AB0907

TREATMENT PATTERNS IN PSORIATIC ARTHRITIS IN US AND EUROPE: RESULTS FROM A REAL-WORLD INTERNATIONAL SURVEY

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Background: With the availability of a greater range of Psoriatic Arthritis (PsA) treatment options, it is increasingly necessary to understand their use and impact on disease control in real-world practice.

Objectives: To assess treatment patterns and their impact on clinical outcomes among PsA patients currently receiving conventional/targeted synthetic disease-modifying anti-rheumatic drugs (cs/tsDMARD) or biologic DMARD (bDMARD).

Methods: A point in time survey was conducted in 2015 across the US, France, Germany, Italy, Spain and UK. Patients had physician-confirmed PsA and had to have been receiving their current cs/tsDMARD (bio naïve) or bDMARD (1st or 2nd line) for ≥6 months. Physicians provided information on demographics, treatment history, disease severity, clinical measures included body surface area (BSA), joint count, flare/remission status. Student t-tests, Pearson's chi-squared and Fisher's exact tests were used to compare physician-reported patient profile variables, clinical status and treatment outcomes.

Results: 519 physicians (331 rheums, 188 derms) provided data for 2467 PsA patients, 1463 of whom met the inclusion criteria (1136 EU, 327 US). No significant differences were observed between EU and US patients in demographics (male 52.6%, mean age 49.0 years), disease duration 6.3 years; disease severity 29.1% moderate to severe). In the EU, 32.3% patients were on cs/tsDMARDs, 55.4% 1st-line bDMARD, 12.3% 2nd-line bDMARD vs 21.7%, 58.4%, 19.9% respectively in the US.

Time in months (mo) from diagnosis to first cs/tsDMARD was similar in the EU and US (EU mean 4.7 mo; US 8.1 mo, p=0.24), from 1st cs/tsDMARD to 1st bio (EU 37.4 mo; US 29.4 mo, p=0.15). Patients in the EU received more cs/tsDMARDs prior to bDMARD initiation than US patients (mean 1.4 v 0.8; p<0.001). US patients were more likely to have bDMARD without combination cs/tsDMARDs (US 65.1% vs EU 52.3%; p=0.004).

Patients receiving cs/tsDMARDs had a worse clinical profile than those on 1st-line bDMARD in all areas other than joint count. Patients on 2nd-line bDMARD had more symptoms, more affected joints and more likely to flare vs 1st-line bDMARD. They had more affected joints but were less likely to flare vs cs/tsDMARD. These findings were directionally similar in the EU and US (table 1). BSA was higher for cs/tsDMARD patients than for any bDMARD patients.

Table 1

	Current cs/tsDMARD (n=438)	Current ±Line bDMARD (n=820)	P value (cs/tsDMARD v 1st Line bDMARD)	Current 2nd Line bDMARD (n=205)	P value (2nd Line bDMARD v cs/tsDMARD)	P value (2nd v 1st Line bDMARD)
Mean No. of PsA Symptoms	1.7	1.4	<0.001	1.9	0.378	<0.001
Mean No. of Joints Affected	3.2	3.3	0.531	4.0	<0.001	<0.001
Patients currently flaring	6.7%	3.4%	0.032	5.4%	<0.001	<0.001
Currently not in Remission	60.5%	39.5%	<0.001	45.9%	<0.001	0.112
Mean BSA	11.4%	7.8%	<0.001	8.6%	0.001	0.583

Conclusions: Only 39%–60% of patients were considered by physicians as in remission, revealing a considerable unmet need in both the EU and US in patients treated with cs/tsDMARDs and bDMARDs. Further research is needed to identify patients on cs/tsDMARDs who may be a candidate for advanced therapy and to recognise patients who might fail on bDMARD who therefore may benefit from a different therapeutic alternative.

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ABILITY OF THE REDUCTIVE X-RAY SCORE FOR PSORIATIC ARTHRITIS (REXSPA) TO DETECT CHANGE IN AN OBSERVATIONAL COHORT OF PATIENTS WITH PSA

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Background: The measurement of radiographic joint damage is important in characterising disease severity, progression, and prognosis in psoriatic arthritis (PsA). Existing radiographic measures are time-consuming to perform, leading to limited data collection from existing longitudinal observational studies.

Objectives: We have previously proposed a Reductive X-ray Score for Psoriatic Arthritis (ReXSPA)¹ as more feasible method, and in this study set out to examine the sensitivity of ReXSPA in a new cohort of patients.

Methods: A retrospective sample of 28 patients who had hand and feet radiographs at 3 time points (5 years before [T⁰], at the time of [T¹], and 5 years post [T²] commencement of anti-TNF treatment) were taken from the Bath longitudinal PsA cohort. Radiographs were scored for erosion, joint space narrowing and proliferation to calculate the Sharp-van der Heijde modified method (VDH) and ReXSPA scores. A sample of 9 radiographs were scored by all assessors (WT, AA and AA) to determine inter- and intra-rater reliability using intra-class correlation coefficients (ICC). Sensitivity to change was determined from timepoint T⁰ to T² using the Standardised Response Mean (SRM) and Smallest Detectable Change (SDC).

Results: The patients' mean age (SD) at T⁰ was 61 years (13.4), the mean disease duration was 11.2 years (11.14). Patients were followed up for a mean (SD) of 10.2 years (2.76). Overall inter- and intra-rater reliability for ReXSPA and VDH were 0.80 and >0.92 and 0.91 and >0.90 respectively. The median (IQR) of ReXSPA score was 8.5 (1–14), 12.5 (5–20) and 14.5 (8–36) at T⁰, T¹, and T² respectively. The percentage SDC was 0.91 for the ReXSPA method and 0.77 for the VDH method, and the SRMs were 0.92 and 0.87 respectively (table 1), demonstrating the sensitivity of both methods in detecting change. There was a trend towards slowing in radiographic progression following the initiation of TNF-inhibitors, but ReXSPA was less sensitive compared to the VDH and was not able to detect a significant change in the rate of progression post-TNF inhibition (p 0.08) (Graphic 1).

Abstract AB0908 – Table 1. Sensitivity to change of each scoring method

Method	Mean Change	SD of change	SEM	SRM	SDC	SDC as% of total score
VDH	22.11	19.14	3.62	0.87	4.09	0.77
Erosion	7.29	10.62	2.01	1.46	2.27	0.71
JSN	16.96	15.17	2.87	0.89	3.24	1.56
ReXPSA	10.9	10.0	1.89	0.92	2.14	0.91
Erosion	3.21	5.31	1.00	1.65	1.13	1.03
JSN	6.36	5.11	0.97	0.80	1.09	1.24
Proliferation	0.96	2.32	0.44	2.40	0.50	1.39

Sharp-van der Heijde modified method (VDH), Standard deviation (SD), Standard error of mean (SEM), Standardised response mean (SRM), Smallest detectable change (SDC).