166 LONG-TERM (156-WEEK) IMPROVEMENTS IN DACTYLITIS AND ENTHESITIS WITH APREMILAST INPSORIATIC ARTHRITIS SUBJECTS: ANALYSIS OF A LARGE, POOLED PALACE 1-3 DATABASE

Dafna D. Gladman¹, Arthur Kavanaugh², Juan J. Gomez-Reino³, Jurgen Wollenhaupt⁴, Maurizio Cutolo⁵, Georg Schett⁶, Eric Lespessailles⁷, Angela Hu⁸, Christopher J. Edwards⁹, Charles A. Birbara¹⁰ and Philip J. Mease¹¹

¹Rheumatology, Toronto Western Hospital, Toronto, ON, CANADA, ²Rheumatology, University of California, San Diego, School of Medicine, La Jolla, CA, USA, ³Rheumatology, Hospital Clínico Universitario, Santiago, SPAIN, ⁴Rheumatology, Schön Klinik Hamburg Eilbek, Hamburg, GERMANY, ⁵Rheumatology, University of Genova, Genova, ITALY, ⁶Rheumatology, University Erlangen-Nuremberg, Erlangen, GERMANY, ⁷Rheumatology, University of Orléans, Orleans, FRANCE, ⁸Biostatistics, Celgene Corporation, Summit, NJ, USA, ⁹Rheumatology, University Hospital Southampton, Southampton, UNITED KINGDOM, ¹⁰Rheumatology, University of Massachusetts Medical School, Worcester, MA, USA, and ¹¹Rheumatology, Swedish Medical Center and University of Washington School of Medicine, Seattle, WA, USA

Background: PALACE 1, 2, and 3 assessed apremilast (APR) efficacy/safety in subjects with active psoriatic arthritis (PsA) despite prior conventional disease-modifying anti-rheumatic drugs (DMARDs) and/or biologics. We report the impact of long-term APR 30 mg BID (APR30) on pre-existing dactylitis and enthesitis in the studies.

Methods: Subjects were randomised (1:1:1) to placebo, APR30, or APR 20 mg BID stratified by baseline DMARD use (yes/no). After the 24-week placebo-controlled phase, all subjects received APR and could enroll in long-term follow-up. Data for subjects with pre-existing dactylitis or enthesitis were pooled across PALACE 1-3. Dactylitis count (range: 0-20) was used to assess dactylitis improvement. Evaluation of enthesitis used the Maastricht Ankylosing Spondylitis Enthesitis Score (MASES; range: 0-13). Analyses utilised the last-observation-carried-forward methodology at week 24 and data as observed for weeks 52 and 156.

Results: Among subjects with dactylitis (n=610) or enthesitis (n=915) at baseline and ≥1 post-baseline value, baseline mean dactylitis counts and MASES ranged from 3.2 to 3.4 and 4.4 to 4.8, respectively. At week 24, mean change in dactylitis count was −1.8 (APR30) vs. −1.3 (placebo) (P=0.0097); more APR30 vs. placebo subjects achieved dactylitis counts=0. Mean change in MASES was −1.3 (APR30) vs. −0.9 (placebo) (P=0.0194); more APR30 vs. placebo subjects achieved MASES=0. The effect on enthesitis was confirmed in the ACTIVE study of APR subjects with ≤1 prior DMARD using the

Gladman Enthesitis Index, focusing on more peripheral sites of activity; significant effect for APR vs. placebo was seen as early as week 2; at week 24, mean change was -1.5 vs. -0.5 (P=0.0032, mixed-model repeated-measure). Sustained improvements in dactylitis and enthesitis severity were seen with continued APR treatment at week 156 in PALACE 1-3: 79.6% achieved dactylitis count=0 and mean percent change was -83.6%; 55.0% of APR subjects achieved MASES=0 and mean percent change was -65.2% (Table 1).

Conclusion: At baseline, 63% of PALACE 1-3 subjects had enthesitis and 42% had dactylitis. With continued treatment, APR30 demonstrated early and long-term benefit (≤156 weeks) in treating dactylitis and enthesitis, including resolution of baseline disease in many subjects.

Disclosures: D.D.G. has received consultancies from AbbVie, Amgen, BMS, Celgene Corporation, Janssen, Novartis, Pfizer and UCB, and has received grants/research support from AbbVie, Amgen, BMS, Celgene Corporation, Janssen, Novartis, Pfizer and UCB. A.K. has received grants/research support from Abbott, Amgen, AstraZeneca, BMS, Celgene Corporation, Centocor-Janssen, Pfizer, Roche and UCB. J.J.G-R. has received consultancies from BMS, Pfizer, Roche, Schering-Plough and UCB and has received grants/research support from Roche and Schering-Plough. J.W. has received consultancies from Abbott, BMS, MSD, Pfizer and UCB and has received grants/research support from Abbott, BMS, MSD, Pfizer and UCB. M.C. has received consultancies from Actelion, BMS and Sanofi-Aventis, and has received grants/research support from Actelion, BMS and Sanofi-Aventis. G.S. has received consultancies from Abbott, Celgene Corporation, Rocheand UCB, and has received grants/research support from Abbott, Celgene Corporation. Roche and UCB. E.L. has received speaker fees from Amgen, Eli Lilly, Novartis and Servier and has received grants/research support from Amgen, Eli Lilly, Novartis and Servier. A.H. is an employee of Celgene Corporation. C.J.E. has received consultancies from Celgene Corporation, Pfizer, Roche and Samsung, and has received speaker fees from Abbott, GSK, Pfizer and Roche. C.J.E has received grants/research support from Celgene Corporation, Pfizer, Roche and Samsung. C.A.B. has received grants/research support from Amgen, BMS, Incyte, Eli Lilly, Merck and Pfizer, P.J.M. has received consultancies from Abbott. Amgen, Biogen Idec, BMS, Celgene Corporation, Genetech, Janssen, Eli Lilly, Novartis, Pfizer, Roche and UCB, and has received speaker fees from Abbott, Amgen, Biogen Idec, BMS, Genetech, Janssen, Eli Lilly, Pfizer and UCB. P.J.M. has received grants/research support from Abbott, Amgen, Biogen Idec, BMS, Celgene Corporation, Genetech, Janssen, Eli Lilly, Novartis, Pfizer, Roche and UCB.

Table 1: Outcomes for Dactylitis Count and MASES at Week 24, Week 52, and Week 156

	Week 24		Week 52	Week 156
Dactylitis Count*	Placebo	APR30	APR30	APR30
	n = 205	n = 221	n = 249	n = 181
Baseline, mean	3.3	3.2	3.4	3.4
Mean change from baseline	-1.3	-1.8	-2.5	-3.0
Mean % change from baseline	-38.2	-48.6	-67.9	-83.6
Median % change from baseline	-66.7	-79.3	-100.0	-100.0
Subjects achieving score of 0, %	39.0	46.2	67.5	79.6
MASES [§]	Placeho	APR30	ΔPR30	ΔPR30

MASES [§]	Placebo	APR30	APR30	APR30
	n = 311	n = 327	n = 377	n = 278
Baseline, mean	4.8	4.4	4.4	4.2
Mean change from baseline	-0.9	-1.3 [‡]	-2.0	-2.7
Mean % change from baseline	-7.0	-23.6 [‡]	-43.5	-65.2
Median % change from baseline	-21.1	-50.0 [‡]	-66.7	-100.0
Subjects achieving score of 0, %	22.5	27.5	37.7	55.0

The n at Week 24 represents subjects with a baseline value >0. The n at Week 52 and Week 156 represents the number of subjects taking APR, regardless of when treatment started (baseline, Week 16, or Week 24), with a baseline value >0 and a value at Week 52 or Week 156. 'Dactylitis count is the sum of all scores (0=absence of dactylitis; 1=presence of dactylitis) from each of the 20 digits. $^{\text{M}}$ MASES ranges from 0 to 13, with 0 indicating no pain at any assessed enthesis and 13 indicating pain at all assessed entheses. $^{\ddagger}P$ <0.05 vs placebo. $^{\parallel}P$ <0.01 vs placebo.