Background: Anti-IL17 agents, such as Secukinumab (SEC) and Ixekizumab (IXE) have been shown to be efficacious for the treatment of psoriasis and PsA¹². In the field of psoriasis, there is growing evidence of a successful switching between the two anti-IL-17 agents in case of an insufficient response to one of the treatments³. There is no information on the efficacy of switching between anti IL17 agents in PsA.

Objectives: To assess the clinical response to IXE in patients with PsA following SEC failure.

Methods: A retrospective observational study was conducted in two rheumatology centers in Israel, including PsA patients with a history of treatment with SEC, further treated with IXE for a minimum of 3 months. Lack of efficacy, loss of efficacy, and side effects over time were reported as a reason for switching to another anti-IL17 agent. The mean difference between the beginning of the follow up period and the different follow up points (6 and 12 months) was tested using a one-sample t-test. Time until treatment failure was estimated using Kaplan–Meier curves, and compared using the log-rank test. Hazard ratios (HRs) and corresponding 95% confidence intervals (CIs) were calculated using the Cox proportional-hazards model to test the association between each variable and the time to treatment failure.

Results: The study included 23 PsA patients (11♀/12♂), mean age 58.7 years±13.4 SD. Most patients (n=20, 86%) received 2+ TNFi and 10 patients (43%) received both TNFi and ustekinumab. Median number of biologics prior to SEC was 3 (IQR 2-4). There was a significant improvement in TJC at 6 and 12 months (-2.16 [-4.0, -0.3]; p=0.025 and -1.69 [-3.09, -0.28]; p=0.022, respectively). SJC was significantly improved at 6 months but not at 12 months (-2.68 [-5.3, -0.04]; p=0.046 and -1.50 [-4.25, 1.25]; p=0.26, respectively). CDAI score was significantly improved at 6 months (-10.19, [-16.26, -4.1], p=0.002) and at 12 months (-9.29 [-14.8, -3.71], p=0.003) as was SDAI score (-10.13 [-16.4, -3.8], p=0.003 and -12.2 [-17.1, -7.2], p=0.0002). At six months, PASI50 was achieved by 81% (13 patients), PASI75 was achieved by 63% (10 patients), PASI90 was achieved by 50% (8 patients) and PASI100 by 31% (10 patients). At 12 months, PASI50 and PASI75 was achieved by 57% (8 patients), PASI90 was achieved by 43% (6 patients) and PASI100 by 21% (3 patients).

Over time, of the 23 patients treated with IXE, 15 patients (65%) had experienced treatment failure, with a median treatment period of 8 months (IQR 6.5-13.5), of which 4 (17%) had primary treatment failure and 11 patients (48%) secondary treatment failure. Reasons for treatment cessation were: worsening psoriasis (4 patients (27%)), worsening peripheral arthritis (4 patients (27%)), both (7 patients (47%)), worsening of axial disease (2 patients (13%)) and adverse events (1 patient, 6%).

Conclusion: patients after failure of multiple biologic treatments experienced significant response of peripheral arthritis and dermatologic disease on IXE after they had previously failed SEC. However, in this refractory cohort of PsA, the effect was limited on time with 65% failure after a median time of 8 months. Within class switch from SEC to IXE is a plausible therapeutic option in PsA patients following secukinumab failure.

REFERENCES:

- Mease PJ, McInnes IB, Kirkham B, et al. *N Engl J Med*. 2015;373(14):1329-1339.
- Nash P, Kirkham B, Okada M, et al. *Lancet Lond Engl*. 2017;389(10086):2317-2327.
- Bokor-Billmann T, Schökel K. *J Dermatol Treat*. 2019;30(3):216-220

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AB0552

PROBABILITY OF ACHIEVING TREATMENT TARGETS WITH APREMILAST MONOTHERAPY IN BIOLOGIC-NAIVE PSORIATIC ARTHRITIS PATIENTS IN ACTIVE WITH MODERATE AND HIGH BASELINE DISEASE ACTIVITY

P. Nash¹, S. Richter², S. Jardon², L. Teng³, J. A. Walsh⁴. ¹Griffith University, Medicine, Brisbane, Australia; ²Amgen Inc., Global Medical Affairs, Thousand Oaks, United

States of America; ³Amgen Inc., Statistics, Thousand Oaks, United States of America; ⁴University of Utah, Rheumatology, Salt Lake City, United States of America

Background: Patients with psoriatic arthritis (PsA) in moderate disease activity (ModDA) who are naive to disease-modifying antirheumatic drugs (DMARDs) have a higher probability of achieving the Clinical Disease Activity Index for PsA (cDAPSA) treatment targets after receiving apremilast 30 mg BID (APR) than those in high disease activity (HDA). In Europe, APR is indicated for the treatment of active PsA in adult patients who had an inadequate response or were intolerant to a prior DMARD therapy. Achievement of cDAPSA treatment targets with APR monotherapy in biologic-naive patients with PsA who had previously taken a maximum of 1 conventional synthetic DMARD (csDMARD) has not been evaluated.

Objectives: To assess the predictive value of baseline clinical disease status on achieving long-term cDAPSA treatment targets at Week 52 among biologic-naive patients with PsA in the phase 3b, randomized, placebo-controlled Assessing Apremilast Monotherapy in a Clinical Trial of Biologic-Naive Patients With PsA (ACTIVE).

Methods: ACTIVE enrolled adults with PsA who had ≥3 swollen and ≥3 tender joints and were biologic naive with prior failure of a maximum of 1 csDMARD. In this post hoc analysis, we assessed the probabilities of achieving cDAPSA treatment targets of remission (REM; ≤4) or low disease activity (LDA; >4 to ≤13) at Week 52 in patients randomized to APR and stratified by cDAPSA ModDA (>13 to ≤27) or HDA (>27) at baseline. Patients with enthesitis at baseline in each stratum were analyzed separately.

Results: Of the 109 patients randomized to APR, 35 were in ModDA (32.1%) and 71 were in HDA (65.1%) at baseline (Table 1). For patients with ModDA vs HDA at baseline, swollen (4.6 vs 10.8) and tender (6.7 vs 21.7) joint counts were lower, and the prevalence of enthesitis was lower (42.9% vs 57.7%) (Table 1). Patients in ModDA at baseline were estimated to be more than twice as likely to achieve treatment targets at Week 52 vs patients in HDA at baseline (Figure 1). Consistent with these results, a higher proportion of patients with ModDA + enthesitis at baseline achieved treatment targets at Week 52 than patients with HDA + enthesitis at baseline (58.9% vs 32.8%).

Table 1. Baseline Demographics and Disease Characteristics

Baseline cDAPSA Category	ModDA (n = 35)	HDA (n = 71)
Age, mean (SD), years	48.5 (12.9)	51.6 (11.8)
Women, n (%)	20 (57.1)	36 (50.7)
White, n (%)	34 (97.1)	71 (100.0)
PsA duration, mean (SD), years	4.5 (4.6)	3.8 (4.5)
Enthesitis, n (%)	15 (42.9)	41 (57.7)
SJC (0-66), mean (SD)	4.6 (1.6)	10.8 (4.3)
TJC (0-68), mean (SD)	6.7 (2.2)	21.7 (11.5)
PtGA (0-10 NRS), mean (SD)	4.9 (1.4)	6.5 (2.0)
PhGA (0-10 NRS), mean (SD)	5.4 (1.2)	6.6 (1.5)

The n represents the total sample. The number of patients with data available may vary. Not included are 3 patients in LDA at baseline. NRS = Numeric Rating Scale; PhGA = Physician's Global Assessment of Disease Activity; PtGA = Patient's Global Assessment of Disease Activity; SJC = swollen joint count; TJC = tender joint count.

Achievement of cDAPSA Treatment Targets at Week 52 With APR

Patients randomized to apremilast 30 mg BID at Week 0. Multiple imputation was used for missing data.

Figure 1.

Conclusion: Similar to observations in DMARD-naïve patients with PsA, patients who were biologic naïve but may have had experience with a maximum of 1 csDMARD, including those with enthesitis, and who were in ModDA at baseline had a higher probability of achieving treatment targets (cDAPSA REM or LDA) at Week 52 with continued APR treatment compared with those with HDA.

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AB0553

BASELINE DISEASE ACTIVITY AS A PREDICTOR FOR ACHIEVING cDAPSA TREATMENT TARGETS WITH APREMILAST IN DMARD-NAIVE PATIENTS WITH MANIFESTATIONS OF ACTIVE PSORIATIC ARTHRITIS

P.J. Mease¹, A. Kavanaugh², A. Ogdie³, A. F. Wells⁴, M. Bergman⁵, D. D. Gladman⁶, F. Behrens⁷, Y. Klyachkin⁸, S. Richter⁹, L. Teng⁸, J. S. Smolen⁹.

¹Swedish Medical Center/Providence St. Joseph Health and University of Washington School of Medicine, Department of Rheumatology, Seattle, United States of America; ²University of California, San Diego, School of Medicine, Division of Rheumatology, Allergy, and Immunology, La Jolla, United States of America; ³University of Pennsylvania, Department of Rheumatology, Philadelphia, United States of America; ⁴Aurora Rheumatology and Immunotherapy Center, Department of Rheumatology, Franklin, United States of America; ⁵Drexel University College of Medicine, Division of Rheumatology, Philadelphia, United States of America; ⁶Schroeder Arthritis Institute, Rheumatology, Toronto, Canada; ⁷Rheumatology and Fraunhofer ITMP – Translational Medicine and Pharmacology, Goethe University, Department of Rheumatology, Frankfurt, Germany; ⁸Amgen Inc., Global Medical Affairs, Thousand Oaks, United States of America; ⁹Medical University of Vienna, Department of Rheumatology, Vienna, Austria

Background: In PALACE 4, DMARD-naïve patients (pts) with moderately active (ModDA) psoriatic arthritis (PsA) at baseline (BL) were more likely to achieve Clinical Disease Activity Index for PsA (cDAPSA) treatment targets (cDAPSA remission [REM] or low disease activity [LDA]) at Week 52 with continued apremilast 30 mg BID (APR) treatment than pts with high disease activity (HDA) at BL. Pts who achieved cDAPSA treatment targets also had no or mild articular and extra-articular disease activity by Week 52. Whether specific PsA manifestations other than arthritis impact the achievement of cDAPSA treatment targets in this population is unknown.

Objectives: To assess the predictive value of BL clinical disease status on achieving cDAPSA treatment targets in DMARD-naïve pts in PALACE 4 with PsA in ModDA or HDA who exhibited manifestations of skin involvement, enthesitis, and/or dactylitis at BL.

Methods: This post hoc analysis included APR-treated pts in ModDA or HDA with available cDAPSA data at BL and Week 52 who exhibited any of the PsA manifestations at BL, including skin-involved body surface area (BSA) $\geq 3\%$, Maastricht Ankylosing Spondylitis Entheses Score (MASES) >0 , or dactylitis count >0 . Pts were divided into 4 subgroups based on number of manifestations: ≥ 1 , only 1, any 2, or all 3. The proportions of pts who shifted across ModDA (>13 to ≤ 27) and HDA (>27) cDAPSA categories at BL to REM (≤ 4) and LDA (>4 to ≤ 13) treatment targets at Week 52 were calculated (data as observed).

Results: In 176 PALACE 4 pts with PsA receiving APR, 165 had involvement in ≥ 1 PsA manifestation in addition to peripheral arthritis (ie, skin/enthesitis/dactylitis) at BL. This population had a mean age of 48.8 years, PsA duration of 3.6 years, Psoriasis Area and Severity Index (PASI) score of 6.6, MASES of 3.8, and dactylitis count of 3.5 (Table 1). Within this subgroup, 32.7% had only 1 of these non-arthritis PsA manifestations, 50.9% had any 2, and 16.4% had all 3. In pts with ≥ 1 manifestation, a greater proportion in ModDA achieved REM/LDA at Week 52 than those in HDA (66.7% vs 32.2%; risk difference: 0.34) (Figure 1). Similarly, greater rates of treatment target achievement were observed in subgroups of pts in ModDA vs HDA and only 1 (72.2% vs 39.1%; risk difference: 0.33), any 2 (57.1% vs 28.6%; risk difference: 0.29), or all 3 (75.0% vs 33.3%; risk difference: 0.42) PsA manifestations (Figure 1).

Conclusion: In DMARD-naïve pts exhibiting various non-arthritis manifestations of active PsA (ie, skin/enthesitis/dactylitis), those in ModDA at BL were more likely to achieve cDAPSA REM or LDA at Week 52 of APR treatment than pts in HDA. This observation was consistent whether pts had only 1 or multiple manifestations. These findings are consistent with the probability of achieving

treatment targets demonstrated in the overall population in PALACE 4 (61.7% ModDA vs 28.2% HDA).

Table 1. BL Demographics and Disease Characteristics in Pts With ≥ 1 Manifestations of PsA (Skin Involvement, Enthesitis, and/or Dactylitis) Treated With APR (N = 165)

Age*, years	48.8 (12.5)
Women, n (%)	87 (52.7)
BMI*, kg/m ²	29.9 (6.5)
Duration of PsA*, years	3.6 (5.0)
Duration of psoriasis*, years	15.5 (13.3)
cDAPSA (0-154)*	39.4 (19.7)
Swollen joint count (0-66)*	10.3 (7.7)
Tender joint count (0-68)*	18.5 (12.9)
Pt's Assessment of Pain (VAS 0-100 mm)*	52.8 (21.5)
Pt's Global Assessment (VAS 0-100 mm)*	53.8 (20.1)
Physician's Global Assessment (VAS 0-100 mm)*	52.2 (17.6)
PASI score (0-72)* [†]	6.6 (5.1)
MASES (0-13)* [‡]	3.8 (3.0)
Dactylitis count (0-20)* [§]	3.5 (3.3)
Corticosteroid use, n (%)	13 (7.9)
NSAID use, n (%)	126 (76.4)

*Mean (SD). [†]In pts with BSA $\geq 3\%$ at BL. [‡]In pts with enthesitis at BL. [§]In pts with dactylitis at BL.

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Figure 1.

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