

Supplemental Online Content

Lescoat A, Huang S, Carreira PE, et al; for the EUSTAR collaborators. Cutaneous manifestations, clinical characteristics, and prognosis of patients with systemic sclerosis sine scleroderma: data from the international EUSTAR database. *JAMA Dermatol*. Published online June 28, 2023. doi:10.1001/jamadermatol.2023.1729

eMethods

eFigure: Flow Chart and selection strategy

eTable 1: Clinical characteristics associated with Puffy fingers (ever) in sine scleroderma patients (ssSSc)

eTable 2: Comparison of the clinical characteristics of ssSSc with lcSSc and dcSSc with same disease duration at last available visit

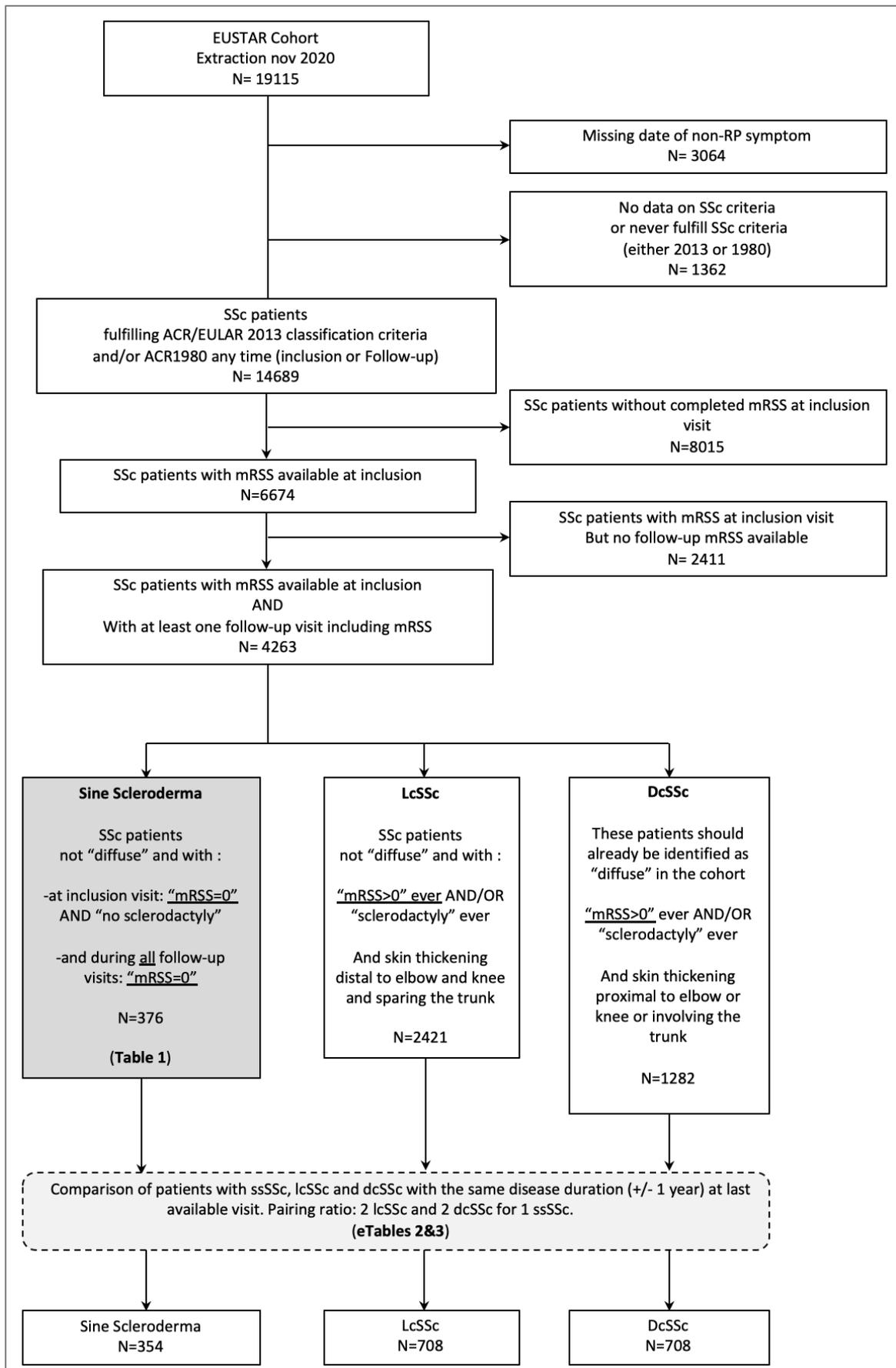
eTable 3: Comparison of the clinical characteristics of ssSSc (with Lung fibrosis/ILD) with lcSSc with Lung fibrosis/ILD) and dcSSc with Lung fibrosis/ILD)

eTable 4: Clinical characteristics associated with ILD and/or Lung Fibrosis ever (i.e. history of ILD and/or Lung Fibrosis at inclusion and/or ILD and/or Lung Fibrosis during follow-up) in sine scleroderma patients (ssSSc)

This supplemental material has been provided by the authors to give readers additional information about their work.

eMethods

We explored demographics, disease characteristics, cardio-pulmonary features, disease activity, and immunological findings among patients with ssSSc at inclusion visit. Quantitative variables were expressed using mean and standard deviation (SD) in case of Gaussian distribution, and median and first and third quartiles in case of non-Gaussian distribution. Qualitative variables were expressed as numbers and percentages. We compared these characteristics among ssSSc patients with lcSSc patients and dcSSc patients, respectively, at last available visit. Comparison between groups were assessed using T-test for quantitative variables with Gaussian distribution, Wilcoxon rank sum test for quantitative variables with non-Gaussian distribution, and Chi² or Fisher exact test as appropriate for qualitative variables. Logistic regressions were used to explore the association between variables at last available visit and ssSSc with DU vs. ssSSc without DU, ssSSc with Puffy fingers vs. ssSSc without Puffy Fingers, ssSSc with Telangiectasia vs. ssSSc without Telangiectasia, ILD vs. ssSSc without ILD. A univariate model was fitted for each of the variables; a multivariate model was fitted including all variables with P<0.2 in their univariate models and excluding variables with 1/3 of missing data. Odds Ratios and 95% CIs were reported for logistic regression. All analyses described above were conducted in SAS (version 9.4). Time to event analysis was conducted for all-cause mortality. We plotted survival curves by SSc group and did pairwise comparisons between ssSSc, lcSSc and dcSSc. Figures were plotted via R package “survival” and “survminer” (R version 4.0.2). We performed all tests with a significance level of P<0.05.



eFigure 1: Flow Chart and selection strategy

eTable 1: Clinical characteristics associated with Puffy fingers (ever) in sine scleroderma patients (ssSSc).

Characteristics of ssSSc patients at last visit (n=353)	Univariate modeling for Puffy fingers (ever versus never)		Multivariable modeling for Puffy fingers (ever versus never)	
	Odds Ratio (95% CI)	P-value	Odds Ratio (95% CI)	P-value
Age at last visit (years)	1.011 (0.996, 1.027)	0.1500	0.971 (0.947, 0.996)	0.0237
Gender (ref=Female)	0.839 (0.391, 1.799)	0.6513		
Disease duration since RP onset (years) (last visit)	1.009 (0.989, 1.029)	0.3954		
Raynaud's Phenomenon (ref=Never)	2.009 (0.125, 32.400)	0.6230		
Telangiectasia (ref=Never)	1.013 (0.635, 1.616)	0.9579		
Pitting scars (ref=Never)	1.040 (0.646, 1.674)	0.8720		
DU (ref=Never)	1.085 (0.661, 1.780)	0.7476		
Joint synovitis (ref=Never)	1.515 (0.838, 2.742)	0.1694	0.518 (0.189, 1.419)	0.2007
Tendon friction rubs (ref=Never)	0.689 (0.313, 1.520)	0.3565		
CK-elevation (ref=Never)	1.315 (0.627, 2.759)	0.4687		
Esophageal symptoms (ref=Never)	1.182 (0.728, 1.919)	0.4996		
Stomach symptoms (ref=Never)	0.942 (0.605, 1.466)	0.7901		
Intestinal symptoms (ref=Never)	1.196 (0.784, 1.826)	0.4063		
History of scleroderma renal crisis (ref=Never)	0.847 (0.235, 3.056)	0.7997		
Proteinuria (ref=Never)	0.689 (0.358, 1.327)	0.2655		
Lung fibrosis on X-Rays or HRCT or presence of ILD (ref=Never)	1.216 (0.786, 1.881)	0.3798		
Significant dyspnea (ref=Never)	0.668 (0.375, 1.191)	0.1715	2.757 (1.066, 7.133)	0.0365
ppDLCO (last visit)	1.006 (0.992, 1.020)	0.4314		
ppFVC (last visit)	1.021 (1.009, 1.033)	0.0007	1.002 (0.984, 1.019)	0.8645
ppTLC (last visit)	1.009 (0.994, 1.024)	0.2417		
sPAP >40mmHg (ref=Never)	1.393 (0.663, 2.926)	0.3818		
Pulmonary hypertension (ref=Never)	0.866 (0.468, 1.602)	0.6464		
Left ventricular ejection fraction (last visit)	0.989 (0.941, 1.040)	0.6792		
Diastolic heart dysfunction (ref=Never)	1.116 (0.714, 1.745)	0.6306		
Conduction block (ref=Never)	0.825 (0.463, 1.469)	0.5127		
EScSG disease activity index (2001) (last visit)	0.855 (0.632, 1.157)	0.3093		
EScSG disease activity index (2016) (last visit)	1.198 (0.785, 1.827)	0.4027		
ANA+ (ref=Negative)	1.445 (0.381, 5.476)	0.5881		
ACA+ (ref=Negative)	1.873 (1.207, 2.906)	0.0051	1.157 (0.541, 2.475)	0.7070
ATA+ (ref=Negative)	0.953 (0.537, 1.690)	0.8691		
RNA (ref=Negative)	1.152 (0.347, 3.830)	0.8169		
PmScl+ (ref=Negative)	0.925 (0.307, 2.782)	0.8891		
U1RNP+ (ref=Negative)	0.323 (0.122, 0.856)	0.0231	2.205 (0.529, 9.196)	0.2777
CRP >5mg/L (ref=Never)	0.530 (0.242, 1.157)	0.1108	0.827 (0.209, 3.266)	0.7864

ACA: anti-centromere antibodies ; ANA: Antinuclear antibodies ; ATA: anti-topoisomerase I antibodies ; CK: creatinine-phospho-kinase ; CRP: C-reactive Protein ; DLCO: Diffusion capacities of carbon-monoxide ; DU: digital Ulcers ; EScSG: European Systemic Sclerosis research group ; FVC: Forced Vital Capacity ; HRCT: High resolution computed tomography ; ILD: Interstitial lung disease ; MMF: Mycophenolate mofetil ; MTX: Methotrexate ; RNA pol III: anti RNA polymerase III antibodies ; RP: Raynaud's Phenomenon ; SD : standard deviation ; sPAP: systolique Pulmonary Arterial Pressure ; SSc: systemic sclerosis ; ssSSc: Systemic sclerosis sine scleroderma ; TLC: Total Lung capacities ; U1-RNP: Anti U1 ribonuclease protein antibodies

eTable 2: Comparison of the clinical characteristics of ssSSc with lcSSc and dcSSc with same disease duration at last available visit.

Characteristics at last visit n, (%) or mean (SD)	ssSSc N=354		lcSSc N=708			dcSSc N=708		
	<i>Data available</i>	Statistics	<i>Data available</i>	Statistics	P-value (ssSSc vs lcSSc)	<i>Data available</i>	Statistics	P-value (ssSSc vs dcSSc)
<i>Demographics</i>								
Age at last visit (years), mean (SD)	354/354	58.4 (13.9)	708/708	58.8 (13.0)	0.6193	708/708	55.4 (13.4)	0.0007
Male gender, n (%)	354/354	31 (8.8%)	708/708	111 (15.7%)	0.0018	708/708	182 (25.7%)	<.0001
Follow-up duration (years), mean (SD)	354/354	3.6 (3.2)	708/708	4.4 (3.6)	0.0002	708/708	4.3 (3.1)	<.0001
Disease duration since first non-RP symptom (years) (last visit), mean (SD)	354/354	10.3 (7.2)	708/708	10.3 (7.2)	0.9911	708/708	10.3 (7.2)	0.9968
Disease duration since RP onset (years) (last visit), mean (SD)	329/354	14.3 (10.8)	657/708	14.2 (10.4)	0.9714	669/708	12.5 (9.1)	0.0222
<i>Disease characteristics</i>								
<i>Skin manifestations</i>								
Raynaud's Phenomenon (ever), n (%)	333/354	331 (99.4%)	664/708	656 (98.8%)	0.5099	682/708	672 (98.5%)	0.3558
Telangiectasia (ever), n (%)	336/354	221 (65.8%)	609/708	455 (74.7%)	0.0036	607/708	484 (79.7%)	<.0001
DU (ever), n (%)	333/354	94 (28.2%)	604/708	321 (53.1%)	<.0001	608/708	415 (68.3%)	<.0001
Pitting scars (ever), n (%)	332/354	105 (31.6%)	601/708	391 (65.1%)	<.0001	601/708	463 (77.0%)	<.0001
Puffy fingers (ever), n (%)	351/354	224 (63.8%)	703/708	579 (82.4%)	<.0001	700/708	613 (87.6%)	<.0001
mRSS (last visit), mean (SD)	320/354	0.0 (0.0)	551/708	5.8 (6.0)	<.0001	571/708	14.1 (9.4)	<.0001
<i>Other manifestations</i>								
Joint synovitis (ever), n (%)	354/354	60 (16.9%)	708/708	172 (24.3%)	0.0063	708/708	218 (30.8%)	<.0001
Tendon friction rubs (ever), n(%)	354/354	26 (7.3%)	706/708	101 (14.3%)	0.0010	706/708	215 (30.5%)	<.0001
Muscle weakness (ever), n (%)	354/354	86 (24.3%)	708/708	195 (27.5%)	0.2579	707/708	315 (44.6%)	<.0001
CK-elevation (ever), n (%)	296/354	36 (12.2%)	644/708	79 (12.3%)	0.9636	663/708	146 (22.0%)	0.0003
Esophageal symptoms (ever), n (%)	354/354	265 (74.9%)	708/708	564 (79.7%)	0.0746	708/708	622 (87.9%)	<.0001

Stomach symptoms (ever), n (%)	354/354	123 (34.7%)	707/708	295 (41.7%)	0.0282	708/708	383 (54.1%)	<.0001
Intestinal symptoms (ever), n (%)	354/354	182 (51.4%)	707/708	326 (46.1%)	0.1031	707/708	354 (50.1%)	0.6802
History of scleroderma renal crisis (ever), n (%)	354/354	10 (2.8%)	708/708	16 (2.3%)	0.5744	708/708	35 (4.9%)	0.1062
Proteinuria (ever), n (%)	336/354	40 (11.9%)	680/708	96 (14.1%)	0.3298	685/708	126 (18.4%)	0.0083
Lung fibrosis on X-Rays or HRCT or presence of ILD (ever), n (%)	331/354	165 (49.8%)	666/708	380 (57.1%)	0.0313	691/708	518 (75.0%)	<.0001
DLCO (%pred) (last visit), mean (SD)	214/354	71.9 (19.7)	420/708	67.2 (19.7)	0.0045	418/708	60.0 (19.9)	<.0001
FVC (%pred) (last visit), mean (SD)	241/354	100.4 (22.2)	463/708	92.5 (20.7)	<.0001	469/708	82.4 (22.6)	<.0001
TLC (%pred) (last visit), mean (SD)	175/354	101.7 (20.8)	355/708	93.3 (19.0)	<.0001	351/708	83.9 (21.1)	<.0001
sPAP >40mmHg, echocardiography (ever), n (%)	298/354	32 (10.7%)	586/708	107 (18.3%)	0.0037	604/708	127 (21.0%)	0.0001
Pulmonary hypertension (ever), n (%)	310/354	47 (15.2%)	633/708	151 (23.9%)	0.0021	649/708	186 (28.7%)	<.0001
Left ventricular ejection fraction (%) (last visit), mean (SD)	219/354	61.0 (5.5)	416/708	61.3 (7.4)	0.2501	433/708	59.9 (8.2)	0.5450
Diastolic heart dysfunction (ever), n (%)	327/354	133 (40.7%)	652/708	293 (44.9%)	0.2042	667/708	275 (41.2%)	0.8669
Conduction block (ever), n (%)	305/354	51 (16.7%)	641/708	152 (23.7%)	0.0144	671/708	201 (30.0%)	<.0001
<i>Disease activity at last available visit</i>								
EScSG disease activity index (2001) (last visit), mean (SD)	191/354	0.7 (0.9)	371/708	1.3 (1.4)	<.0001	425/708	2.1 (1.8)	<.0001
EScSG disease activity index (2016) (last visit), mean (SD)	354/354	0.2 (0.6)	708/708	0.3 (0.9)	0.0297	708/708	0.5 (1.3)	0.0017
<i>Immunological findings</i>								
ANA+ (ever), n (%)	352/354	343 (97.4%)	706/708	693 (98.2%)	0.4422	702/708	678 (96.6%)	0.4485
ACA+ (ever), n (%)	347/354	214 (61.7%)	688/708	288 (41.9%)	<.0001	680/708	111 (16.3%)	<.0001
ATA+ (ever), n (%)	348/354	60 (17.2%)	697/708	278 (39.9%)	<.0001	689/708	419 (60.8%)	<.0001
RNA pol III+ (ever), n (%)	308/354	13 (4.2%)	509/708	26 (5.1%)	0.5643	539/708	68 (12.6%)	<.0001
PmScl+ (ever), n (%)	290/354	15 (5.2%)	495/708	17 (3.4%)	0.2346	536/708	39 (7.3%)	0.2430
U1RNP+ (ever), n (%)	322/354	19 (5.9%)	619/708	35 (5.7%)	0.8775	615/708	20 (3.3%)	0.0539
CRP >5mg/L (ever), n (%)	314/354	27 (8.6%)	538/708	50 (9.3%)	0.7329	495/708	56 (11.3%)	0.2150
<i>Therapeutics</i>								

Immunomodulatory therapies (ever)*, n (%)	338/354	167 (49.4%)	611/708	392 (64.2%)	<.0001	612/708	459 (75.0%)	<.0001
MMF (ever), n (%)	338/354	15 (4.4%)	611/708	51 (8.3%)	0.0234	612/708	85 (13.9%)	<.0001
MTX (ever), n (%)	338/354	47 (13.9%)	611/708	169 (27.7%)	<.0001	612/708	208 (34.0%)	<.0001
Corticosteroids (ever), n (%)	338/354	127 (37.6%)	611/708	227 (37.2%)	0.8976	612/708	311 (50.8%)	<.0001
Cyclophosphamide (ever), n (%)	338/354	28 (8.3%)	611/708	86 (14.1%)	0.0086	612/708	169 (27.6%)	<.0001
Calcium channel inhibitors (ever), n (%)	338/354	222 (65.7%)	611/708	388 (63.5%)	0.5025	612/708	414 (67.6%)	0.5373
Sildenafil (ever), n (%)	338/354	41 (12.1%)	611/708	73 (11.9%)	0.9340	612/708	81 (13.2%)	0.6260
Bosentan (ever), n (%)	338/354	38 (11.2%)	611/708	102 (16.7%)	0.0234	612/708	170 (27.8%)	<.0001
Iloprost (ever), n (%)	338/354	32 (9.5%)	611/708	124 (20.3%)	<.0001	612/708	157 (25.7%)	<.0001

ACA: anti-centromere antibodies ; ANA: Antinuclear antibodies ; ATA: anti-topoisomerase I antibodies ; CK: creatinine-phospho-kinase ; CRP: C-reactive Protein ; DLCO: Diffusion capacities of carbon-monoxide ; DU: digital Ulcers ; ESeSG: European Systemic Sclerosis research group ; FVC: Forced Vital Capacity ; HRCT: High resolution computed tomography ; ILD: Interstitial lung disease ; MMF: Mycophenolate mofetil ; MTX: Methotrexate ; RNA pol III: anti RNA polymerase III antibodies ; RP: Raynaud's Phenomenon ; SD : standard deviation ; sPAP: systolique Pulmonary Arterial Pressure ; SSc : systemic sclerosis ; ssSSc: Systemic sclerosis sine scleroderma ; TLC: Total Lung capacities ; U1-RNP: Anti U1 ribonuclease protein antibodies

*= Abatacept, Abatacept (iv or sc), Enbrel, Golimumab, Humira, Infliximab, JAK kinase inhibitors, Rituximab, TNF-alpha antagonist, Tnf alpha antagonist, Tocilizumab, Tocilizumab (iv or sc), Other biologic therapy, Azathioprine, Cyclosporine A, Cyclophosphamide, D-penicillamine, Chloroquine/Hydroxychloroquine, Imatinib, Leflunomide, Methotrexate, Mycophenolate mofetyl, Prednisone, Sulfasalazine

eTable 3: Comparison of the clinical characteristics of ssSSc (with Lung fibrosis/ILD) with lcSSc with Lung fibrosis/ILD) and dcSSc with Lung fibrosis/ILD).

Characteristics at last visit n, (%) or mean (SD)	ssSSc with Lung fibrosis/ILD N=165		lcSSc with Lung fibrosis/ILD N=380			dcSSc with Lung fibrosis/ILD N=518		
	<i>Data available</i>	Statistics	<i>Data available</i>	Statistics	P-value (ssSSc vs lcSSc)	<i>Data available</i>	Statistics	P-value (ssSSc vs dcSSc)
<i>Demographics</i>								
Age at last visit (years), mean (SD)	165/165	61.2 (12.9)	380/380	60.0 (12.8)	0.3194	518/518	55.8 (13.4)	<0.0001
Male gender, n (%)	165/165	19 (11.5%)	380/380	71 (18.7%)	0.0384	518/518	132 (25.5%)	0.0002
Follow-up duration (years), mean (SD)	165/165	4.0 (3.5)	380/380	4.8 (3.7)	0.0088	518/518	4.4 (3.2)	0.0398
Disease duration since first non-RP symptom (years) (last visit), mean (SD)	165/165	10.8 (7.8)	380/380	10.6 (7.0)	0.7440	518/518	10.7 (7.2)	0.8681
Disease duration since RP onset (years) (last visit), mean (SD)	149/165	14.8 (10.9)	356/380	13.7 (9.1)	0.5433	497/518	12.8 (8.9)	0.0796
<i>Cardio-pulmonary parameters</i>								
Significant dyspnea (ever), n (%)	146/165	33 (22.6%)	354/380	97 (27.4%)	0.2660	497/518	173 (34.8%)	0.0055
DLCO (%pred) (last visit), mean (SD)	103/165	65.3 (20.6)	230/380	61.1 (18.2)	0.0651	306/518	56.2 (19.2)	<0.0001
FVC (%pred) (last visit), mean (SD)	117/165	92.8 (22.6)	265/380	86.7 (20.6)	0.0103	349/518	78.9 (22.3)	<0.0001
TLC (%pred) (last visit), mean (SD)	92/165	98.3 (21.2)	195/380	88.8 (19.7)	0.0002	258/518	81.0 (21.0)	<0.0001
sPAP >40mmHg, echocardiography (ever), n (%)	150/165	17 (11.3%)	324/380	74 (22.8%)	0.0031	451/518	112 (24.8%)	0.0005
Pulmonary hypertension (ever), n (%)	147/165	31 (21.1%)	345/380	111 (32.2%)	0.0130	480/518	168 (35.0%)	0.0015
<i>Immunological findings</i>								
ANA+ n (%)	164/165	161 (98.2%)	380/380	374 (98.4%)	1.0000	515/518	499 (96.9%)	0.5868
ACA+ , n (%)	162/165	84 (51.9%)	369/380	97 (26.3%)	<0.0001	508/518	66 (13.0%)	<0.0001
ATA+ , n (%)	163/165	36 (22.1%)	376/380	205 (54.5%)	<0.0001	510/518	351 (68.8%)	<0.0001
RNA pol III+ , n (%)	143/165	7 (4.9%)	275/380	17 (6.2%)	0.5916	400/518	46 (11.5%)	0.0224

PmScl+ , n (%)	135/165	10 (7.4%)	261/380	9 (3.4%)	0.0806	398/518	28 (7.0%)	0.8845
U1RNP+ , n (%)	154/165	8 (5.2%)	337/380	17 (5.0%)	0.9440	459/518	16 (3.5%)	0.3441
CRP >5mg/L (ever), n (%)	156/165	19 (12.2%)	300/380	29 (9.7%)	0.4068	369/518	48 (13.0%)	0.7948
<i>Therapeutics</i>								
Immunomodulatory therapies (ever)*, n (%)	162/165	89 (54.9%)	334/380	241 (72.2%)	0.0001	447/518	350 (78.3%)	<0.0001
MMF (ever), n (%)	162/165	13 (8.0%)	334/380	42 (12.6%)	0.1301	447/518	67 (15.0%)	0.0246
MTX (ever), n (%)	162/165	20 (12.3%)	334/380	84 (25.1%)	0.0010	447/518	144 (32.2%)	<0.0001
Corticosteroids (ever), n (%)	162/165	69 (42.6%)	334/380	158 (47.3%)	0.3231	447/518	254 (56.8%)	0.0019
Cyclophosphamide (ever), n (%)	162/165	27 (16.7%)	334/380	74 (22.2%)	0.1545	447/518	147 (32.9%)	<0.0001
Calcium channel inhibitors (ever), n (%)	162/165	90 (55.6%)	334/380	214 (64.1%)	0.0678	447/518	320 (71.6%)	0.0002
Sildenafil (ever), n (%)	162/165	14 (8.6%)	334/380	48 (14.4%)	0.0704	447/518	62 (13.9%)	0.0845
Bosentan (ever), n (%)	162/165	18 (11.1%)	334/380	65 (19.5%)	0.0195	447/518	145 (32.4%)	<0.0001
Iloprost (ever), n (%)	162/165	14 (8.6%)	334/380	67 (20.1%)	0.0013	447/518	121 (27.1%)	<0.0001

ACA: anti-centromere antibodies ; ANA: Antinuclear antibodies ; ATA: anti-topoisomerase I antibodies ; CK: creatinine-phospho-kinase ; CRP: C-reactive Protein ; DLCO: Diffusion capacities of carbon-monoxide ; DU: digital Ulcers ; EScSG: European Systemic Sclerosis research group ; FVC: Forced Vital Capacity ; HRCT: High resolution computed tomography ; ILD: Interstitial lung disease ; MMF: Mycophenolate mofetil ; MTX: Methotrexate ; RNA pol III: anti RNA polymerase III antibodies ; RP: Raynaud's Phenomenon ; SD : standard deviation ; sPAP: systolique Pulmonary Arterial Pressure ; SSc : systemic sclerosis ; ssSSc: Systemic sclerosis sine scleroderma ; TLC: Total Lung capacities ; U1-RNP: Anti U1 ribonuclease protein antibodies

*= Abatacept, Abatacept (iv or sc), Enbrel, Golimumab, Humira, Infliximab, JAK kinase inhibitors, Rituximab, TNF-alpha antagonist, Tnf alpha antagonist, Tocilizumab, Tocilizumab (iv or sc), Other biologic therapy, Azathioprine, Cyclosporine A, Cyclophosphamide, D-penicillamine, Chloroquine/Hydroxychloroquine, Imatinib, Leflunomide, Methotrexate, Mycophenolate mofetyl, Prednisone, Sulfasalazine

eTable 4: Clinical characteristics associated with ILD and/or Lung Fibrosis ever (i.e. history of ILD and/or Lung Fibrosis at inclusion and/or ILD and/or Lung Fibrosis during follow-up) in sine scleroderma patients (ssSSc).

Characteristics at last visit N=352	Univariate modeling for ILD and/or Lung Fibrosis (ever)		Multivariable modeling for ILD and/or Lung Fibrosis (ever)	
	Odds Ratio (95% CI)	P-value	Odds Ratio (95% CI)	P-value
Age at last visit (years)	1.037 (1.020, 1.054)	<.0001	1.048 (1.009, 1.089)	0.0148
Gender (ref=Female)	1.727 (0.797, 3.745)	0.1664	4.801 (0.416, 55.361)	0.2086
Disease duration since RP onset (years) (last visit)	1.018 (0.998, 1.038)	0.0751	1.003 (0.968, 1.038)	0.8847
Raynaud's Phenomenon (ref=Never)	1.018 (0.063, 16.417)	0.9898		
Telangiectasia (ref=Never)	0.975 (0.618, 1.536)	0.9117		
Previous or Current (ref=Never)	0.813 (0.505, 1.309)	0.3946		
Pitting scars (ref=Never)	1.016 (0.640, 1.613)	0.9477		
Puffy fingers (ref=Never)	1.216 (0.786, 1.881)	0.3799		
Joint synovitis (ref=Never)	1.355 (0.777, 2.366)	0.2846		
Tendon friction rubs (ref=Never)	1.331 (0.593, 2.984)	0.4883		
CK-elevation (ref=Never)	1.851 (0.917, 3.738)	0.0858	4.194 (1.137, 15.471)	0.0314
Esophageal symptoms (ref=Never)	0.941 (0.581, 1.525)	0.8056		
Stomach symptoms (ref=Never)	1.022 (0.659, 1.586)	0.9221		
Intestinal symptoms (ref=Never)	1.404 (0.923, 2.136)	0.1127	2.427 (1.075, 5.478)	0.0328
History of scleroderma renal crisis (ref=Never)	1.199 (0.317, 4.541)	0.7894		
Proteinuria (ref=Never)	1.277 (0.652, 2.501)	0.4756		
Significant dyspnea (ref=Never)	3.764 (1.925, 7.357)	0.0001	2.503 (0.711, 8.806)	0.1529
ppDLCO (last visit)	0.963 (0.948, 0.979)	<.0001		
ppFVC (last visit)	0.967 (0.954, 0.980)	<.0001	0.964 (0.943, 0.985)	0.0007
ppTLC (last visit)	0.980 (0.965, 0.995)	0.0083		
sPAP >40mmHg (ref=Never)	1.273 (0.630, 2.573)	0.5019		
Pulmonary hypertension (ref=Never)	2.499 (1.321, 4.730)	0.0049	0.625 (0.189, 2.069)	0.4417
Left ventricular ejection fraction (last visit)	0.965 (0.918, 1.013)	0.1498		
Diastolic heart dysfunction (ref=Never)	1.924 (1.237, 2.991)	0.0037	1.364 (0.553, 3.366)	0.5006
Conduction block (ref=Never)	2.493 (1.338, 4.645)	0.0040	1.031 (0.350, 3.039)	0.9556
EScSG disease activity index (2001) (last visit)	1.802 (1.272, 2.551)	0.0009		
EScSG disease activity index (2016) (last visit)	1.190 (0.807, 1.754)	0.3798		
ANA+ (ref=Negative)	1.767 (0.416, 7.510)	0.4406		
ACA+ (ref=Negative)	0.429 (0.275, 0.671)	0.0002	1.581 (0.578, 4.324)	0.3721
ATA+ (ref=Negative)	2.318 (1.282, 4.194)	0.0054	3.246 (0.850, 12.390)	0.0850
RNA (ref=Negative)	1.182 (0.388, 3.601)	0.7684		
PmScl+ (ref=Negative)	3.382 (0.911, 12.554)	0.0686	>999.999 (<0.001, >999.999)	0.9702
U1RNP+ (ref=Negative)	0.740 (0.284, 1.926)	0.5374		
CRP >5mg/L (ref=Never)	2.199 (0.932, 5.185)	0.0718	0.940 (0.219, 4.031)	0.9341

ACA: anti-centromere antibodies ; ANA: Antinuclear antibodies ; ATA: anti-topoisomerase I antibodies ; CK: creatinine-phospho-kinase ; CRP: C-reactive Protein ; DLCO: Diffusion capacities of carbon-monoxide ; DU: digital Ulcers ; EScSG: European Systemic Sclerosis research group ; FVC: Forced Vital Capacity ; HRCT: High resolution computed tomography ; ILD: Interstitial lung disease ; MMF: Mycophenolate mofetil ; MTX: Methotrexate ; RNA pol III: anti RNA polymerase III antibodies ; RP: Raynaud's Phenomenon ; SD : standard deviation ; sPAP: systolique Pulmonary Arterial Pressure ; SSc: systemic sclerosis ; ssSSc: Systemic sclerosis sine scleroderma ; TLC: Total Lung capacities ; U1-RNP: Anti U1 ribonuclease protein antibodies