physician's assessment of ulcers, 7/patient's evaluation of changes in ulcers, 8/ physician's evaluation of changes in ulcers 9/number of digital ulcers. The patients were evaluated after the drug infusion and 1 year later. Clinical and demographic characteristics of patients treated with vasoactive drugs are presented in table 1.

Results: Table 1. Clinical and demographic characteristics of patients with digital ulcers

	Ilomedin®	Vazaprostan®
N	22	20
Females (%)	100	90
Age	46.7 (±9.9)	41.9 (±12.9)
Diffuse SSc (%)	36.4	14.3
SSc duration (yy)	12.9	10.8
N of ulcers (baseline)	3.3 (±2.2)	1.7 (±1.03)

*Mean ±SD

Results: The results obtained show improvement of ischaemic lesions in both groups.

The comparison of results speaks in favour of Vasoprostan vs Ilomedin in terms of significant pain reduction, table 2.

Abstract SAT0503 – Table 2. Comparative characteristics of scores and values from different assessment tools in groups treated with Vasoprostan and Ilomedin (post-treatment).

	Ilomedin®	Vazaprostan®
HAQ-SSc	1.49	1.18
HAQ	1.22	1.18
Cochin score	16.38	22
VAS	46.61*	27.12*
Physicians Global assessment	3.8	3.5
patients Global assessment	4.61	3.75
Ulcers N	3.07	1.16

*p<0.05

Conclusions: It should be noted that certain degree of positive dynamics in healing of ulcers was established by practically all assessment tools. VAS looks like the most sensitive tool in evaluation of pain. Of importance is the fact, that despite marked ischaemic lesions and digital ulcers, the Cochin score reflecting hand functional capacity did not exceed average values at baseline and did not change significantly post-treatment.

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SAT0504 THE ASSOCIATION OF MYOSITIS SPECIFIC ANTIBODIES IN PATIENTS WITH INFLAMMATORY MYOSITIS: PRELIMINARY DATA IN INDIAN PATIENTS

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Background: Studies in Autoimmune Inflammatory Myositis (AIM) have shown that certain antibodies have a role in the diagnosis and prognosis of patients with myositis. This ongoing study presents the preliminary data of 48 patients of Indian AIM.

Abstract SAT0504 – Table 1. Myositis Antibody distribution according to clinical features.

	Proximal muscle weakness (%) (n=46)	Pharyngeal muscle weakness (%) (n=17)	Rash (%) (n=28)	Mechanic hands (%) (n=5)	Raynaud's (%) (n=11)	Digital Ulcer (%) (n=2)	Arthritis (%) (n=13)	ILD (%) (n=11)	Total (n=48)
Myositis Specific Antibodies									
MI-2	6 (13)	2 (11.7)	6 (21.4)	0	1 (9)	0	1 (7.6)	0	6 (12.5)
JO-1	4 (8.6)	1 (5.8)	3 (10.7)	3 (60)	2 (18.1)	0	3 (23)	4 (36.3)	5 (10.4)
NON JO-1 ARS (PL-7)	1 (2.1)	0	2 (7.1)		2 (18.1)	0	0	1 (9)	2 (4.1)
SRP	2 (4.3)	0	0	0	0	0	0	1 (9)	2 (4.1)
MDA-5	0	0	1 (3.5)	1 (20)	1 (9)	1 (50)	1 (7.6)	0	1 (2)
NXP2	1 (2.1)	1 (5.8)	1 (3.5)	0	0	0	0	0	1 (2)
TIF1γ	1 (2.1)	0	0	0	0	0	0	1 (9)	1 (2)
SAE1	0	0	0	0	0	0	0	0	0
SAE2	0	0	0	0	0	0	0	0	0
Myositis Associated Antibodies									
RO52	14 (30.4)	4 (23.5)	10 (35.7)	4 (80)	6 (54.5)	1 (50)	3 (23)	5 (45.4)	16 (33.3)
PM SCL	1 (2.1)	0	0	0	0	0	0	1 (9)	1 (2)
RNP	2 (4.3)	1 (5.8)	1 (3.5)	0	2 (18.1)	1 (50)	2 (15.3)	2 (18.1)	2 (4.1)
Ku	0	0	0	0	0	0	0	0	0

Objectives: To study the prevalence of Myositis specific and Myositis Associated antibodies (MSA and MAA respectively) in Indian patients with AIM and to correlate these antibodies with clinical features.

Methods: All consecutive patients with Inflammatory myositis (satisfying the Bohan and Peter criteria, 1975 attending the Rheumatology and Clinical Immunology department of Medanta hospital from November 2016 to October 2017 were included prospectively and divided into groups as Dermatomyositis (DM), Poly-myositis (PM), CTD associated myositis (CTD-M), Cancer associated myositis (CAM) and Juvenile Myositis (JM). Their clinical data and sera were collected after obtaining informed consent. Sera was analysed for IgG antibodies against Jo-1, PL-7, PL-12, EJ, SRP, Mi-2, MDA-5, TIF1γ, SAE1, SAE2, NXP2 and SSA/ R052kD using the microELISA technique (BlueDriver Dot Myositis¹² SAE IgG kit). Their ENA was also recorded (Blue DriverQuantrix-ANA25 Screen IgG kit d-tek). Results were read by the BlueScan scanner and value ≥10 were considered positive. The study was approved by the Ethics committee of Medanta hospital.

Results: There were 48 patients in the cohort (M:F=12:36) with the mean age of 41.3 years and a median disease duration of 30 months. Nineteen of them were DM, 19 were PM, 5 were CTD-M, 2 were CAM and 3 were JM. 58.3% were ANA positive and MSA were positive in 37.5% of the cohort, MSA being mutually exclusive. Antibodies against Mi-2 were present in 6 patients (12.5%), Jo-1 antibodies in 5 (10.4%), 2 (4.1%) patients each had PL-7 and SRP antibodies. One patient (2%) each had MDA-5, NXP2 and TIF1γ antibodies. MAAs were seen in 39.5% of the cohort with antibodies against Ro, RNP and PM- Scl seen in 16 (33.3%), 2 (4.1%) and 1 (2%) respectively. Mi-2 antibodies were seen only in DM and JM group. The lone patient who had MDA-5 antibody had amyopathic DM. Malignancy screening was negative in NXP2 and TIF1γ antibody positive patients.

Conclusions: MSA were present in almost 40% of the cohort. Mi-2 antibodies were associated with rash and none had ILD whereas Jo-1 antibodies were associated with mechanic hands, arthritis and ILD. With further recruitment of patients in this ongoing study, we hope to get more robust data in future.

Disclosure of Interest: None declared

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SAT0505 COMPARISON OF LONG-TERM CYCLOPHOSPHAMIDE (CY) AND MYCOPHENOLATE MOFETIL (MMF) EFFICACY AND SAFETY IN PATIENTS WITH SYSTEMIC SCLEROSIS (SSC) AND INTERSTITIAL LUNG DISEASE (ILD)

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Background: CY is considered to be the drug of choice for ILD therapy in patients with SSC. However, based on published evidence, only temporary and modest improvement of pulmonary fibrosis is usually achieved, therefore search for new more effective and safe agents is ongoing, with specific attention given to MMF.

Objectives: To compare CY and MMF effects on SSC clinical manifestations and activity, and safety of both agents in an open prospective non-randomised study.

Methods: The study included patients with a documented SSC diagnosis and ILD signs based on HRCT data. All patients were treated with immunosuppressants in combination with low and medium doses of glucocorticoids. 36 pts (mean age 47 ±12 years, m/f 1/1,1, SSc duration 5.0±4.8 years, diffuse/limited – 1/1,6) were administered parenteral CY during 12±6 months, with a cumulative dose of 10.6 ±5 g. 45 pts (mean age 49±13 years, m/f – 1/10, SSc duration 7.6±6.3 years, diffuse/limited – 1/1,3) were administered MMF at 2 g/day during 13±2 months. The

following parameters were monitored during the study: FVC%, DLC%, modified skin score (), activity index (EScSG), gastrointestinal tract symptoms, left ventricle ejection fraction, presence of diastolic ventricle dysfunction, PASP (Echo-CG), heart rhythm and conduction disorders (ECG), count of digital ulcers and necroses.

Results: MMF therapy led to a significant reduction of the mRSS (7.5±6.9 and 4.8±3.9, $p=0.0006$), EScSG (1.9±1.5 and 1.22±0.9, $p=0.005$), number of patients with heart conduction disorders (13/29% and 5/11%, $p=0.03$).

The FVC improvement by $\geq 10\%$ was documented in 6 (13%) pts, and DLCO – in 3 (7%); while worsening was observed in 4 (9%), and 2 (4%) cases, respectively. Mean FVC (90.3±20.8 and 92.2±21, $p=0.09$), and DLCO (52.2±17.4 and 51.9 ±17, $p=0.86$) values did not change significantly.

CY therapy resulted in significant FVC increase (80.5±20.1 and 85.9±20.5; $p=0.034$), reduction of EScSG (2.8±2 and 1.4±1.2, $p=0.0002$) and mRSS (11.2 ±9.8 and 7.9±6.8, $p=0.009$). $\geq 10\%$ FVC increase was observed in 11 (31%) pts, which was significantly more than in MMF group ($p=0.043$). FVC loss was noticed in 2 (5.6%) cases. The median FVC increase was 5.4% (25th%=-0.6, 75th% =12.3). $\geq 10\%$ DLCO improvement and worsening was observed in 2 (6.7%) pts. The mean DLCO values (53.5±16.2 and 54.4±15.5) did not change significantly.

The other parameters monitored did not show significant deviations during the observation period.

Drug tolerability was better in MMF group: the rate of adverse drug reactions was significantly lower in MMF group (12/27%), compared to CY group (19/53%), $p=0.03$.

Conclusions: Both drugs effectively reduced mRSS and EScSG in SSc patients. However, CY more often led to a clinically significant increase in FVC, in contrast to MMF, mostly contributing to stabilisation of FVC. The obtained results justify a differentiated approach to SSc pharmacotherapy depending on disease severity. A CY induction therapy should be considered as appropriate practice in patients with more severe pulmonary disease. A MMF induction therapy should be considered in SSc patients with cardiomyopathy and mild pulmonary disease, with poor CY tolerability. In other cases, MMF should be used for maintenance therapy after induction with CY.

Disclosure of Interest: None declared

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SAT0506 SSC IN OLDER AGE: FREQUENT AND WITH A DIFFERENT PHENOTYPE. DATA OF THE GERMAN NETWORK FOR SYSTEMIC SCLEROSIS

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Background: Systemic sclerosis (SSc) is a very heterogeneous multisystem connective tissue disease. The majority of affected patients develop initial clinical symptoms between the age of 30 to 50 years. It is not known whether an ageing population affects the clinical phenotype of SSc.

Objectives: To investigate the relationship of the age at disease onset and clinical characteristics in SSc patients using the registry of the German Network for Systemic Scleroderma.

Methods: Clinical data of the patient registry, currently including 4021 patients, were evaluated. Three age ranges at disease onset (<40 years, 40–60 years, and >60 years) were correlated with clinical characteristics.

Results: Among all SSc patients, 27% of patients developed first non-Raynaud symptoms at the age <40 years, while 44% developed SSc between 40–60 years, and 29% were older than 60 years of age. In particular, SSc patients with disease onset >60 years developed significantly ($p<0.001$) more often the lcSSc subtype (71.1%), anti-centromere antibodies (45.8%), had a significantly lower modified Rodnan Skin Score (mRSS) (7.8±8.1), more often pulmonary hypertension (PH) (17.4%), a significantly lower mean DLCO level (69.7%±21.5) and less often digital ulcerations (20.2%). However, a significant difference for lung fibrosis, heart or kidney involvement could not be observed. The more progressive subsets (dcSSc

and SSc overlap syndromes) are found significantly more often at younger ages ($p<0.001$).

Conclusions: In this registry, nearly one third of patients developed SSc at an age above 60 years. These are mostly of the limited cutaneous subtype with frequent PH. These findings have an important influence on recommendations on diagnosis and therapy of SSc.

Disclosure of Interest: None declared

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SAT0507 IMPLANTABLE LOOP RECORDER CAN SCREEN FOR INCIDENTAL SIGNIFICANT ARRHYTHMIAS IN SCLERODERMA, WITH CARDIAC MRI ECV AND TROPONIN BIOMARKER, USEFUL FOR RISK STRATIFICATION

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Background: Cardiac involvement and in particular conduction abnormalities represent a significant cause of morbidity and mortality in patients with systemic sclerosis (SSc). No studies assessed the value of implantable loop recorder (ILR) for early detection of arrhythmias in asymptomatic patients with SSc; or whether cardiac magnetic resonance (CMR) features associate with arrhythmias.

Objectives: To assess the prevalence of conduction abnormalities over a 3 year period using an ILR (REVEAL) and evaluate relationship with disease phenotype, cardiac biomarkers and CMR in SSc patients.

Methods: 20 patients (pts) with ACR/EULAR criteria for SSc, with no history of cardiovascular (CV) disease and ≤ 1 CV risk factor had 3T CMR with late gadolinium enhancement (LGE) and T1 mapping for ECV quantification. An ILR was then inserted, for 3 years follow-up. ILR data were downloaded every 3 months. Serum cardiac biomarkers were also measured at the initial visit.

Results: 19 pts had available ILR data; 12 (63%) females, median (SD) age 53 (12, 6 (32%) diffuse SSc(dcSSc), 6 (32%) ACA+, 4 (21%) Scl70+, 8 (42%) history of interstitial lung disease (ILD) and 7 (36%) history of digital ulcers (DU). 14/19 had any ILR abnormalities, 8/14 significant arrhythmias: 1 complete heart block; 2 non-sustained ventricular tachycardia (NSVT), and 5 atrial arrhythmias (1 atrial flutter, 1 AF, 1 SVT, 1 AF and SVT and 1 AF followed by atrial flutter and SVT). Of these 8 pts, 4 had dcSSc, 2 Scl70+, 4 ACA+, 3 with ILD and 3 DU history. All 3 patients with severe arrhythmias (NSVT/CHB) were dcSSc, 2 Scl70+, 2 males. Management comprised 1 permanent pacemaker implantation, 3 antiarrhythmic treatment, 1 anticoagulation. 15 pts had CMR. The 8 pts with significant arrhythmia appeared to have higher ECV, LV mass, and LVEF% (table 1). LGE was observed in 1 (NSVT), of a total of 5/15 with LGE. HsTnI was considerably higher in those with significant arrhythmias [(mean diff.(95% CI) 117 (-10, 245)]. NTproBNP [(mean diff.(95% CI) 92 (-30, 214)] also appeared greater in those with significant arrhythmias. There was no difference in CK levels between the two groups.

CMR baseline	ILR significant arrhythmias, all years n=6 Mean(SD)	ILR no significant arrhythmias n=9 Mean(SD)	Mean difference [95% CI]
ECV%	32(² n=5)	29(⁴ n=9)	2 [-2, 6]
LVEDV/BSA (ml/m ²)	84(¹⁶)	83(²⁰)	1 [-21, 22]
LVEF%	62(⁴)	59(⁵)	2 [-3, 8]
LV mass/BSA(g/m ²)	46(⁷)	44(¹⁴)	2 [-10, 15]
LVSF/BSA(ml/m ²)	51(⁸)	49(¹¹)	2 [-9, 13]
LVESF/BSA(ml/m ²)	33(⁹)	34(¹⁰)	-2 [-13, 9]
Distensibility (10 ⁻³ mmHg ⁻¹)	5 (4)	4 (2)	0.4 [-3, 4]
Torsion °	12(⁶ n=5)	14(⁵ n=8)	-2 [-8, 5]
LGE	N 1/5	N 4/9	

Conclusions: This pilot study demonstrates the ability of ILR to detect life-threatening arrhythmia in asymptomatic SSc pt. The data suggest CMR ECV (but not LGE) and cardiac biomarkers, in particular hsTnI (indicating subclinical myocardial injury) may be able to identify at risk pts that would benefit from ILR screening. Future studies can inform a risk model, and provide insight into the pathogenesis of SSc associated arrhythmias.

Disclosure of Interest: None declared

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