**AB0946**

**IMPROVEMENTS IN WORK PRODUCTIVITY WITH UP TO 104 WEEKS OF APREMILAST MONOTHERAPY: RESULTS FROM A PHASE 3B, RANDOMISED, CONTROLLED STUDY IN BIOLOGIC-NAÏVE SUBJECTS WITH ACTIVE PSORIATIC ARTHRITIS**

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**Background:** Psoriatic arthritis (PsA) patients may experience disease manifestations across multiple domains and impaired functioning in daily activities at home and work. The phase 3b ACTIVE study is evaluating the efficacy of apremilast (APR) monotherapy in biologic-naïve subjects with active PsA who may have had exposure to 1 prior conventional DMARD.

**Objectives:** To assess work productivity through Week 104.

**Methods:** Subjects were randomised (1:1) to receive APR 30 mg BID or placebo (PBO). Subjects who did not improve by >10% in swollen and tender joint counts at Week 16 were eligible for early escape. At Week 24, all remaining PBO subjects were switched to APR. Work productivity and activity impairment were assessed at baseline (BL) and Week 16 using the 6-item, self-administered Work Productivity and Activity Impairment Questionnaire: Psoriatic Arthritis (WPAI:PsA). WPAI: PsA includes 4 subscale scores (Absenteeism, Presenteeism, Work Productivity Loss, Activity Impairment) and the SF-36v2 domain scores for Physical Functioning (PF), Bodily Pain (Pain), and Vitality (VIT), as well as associations with ACR20 response. Improvement in work productivity was assessed through Week 104.

**Results:** BL characteristics were similar between APR and PBO subjects with WPAI:PsA scores included in this analysis. At Week 16, APR significantly improved work productivity and the ability to carry out daily activities vs PBO, with significantly greater mean improvements observed in the overall Work Productivity Loss (p=0.001) and Activity Impairment (p<0.001) scores (table 1). Estimated mean change in the Absenteeism score was similar with APR vs PBO (p=0.679). By contrast, the Presenteeism score showed significant improvement with APR vs worsening with PBO (−10.8% vs 4.1%; p=0.002). At Week 16, statistically significant correlations were observed between WPAI:PsA subscale scores (except Absenteeism) and the SF-36v2 domain scores for PF, Pain, and VIT, as were associations with ACR20 response. Among subjects randomised to APR at BL, improvements in Week 16 WPAI:PsA subscale score were generally maintained through Week 104 in those continuing APR.

**Conclusions:** In biologic-naïve subjects with PsA, APR monotherapy contributed to an overall improvement in work productivity at Week 16, which correlated with SF-36v2 PF, Pain, and VIT scores and was associated with ACR20 response; improvements in WPAI:PsA subscale scores were generally maintained to Week 104.

**Disclosure of Interest:** P. Mease Grant/research support from: Abbott, Amgen, Biogen Idec, BMS, Celgene Corporation, Genentech, Janssen, Eli Lilly, Novartis, Pfizer, Roche, Consultant for: Abbott, Amgen, Biogen Idec, BMS, Celgene Corporation, Genentech, Janssen, Eli Lilly, Novartis, Pfizer, Roche, UCB, B. Lockshin2, C. Liu3, E. Siegela, L. Chen3, X. Bu3, X. Wang3, K. Douglas5. 1Swedish Med. Ctr. and Univ. of Washington, Seattle; 2US Dermatology Partners, Rockville; 3Bellevue Dermatology Clinic, Bellevue; 4Arthritis and Rheumatism Associates and Georgetown Univ., Rockville; 5AbbVie Inc, N Chicago, USA

**AB0947**

**IMPACT OF CLINICAL SPECIALTY SETTING ON DISEASE MANAGEMENT IN PATIENTS WITH PSORIATIC ARTHRITIS: RESULTS FROM A CROSS-SECTIONAL OBSERVATIONAL STUDY IN THE UNITED STATES**


**Background:** Early diagnosis and effective treatment has been shown to decrease functional disability and structural progression in patients (pts) with psoriatic arthritis (PsA).1 However, factors that influence treatment management decisions are poorly understood.

**Objectives:** To evaluate the impact of clinical specialty setting on the management of US pts with PsA.

**Methods:** LOOP was a multi-centre, cross-sectional observational study conducted across 44 sites in US. Adult pts with a suspected or an established diagnosis of PsA who were routinely visiting a rheumatologist (rheum) or a dermatologist (derm) were eligible to participate in this study. Each enrolled pt was assessed by both rheum and derm. The association between enrolling or diagnosing clinical specialty setting and time from symptom onset to PsA diagnosis and to different disease management steps were examined.

**Disclosure of Interest:** P. Mease Grant/research support from: Abbott, Amgen, Biogen Idec, BMS, Celgene Corporation, Genentech, Janssen, Eli Lilly, Novartis, Pfizer, Roche, UCB, B. Lockshin2, C. Liu3, E. Siegela, L. Chen3, X. Bu3, X. Wang3, K. Douglas5. 1Swedish Med. Ctr. and Univ. of Washington, Seattle; 2US Dermatology Partners, Rockville; 3Bellevue Dermatology Clinic, Bellevue; 4Arthritis and Rheumatism Associates and Georgetown Univ., Rockville; 5AbbVie Inc, N Chicago, USA

**Table 1**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Rheum (N=336)</th>
<th>Derm (N=147)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TJC68</td>
<td>8.2 (10.8)</td>
<td>9.9 (10.3)</td>
<td>0.09</td>
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<tr>
<td>SJC66</td>
<td>3.4 (6.4)</td>
<td>4.3 (6.0)</td>
<td>0.62</td>
</tr>
<tr>
<td>DAS28 (CRP)</td>
<td>3.2 (1.5)</td>
<td>4.2 (2.0)</td>
<td>0.05</td>
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<tr>
<td>DAS28 (ESR)</td>
<td>3.14 (1.6)</td>
<td>3.8 (2.1)</td>
<td>0.19</td>
</tr>
<tr>
<td>Enthesis based on LEI</td>
<td>1.0 (1.6)</td>
<td>1.5 (1.8)</td>
<td>0.17</td>
</tr>
<tr>
<td>Dactylitis count</td>
<td>0.6 (1.5)</td>
<td>0.8 (1.7)</td>
<td>0.17</td>
</tr>
<tr>
<td>BASDAI (axial involvement)</td>
<td>4.6 (3.2)</td>
<td>4.3 (3.3)</td>
<td>0.76</td>
</tr>
<tr>
<td>BSA (%)</td>
<td>5.0 (10.9)</td>
<td>8.1 (14.5)</td>
<td>0.04</td>
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<tr>
<td>Psoriatic nail count</td>
<td>1.9 (3.1)</td>
<td>2.0 (3.1)</td>
<td>0.74</td>
</tr>
<tr>
<td>PASI</td>
<td>3.0 (5.1)</td>
<td>5.5 (7.9)</td>
<td>&lt;0.01</td>
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<tr>
<td>PGA at the time of diagnosis</td>
<td>6.7 (2.7)</td>
<td>5.9 (3.1)</td>
<td>0.03</td>
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<tr>
<td>PGA during last visit</td>
<td>4.7 (2.9)</td>
<td>4.7 (3.0)</td>
<td>0.96</td>
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<tr>
<td>HAG-DI</td>
<td>0.97 (7.1)</td>
<td>0.7 (0.7)</td>
<td>0.05</td>
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<tr>
<td>SF12v2 PCS</td>
<td>40.6 (10.5)</td>
<td>41.8 (10.3)</td>
<td>0.24</td>
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<tr>
<td>SF12v2 MCS</td>
<td>46.9 (11.1)</td>
<td>47.9 (11.6)</td>
<td>0.31</td>
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<tr>
<td>DLQI</td>
<td>5.4 (5.9)</td>
<td>7.6 (7.4)</td>
<td>0.01</td>
</tr>
</tbody>
</table>

*P-value from two sample t-test: Rheumatologist vs Dermatologist.
*All data are presented as mean (SD) unless otherwise specified.
*N=40; 8; 9; 13; 36; 14; 32; 14; 15; 36; 13; 34; 1; 65; 36.
*BSA=body surface area with psoriasis; DAS28 (CRP)=28 joint disease activity score based on C-reactive protein; DAS28 (ESR)=DAS28 based on erythrocyte sedimentation rate; Derm=dermatologist; DQI=Dermatology quality index; HAQ-DI=health assessment questionnaire – disability index; LEI=Leeds enthesis index; MCS=mental component score; PASI=psoriasis area and severity index; PGA=physical component score; PGA=physician global assessment; PsA=psoriatic arthritis; PsA–patient’s global assessment of disease; Rheum=rheumatologist; Rheum=rheumatologist; SF12v2=short form 12-item health survey version 2.0; SD=standard deviation; TJC68=tender joint count, 66 joints; TJC68=tender joint count, 68 joints.
TUMOUR NECROSIS FACTOR INHIBITORS AND THEIR EFFECTS ON HBA1C LEVELS IN PATIENTS WITH PSORIATIC ARTHRITIS

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Background: Tumour necrosis factor is a key inflammatory cytokine in the pathogenesis of psoriatic arthritis (PsA) and diabetes mellitus (DM). 1,2 Tumour necrosis factor inhibitors (TNFi) have been shown to be associated with a decreased incidence of DM, but it is unknown whether treatment of PsA with TNFi has off-target therapy benefits for patients with DM. 3

Objectives: To determine whether initiation of a TNFi, compared to initiation of methotrexate (MTX) or metformin, results in a decrease in HbA1c levels in patients with PsA, DM, and elevated HbA1c.

Methods: A retrospective cohort study was conducted in Outpatients, a de-identified administrative claims database that includes laboratory values for PsA diagnosis was established prior to study entry in 404 pts enrolled (suspected pts), while diagnosis was confirmed during the study in 109 pts (suspected pts). In established pts, PsA was first diagnosed in 352 (87.1%) pts by a rheum and 40 (9.9%) pts by a derm. Among suspected pts, 87 (79.8%) and 15 (13.8%) pts were being managed by rheum and derm setting, respectively. Pt demographics and disease characteristics were comparable between PsA pts enrolled by rheum and derm setting. Current disease activity and disease burden were comparable between PsA pts enrolled by rheum and derm setting (table 1); though pts enrolled by a derm setting had higher scores on skin measures and enthesis. The median (95% CI) time from symptom onset to PsA diagnosis was 1.0 (0.5, 1.1) and 2.6 (1.7, 4.1) years (y) in pts enrolled in rheum and derm setting, respectively (p<0.001). However, the median time to PsA diagnosis was 0.9 (0.5, 1.0) and 1.0 (0.0, 2.0) y in pts diagnosed by rhuems and derms, respectively. After PsA diagnosis, the median time to first csDMARD and to first bDMARD was 1.0 and 2.4 y, respectively. Overall, 282 (55.0%) and 354 (68.0%) pts received csDMARDs and bDMARDs, respectively. Treatment with first csDMARD occurred in 106 (20.7%) pts before PsA diagnosis and 176 (34.3%) pts after diagnosis; for first bDMARD, it was 121 (23.6%) and 233 (45.4%) pts, respectively.

Conclusions: The duration from symptom onset to PsA diagnosis was longer in pts enrolled by derms and was similar in pts diagnosed by both rheums and derms. The median time was longer for treatment with first bDMARD compared to first csDMARD. Current disease activity and disease burden highlight the delay in PsA diagnosis and the need for appropriate management of PsA pts, irrespective of clinical specialty setting.

REFERENCES:

Acknowledgements: AbbVie funded the LOOP study, contributed to its design, and participated in data collection, analysis and interpretation of the data, and in writing, review, and approval of the publication. AbbVie and the authors thank all study investigators for their contributions and the patients who participated in this study. Medical Writing: Deepa Venkitaramani, PhD, of AbbVie.


AB0948 – Figure 1

Conclusions: TNFi and MTX initiation lead to a decline in Hba1c by half as much as metformin. Changes in Hba1c were not different among patients initiating TNFi versus MTX.

REFERENCES:

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AB0949

SEVER 25-HYDROXYVITAMIN D STATUS IN PATIENTS WITH PSORIATIC ARTHRITIS

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Background: Vitamin D has been recognised not only in calcium metabolism and bone metabolism but also in the physiological activities of a wide variety of cells, and its deficiency is caused by fractures/falls, osteoporosis and other various disease risks have been reported.

Objectives: To clarify vitamin D satisfaction status of patients with PsA, which is one of spondyloarthritics, by measuring serum 25OH D concentration.

Methods: 180 patients with PsA satisfying CASPRA criteria during the visit to our hospital between August 2016 and June 2017, 125 males, averaging age 54.1 y.o., BMI average 24.2, mean disease duration of PsA and psoriasis was 8.1 years, 19.3 years, respectively. The type of psoriatic arthritis was 79 spondylitis type and 101 peripheral type. MTX was 51.7% as an agent for treating PsA, and the average dose was 15.31 mg/week. The number of biologics uses was 37.2%. There were 9 cases of osteoporosis and 21 cases of osteoarthritis, 20 patients who were undergoing treatment for osteoporosis, and all patients were treated with activated VD3. 110 patients (61.1%) had active type VD3 paint applied to psoriasis eruption. The ACPA positive rate was 7.4%, the rheumatoid factor positive was 17.7%, and...