

Supplementary Table S1. Demographic characteristics of SSc patients and healthy controls.

	Healthy (n = 15)	SSc (n = 32)
Age, mean \pm SD years	51.07 \pm 3.00	55.34 \pm 11.52
Female, n (%)	10 (66.7)	23 (71.9)
Disease duration, mean \pm SD years		1.57 \pm 0.95
Disease subtype		
dcSSc, n (%)		20 (62.50)
lcSSc, n (%)		12 (32.50)
mRSS		16.13 \pm 7.73
DU, n (%)		9 (28.13)
ILD, n (%)		10 (38.46)
PAH, n (%)		8 (27.59)
NVC		
Non-SSc pattern, n (%)		8 (27.59)
SSc pattern, n (%)		21 (72.41)
early, n (%)		0 (0)
active, n (%)		12 (41.38)
late, n (%)		9 (31.03)
Drugs		
Glucocorticoid, n (%)		17 (51.13)

Immunosuppressive, n (%)

25 (78.13)

dcSSc: Diffused cutaneous SSc; lcSSc: limited cutaneous SSc; mRSS: Modified Rodnan skin score; ILD: Interstitial lung disease; PAH: Pulmonary arterial hypertension; DU: Digital ulcer; NVC: Nailfold videocapillaroscopy;

Supplementary Table S2. Demographic characteristics of SSc patients and healthy controls who underwent skin biopsy.

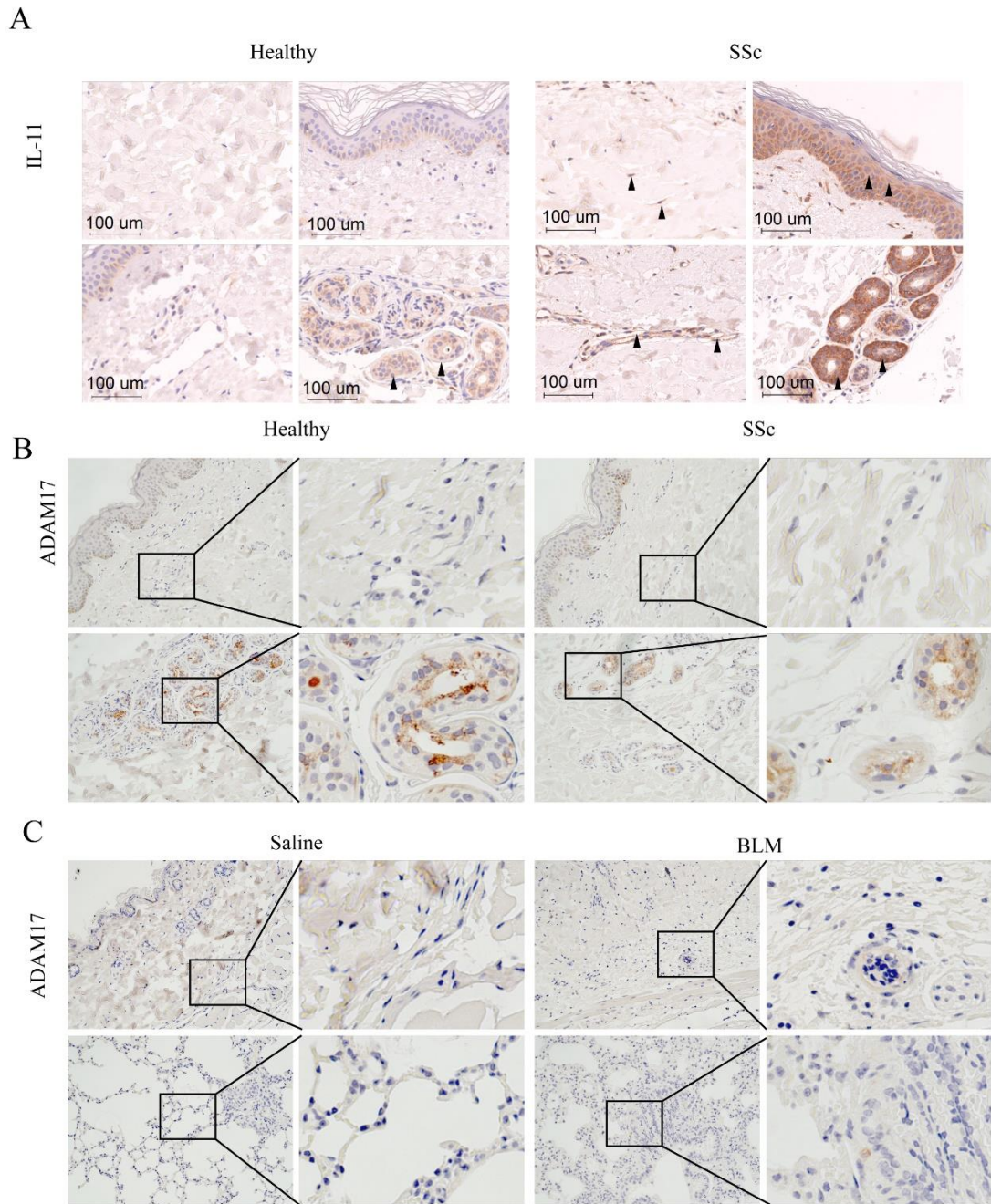
Skin sample	Sex	Age	Disease subtype	Disease Duration, years	Immunosuppression
Control 1	F	20			
Control 2	F	33			
Control 3	F	33			
Control 4	F	34			
Control 5	F	59			
Control 6	F	67			
SSC 1	F	22	dcSSC	48	None
SSC 2	F	27	dcSSC	13	Hydroxychloroquine
SSC 3	F	34	dcSSC	13	Methotrexate
SSC 4	F	47	dcSSC	5	Hydroxychloroquine; Prednisone
SSC 5	F	48	dcSSC	5	Mycophenolate; Prednisone

SSC 6	F	50	dcSSC	24	None
SSC 7	F	62	dcSSC	36	Tofacitinib
SSC 8	M	59	dcSSC	24	Mycophenolate
SSC 9	M	65	lcSSC	9	Prednisone

Supplementary Table S3. Levels of plasma IL-11 in SSc and healthy control

Group	Healthy (n=4/15)	SSc (n=6/32)	P value
Female sex, n (%)	4 (100)	5 (83.33)	>0.999
Age, mean \pm SD years	51.25 \pm 4.35	50.83 \pm 9.50	0.937
IL-11, mean \pm SD pg/ml	2.26 \pm 1.74	5.90 \pm 5.54	0.246

SSc: Systemic sclerosis;



Supplementary Figure S1. Expression of IL-11 and ADAM17 in skin. (A) Several types of IL-11 positive cells in human skin. (B-C) Immunohistochemical staining of ADAM17 in skin of SSc patients and healthy controls, and in skin/ pulmonary of model and control mice. (magnification = 20X).