Years of TNFi treatment	0	1	2	3	4	5	6	7	8	9
LowerMedianFatigue (n)	430	387	337	283	238	166	94	47	28	19
HigherMedianFatigue (n)	450	410	341	273	216	155	92	43	28	16

Conclusions: Fatigue remains a dominating symptom after TNFi treatment, and is associated with higher baseline disease activity, more comorbidities, smoking, higher pain and HAQ scores, and increased risk of TNFi treatment discontinuation in a cohort of Danish patients with PsA. The agreement between ACR responses and VASfatigue responses is weak to moderate suggesting heterogeneity between experienced fatigue and joint inflammation.

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THU0333 EFFICACY AND SAFETY OF IXEKIZUMAB IN PATIENTS WITH ACTIVE PSORIATIC ARTHRITIS: THREE YEAR RESULTS FROM A PHASE 3 STUDY (SPIRIT-P1)

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Background: Ixekizumab (IXE) is a high affinity monoclonal antibody that selectively targets interleukin-17A. IXE, every 4 (Q4W) or 2 (Q2W) weeks, was superior to placebo (PBO) in improving the signs and symptoms of psoriatic arthritis (PsA) at Week 24 in biologic-naïve patients (pts).

Objectives: To determine the efficacy and safety of IXE treatment up to 3 years in biologic-naïve pts with PsA.

Methods: In SPIRIT-P1 (NCT01695239), 381 pts entered the extension period (EP; Weeks 24–156). Pts failing to demonstrate $\geq 20\%$ improvement in both tender and swollen joint counts at Week 32, or any subsequent visit, were discontinued (mandatory discontinuation criteria). Ad-hoc efficacy data are presented for intent-to-treat (ITT) pts initially randomised to IXE at Week 0. Modified non-responder imputation (mNRI; missing data treated as non-response for pts discontinued due to lack of efficacy or adverse events [AEs]; multiple imputation (MI) for all other missing data) was applied to categorical measures. Modified baseline observation carried forward (mBOCF) was applied to continuous efficacy measures. Safety assessments are presented for all pts who entered the EP; baseline was the first IXE dose during the EP.

Results: Of the 210 pts initially randomised to IXE at Week 0 (ITT), 125 (60%) pts completed 156 weeks of treatment; 27 pts discontinued due to AEs, and 26 pts met the mandatory discontinuation criteria. Efficacy results are summarised (table 1). Improvements in ACR (American College of Rheumatology) and PASI (Psoriasis Area and Severity Index) responses, resolution in enthesitis and dactylitis, and improvements from baseline HAQ-DI (Health Assessment Questionnaire Disability Index), enthesitis, and dactylitis persisted up to Week 156. Safety

assessments for all pts who entered the EP are summarised (table 2). Frequencies of treatment-emergent AEs (TEAEs) were similar between IXE Q4W and Q2W. The majority of TEAEs were mild or moderate in severity; serious AEs occurred in 47 pts.

Abstract THU0333 – Table 1. Efficacy Overview at Week 156 (ITT Population)

	IXE Q4W (n=107)	IXE Q2W (n=103)
Responder Rates (n/Nx [%]): mNRI		
ACR20	74/107 (69%)	64/103 (62%)
ACR50	55/107 (51%)	58/103 (56%)
ACR70	35/107 (33%)	45/102 (44%)
PASI75 ^a	46/73 (63%)	41/59 (69%)
PASI90 ^a	37/73 (51%)	38/59 (65%)
PASI100 ^a	32/73 (44%)	36/59 (61%)
LEI= ^b	32/68 (47%)	23/57 (40%)
LDI-B= ^c	23/37 (62%)	17/25 (68%)
Mean Change from Baseline (SD): mBOCF		
HAQ-DI	-0.4 (0.6)	-0.5 (0.6)
LEI ^b	-1.7 (1.8)	-1.7 (1.7)
LDI-B ^c	-51.2 (91.0)	-55.4 (61.3)

LEI=Leeds Enthesitis Index; LDI-B=Leeds Dactylitis Index-Basic; Nx=pts with non-missing data; n=responders. With mNRI, missing data were treated as non-response for pts discontinued due to lack of efficacy or AEs. All other missing data were imputed with MI. With MI analysis, 32 patients were considered ACR20 responders. ^aPts with psoriatic lesions $\geq 3\%$ of body surface area at baseline. ^bPts with LEI >0 at baseline. ^cPts with LDI-B >0 at baseline.

Abstract THU0333 – Table 2. Safety Outcome Measures (Weeks 24–156)

	Total IXE Q4W (N=191)	Total IXE Q2W (N=190)
TEAEs	146 (76%)	144 (76%)
Serious AEs	28 (15%)	19 (10%)
Serious Infections	5 (3%)	1 (<1%)
Discontinued due to AE	16 (8%)	21 (11%)
Death	1* (<1%)	0
Infections	92 (48%)	94 (49%)
Injection-Site Reactions	21 (11%)	23 (12%)
Hypersensitivities	8 (4%)	11 (6%)

n=pts with ≥ 1 designated AE. Data presented as n (%). For safety analyses, baseline was defined as the time of first study drug injection during the EP (Weeks 24–156). *Pt experienced a cerebrocardiovascular accident.

Conclusions: In pts treated with IXE, improvements in the signs and symptoms of PsA persisted up to 3 years. No unexpected safety signals were observed, and the safety profile was consistent with previous studies of IXE.

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SLE, Sjögren's and APS – clinical aspects (other than treatment)

THU0334 PATTERNS OF ASPIRIN USE IN SLE PREGNANCIES WITHIN A MULTINATIONAL INCEPTION COHORT AND RELATIONSHIP TO PREECLAMPSIA RISK FACTORS

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Background: Aspirin reduces the risk of preeclampsia in pregnancies at high risk, and is recommended in pregnant women with ≥ 1 risk factors for preeclampsia, including systemic lupus erythematosus (SLE).

Objectives: To assess the prevalence of aspirin use in SLE pregnancies within a multinational inception cohort and compare aspirin use among those with and without additional preeclampsia risk factors.

Methods: Premenopausal women aged 18–45 enrolled in the Systemic Lupus International Collaborating Clinics (SLICC) Registry (2000–2017) within 15

months of SLE onset were evaluated with yearly visits to update co-morbidities, pregnancy status, and medications. Study visits with a current pregnancy were assessed for aspirin use and preeclampsia risk factors. Aspirin use was compared over time and among those with and without traditional risk factors for preeclampsia (i.e. hypertension, renal disease, diabetes, nulliparity, BMI $\geq$ 35, age $>$ 40), as well as known disease-specific risk factors (i.e. antiphospholipid antibodies [+aPL], nephritis).

Results: We identified 297 women who had 479 pregnancies over the study period. Mean age during pregnancy was 31 (SD 4.9) years and 30% were nulliparous. Half of the pregnancies experienced $\geq$ 1 traditional preeclampsia risk factors in addition to SLE, while a third had +aPL. We observed aspirin use in 121/475 (25% of pregnancies (95% CI 22,29) versus 22% (95%CI 19,25) of visits before and after pregnancy among the same women. Aspirin use was similar among pregnancies with and without $\geq$ 1 traditional risk factor for preeclampsia [25% (95%CI 20,31) versus 26% (95%CI 21,32)], while we observed a higher prevalence of aspirin use in those with +aPL (38%, 95% CI 24,55) versus those without (23%, 95% CI 15,34). There was a significant difference in aspirin use based on maternal race/ethnicity, with 67/205 (33%, 95% CI 26,39) aspirin use in Caucasians versus 9/88 (10%, 95% CI 5,18) for black women. Prevalence of aspirin use in pregnancy varied across regions (12% $>$ 37%), and did not increase over time.

Abstract THU0334 – Table 1. Prevalence of preeclampsia (PE) risk factors among pregnant SLE visits and prevalence of ASA use among women with and without PE risk factors

Risk factor	Overall prevalence n=475 n (%)	Prevalence of ASA use (%; 95% CI)	
		With risk factor	Without risk factor
Age $>$ 40	14 (3)	2/14 (14%, 4–40)	119/461 (26%, 22–30)
BMI $\geq$ 35	33/437 ^b	8/33 (24%, 13–41)	113/404 (28%, 24–33)
Nulliparous	136/461 ³⁰	37/136 (27%, 20–35)	80/325 (25%, 20–30)
Renal disease	83 (17)	17/83 (20%, 13–30)	104/392 (27%, 22–31)
Nephritis	53 (11)	11/53 (21%, 12–23)	109/422 (26%, 22–30)
Hypertension	79 (17)	24/79 (30%, 21–41)	97/396 (24%, 21–29)
Diabetes	2 (0)	0/2 (0%, 0–1)	121/473 (26%, 22–30)
$\geq$ 1 traditional PE risk factor	234 (49)	58/234 (25%, 20–31)	63/241 (26%, 21–32)
aPL +	34/104 ³³	13/34 (38%, 24–55)	16/70 (23%, 15–34)

Conclusions: In this cohort including 479 SLE pregnancies, most pregnant women were not on aspirin and half had preeclampsia risk factors in addition to SLE. It is possible that aspirin was introduced at/or following the study visit when the pregnancy was documented, highlighting the importance of the treating rheumatologist in reviewing aspirin use and initiating it in pregnant SLE women. Our findings suggest black SLE women as a potentially vulnerable group during pregnancy, having the lowest prevalence of aspirin use.

Disclosure of Interest: None declared

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THU0335 FACTORS ASSOCIATED WITH DEVELOPMENT AND MORTALITY OF PULMONARY HYPERTENSION IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

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Background: Pulmonary hypertension (PH) is a major cause of death in patients with systemic lupus erythematosus (SLE). In recent years, SLE with PH has become more common in the past few decades, and novel therapies has been developed to improve the prognosis of PH in SLE patients. Therefore, it is necessary to investigate further to identify serological and clinical factors for the development and mortality of PH in SLE patients.

Objectives: This study aims to estimate the prevalence of PH in SLE patients and identify the factors associated with the development of and mortality from PH in SLE patients.

Methods: We conducted a prospective study of SLE patients with fulfilling the American College of Rheumatology criteria (ACR) in a single tertiary centre from February 1998 to December 2013. PH was defined as a systolic pulmonary

arterial pressure (sPAP) $\geq$ 30 mmHg at rest on transthoracic echocardiography (TTE). We assessed potential associated factors contributing to the development and mortality of PH in SLE patients using univariate and multivariable logistic regression models.

Results: Of 1110 patients with SLE, 48 patients were identified to have PH. Multivariable analysis indicated that pleuritis or pericarditis (odds ratio (OR)=4.62, 95% confidence interval (CI)=2.46 to 8.70, $p<$ 0.01), anti-RNP antibody (OR=2.42, 95% CI=1.21 to 4.82, $p=$ 0.01), interstitial lung disease (ILD) (OR=8.34, 95% CI=2.21 to 31.54, $p<$ 0.01), and cerebro-cardiovascular disease (OR=13.37, 95% CI=3.56 to 50.21, $p<$ 0.01) were independently associated with the development of PH in SLE. Subgroup analysis among patients with PH demonstrated that there were no statistically significant factors associated with PH mortality in SLE.

Abstract THU0335 – Table 1. Factors associated with pulmonary hypertension development in systemic lupus erythematosus

	Univariate		Multivariable	
	OR (95% CI)	p-value	OR (95% CI)	p-value
Sex: female	1.92 (0.46 to 8.07)	0.37	4.44 (0.54 to 36.76)	0.17
Age at diagnosis of SLE	0.99 (0.97 to 1.02)	0.59	0.99 (0.96 to 1.02)	0.49
Disease duration ^a	1.00 (1.00 to 1.00)	0.87	1.00 (0.99 to 1.00)	0.48
Ever smoker	0.52 (0.18 to 1.47)	0.22		
Pleuritis or pericarditis	4.60 (2.55 to 8.29)	$<$ 0.01	4.62 (2.46 to 8.70)	$<$ 0.01
Raynaud phenomenon	1.48 (0.79 to 2.77)	0.22		
Anti-Sm	1.65 (0.81 to 3.39)	0.17	0.89 (0.38 to 2.11)	0.75
Anti-RNP	2.48 (1.36 to 4.51)	$<$ 0.01	2.42 (1.21 to 4.82)	0.01
ACL	1.10 (0.55 to 2.19)	0.79		
LAC	0.83 (0.32 to 2.12)	0.69		
SLEDAI score at enrollment	1.03 (0.96 to 1.09)	0.42		
ILD (pulmonary, pleural fibrosis)	9.56 (2.89 to 31.69)	$<$ 0.01	8.34 (2.21 to 31.54)	$<$ 0.01
Cerebro-cardiovascular disease	7.34 (2.30 to 23.41)	$<$ 0.01	13.37 (3.56 to 50.21)	$<$ 0.01

OR: odds ratio; CI: confidence interval; SLE: systemic lupus erythematosus; Anti-Sm: Anti-Smith; Anti-RNP: Anti-ribonucleoprotein; ILD: interstitial lung disease.

^aFrom diagnosis of SLE to last follow-up.

Conclusions: The prevalence of PH was 4.3% in our cohort. There were significant associations with pleuritis or pericarditis, ILD, cerebro-cardiovascular disease, and anti-RNP antibody in SLE, which may contribute to the development of PH. However, there were no statistically significant factors correlating PH mortality in SLE.

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THU0336 PREDICTORS OF SUBCLINICAL CAROTID ATHEROMATOSIS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: RELEVANCE OF ACTIVITY, DAMAGE AND SEVERITY INDEXES

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Background: The prevalence of subclinical atheromatosis in patients with systemic lupus erythematosus (SLE) is double that observed in the general population. The mechanisms of this accelerated atherosclerosis are unknown, but they may include factors related to the disease, as well as the interaction of these with classic cardiovascular risk factors (CVRF).

Objectives: We analyse wich predictors of subclinical carotid atheromatosis exist in a large series of patients with SLE, with special emphasis on the role of the activity, damage and severity indexes.

Methods: Cross-sectional study that included 276 patients with SLE. Lipid serum levels, autoimmunity profile and the activity (SLEDAI), severity (Katz) and damage (SLICC) indexes were determined. The thickness of the carotid intima-media (cIMT) and the presence of plaques were determined by radiofrequency US. The cardiovascular risk was estimated through SCORE. Multivariate regression analysis was performed to assess the relationship of the indexes with CVRF, cIMT and