support from: AstraZeneca, Celgene, Compugen, Novartis, Roche, UCB Pharma, Consultant for: AbbVie, Celgene, Galvani, Lilly, Novartis, Pfizer, UCB Pharma
DOI: 10.1136/annrheumdis-2019-eular.4883

OP0109

EFFICACY OF FILGOTINIB VS PLACEBO IN ACTIVE PSORIATIC ARTHRITIS: PATIENT-LEVEL DATA FROM EQUATOR, A RANDOMIZED, PHASE 2 STUDY

Philip J Mease¹, Dafna D Gladman², Filip van den Bosch³, Mykola Stanislavchuk⁴, Anna Rychlewska-Hanczewska⁵, Chantal Tasset⁶, Luc Meuleners⁶, Robin Besuyen⁷, Jingjing Gao⁸, Mona Trivedi⁹, Laura C Coates⁹, Philip Helliwell¹⁰.
¹Swedish Medical Center/Providence St Joseph Health and University of Washington, Seattle, United States of America; ²University of Toronto and Krembil Research Institute, Toronto Western Hospital, Toronto, Canada; ³Ghent University Hospital, Ghent, Belgium; ⁴National Pirogov Memorial Medical University, Vinnytsya, Ukraine; ⁵Ai Centrum Medyczne, Poznan, Poland; ⁶Galapagos NV, Mechelen, Belgium; ⁷Galapagos BV, Leiden, Netherlands; ⁸Gilead Sciences, Inc., Foster City, United States of America; ⁹University of Oxford, Oxford, United Kingdom; ¹⁰Leeds Institute of Rheumatic and Musculoskeletal Medicine, Leeds, United Kingdom

Background: Filgotinib (FIL) is an oral, selective Janus kinase 1 inhibitor in development for the treatment of several inflammatory diseases. In the phase 2 EQUATOR trial (NCT03101670), FIL was efficacious vs placebo (PBO) in patients with active psoriatic arthritis (PsA), and was well tolerated [1].

Objectives: To evaluate the onset and maintenance of response to FIL vs PBO in EQUATOR by evaluating patient-level response over time.

Methods: EQUATOR was a 16-week, multicenter, double-blind study in which patients with active PsA were randomized 1:1 to FIL 200 mg or PBO once daily [1]. Disease activity was assessed at screening, day 1 and weeks 1, 2, 4, 8, 12 and 16, and the primary efficacy endpoint was the proportion of patients achieving 20% American College of Rheumatology (ACR20) response. The onset of response was assessed by calculating the median time to ACR20 response using the Kaplan-Meier method and compared between FIL and PBO using the log-rank test. Maintenance of response was assessed by analysing ACR20 response patterns over time in the FIL and PBO groups.

Results: Of 131 patients randomized (FIL: n=65; PBO: n=66), 124 (95%) completed the study. Demographics and baseline disease characteristics were similar between groups. The onset of response to FIL was early, with a median (95% confidence interval) time to first ACR20 response of 4.07 weeks (2.29, 4.14) in the FIL group compared with 12.29 weeks (12, not reached) in the PBO group ($p<0.0001$; Figure 1). ACR20 responses were achieved at week 16 in 80.0% (52/65) and 33.3% (22/66) of patients in the FIL and PBO groups, respectively, using the non-responder imputation method, and 86.7% (52/60) and 34.4% (22/64), respectively, using observed cases. The number of patients who presented with a stable ACR20 response (i.e. the response was maintained once initially achieved regardless of the time point at which the patient first became a responder) among those who were responders at week 16 (i.e. the primary endpoint) was higher in the FIL group than in the PBO group (80.8% [42/52] vs 68.2% [15/22]) (Figure 2). Similar trends were observed for other efficacy endpoints representing various manifestations of PsA.

Conclusion: In general, patients treated with FIL achieved an ACR20 response earlier than those on PBO and these responses appeared to be more stable. In

the PBO group, there were more occurrences of the response being lost over time and fewer cases of regaining a lost response.

REFERENCE:

[1] Mease P, et al. Lancet 2018;392:2367-77.

Acknowledgement: This study was funded by Galapagos NV (Mechelen, Belgium). Medical writing support was provided by Alice Wareham PhD, CMPP (Aspire Scientific Ltd, Bollington, UK) and funded by Galapagos NV.

Disclosure of Interests: Philip J Mease Grant/research support from: AbbVie, Amgen, BMS, Celgene, Janssen, Lilly, Novartis, Pfizer, SUN and UCB, Consultant for: AbbVie, Amgen, BMS, Galapagos, Gilead Sciences, Inc., Janssen, Lilly, Novartis, Pfizer, SUN and UCB, Speakers bureau: AbbVie, Amgen, BMS, Celgene, Genentech, Janssen, Lilly, Novartis, Pfizer and UCB, Dafna D Gladman Grant/research support from: AbbVie, Amgen, Celgene, Lilly, Novartis, Pfizer, and UCB, Consultant for: AbbVie, Amgen, BMS, Celgene, Galapagos, Gilead, Janssen, Lilly, Novartis, Pfizer, and UCB, Filip van den Bosch Consultant for: AbbVie, BMS, Galapagos, Janssen, Lilly, Merck, Novartis, Pfizer and UCB, Speakers bureau: AbbVie, BMS, Janssen, Lilly, Merck, Novartis, Pfizer and UCB., Mykola Stanislavchuk Grant/research support from: AstraZeneca, Celltrion, Galapagos, Genentech, GlaxoSmithKline, Human Genome, Lilly, MedImmune, Pfizer, Roche and UCB, Anna Rychlewska-Hanczewska Grant/research support from: Galapagos and Gilead Sciences, Inc., Chantal Tasset Shareholder of: Warrants from Galapagos, Employee of: Galapagos, Luc Meuleners Shareholder of: Warrants from Galapagos, Employee of: Galapagos, Robin Besuyen Shareholder of: Warrants from Galapagos, Employee of: Galapagos, Jingjing Gao Shareholder of: AbbVie and Gilead Sciences, Inc., Employee of: Gilead Sciences, Inc., Mona Trivedi Shareholder of: Amgen and Gilead Sciences, Inc., Employee of: Gilead Sciences, Inc., Laura C Coates Grant/research support from: AbbVie, Celgene, Lilly, Novartis and Pfizer, Consultant for: AbbVie, Amgen, BMS, Celgene, Galapagos, Gilead Sciences Inc., Janssen, Lilly, Novartis, Pfizer, Prothena Corp and UCB, Philip Helliwell Grant/research support from: Paid to charity: from AbbVie, Janssen and Novartis, Consultant for: Paid to charity: from AbbVie, Amgen, Pfizer, and UCB and Celgene. Paid to self: from Celgene and Galapagos

DOI: 10.1136/annrheumdis-2019-eular.6064

OP0110

IXEKIZUMAB IMPROVES SIGNS AND SYMPTOMS OF PSORIATIC ARTHRITIS IN PATIENTS WHO HAVE HAD INADEQUATE RESPONSE TO 1 OR 2 TUMOR NECROSIS FACTOR INHIBITORS

L Bruce Kirkham¹, Carlos Sesin², Aubrey Trevelin Sprabery³, Chen-Yen Lin³, Amanda M. Gellett³, Anthony Turkiewicz⁴. ¹Guy's Hospital, London, United Kingdom; ²Mount Sinai Medical Center, Miami, United States of America; ³Eli Lilly and Company, Indianapolis, United States of America; ⁴Rheumatology Associates, Birmingham, United States of America

Background: Psoriatic arthritis (PsA) is a progressive, chronic inflammatory disease often treated with tumor necrosis factor inhibitors (TNFi) when conventional treatments fail. Patients with inadequate response to TNFi represent a more difficult-to-treat population.

Objectives: To report the efficacy of ixekizumab (IXE), a monoclonal antibody that selectively targets interleukin-17A, in patients with inadequate response to 1 TNFi or 2 TNFi.

Methods: In a Phase 3 study (SPIRIT-P2; NCT02349295), patients who had an inadequate response or intolerance to 1 or 2 TNFi were randomized to receive subcutaneous IXE 80 mg every 2 weeks (IXEQ2W; N=123) or every 4 weeks (IXEQ4W; N=122), after a 160-mg starting dose, or placebo (PBO; N=118) for up to 24 weeks. At Week 16, patients not meeting predefined criteria (<20% improvement in tender joint count [TJC] and swollen joint count [SJC]) received rescue therapy and were imputed as nonresponders at Weeks 20 and 24. At Week 24, PBO patients were rerandomized to IXEQ2W or IXEQ4W through Week 52 and excluded from the 52-week analysis. At Week 32 or any subsequent visit, patients were discontinued if they did not reach ≥20% improvement from baseline in both TJC and SJC. These ad-hoc data were derived from patients in the intent-to-treat population with prior inadequate response to TNFi; intolerant patients were excluded from the analysis. Efficacy was measured by percentage of patients who attained ≥50% improvement in American College of Rheumatology response criteria (ACR50), an improvement in Health Assessment Questionnaire-Disability Index (HAQ-DI) ≥0.35, minimal disease activity (MDA), Disease Activity Score 28 – C-reactive protein (DAS28-CRP) EULAR Good Response criteria, and Disease Activity in Psoriatic Arthritis (DAPSA) ≤14.

Results: At baseline, 1-TNFi inadequate responders were, on average, 52 years of age with a PsA diagnosis for 10 years; 40% were using MTX, and HAQ-DI was 1.2. 2-TNFi inadequate responders were 52 years of age with a PsA diagnosis for 11 years; 42% were using MTX, and HAQ-DI was 1.3. Regardless of inadequate response to 1 or 2 TNFi, at Week 24 significantly more patients receiving Q4W or

Q2W than PBO attained ACR50, improvement in HAQ-DI ≥ 0.35 , MDA, DAS28-CRP, and DAPSA ≤ 14 . Improvement persisted on all measures through Week 52.

	1-TNFI Inadequate Responder n/N (%)			2-TNFI Inadequate Responder n/N (%)		
	PBO	Q4W	Q2W	PBO	Q4W	Q2W
ACR50						
Week 24	2/68 (2.9%)	24/71 (33.8%)*	19/65 (29.2%)*	3/41 (7.3%)	15/41 (36.6%)*	16/46 (34.8%)*
Week 52	—	29/71 (40.8%)	20/65 (30.8%)	—	18/41 (43.9%)	13/46 (28.3%)
Improvement in HAQ-DI $\geq 0.35^a$						
Week 24	9/61 (14.8%)	28/61 (45.9%)*	19/58 (32.8%)*	7/38 (18.4%)	16/36 (44.4%)*	20/41 (48.8%)*
Week 52	—	32/61 (52.5%)	18/58 (31.0%)	—	14/36 (38.9%)	13/41 (31.7%)
MDA						
Week 24	3/68 (4.4%)	22/71 (31.0%)*	14/65 (21.5%)*	1/41 (2.4%)	8/41 (19.5%)*	13/46 (28.3%)*
Week 52	—	26/71 (36.6%)	17/65 (26.2%)	—	11/41 (26.8%)	7/46 (15.2%)
DAPSA ≤ 14						
Week 24	11/68 (16.2%)	30/71 (42.3%)*	24/65 (36.9%)*	2/41 (4.9%)	14/41 (34.1%)*	12/46 (26.1%)*
Week 52	—	41/71 (57.7%)	26/65 (40.0%)	—	18/41 (43.9%)	14/46 (30.4%)
DAS28-CRP Good Response Criteria ^b						
Week 24	7/68 (10.3%)	33/71 (46.5%)*	24/65 (36.9%)*	2/41 (4.9%)	17/41 (41.5%)*	16/46 (34.8%)*
Week 52	—	38/71 (53.5%)	27/65 (41.5%)	—	19/41 (46.3%)	15/46 (32.6%)

* $P < 0.05$ vs. PBO, ** $P < 0.001$ vs. PBO, Fisher's exact test. Missing values imputed using nonresponder imputation.

^aPatients with ≥ 0.35 HAQ-DI at baseline.

^bGood response criteria defined as >1.2 improvement and ≤ 3.2 present DAS28-CRP.

Conclusion: Both IXE Q4W and Q2W improved the signs and symptoms of PsA in a population of difficult-to-treat patients who have had inadequate response to 1 or 2 TNFi.

Disclosure of Interests: : L Bruce Kirkham Grant/research support from: Investigator for Janssen Research & Development, LLC, Consultant for: Abbvie, Eli Lilly and Company, Janssen, Novartis, Carlos Sesin Grant/research support from: Eli Lilly and Company, Novartis, Roche, Consultant for: Eli Lilly and Company, Novartis, Pfizer, Amgen, Abbvie, Janssen, Speakers bureau: Eli Lilly and Company, Novartis, Pfizer, Amgen, Abbvie, Janssen, Radius, Regeneron/Sanofi Genzyme, Janssen, Aubrey Trevelin Sprabery Shareholder of: Eli Lilly and Company, Employee of: Eli Lilly and Company, Chen-Yen Lin Shareholder of: Eli Lilly and Company, Employee of: Eli Lilly and Company, Amanda M. Gellert Shareholder of: Eli Lilly and Company, Employee of: Eli Lilly and Company, Anthony Turkiewicz Grant/research support from: Janssen, Eli Lilly and Company, UCB, Pfizer, Regeneron Sanofi-Genzyme, Novartis, Consultant for: Janssen, Eli Lilly and Company, UCB, Pfizer, Regeneron Sanofi-Genzyme, Novartis, Abbvie, Medac, Horizon, Genentech

DOI: 10.1136/annrheumdis-2019-eular.1479

OP0111

A RANDOMIZED, PHASE 3, DOUBLE-BLIND TRIAL EXAMINING METHOTREXATE AND ETANERCEPT AS MONOTHERAPY OR IN COMBINATION FOR TREATING PSORIATIC ARTHRITIS: A COMPARISON OF THE COMPOSITE MEASURES USED TO EVALUATE DISEASE ACTIVITY

Philip J Mease¹, Dafna D Gladman², David Collier³, Christopher T. Ritchlin⁴, Philip Helliwell⁵, Laura C Coates⁶, Vibeke Strand⁷, Lyrica Liu³, Greg Kricorian³, James Chung³. ¹Swedish Medical Center and University of Washington, Seattle, United States of America; ²University of Toronto, Toronto, Canada; ³Amgen Inc., Thousand Oaks, United States of America; ⁴University of Rochester Medical Center, Rochester, United States of America; ⁵University of Leeds, Leeds, United Kingdom; ⁶University of Oxford, Oxford, United Kingdom; ⁷Stanford University, Palo Alto, United States of America

Background: Optimal treatment regimens and measuring outcomes in psoriatic arthritis (PsA) remain key areas of research.

Objectives: To examine methotrexate (MTX) and etanercept (ETN) as monotherapy or in combination in a randomized trial and assess the relative performance of PsA-specific composite measures using trial efficacy data.

Methods: Patients with active PsA naïve to biologic drugs (no prior MTX for PsA) were randomized to 3 groups for 48 weeks: ETN 50mg+MTX 20mg weekly (Combo; N=283); ETN 50mg+placebo weekly (ETN-mono; N=284); or MTX 20mg+placebo weekly (MTX-mono; N=284). At week 24, the American College of Rheumatology (ACR)20 and Minimal Disease Activity (MDA) responses were the primary and key secondary endpoints, respectively. Other PsA-specific composite measures used for disease activity included the Psoriatic Arthritis Disease Activity Score (PASDAS) and Disease Activity Index for Psoriatic Arthritis (DAPSA).

Results: Baseline characteristics were well balanced in the 3 arms. Mean (SD) age was 48.4 (13.1) years and mean/median PsA duration 3.2/0.6 years. ACR20 and MDA responses at week 24 were significantly greater with ETN-mono vs MTX-mono and Combo vs MTX-mono; ETN-mono and Combo had similar results (Table). PASDAS also showed differences between each ETN-containing arm vs MTX-mono and no difference for ETN-mono vs Combo, whereas study arm differences were not seen with DAPSA. PASDAS had a greater effect size and standardized response than DAPSA.

Conclusion: In this large randomized, controlled PsA trial, ETN-mono or Combo had greater efficacy than MTX-mono. Combining ETN and MTX did not improve ETN efficacy. Compared with the joint-focused DAPSA, PASDAS captured a wider range of PsA manifestations and performed better in this trial.

	Table: Week 24 Results					
	Methotrexate Monotherapy N=284	Etanercept Monotherapy N=284	Methotrexate plus Etanercept N=283			
	Composite endpoint response ^a	ES ^b (SD)	Composite endpoint response ^a	ES ^b (SD)	Composite endpoint response ^a	ES ^b (SD)
ACR 20, %	50.7	—	65.5 (P=0.002)	—	65.0 (P=0.005)	—
ACR 50, %	30.6	—	44.4 (P=0.006)	—	45.7 (P=0.001)	—
ACR 70, %	13.8	—	29.2 (P=0.001)	—	27.7 (P=0.001)	—
MDA, %	22.9	—	35.9 (P=0.005)	—	35.7 (P=0.005)	—
VDA, %	4.8	—	15.2 (P=0.001)	—	14.3 (P=0.001)	—
PASDAS	-1.98 (0.10)	1.56 (1.26)	-2.84 (0.10) (P=0.001)	2.28 (1.66)	-2.83 (0.11) (P=0.001)	2.18 (1.54)
DAPSA	-22.6 (1.4)	5.92 (1.54)	-25.9 (1.3) (P=0.001)	1.56 (1.25)	-24.9 (1.4) (P=0.001)	1.98 (1.12)

ACR, American College of Rheumatology; PASDAS, Psoriatic Arthritis Disease Activity Score; ES, effect size; MDA, minimal disease activity; PASDAS, Psoriatic Arthritis Disease Activity Score; SD, standard deviation; SE, standard error; SE, standardized response; VDA, very low disease activity; ^aPercent patients with response for ACR, MDA, and VDA; mean change from baseline (SE) for PASDAS and DAPSA; ^bEffect size=baseline mean-post baseline mean/SD of baseline mean; ^cStandardized response=baseline mean-post baseline mean/SD of change from baseline for that visit, in the same treatment group; ^dP-values are for comparison with the methotrexate monotherapy; P-values in bold measured statistical significance; all others are unadjusted

Disclosure of Interests: : Philip J Mease Grant/research support from: AbbVie, Amgen, BMS, Celgene, Janssen, Lilly, Novartis, Pfizer, SUN and UCB, Consultant for: AbbVie, Amgen, BMS, Galapagos, Gilead Sciences, Inc., Janssen, Lilly, Novartis, Pfizer, SUN and UCB, Speakers bureau: AbbVie, Amgen, BMS, Celgene, Genentech, Janssen, Lilly, Novartis, Pfizer and UCB, Dafna D Gladman Grant/research support from: AbbVie, Amgen, Celgene, Lilly, Novartis, Pfizer, and UCB, Consultant for: AbbVie, Amgen, BMS, Celgene, Galapagos, Gilead, Janssen, Lilly, Novartis, Pfizer, and UCB, David Collier Shareholder of: Amgen Inc., Employee of: Amgen Inc., Christopher T. Ritchlin Grant/research support from: AbbVie, Amgen, UCB Pharma, Consultant for: AbbVie, Amgen, Lilly, Novartis, Pfizer, UCB Pharma, Philip Helliwell Grant/research support from: Paid to charity: from AbbVie, Janssen and Novartis, Consultant for: Paid to charity: from AbbVie, Amgen, Pfizer, and UCB and Celgene. Paid to self: from Celgene and Galapagos, Laura C Coates Grant/research support from: AbbVie, Celgene, Lilly, Novartis and Pfizer, Consultant for: AbbVie, Amgen, BMS, Celgene, Galapagos, Gilead Sciences Inc., Janssen, Lilly, Novartis, Pfizer, Prothena Corp and UCB, Vibeke Strand Consultant for: AbbVie, Amgen, Bayer, BMS, Boehringer Ingelheim, Celgene, Celltrion, CORRONA, Crescendo, EMD Serono, Genentech/Roche, GSK, Horizon, Inmedix, Janssen, Kezar, Lilly, Merck, Novartis, Pfizer, Regeneron, Samsung, Sandoz, Sanofi, Servier, UCB., Lyrica Liu Shareholder of: Amgen Inc., Employee of: Amgen Inc., Greg Kricorian Shareholder of: Amgen Inc., Employee of: Amgen Inc., James Chung Shareholder of: Amgen Inc., Employee of: Amgen Inc.

DOI: 10.1136/annrheumdis-2019-eular.783

OP0112

UNACCEPTABLE PAIN DESPITE INFLAMMATION CONTROL AFTER START OF A FIRST ANTI-TNF THERAPY IN PATIENTS WITH PSORIATIC ARTHRITIS AND ITS RELATION TO TREATMENT RESPONSE

Carmen Roseman¹, Johan K Wallman¹, Anna Jöud², Maria Schelin³, Jon T Einarsson¹, Elisabet Lindqvist¹, Meliha C Kapetanovic¹, Jon Lampa⁴, Tor Olafsson¹. ¹Lund University, Department of Clinical Sciences Lund, Rheumatology, Lund, Sweden; ²Lund University, Division of Occupational and Environmental Medicine, Lund, Sweden; ³Lund University, Department of Clinical Sciences Lund, Oncology, Lund, Sweden; ⁴Karolinska Institute, Department of Medicine, Rheumatology Unit, Stockholm, Sweden

Background: Pain is a major concern of patients with inflammatory arthritides, but while considerable focus has been put on the occurrence and