vs 1.68%) and incidence (0.96 vs 0.36 per 100 patient-years) of SS than male patients. Compared with other age groups, patients with RA aged 30–49 years had the highest prevalence (3.80%) and incidence (0.77 per 100 patient-years) of SS (Table 1). Compared with patients with RA only, those with both SS and RA were more likely to be female (92% vs 76%), had higher Charlson Comorbidity Index and lower CDAI scores, and were more likely to have prior use of biologic/targeted synthetic DMARDs (30% vs 10%) and conventional DMARDs (48% vs 18%) (Table 2).

Conclusion: This study estimated the prevalence and incidence of SS among patients with RA in real-world community practice settings, and provided insights on clinical characteristics of these patients. Patients with both SS and RA have less joint disease activity and greater DMARD exposure than those with RA only. The findings underscore the complexity of SS secondary to RA and highlight the important role of epidemiological research in understanding this condition.

*b/tsDMARDs: abatacept, infliximab, etanercept, adalimumab, certolizumab pegol, golimumab, tocilizumab, rituximab and tofacitinib; cDMARD: MTX, sulfasalazine, azathioprine, tacrolimus, gold thiomalate, leflunomide, aurothioglucose, auranofin, cyclosporine, penicillamine, cyclophosphamide and hydroxychloroquine b=biologic; c=conventional; IQR=interquartile range; RAPID3=Routine Assessment of Patient Index Data 3; SS=Sjögren's syndrome; ts=targeted synthetic

Acknowledgement: Medical writing: Fiona Boswell, Caudex; funding: Bristol-Myers Squibb

Table 1. Prevalence and incidence of SS in patients with RA

	Patients with RA, n	Prevalent SS patients, n	Prevalence, %, crude (standardised*)	Incident SS patients, n	IR per 100 PY, crude (standardised*)
Total	53,156	2451	4.61 (3.48)	1450	0.81 (0.66)
Sex					
Female	40,843	2263	5.54 (5.23)	1331	0.98 (0.96)
Male	12,312	188	1.53 (1.68)	119	0.28 (0.36)
Age, years					
18–29	1427	51	3.57 (2.70)	36	0.74 (0.57)
30–49	9951	512	5.15 (3.80)	333	1.00 (0.77)
50–69	27,053	1327	4.91 (3.76)	805	0.89 (0.70)
≥70	14,725	561	3.81 (3.22)	276	0.56 (0.46)

*Age and sex-standardised to the 2017 USA population; one patient was excluded from the calculation due to lack of information on sex

IR=incidence rate; PY=patient-years; SS=Sjögren's syndrome

Table 2. Characteristics of patients with RA and SS vs RA only

Characteristic	RA and SS	RA only
n	2451	50,705
Age, years		
n	2451	50,705
Median (IQR)	63.00 (15.00)	62.00 (20.00)
Female, n (%)	2263 (92.33)	38,580 (76.09)
Charlson Comorbidity Index score		
n	2451	50,705
Median (IQR)	1.00 (1.00)	0.00 (0.00)
BMI, kg/m²		
n	1571	10,850
Median (IQR)	28.13 (8.43)	29.09 (8.76)
CDAI score		
n	284	1262
Median (IQR)	11.75 (16.50)	16.00 (17.00)
RAPID3 score		
n	127	875
Median (IQR)	9.20 (12.60)	12.30 (11.20)
Comorbidities, n (%)		
Vasculitis	16 (0.65)	34 (0.07)
Lymphoma	5 (0.20)	11 (0.02)
Neuropathy	65 (2.65)	197 (0.39)
Pulmonary fibrosis	16 (0.65)	26 (0.05)
Pulmonary nodules	9 (0.37)	28 (0.06)
Prior RA treatment, n (%)*		
0	997 (40.68)	38,317 (75.57)
1	753 (30.72)	9037 (17.82)
≥2	701 (28.60)	3351 (6.61)
Prior cDMARD, n (%)*	1173 (47.86)	9160 (18.07)
Prior b/tsDMARD, n (%)*	731 (29.82)	5067 (9.99)

Disclosure of Interests: Leticia Ferri Shareholder of: Bristol-Myers Squibb, Employee of: Bristol-Myers Squibb, Ying Bao Employee of: Bristol-Myers Squibb, Sonie Lama Employee of: Bristol-Myers Squibb, Varshini Rajagopalan Consultant for: Bristol-Myers Squibb, Evo Alemão Shareholder of: Bristol-Myers Squibb, Employee of: Bristol-Myers Squibb

DOI: 10.1136/annrheumdis-2019-eular.2130

AB0510

LUNG ULTRASOUND OF PLEURAL IRREGULARITIES IN SUB-CLINICAL PRIMARY SJÖGREN'S SYNDROME- LUNG INVOLVEMENT: A SINGLE CENTRE EXPERIENCE

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Background: Ultrasound of Pleural Irregularities (PI-US) has recently been suggested as a useful tool for the diagnosis and quantification of severity in connective tissue diseases (CTD)-related lung involvement. However, no data are available regarding its role in the sub-clinical phase of primary Sjögren's syndrome (pSS)-related lung involvement.

Objectives: Aim of this study was to describe the role of lung ultrasound analyzing pleural irregularities in asymptomatic pSS-patients in order to early detect lung abnormalities/alterations.

Methods: pSS patients regularly followed-up at our Sjögren's Clinic and asymptomatic for dyspnea and cough, undergoing to CT or HRCT exam for lymphoproliferative and/or neoplastic screening, were included in the study. Demographic, clinical, biological and serological data were collected. PI-US was performed by a single operator using a MyLab ClassC (Esaote), 13-18 MHz, 5 cm linear probe. PI was defined as the loss of normal hyperechoic linear pleural contour (score 0-2: normal, minimal and major changes at each intercostal space). PI-US total score represented the sum of partial scores assigned to 6 lung fields (2 for the anterior, 2 for postero-superior and 2 for postero-inferior chest surface). CT-abnormal findings, distinguishing typical (interstitial pattern) from atypical lung alterations (non specific findings), were analyzed by an expert radiologist.

Results: 24 pSS patients (AECG criteria), 20 F:4 M, mean age =58 ±12.2 yrs, mean follow-up duration 8.6±12.2 yrs, were included in the study. All patients were positive for ANA, 21/24 for anti-Ro/SSA, 15/24 for Rheumatoid Factor (RF) and 6 of them for cryoglobulins.

Four patients (16.67%) had a previous history of pSS-related lymphoproliferative disorder.

None of the included patients reported cough or dyspnoea and the thoracic examination did not arise any abnormalities suggestive for lung diseases.

The mean PI-US total and postero-inferior partial score resulted 22.75 ±19.72 and 8.29±8.60 respectively. CT/HRCT resulted normal in 9/24 patients (37.5%) and showed abnormal findings in 15/24 (62.5%). The latter consisted of non- Interstitial Lung Disease (ILD) alterations in 13/15 cases (i.e. 13/13 fibrotic striae and/or micro/macronodularities, 5/13 disventilatory striae and/or medium lobe syndrome, 3/13 bronchiectasias and/or bronchioloelectasias and 3/13 thin-walled cysts/atypical emphysema). In 2/15 patients a new diagnosis of Interstitial Lung Disease (ILD) was made with patients presenting a typical NSIP-pattern. Both the mean PI-US total score and the postero-inferior partial score resulted significantly higher in patients with abnormal CT/HRCT compared to those with normal CT findings (p =0.003 and p= 0.001 respectively). On the contrary, PI-US total and partial scores were not significantly different between ILD and non-ILD pSS patients (p= 0.103).

Conclusion: this study highlights the potential usefulness of PI-US as a sensitive, non invasive tool for the diagnosis of sub-clinical early lung alterations in pSS.

Disclosure of Interests: Francesco Ferro: None declared, Alessandra Bulleri: None declared, Elena Elefante: None declared, Alessandra Tripoli: None declared, Marta Mosca Paid instructor for: GlaxoSmithKline, Lilly, UCB, Chiara Baldini: None declared

DOI: 10.1136/annrheumdis-2019-eular.5973