patients were correctly classified as LDA according to DAPSA, PASDAS, CPDAI and DAS28-CRP.

Only DAPSA (Sensitivity (S)=88.2%, Specificity (Sp)=40.5, $p=0.033$), PASDAS (S=88.2%, Sp=55.0%, $p=0.002$) and the MDA criteria (S=71.4%, Sp=67.3%, $p=0.003$) were able to discriminate patients with and without MUDA at follow-up. A global ultrasound inflammation subscore for joints and entheses (GUIS-j/e), containing the above mentioned US variables, was significantly higher in patients with active disease versus patients in LDA according to DAPSA ($p=0.002$) and PASDAS ($p=0.013$) at baseline and DAPSA ($p=0.007$), PASDAS ($p=0.001$), CPDAI ($p=0.021$) and the MDA criteria ($p<0.001$) at follow-up.

Conclusions: Of all tested LDA definitions, DAPSA was overall the most efficacious in differentiating between high and low ultrasound scores and better identified patients with MUDA as compared to the other tested scores.

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OP0127 CAN ACHIEVING MINIMAL DISEASE ACTIVITY (MDA) PREVENT PROGRESSION OF SUBCLINICAL ATHEROSCLEROSIS AND ARTERIAL STIFFNESS? A TWO-YEAR PROSPECTIVE COHORT STUDY IN PSORIATIC ARTHRITIS

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Background: PsA patients have higher CVD risk due to underlying inflammation. While achieving MDA was associated with articular benefits, its effect on CVD risk remained uncertain

Objectives: To investigate effect of achieving MDA on subclinical atherosclerosis and arterial stiffness

Methods: Subjects without CVD were recruited and received protocolised treatment aiming at MDA for 2 years. High-resolution ultrasound (for subclinical atherosclerosis) and arterial stiffness were assessed yearly. The primary objective was to investigate the effect of achieving MDA (MDA group) at 12 months on the progression of subclinical atherosclerosis (carotid intima-media thickness [IMT] and plaque) over 2 years. Secondary objectives were to compare 1) changes in arterial stiffness (branchial-ankle pulse wave velocity [PWV]) and augmentation index (AIX) over 2 years between MDA and non-MDA group; 2) changes in vascular outcomes in patients who could or could not achieve sustained MDA (sMDA, defined as achieving MDA from month 12 to 24). Carotid plaque progression was defined as an increase in number/region harbouring plaque compared with baseline

Results: 90 patients [male:52(58%); age: 50±11] were included. At 24 months, 62 (69%) were on csDMARDs, 20 (22%) were on anti-TNF- α and 8 (9%) were on Secukinumab. Proportion of patient achieved MDA increased significantly (baseline: 17%; 12 months: 64%; 24 months: 69%) after intensive treatment. Vascular outcomes were similar between MDA and non-MDA group (figure 1). 41 (46%) patients achieved sMDA. At baseline, a higher prevalence of subjects in the non-sMDA group were smokers, treated with NSAIDs and csDMARDs; fewer subjects were on bDMARDs, and they had higher disease activity compared with the sMDA group. 34 (38%) of them had plaque progression and prevalence was numerically higher in the non-sMDA group [22 (45%) vs 12 (29%), $p=0.13$]. Using multivariate analysis, achieving sMDA had protective effect on plaque progression [OR=0.27, 95% CI: 0.09 to 0.84, $p=0.03$] after adjustment of baseline difference (table 1). Achieving sMDA was also related to less progression of total plaque area (TPA), mean and maxIMT, PWV and AIX (table 1)

Conclusions: Effective suppression of inflammation by achieving sustained MDA may prevent subclinical atherosclerosis and arterial stiffness progression in PsA patients

Abstract OP0127 – Table 1. Multivariate analysis on vascular outcomes

Outcome	Baseline covariates	OR/ β	95% CI	p
Plaque progression	Age	1.07	1.01–1.13	0.02
	VAS Physician Global	0.96	0.93–0.99	0.02
	LDL-C	2.63	1.31–5.49	0.01
	bDMARDs use	0.11	0.01–0.65	0.02
TPA change	sMDA	0.27	0.09–0.85	0.02
	BMI	−0.43	−0.76, −0.10	0.01
	LDL-C	2.83	0.72–4.93	0.01
meanIMT change	sMDA	−3.92	−7.18, −0.66	0.02
	bDMARDs use	−0.03	−0.07, −0.00	0.03
	sMDA	−0.04	−0.07, −0.01	0.01
maxIMT change	Any plaque progression	−0.07	−0.13, −0.01	0.02
	sMDA	−0.07	−0.13, −0.01	0.03
PWV change	Age	4.95	0.92–8.99	0.02
	PWV	−0.48	−0.68, −0.29	<0.001
	sMDA	−71.4	−143.2, 0.23	0.05
			0.23	
AIX change	Sex	3.32	0.11–6.56	0.04
	sMDA	−3.06	−6.07, −0.05	0.05

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OP0128 THE PHENOTYPE OF AXIAL PSORIATIC ARTHRITIS: IS IT DEPENDENT ON HLA-B27 STATUS?

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Background: Up to 50% of patients with psoriatic arthritis (PsA) have associated spinal involvement similar to ankylosing spondylitis (AS). HLA-B27 positivity is lower in PsA compared to other SpA which may affect the disease phenotype.

Objectives: Our aim was to compare axial phenotype in PsA patients with and without HLA-B27 with AS patients.

Methods: A large international collaboration collected BASDAI, CRP, HLA-B27 status and sacroiliac joints (SIJ) and spine radiographs. These were read centrally by two blinded readers using consensus on the modified New York criteria, mSASSS and PASRI. AP spine radiographs were examined for symmetry (score difference ≥ 2 between sides) and morphology of syndesmophytes (typical marginal vs atypical chunky/non-marginal) were compared.

Results: Eight sites contributed 244 (25% HLA-B27+) PsA patients and 198 (75% HLA-B27+) AS patients. Mean BASDAI, mSASSS and PASRI were higher in AS. When categorised by diagnosis and HLA-B27 there were significant differences for age, sex, disease duration, mSASSS, PASRI and syndesmophyte symmetry. Regression analysis, with mSASSS and PASRI as dependent variables revealed significant associations with age, sex, duration of disease, and group (HLA-B27 and diagnosis).

Binary multivariate logistic regression was used to investigate associations of age, sex, HLA-B27 status, diagnosis (PsA v AS) and concomitant diabetes with radiographic features. Sacroiliac symmetry showed no significant associations, whilst syndesmophyte symmetry was associated with increasing age and HLA-B27 positivity. Typical marginal syndesmophytes were associated with age, HLA-B27 status and disease duration: in the cervical spine significant associations with age, sex and HLA-B27 status; in the lumbar spine with age, HLA-B27 and diagnosis. Atypical chunky syndesmophytes were associated only with increasing age and male sex.

Abstract OP0128 – Table 1

	Psoriatic arthritis		Ankylosing spondylitis		Statistic	p (2 way)
	B27- (n=184)	B27+ (n=60)	B27- (n=50)	B27+ (n=148)		
Age, y mean (sd)	55.3 (13.4)	50.5 (13.70)	48.5 (14.1)	48.5 (14.3)	7.7*	0.0001
Males n (%)	106 (58)	38 (63)	32 (64)	114 (77)	13.9+	0.003
Duration of disease, y mean (sd)	11.8 (10.3)	14.2 (11.0)	8.4 (9.5)	13.3 (12.3)	3.3*	0.02
Symmetry at SIJ n (%)	165 (90)	54 (90)	43 (86)	132 (89)	7.1+	Ns
Symmetry in spine n/N (%)	36/62 (58)	21/29 (72)	14/24 (58)	67/84 (80)	9.5+	0.02
Marginal syndesmophytes, n (%)	94 (51)	39 (65)	25 (50)	89 (60)	5.5+	Ns
Atypical syndesmophytes, n (%)	41 (22)	17 (28)	12 (24)	29 (20)	1.9+	Ns

* F statistic from one way analysis of variance. +chi squared statistic

Conclusions: This analysis suggests less difference in radiographic phenotype between AS and axial PsA than previously thought. HLA-B27 negative PsA patients have less severe disease as measured by mSASSS and PASRI with less typical marginal syndesmophytes and symmetry, whilst HLA-B27 positive PsA appears similar to AS.

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OP0129 DRUG SURVIVAL ON ANTI-TNF-ALPHA IN PSORIATIC ARTHRITIS PATIENTS WITH AXIAL INVOLVEMENT AND ANALYSIS OF PREDICTORS

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Background: A few studies have focused on the clinical outcomes in predominant axial Psoriatic Arthritis (PsA) patients treated with anti-TNF- α agents¹⁻³ in real-life settings.

Objectives: Primary endpoint: to evaluate drug survival on anti-TNF- α agents in PsA patients with axial involvement or axial and either polyarticular or oligoarticular peripheral arthritis. Secondary endpoints: to evaluate the presence of any predictor of discontinuation of anti-TNF in PsA patients with axial involvement and to investigate whether peripheral arthritis may impact the discontinuation for ineffectiveness in patients with axial disease.

Methods: 415 biologic therapy-naïve PsA patients (CASPAR criteria) starting a first TNF-inhibitor from January 2010 to December 2016 were screened. Among these, 87 had axial involvement (ASAS criteria) with imaging arm (X-ray or MRI) and were enrolled: 40 with axial and polyarticular peripheral PsA (Axe +Poly PsA), 38 with axial and oligoarticular peripheral PsA (Axe +Oligo PsA) and 9 with only axial disease (Ax-PsA). At baseline and at last available visit or drug discontinuation, we collected age, gender, disease duration, BMI, HLA-B27, nail psoriasis and/or dactylitis, TJC, SJC, ESR, CRP, enthesitis, LEI, DAPSA, BASDAI, ASDAS-CRP, PASI, HAQ, intake of glucocorticoids and DMARDs, anti-TNF therapy discontinuation and reasons of discontinuation. Drug

survival was evaluated by Kaplan-Meier life table method, comparison of survival curves with Log-rank test and baseline predictors of drug discontinuation with Cox regression analysis.

Results: At baseline, Axe +Poly PsA patients had significantly higher peripheral (DAPSA) and axial disease activity (BASDAI, ASDAS-CRP). Stratifying patients by subset of disease, the median of treatment was 51 months (95% IQR 24.87–77.13) for Ax-PsA group, 50 months (95% IQR 28.39–71.61) for Axe +Oligo PsA group, 30 months (95% IQR 11.84–48.15) for Axe +Poly PsA group (figure 1). Axe +Oligo PsA patients had significantly higher persistence on TNFi rather than Axe +Poly PsA patients (log rank test, $p=0.03$). Axe +Poly PsA patients had higher risk of stopping TNFi (Cox regression, HR 3.75) and significantly higher percentage of discontinuation for ineffectiveness rather than for an adverse event (χ^2 test, $p=0.0009$). At last observation, Axe +Poly PsA patients had higher DAPSA but no difference in axial disease activity (t-STUDENT test, Mann-Whitney test).

Abstract OP0129 – Figure 1. Drug survival on TNF-inhibitor in Ax-PsA, Axe+Oligo-PsA and Axe+Poly-PsA patients (Kaplan-Meier life table method, log rank test)

Conclusions: PsA subsets seems to have different features, behaviour, clinical response and drug survival on TNF-inhibitors. Axe +Poly PsA subset seems to be more aggressive and difficult to treat. Anti-TNF- α blockers may perform differently in PsA: a more accurate analysis of the clinical disease subsets may improve our knowledge and better management of PsA in daily practice.

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OP0130 RISK OF CANCER IN PATIENTS WITH PSORIASIS/ PSORIATIC ARTHRITIS: A POPULATION-BASED STUDY IN THE PROVINCE OF BRITISH COLUMBIA

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Background: Psoriasis (PsO) is a relapsing chronic autoimmune disease of the skin. Up to one-third of patients (pts) also develop inflammatory arthritis, known as psoriatic arthritis (PsA). PsO/PsA, like other forms of chronic inflammatory arthritis, are often associated with complications such as cardiovascular disease and infections. However, data on the risk of cancer in pts with PsO/PsA at population level are limited.

Objectives: To assess the risk of cancer in pts with newly diagnosed PsO/PsA at the population level.

Methods: We created a population-based matched retrospective cohort of PsO/PsA pts diagnosed between 1 January 1997 and 31 December 2012 using administrative health data from British Columbia, Canada. We identified all incident cases of PsO/PsA and an equal number of controls matched on sex, age and calendar year. PsO/PsA cases met ≥ 1 of the following: 1 diagnostic code for PsO/PsA by a rheumatologist/dermatologist; ≥ 2 diagnostic codes for PsO/PsA, ≥ 2 months apart in a 2 year period by a non-rheumatologist/dermatologist; or ≥ 1 hospitalisation with diagnostic code for PsO/PsA. We evaluated incident cancers during follow-up from the Cancer Registry in both cohorts. Adjusted risk of cancers