about the association between systemic sclerosis (SSc) and osteoporosis (OP) are controversial and scarce about the risk factors of OP in SSc.  $^{\rm 1,2}$ 

**Objectives:** The aim of the study was to determine the OP frequency in SSc and assess its risk factors.

**Methods:** In a prospective cohort of SSc patients, usual risk factors of OP were assessed, as well as SSc organ involvements: pulmonary, cardiac, skin and renal involvements and SSc treatments. All patients underwent dual energy X-ray absorptiometry: bone mineral density (BMD) was measured at the lumbar spine (LS), femoral neck (FN) and total hip (TH). Osteoporosis was defined as having a T-score inferior to -2.5.

Results: Forty-eight patients were included with a median age of 60 years, 27-81 41 women (85.4%), with a diffuse cutaneous subtype in 13 cases (27.1%) and illness duration of 12.6 years (0.3-41.1). Average BMD was 0.98±0.21 in LS, 0.84 ±0.13 in FN and 0.86±0.15 in TH. OP was found in 19 patients (40%). Among patients with OP, an associated auto-immune disorder was found in 13 patients (68.4%) versus 10 (34.5%) in the non-OP group (p=0.04), digestive sub-occlusion in 4 patients (21% versus 0 patients, p=0.02), and chronic liver disease in 6 patients (31.6%) versus 2 (6.9%, p=0.04). Respiratory explorations found a DLCO of 12.7 (6.8-17.2) versus 15.6 (9.6-32.2) (p=0.007), a CVF of 2.47 (1.1-4) versus 3 (1.7-5.9) (p=0.03). DAS28-CRP was significantly higher (2.29 (1,53-4.46) in the OP group versus 1.86 (0-3.8) in the non-OP group, p=0.02); with a higher frequency of hand X-ray erosions (6 OP patients (31.6%) versus 2 (6.9%), p=0.04). No difference was found in Rodnan score, SSc subtype, illness duration, malnutrition, treatments (proton pump inhibitors, cyclophosphamide, steroids), autoantibodies profile; nor with the usual OP risk factors: age, smoking, personal or family history of OP fractures, alcohol consumption, weight, BMI, long term steroid treatment, early menopause and thyroid disease. No difference in serum vitamin D. calcium, thyroid hormones and C-reactive protein levels was found between OP and non-OP groups.

**Conclusions:** Osteoporosis was associated with SSc-related factors such as: articular, digestive and respiratory involvements, and associated auto-immune diseases. Usual OP risk factors where not significantly different between osteoporotic SSc patients and non-osteoporotic patients.

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# Disclosure of Interest: None declared

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# AB0803 A REAL LIFE EXPERIENCE ON THE EFFICACY AND SAFETY OF MYCOPHENOLATE MOFETIL IN CONNECTIVE TISSUE DISORDER ASSOCIATED INTERSTITIAL LUNG DISEASE – A RETROSPECTIVE STUDY

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**Background:** Interstitial lung disease(ILD) is one of the common extra articular manifestations of various connective tissue disorders(CTD). We don't have enough evidence on the drugs used, except for ILD in systemic sclerosis and the results of the same has been extrapolated to other diseases. Mycophenolate mofetil(MMF) has antiproliferative and anti fibrotic action in addition to anti inflammatory property and hence we wanted to study the efficacy and safety of MMF in our diverse cohort of CTD-ILD.

**Objectives:** To study the efficacy and safety of mycophenolate mofetil (MMF) in a diverse cohort of patients with connective tissue disease(CTD) associated interstitial lung disease(ILD).

**Methods:** This is a retrospective observational study with records of outpatients with CTD associated ILD were screened from <sup>Oct 2014</sup> to .<sup>Dec 2017</sup> Among them, patients with imaging (HRCT chest) documented ILD were included. All patients underwent detailed clinical assessment, serological investigations (baseline blood test, erythrocyte sedimentation rate, C – reactive protein, rheumatoid factor, ACPA Ab, antinuclear antibody, ANA profile, complements), urine routine, pulmonary function test(PFT), HRCT chest and echocardiogram. The response of ILD to treatment(follow up of 2 years) was assessed clinically, radiologically and by PFT.

Results: 54 patients were identified with CTD-ILD of which 33 patients were on MMF. 13 patients were diagnosed with MCTD. 12 with RA. 3 with diffuse cutaneous systemic sclerosis, 2 with SSc/myositis overlap, 1 with primary sjogren's syndrome, 1 with SLE/Sjogren's overlap and 1 with lung dominant CTD(Scl 70+ve). The cohort was divided in to 3 groups - MCTD, RA and others (SSc predominant). Among patients with MCTD, 10 had NSIP pattern of ILD, 3 UIP. In RA, 7 had NSIP and 5 UIP and among others 7 NSIP and 1 UIP. The mean FEV1 and FVC values over 2 years and the treatment response has been discussed in table 1 and Figure 1. FEV1 and FVC had high positive correlations (Pearson correlation, p<0.05) with treatment for all groups of diseases. The values go together in the positive direction with treatment. Among the groups, all patients who improved had NSIP pattern and all who worsened had UIP. Though there were numerical differences in the mean values of FEV1 and FVC between two groups (NSIP and UIP), it was not statistically significant (paired 't' test, p>0.05). There was no significant difference in FEV1 and FVC values with treatment between the three groups (one way ANOVA test).





Abstract AB0803 - Figure 1

**Conclusions:** Treatment with MMF over a median duration of 24 months stabilised the ILD in majority. MMF appears to be efficacious, safe and well tolerated in our diverse cohort of CTD-ILD and needs to be evaluated further in prospective studies with a bigger sample size.

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#### Disclosure of Interest: None declared

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### Abstract AB0803 - Table 1

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Variables	Mean FEV1 (%)				Mean FVC (%)				ILD after treatment (PFT and Radiological)		
	Baseline	At	At	At	Baseline	At	At	At	Improved	Stable	Worsened
		6 months	12 months	24 months		6 months	12 months	24 months			
MCTD	65	65	67	68	62	63	64	65	4	8	1
RA	60	62	63	64	59	60	61	62	4	7	1
OTHERS	62	65	65	65	64	65	65	65	0	7	1