmithKline, Janssen, Novartis, Pfizer, SUN, and UCB Pharma, Grant/research support from: AbbVie, Amgen, Bristol Myers Squibb, Eli Lilly, Galapagos, Gilead, Janssen, Novartis, Pfizer, SUN, and UCB Pharma, Wolf-Henning Boehnke Speakers bureau: AbbVie, Almirall, Celgene, Janssen, Leo, Eli Lilly, Novartis, UCB Pharma, Consultant of: AbbVie, Almirall, Celgene, Janssen, Leo, Eli Lilly, Novartis, UCB Pharma, Grant/research support from: Pfizer, John Tesser Speakers bureau: AbbVie, Amgen, Bristol Myers Squibb, Crescendo Biosciences/Myriad, GlaxoSmithKline, Genentech, Janssen, Eli Lilly, and Pfizer, Consultant of: AbbVie, AstraZeneca, Bristol Myers Squibb, Gilead, Janssen, Eli Lilly Novartis, and Pfizer, Grant/research support from: AbbVie, Bristol Myers Squibb, Boehringer Ingelheim, Celgene, Horizon, Janssen, Eli Lilly, Merck KG, Novartis, Pfizer, Sandoz, Sun Pharma, Setpoint, and UCB Pharma, Elena Schiopu Consultant of: Janssen, Grant/ research support from: Janssen, Soumya D Chakravarty Shareholder of: Johnson & Johnson, of which Janssen Research & Development is a wholly owned subsidiary, Employee of: Janssen Global Services, LLC, Yungang Jiang Employee of: Cytei, Inc., providing statistical support (funded by Janssen), Shihong Sheng Shareholder of: Johnson & Johnson, of which Janssen Research & Development is a wholly owned subsidiary, Employee of: Janssen Research & Development, LLC, Xie L Xu Shareholder of: Johnson & Johnson, of which Janssen Research & Development is a wholly owned subsidiary, Employee of: Janssen Research & Development, LLC, May Shaway Shareholder of: Johnson & Johnson, of which Janssen Research & Development is a wholly owned subsidiary, Employee of: Janssen Global Services, LLC, Yungang Jiang Employee of: Cytei, Inc., providing statistical support (funded by Janssen), Shihong Sheng Shareholder of: Johnson & Johnson, of which Janssen Research & Development is a wholly owned subsidiary, Employee of: Janssen Research & Development, LLC, Joseph F. Merola Consultant of: AbbVie, Arena, Biogen, Bristol Myers Squibb, Dermavant, Eli Lilly, Janssen, Novartis, Pfizer, Sun Pharma, and UCB Pharma, Iain Mclntosh Consultant of: AbbVie, Bristol Myers Squibb, Celgene, Eli Lilly, Gilead, Janssen, Novartis, Pfizer, and UCB Pharma, Grant/research support from: Bristol Myers Squibb, Celgene, Eli Lilly, Janssen, and UCB Pharma, Atul Deodhar Speakers bureau: AbbVie, Amgen, Bristol Myers Squibb, Celgene, Eli Lilly, Novartis, Pfizer, UCB Pharma, Consultant of: AbbVie, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eli Lilly, Galapagos, GlaxoSmithKline, Janssen, Novartis, Pfizer, UCB Pharma, Grant/research support from: AbbVie, Eli Lilly, GlaxoSmithKline, Novartis, Pfizer, UCB Pharma.