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Only 12% had moderate and 6% had severe arthritis. Similarly, only 10% had moderate and 7% had severe psoriasis. During and following pregnancy, about half of all patients reported no change in either joint or skin activity during and follow pregnancy, with fairly equal numbers reporting improved and worsened arthritis. On the other hand, 42% had improved psoriasis during pregnancy compared to 6% with worsened. There did not appear to be a significant postpartum flare.

Conclusions: Our analysis found that among women with PsA who have tried to become pregnant, 36% experienced infertility, primarily due to PCOS. Compared to pregnancies occurring before the diagnosis of PsA, pregnancies after PsA diagnosis had a lower frequency of live births and a higher frequency of preterm births. Overall, in this cohort of women with mostly mild disease during pregnancy, arthritis pain and psoriasis activity did not appear to substantially worsen during pregnancy.

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### SAT0467 ALL 10-YEAR CARDIOVASCULAR RISK SCORES ARE SIMILAR IN PATIENTS WITH PSORIATIC ARTHRITIS AND **PSORIASIS**

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Background: Psoriatic arthritis (PsA) and Psoriasis (PsO) are associated with higher cardiovascular (CV) risk with higher risk in patients with a severe disease phenotype<sup>1,2</sup>. Long-term CV risk is evaluated using several methods for the

Objectives: The aim of the study was to compare CV risk factors and 10-year CV risk scores between patients with PsA and those with PsO only.

Methods: PsA patients fulfilling the CASPAR criteria and PsO with disease duration <10 years were enrolled consecutively from Rheumatology and Dermatology clinics. Fasting bloods were obtained for glucose, insulin and lipids. Patients underwent thorough physical examination, joint and skin assessments and completed questionnaires on health and quality of life. Four different CV risk scores were calculated: (1) Framingham Coronary risk score (FCS); (2) American College of Cardiology and American Heart Association (ACC/AHA) 10year atherosclerotic cardiovascular disease (ASCVD) algorithm; (3) Systematic Coronary Risk Evaluation (SCORE) algorithm; and (4) QRISK2 (2016).

Results: 232 patients (100 PsA and 132 PsO) were recruited with mean age 52.4 (±10.5) for PsA and 39.7 (±14.4) for PsO. Mean disease duration for PsA was 17.9 (±10) years. There were significantly more patients with hypertension (HTN) and metabolic syndrome in PsA group, and the patients taking DMARDs and/or biologics treatment were also higher compared to PsO. Fasting glucose, insulin, lipids, BMI and waist/hip ratio did not show significant differences. The mean FCS, ASCVD, SCORE and QRISK2 were significantly higher in PsA as compared to PsO (7.6±7.0% vs. 4.7±6.1%, P=0.0002; 8.4±8.2% vs. 4.5±5.8%, P<0.0001; 2.1±2.6% vs. 1.1±1.8%, P=0.0002; 11.2±9.9% vs.  $5.2\pm6.4\%$ , P<0.0001, respectively). However, after adjusting for age and sex, all CV risk scores were similar (P=0.21). Multiple regression analysis revealed that waist/hip ratio significantly correlated with all CV risk scores in both PsA and PsO. Conclusions: We found similar 10-year risk of CVD in PsA and PsO patients using FCS, ASCVD, SCORE and QRISK2. Waist/hip ratio had significant effect on all CV risk scores suggesting that central obesity should be managed appropriately to reduce long-term CVD in psoriatic disease.

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# SAT0468 PRESENCE OF POOR PROGNOSTIC FACTORS MAY PREDICT RESPONSE TO ABATACEPT IN PATIENTS WITH ACTIVE **PSORIATIC ARTHRITIS: RESULTS FROM A POST HOC ANALYSIS FROM A PHASE III STUDY**

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Background: Abatacept, a selective T-cell co-stimulation modulator, significantly increased ACR20 response and had an overall beneficial effect on musculoskeletal symptoms in patients (pts) with active psoriatic arthritis (PsA) in the Phase III Active pSoriaTic athritis RAndomizEd triAl (ASTRAEA, NCT01860976).1 Factors that may predict responses to abatacept were explored in this post hoc analysis. Objectives: To evaluate the relationship between baseline characteristics and abatacept response in a post hoc analysis of ASTRAEA.

Methods: Pts were randomized (1:1) to SC abatacept 125 mg weekly or placebo for 24 weeks in this trial. Pts without >20% improvement in joint counts at Week 16 were switched to open-label abatacept (early escape). ACR20 response rate in pts stratified by baseline variables was investigated in a multivariate analysis and odds ratios (ORs) generated to identify differences in response. Using a cut-off of OR 1.2, indicating pt subgroups in whom abatacept appeared to have a meaningful treatment benefit, baseline variables were further investigated in a univariate analysis and estimated differences calculated.

Results: Of 424 pts enrolled, 213 received abatacept and 211 placebo. In abatacept-treated pts, the multivariate model showed a difference in ACR20 response (OR >1.2) for baseline CRP (>upper limit of normal [ULN] vs <ULN: OR 1.346 [95% CI 0.668, 2.712]), DAS28 (CRP) (>5.1 vs <5.1; 1.489 [0.782, 2.836]), dactylitis (>0 vs 0; 1.372 [0.708, 2.659]), and median baseline erosions  $(\ge 3 \text{ vs} < 3; 1.924 [1.032, 3.587])$ . In placebo-treated pts, the OR was > 1.2 for dactylitis only (1.406 [0.619, 3.193]). These factors, which have been identified previously as indicating poor prognosis in PsA, were balanced between treatment arms at baseline. In the univariate model by poor prognostic factors, the differences in ACR20 response rates with abatacept treatment vs placebo in distinct subgroups were numerically greater in pts who were positive for these prognostic factors at baseline than in those who were not (Figure).

Figure, Univariate Analysis of ACR20 Response Rate by Poor Prognostic Factors at Week 24

	Responders, n/N (%)			
	Abatacept	Placebo	Estimated differ	ence (95% CI)
All patients	84/213 (39.4)	47/211 (22.3)		17.2 (8.7, 25.6)
CRP = ULN	19/66 (28.8)	16/78 (20.5)		8.3 (-5.9, 22.4)
CRP >ULN	64/146 (43.8)	31/131 (23.7)		20.2 (9.3, 31.0)
CRP = ULN and baseline erosion score <3	9/43 (20.9)	10/44 (22.7) —	-	-2.4 (-19.1, 14.3)
CRP ≤ULN and baseline erosion score ≥3	9/22 (40.9)	4/30 (13.3)		25.0 (2.5, 47.5)
CRP >ULN and baseline erosion score <3	28/72 (38.9)	16/69 (23.2)		12.9 (-2.1, 27.9)
CRP >ULN and baseline erosion score ≥3	32/68 (47.1)	14/57 (24.6)	_	24.5 (8.8, 40.1)
DAS28 (CRP) ≤5.1	38/111 (34.2)	26/121 (21.5)		12.5 (1.2, 23.8)
DAS28 (CRP) >5.1	42/99 (42.4)	21/87 (24.1)		19.0 (6.0, 31.9)
No baseline dactylitis digits	46/137 (33.6)	29/144 (20.1)		13.2 (3.0, 23.3)
With baseline dactylitis digits	32/66 (48.5)	14/55 (25.5)		21.5 (5.0, 37.9)
Baseline erosion score <3	37/115 (32.2)	26/114 (22.8)		8.2 (-2.9, 19.3)
Baseline erosion score ≥3	42/91 (46.2)	18/88 (20.5)		26.3 (13.2, 39.3)

ULN-upper limit of normal

Conclusions: These findings identified subgroups of pts with PsA with certain baseline characteristics in whom abatacept is most likely to be effective. The predictive factors identified are aligned with poor prognostic factors in the EULAR and Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) guidelines, 2,3 and may indicate pts with the highest unmet medical need.

## References:

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### SAT0469 | INTEGRATED EFFICACY ANALYSIS OF TOFACITINIB, AN ORAL JANUS KINASE INHIBITOR, IN PATIENTS WITH ACTIVE **PSORIATIC ARTHRITIS**

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Background: Tofacitinib is an oral Janus kinase inhibitor under investigation for treatment of psoriatic arthritis (PsA).