### ACR/EULAR Classification Criteria for Systemic Sclerosis (SSc, Scleroderma)





### Disclosure

- This project was jointly funded by
  - American College of Rheumatology (ACR)
  - European League Against Rheumatism (EULAR)





### **Objectives**

- 1. To understand the strengths and weaknesses of the current classification criteria in SSc
- To become familiar with how to use the new criteria in SSc



rich3/zar-anr/zar-anr/zar01113/zar0475d13g | mcintyrn | S=15 | 8/28/13 | 13:53 | Art; 13-0130 |

ARTHRITIS & RHEUMATISM

Vol. •, No. •, • 2013, pp xx-xx

DOI 10.1002/art.•

© 2013, American College of Rheumatology

#### Arthritis & Rheumatism

An Official Journal of the American College of Rheumatology www.arthritisrheum.org and wileyonlinelibrary.com

#### SPECIAL ARTICLE

AQ: 1

2013 Classification Criteria for Systemic Sclerosis

An American College of Rheumatology/European League Against Rheumatism Collaborative Initiative

Frank van den Hoogen,¹ Dinesh Khanna,² Jaap Fransen,³ Sindhu R. Johnson,⁴ Murray Baron,⁵ Alan Tyndall,⁶ Marco Matucci-Cerinic,² Raymond P. Naden,⁶ Thomas A. Medsger Jr.,⁰ Patricia E. Carreira,¹⁰ Gabriela Riemekasten,¹¹ Philip J. Clements,¹² Christopher P. Denton,¹³ Oliver Distler,¹⁴ Yannick Allanore,¹⁵ Daniel E. Furst,¹² Armando Gabrielli,¹⁶ Maureen D. Mayes,¹² Jacob M. van Laar,¹³ James R. Seibold,¹⁰ Laszlo Czirjak,²⁰ Virginia D. Steen,²¹ Murat Inanc,²² Otylia Kowal-Bielecka,²³ Ulf Müller-Ladner,²⁴ Gabriele Valentini,²⁵ Douglas J. Veale,²⁶ Madelon C. Vonk,³ Ulrich A. Walker,⁶ Lorinda Chung,²² David H. Collier,²⁵ Mary Ellen Csuka,²⁰ Barri J. Fessler,³⁰ Serena Guiducci,² Ariane Herrick,³¹ Vivien M. Hsu,³² Sergio Jimenez,³³ Bashar Kahaleh,³⁴ Peter A. Merkel,³⁵ Stanislav Sierakowski,²³ Richard M. Silver,³⁶ Robert W. Simms,³⁵ John Varga,³³ and Janet E. Pope³³

This criteria set has been approved by the American College of Rheumatology (ACR) Board of Directors and the European League Against Rheumatism (EULAR) Executive Committee. This signifies that the criteria set has been quantitatively validated using patient data, and it has undergone validation based on an external data set. All ACR/EULAR-approved criteria sets are expected to undergo intermittent updates.





rich3/zar-anr/zar-anr/zar01113/zar0475d13g | mcintym | S=15 | 8/28/13 | 13:53 | Art: 13-0130 |

ARTHRITIS & RHEUMATISM Vol. ◆, No. ◆, ◆ 2013, pp xx–xx DOI 10.1002/art.◆

© 2013, American College of Rheumatology

#### Arthritis & Rheumatism

An Official Journal of the American College of Rheumatology www.arthritisrheum.org and wileyonlinelibrary.com

SPECIAL ARTICLE

2013 Classification Criteria for Systemic Sclerosis

An America Agair

Criteria

Frank van den Hoogen, <sup>1</sup> D
Alan Tyndall, <sup>6</sup> Marco N
Patricia E. Carreira, <sup>10</sup> Gab
Oliver Distler, <sup>14</sup> Yannick Alla
Jacob M. van Laar, <sup>18</sup> Jame
Otylia Kowal-Bielecka, <sup>2</sup>
Madelon C. Vonk, <sup>3</sup> Ulrich A
Barri J. Fessler, <sup>30</sup> Serena
Bashar Kahaleh, <sup>34</sup> Po

This criteria set has been approved European League Against Rheum been quantitatively validated using All ACR/EULAR-approved criteric

### 2013 classification criteria for systemic sclerosis: an American college of rheumatology/European league against rheumatism collaborative initiative

Frank van den Hoogen, Dinesh Khanna, Jaap Fransen, Sindhu R Johnson, Murray Baron, Alan Tyndall, Marco Matucci-Cerinic, Raymond P Naden, Thomas A Medsger Jr, Patricia E Carreira, Gabriela Riemekasten, Larendam Philip J Clements, Alan Christopher P Denton, Mayer Distler, Aranick Allanore, Daniel E Furst, Armando Gabrielli, Maureen D Mayes, Murat Inanc, Sames R Seibold, Laszlo Czirjak, Virginia D Steen, Murat Inanc, Cotylia Kowal-Bielecka, Müller-Ladner, Gabriele Valentini, Douglas J Veale, Madelon C Vonk, Ulrich A Walker, Lorinda Chung, David H Collier, Mary Ellen Csuka, Mary Ellen Csuka, Barri J Fessler, Serena Guiducci, Ariane Herrick, Nivien M Hsu, Sergio Jimenez, Sashar Kahaleh, Peter A Merkel, Ariane Herrick, Stanislav Sierakowski, Richard M Silver, Robert W Simms, John Varga, Janet E Pope





## ACR/EULAR SSc Classification Criteria Committee

#### Co-convenors

- Frank van den Hoogen (EULAR)
- Janet E Pope (ACR)

#### **Members**

- Jaap Fransen
- Sindhu R Johnson
- Alan Tyndall
- Murray Baron
- Marco Matucci-Cerinic
- Dinesh Khanna





## SSc Criteria were developed collaboratively

Frank van den Hoogen, Dinesh Khanna, Jaap Fransen, Sindhu R. Johnson, Murray Baron, Alan Tyndall, Marco Matucci-Cerinic, Raymond Naden, Thomas A Medsger Jr., Patricia Carreira, Gabriela Riemekasten, Phillip Clements, Christopher P Denton, Oliver Distler, Yannick Allanore, Daniel E Furst, Armando Gabrielli, Maureen Mayes, Jacob M van Laar, James R Seibold, Laszlo Czirjak, Virginia Steen, Murat Inanc, Otylia Kowal-Bielecka, Ulf Müller-Ladner Gabriele Valentini, Douglas Veale, Madelon Vonk, Ulrich A Walker, Lorinda Chung, Dave Collier, Mary Ellen Csuka, Barry J Fessler, Serena Guiducci, Ariane Herrick, Vivian Hsu, Sergio Jimenez, Bashar Kahaleh, Peter Merkel, Stanislav Sierakowski, Richard Silver, Rob Simms, John Varga, Janet E Pope





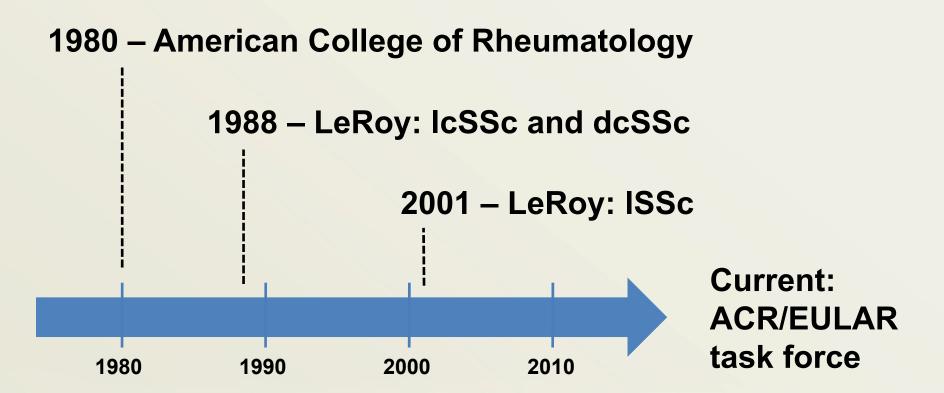
### Why do we need SSc classification criteria?

- To enroll SSc patients in studies (i.e., meeting classification criteria)
- 2. To differentiate SSc from other mimickers
- 3. To help to understand pathophysiology, subsets of patients with various features





### Classification schemes - Overview







## Which patient(s) meet the 1980 ACR SSc classification criteria?

- 1. Sclerodactyly, Raynaud's, positive anti-centromere, pulmonary arterial hypertension
- Sclerodactyly, GERD, dilated esophagus, dysphagia RNA polymerase III, Scleroderma renal crisis
- 3. Sclerodactyly, Raynaud's, anti-centromere, dysphagia, dilated nailfold capillaries, calcinosis
- 4. Modified Rodnan skin score of 20 including finger involvement
- 5. Modified Rodnan skin score of 20 and no finger involvement ever, no Raynaud's Phenomenon and negative ANA

Subcommittee for Scleroderma Criteria of the American Rheumatism Association Diagnostic and Therapeutic Criteria Committee. *Arthritis Rheum* 1980; 23:581-90





## Which patient(s) meet the 1980 ACR SSc classification criteria?

- 1. Sclerodactyly, Raynaud's, positive anti-centromere, pulmonary arterial hypertension NO
- Sclerodactyly, GERD, dilated esophagus, dysphagia RNA polymerase III, Scleroderma renal crisis NO
- 3. Sclerodactyly, Raynaud's, anti-centromere, dysphagia, dilated nailfold capillaries, calcinosis **NO**
- 4. Modified Rodnan skin score of 20 including finger involvement
- 5. Modified Rodnan skin score of 20 and no finger involvement ever, no Raynaud's Phenomenon and negative ANA NO

Subcommittee for Scleroderma Criteria of the American Rheumatism Association Diagnostic and Therapeutic Criteria Committee. *Arthritis Rheum* 1980; 23:581-90





#### 1980 ACR Scleroderma Classification Criteria

- Major criterion: proximal cutaneous sclerosis/skin thickening (non-pitting) proximal to the MCPs (metacarpophalangeal joints), affecting other parts of the body
  - usually bilateral, symmetrical, and almost always including sclerodactyly
  - The major criterion is sufficient.
- Minor criteria: 2 or 3 are needed if no major criterion:
  - sclerodactyly
  - digital pitting scars of fingertips or loss of substance of the distal finger pad
  - bibasalar pulmonary fibrosis

1 major criterion or ≥ 2 minor criteria were found in 97% of definite SSc cases (sensitivity 97%) but in only 2% of the comparison patients (specificity 98%)

Subcommittee for Scleroderma Criteria of the American Rheumatism Association Diagnostic and Therapeutic Criteria Committee. *Arthritis Rheum* 1980; 23:581-90.





## What are the limitations of the 1980 ACR classification criteria for SSc?

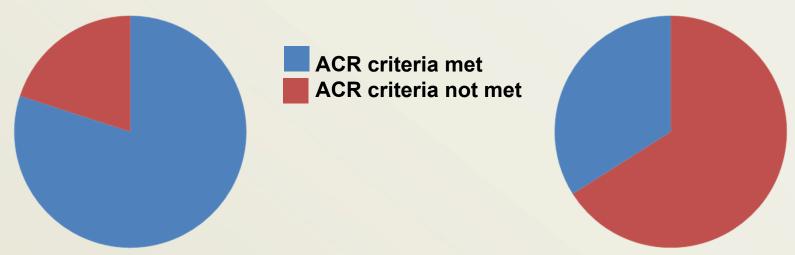
- They don't classify some of those with limited cutaneous SSc
- 2. They don't always classify early SSc
- 3. They don't include antibodies that are common in SSc such as anti-centromere
- 4. They don't include nailfold changes that could help differentiate SSc from primary Raynaud's Phenomenon (RP)

Subcommittee for Scleroderma Criteria of the American Rheumatism Association Diagnostic and Therapeutic Criteria Committee. *Arthritis Rheum* 1980; 23:581-90



#### Limitations of the 1980 ACR Scleroderma classification

- Pittsburgh cohort of 639 patients with SSc<sup>1</sup>
  - 20% of limited SSc patients did not meet ACR criteria
- French Canadian cohort of 259 patients with SSc<sup>2</sup>
  - 66% of limited SSc patients did not meet
     ACR criteria



- 10 to 20% of limited SSc patients do not meet criteria for SSc<sup>3</sup>
- Many SSc patients diagnosed by expert clinicians would be excluded based on ACR criteria
- 1. Subcommittee for Scleroderma Criteria of the American Rheumatism Association Diagnostic and Therapeutic Criteria Committee. *Arthritis Rheum* 1980; 23:581-90 2. Lonzetti LS, et al. *Arthritis Rheum* 2001; 44:735-6. 3. J Walker, J



Pope Clinical Rheumatol 2007

#### Development of Classification and Response Criteria for Rheumatic Diseases

CLASSIFICATION AND RESPONSE CRITERIA SUBCOMMITTEE OF THE AMERICAN COLLEGE OF RHEUMATOLOGY COMMITTEE ON QUALITY MEASURES

Collaboration between experts and clinical epidemiologists

Balance of expert based and data driven methods

Avoid circularity of reasoning

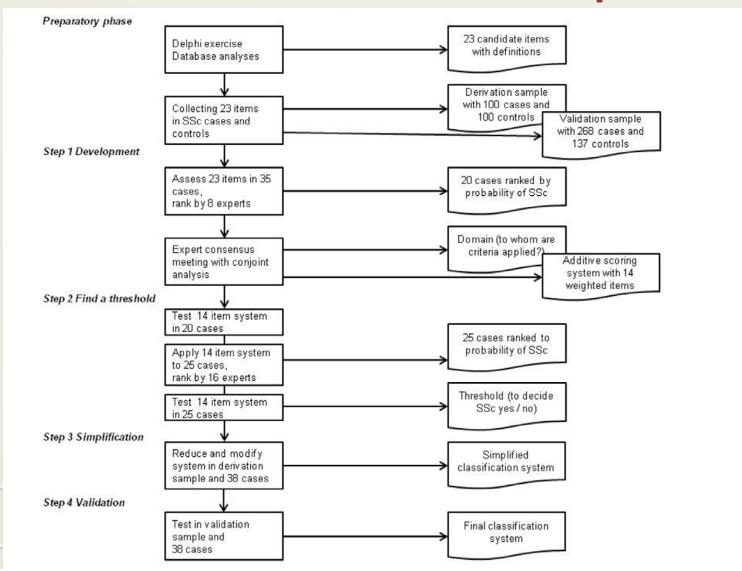
Evaluate psychometric properties of candidate criteria

Singh JA, et al. Arthritis Rheum. 2006 Jun 15;55(3):348-52.

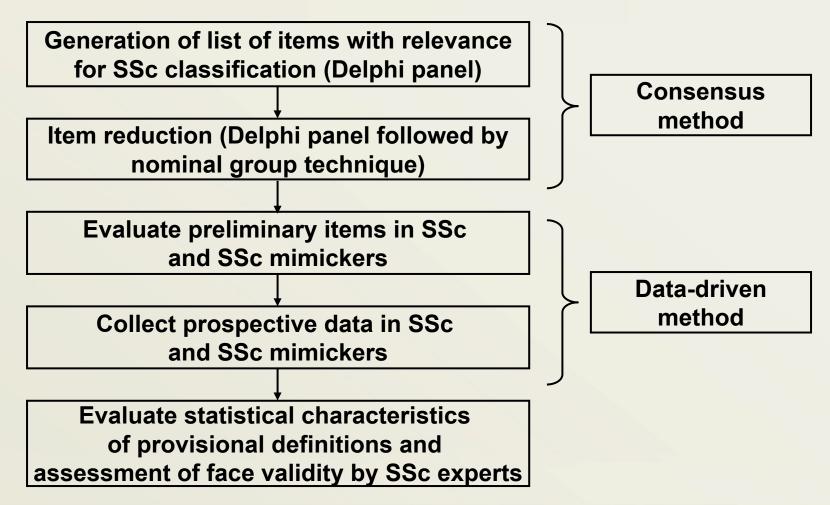




## Overview of the ACR / EULAR SSc Classification Criteria Development



### Reclassification of SSc by the ACR / EULAR Task Force



SSc mimickers = eosinophilic fasciitis, generalised morphea, other connective tissue disease, scleromyxedema, etc.





### Delphi results: Items to be tested for the new ACR / EULAR SSc criteria

Item	Appropriateness score* (median)	TOP score	Rank
Positive antitopoisomerase I	9	73%	1
Presence of scleroderma	9	70%	2
Abnormal nailfold capillary pattern	9	67%	3
Positive anticentromere	9	62%	4
Positive anti-RNA polymerase III	8	43%	5
Finger tip ulcers or pitting scars	8	34%	6
Raynaud's phenomenon	7	33%	7
Interstitial lung disease/pulmonary fibrosis	7	28%	8
Renal crisis	8	27%	9

<sup>\*</sup>Scored from 1 to 9, with a higher score denoting greater appropriateness for the classification of SSc





DATA
driven
validation
of top SSc
items for
criteria
from
DELPHI
exercise

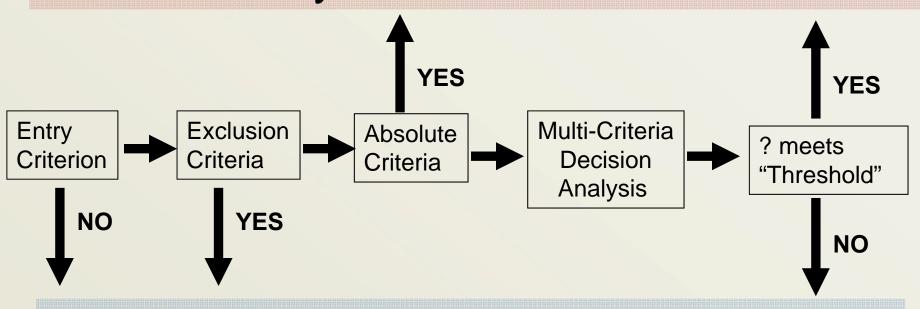
Cuitorion	Pooled mean OR	Empiric	Expert based
Criterion	(95% Crl)	ranking	ranking
Renal crisis	NC	1 ab	9
Digital pulp loss or acro-osteolysis	NC	1 ab	13 <sup>b</sup>
Scleroderma	426.7 (256.5, 691.2)	2	1
Telangiectasia	91.4 (57.6, 154.5)	3	11
Anti-RNA polymerase III antibody	75.4 (13.2, 312.6)	4	6
Puffy fingers	34.9 (24.0, 49.2)	5	12
Finger or wrist flexion contracture	29.0 (17.8, 46.2)	6	19
Tendon or bursal friction rubs	26.81 (2.4, 91.9)	7	10
Anti-topoisomerase-1 antibody	24.9 (12.7, 48.0)	8	2
Raynaud's phenomenon	24.1 (15.3, 37.5)	9	7
Finger tip ulcers or pitting scars	19.3 (12.7, 28.8)	10	5
Anti-centromere antibody	13.8 (9.0, 21.0)	11	3
Abnormal nailfold capillary pattern	10.4 (6.9, 15.1)	12	4
Gastro-esophageal reflux disease	7.8 (6.1, 10.0)	13	17
Antinuclear antibody	6.06 (4.1, 8.8)	14	13 <sup>b</sup>
Calcinosis	6.05 (3.4, 10.5)	15	18
Dysphagia	5.7 (4.2, 7.7)	16	19
Esophageal dilatation	5.6 (2.9, 10.2)	17	14
Interstitial lung disease	4.5 (3.4, 5.8)	18	8
Anti-PM-SCL antibody	2.4 (1.9, 7.1)	19	$20^{\rm b}$
Pulmonary arterial hypertension	1.2 (0.9, 1.5)	20	15
Carbon monoxide diffusion capacity (DLCO)	1.5 (1.1, 2.0)	21	16
Forced vital capacity (FVC)	0.9 (0.6, 1.3)	22	$20^{\rm b}$

**NC= Not Calculable** 

Johnson SR, et al. Arthritis Care Res (Hoboken). 2012 Mar;64(3):358-67.

### Classification of "Systemic Sclerosis" ACR / EULAR

### "Systemic Sclerosis"

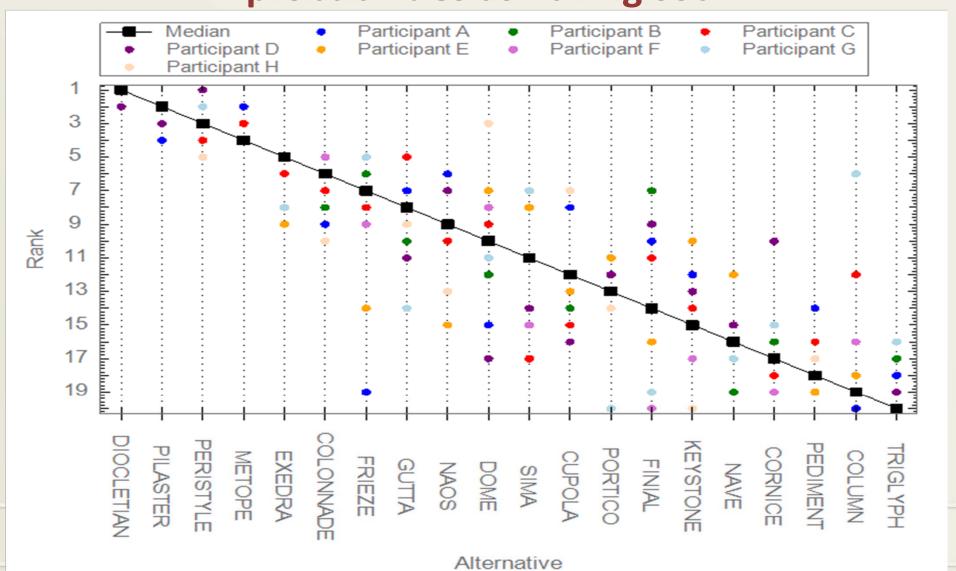


Not "Systemic Sclerosis"





## Ranking of cases with a spectrum of probabilities as having SSc



	Deriva	ition sample		Valida	tion sample	
Item	SSc	Scleroderma- like disorder	p-value	SSc	Scleroderma- like disorder	p-value
N=	100	100		268	137	
Age	55 (13)	51 (15)	0.05	54 (13)	52 (15)	0.17
Female	86 (86%)	79 (79%)	0.25	221 (83%)	101 (75%)	0.08
Region						
North America	50	50		191	91 (32%)	
Europe	50	50		(68%) 77 (63%)	46 (37%)	0.32
Time since onset of Raynaud's (years)	13 (7- 18)	12 (4-18)	0.42	9 (5-18)	10 (4-22)	.40
Time since first non- Raynaud's symptom (years)	10 (4- 13)	9 (2-14)	0.58	7 (3-12)	7 (3-15)	.89
Time since diagnosis (years)	8 (3-12)	6 (1-9)	0.10	5 (2-11)	4 (1-7)	.016
Scleroderma-like disorders		28 (28%)			32 (23%)	
systemic lupus erythematosus						
polymyositis/ dermatomyositis		23 (23%)			21 (15%)	
primary Raynaud's syndrome		19 (19%)			7 (5%)	
mixed connective tissue disease		9 (9%)			14 (10%)	
undifferentiated connective tissue disease		8 (8%)			17 (12%)	
eosinophilic fasciitis		6 (6%)			16 (12%)	
nephrogenic sclerosing fibrosis		3 (3%)			3 (2%)	
generalized morphea		5 (5%)			8 (6%)	
scleromyxedema		1 (1%)			3 (2%)	
graft versus host disease		3 (3%)			3 (2%)	
other diagnoses		8 (8%)			13 (9%)	
Manifestations						
Raynaud's phenomenon	91 (91%)	49 (49%)	<0.0001	257 (96%)	63 (46%)	<0.0001
Autoantibodies	68	7 (7%)	<0.0001	137	15 (11%)	<0.0001

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

#### **TOTAL SCORE^:**

Patients having a total score of <u>9 or more</u> are being classified as having definite systemic sclerosis. ^ Add the maximum weight (score) in each category to calculate the total score.

## Sensitivity and Specificity on ACR-EULAR Classification Criteria for SSc

	Derivation sample		Validation sample		
	(N=200)		(N=	405)	
	Sensitivity	Specificity	Sensitivity	Specificity	
	(95% CI)	(95% CI)	(95% CI)	(95% CI)	
1980 ARA SSc Criteria	.80 (.7287)	.77 (.6884)	.75 (.7080)	.72 (.6479)	
2001 LeRoy and Medsger criteria	.76 (.6884)	.69 (.6884)	.75 (.7080)	.78 (.70- .85)	
2013 SSc Criteria	.95 (.9098)	.93 (.8697)	.91 (.8794)	.92 (.8696)	



Item	Definition
Skin thickening	Skin thickening or hardening not due to scarring after injury, trauma, etc.
Puffy fingers	Swollen digits - a diffuse, usually nonpitting increase in soft tissue mass of the digits extending beyond the normal confines of the joint capsule. Normal digits are tapered distally with the tissues following the contours of the digital bone and joint structures. Swelling of the digits obliterates these contours. Not due to other reasons such as inflammatory dactylitis.
Finger tip ulcers or pitting scars	Ulcers or scars distal to or at the PIP joint not thought to be due to trauma. Digital pitting scars are depressed areas at digital tips as a result of ischemia, rather than trauma or exogenous causes.
Telangiectasia	Telangiectasia(e) in a scleroderma like pattern are round and well demarcated and found on hands, lips, inside of the mouth, and/or large matt-like telangiectasia(e). Telangiectasiae are visible macular dilated superficial blood vessels; which collapse upon pressure and fill slowly when pressure is released; distinguishable from rapidly filling spider angiomas with central arteriole and from dilated superficial vessels.
Abnormal nailfold capillary pattern consistent with SSc	Enlarged capillaries and/or capillary loss with or without peri-capillary hemorrhages at the nailfold and may be seen on the cuticle.
Pulmonary arterial hypertension	Pulmonary arterial hypertension diagnosed by right heart catheterization according to standard definitions.
Interstitial lung disease	Pulmonary fibrosis on HRCT or chest radiograph, most pronounced in the basilar portions of the lungs, or presence of 'Velcro' crackles on auscultation not due to another cause such as congestive heart failure.
Raynaud's phenomenon	Self report or reported by a physician with at least a two- phase color change in finger(s) and often toe(s) consisting of pallor, cyanosis and/or reactive hyperemia in response to cold exposure or emotion; usually one phase is pallor.
Scleroderma specific antibodies	Anti-centromere antibody or centromere pattern on antinuclear antibody (ANA) testing; anti-topoisomerase I antibody (also known as anti-Scl70 antibody); or anti-RNA polymerase III antibody. Positive according to local laboratory standards.

### Definitions of terms

### Classification criteria

- They are not diagnostic criteria but hopefully are close
- Thus early patients may not be classified
- Classification criteria do not equal diagnositic criteria, so it is possible that some patients may be diagnosed with SSc but don't meet the ACR / EULAR SSc classification criteria





### Use of the ACR / EULAR SSc classification criteria

#### Exclusion criteria

- You know there is a different disease
- Absence of sclerodactyly (ever) if skin involvement is elsewhere

#### Absolute inclusion criterion

 Scleroderma skin involvement with sclerodactyly and contiguous skin involvement proximal to the MCPs





#### Caveats for ACR / EULAR SSc classification criteria

- Mark highest score in each category
- Not all centers have access to RNApolymerase III Ab
- Don't apply criteria if you don't think patient has SSc or have a better explanation
  - Such as generalized morphea
- You can have more than one connective tissue disease (CTD) so a patient can have an overlap with SSc as one of the diseases and some patients with mixed connective tissue disease may be classified with SSc





### **Conclusions**

- There is a need to effectively classify SSc patients
- Classification systems have evolved over the years with advancing technology
  - Capillaroscopy, autoantibodies, new methodologies
- Patients can be classified with more than one disease with the ACR / EULAR SSc classification criteria (i.e., overlaps)
- You have to do some math!
- Current classification includes more patients who would not have been classified by previous criteria





## Conclusions about 2013 ACR/EULAR SSc classification criteria

- Items have good face validity
- Items have good discriminant validity
- Items have good construct validity
- The sensitivity and specificity of the ACR/EULAR SSc classification criteria are better than previous criteria





## Using the 2013 ACR / EULAR SSC Classification Criteria

Apply the criteria for SSc, if appropriate





- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

#### TOTAL SCORE^:

Patients having a total score of <u>9 or more</u> are being classified as having definite systemic sclerosis. ^ Add the maximum weight (score) in each category to calculate the total score.

# Sclerodactyly, Raynaud's, + anti-centromere, pulmonary arterial hypertension

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- These criteria are not applicable to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

#### TOTAL SCORE^:

Patients having a total score of <u>9 or more</u> are being classified as having definite systemic sclerosis. ^ Add the maximum weight (score) in each category to calculate the total score.

Sclerodactyly 4, Raynaud's 2, + anti-centromere 3, pulmonary arterial

hypertension, ILD 2

Score 11

Yes, criteria are met

- These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCORE^:	

Sclerodactyly, GERD, dilated esophagus, dysphagia RNA polymerase III, Scleroderma renal crisis

Patients having a total score of 9 or more are being classified as having definite systemic sclerosis. ^ Add the maximum weight (score) in each category to calculate the total score.

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /	
		Score	
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9	Sclerodactyly, 4
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2	GERD, 0 dilated esophagus,0
	Whole Finger, distal to MCP	4	dysphagia 0
Finger tip lesions	Digital Tip Ulcers	2	RNA polymerase III
(only count the highest score)	Pitting Scars	3	3,
Telangiectasia		2	Scleroderma renal
Abnormal nailfold capillaries		2	crisis 0
Pulmonary arterial hypertension and/or Interstitial lung Disease		2	
Raynaud's phenomenon		3	
Scleroderma related antibodies		3	
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)			Total score 7, SSc criteria not
	TOTAL SCORE^:		met
Patients having a total score of <u>9 or more</u> a sclerosis. ^ Add the maximum weight (scor			

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCORE^:	

Sclerodactyly just to PIP, GERD, dilated esophagus, dysphagia RNA polymerase III, RNP+ Scleroderma renal crisis

Patients having a total score of <u>9 or more</u> are being classified as having definite systemic sclerosis. ^ Add the maximum weight (score) in each category to calculate the total score.

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /	
		Score	
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9	Sclerodactyly just to PIP, 0
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2	GERD 0, dilated esophagus
	Whole Finger, distal to MCP	4	0, dvenbagia 0
Finger tip lesions	Digital Tip Ulcers	2	dysphagia 0 RNA polymerase
(only count the highest score)	Pitting Scars	3	III 3,
Telangiectasia		2	RNP+ 0
Abnormal nailfold capillaries		2	Scleroderma renal
Pulmonary arterial hypertension and/or Interstitial lung Disease		2	crisis 0
Raynaud's phenomenon		3	
Scleroderma related antibodies		3	
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)			Total 3
	TOTAL SCORE^:		
Patients having a total score of <u>9 or more</u> a sclerosis. ^ Add the maximum weight (sco			

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL 000DE4	

Sclerodactyly, Raynaud's, + anticentromere, dysphagia, dilated nailfold capillaries, calcinosis

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /	
		Score	
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9	Sclerodactyly 4 Raynaud's 3,
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2	+ anti- centromere 3,
	Whole Finger, distal to MCP	4	Dysphagia 0,
Finger tip lesions	Digital Tip Ulcers	2	dilated nailfold
(only count the highest score)	Pitting Scars	3	capillaries 2,
Telangiectasia		2	calcinosis 0
Abnormal nailfold capillaries		2	
Pulmonary arterial hypertension and/or Interstitial lung Disease		2	
Raynaud's phenomenon		3	
Scleroderma related antibodies		3	Total score 12
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)			
	TOTAL SCORE^:		
Patients having a total score of <u>9 or more</u> a	are being classified as having defin	ite systemic	

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

Modified
Rodnan skin
score of 20
including
finger
involvement
Raynaud's
ANA
nucleolar
GERD
ILD

## **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL COOREA	

# TOTAL SCORE^:

Patients having a total score of <u>9 or more</u> are being classified as having definite systemic sclerosis. ^ Add the maximum weight (score) in each category to calculate the total score.

Modified
Rodnan skin
score of 20
including finger
involvement 9
Raynaud's 3
ANA nucleolar 0
GERD 0
ILD 2

## **Total score 14**

NB criterion is met for skin thickening proximal to MCP so criteria don't need to be applied

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

Modified Rodnan skin score of 20 and no finger involvement ever

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

Modified Rodnan skin score of 20 and no finger involvement ever

Don't apply the criteria N/A Skin thickening sparing the fingers are not cl

#### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

sco 9  ngers 2  Finger, distal to MCP 4  Tip Ulcers 2	re
ngers 2 Finger, distal to MCP 4	
Finger, distal to MCP 4	
Tip Ulcers 2	
Scars 3	
2	
2	
2	
3	
3	
	2

No skin involvement ever, Telangiectasia, PAH, Raynaud's, +ANA

### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCORE^:	

No skin involvement ever 0. **Telangiectasia** 2, PAH 2, Raynaud's 3, +ANA 0

**Total score 7** 

SSc Criteria are not currently met

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

No skin involvement ever, Telangiectasia, PAH, Raynaud's, +ANA, +anticentromere Ab

#### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCORE^:	

No skin involvement ever 0. **Telangiectasia** 2, PAH 2, Raynaud's 3, **+ANA 0.** +anticentromere Ab 3

Total score 10

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

No skin involvement ever, Telangiectasia, ILD, PAH, Raynaud's, +ANA +Scl70 (topo1)

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /	
		Score	No skin
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9	involvement ever 0,
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2	Telangiectasia 2,
	Whole Finger, distal to MCP	4	ILD and PAH 2,
Finger tip lesions	Digital Tip Ulcers	2	Raynaud's 3,
(only count the highest score)	Pitting Scars	3	+ANA 0,
Telangiectasia		2	+Scl70 (topo1) 3
Abnormal nailfold capillaries		2	
Pulmonary arterial hypertension and/or Interstitial lung Disease		2	
Raynaud's phenomenon		3	Total acomo 40
Scleroderma related antibodies		3	Total score 10
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)			Not PAH and/or ILD count total of
	TOTAL SCORE^:		2

# You can try now





- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

No skin involvement ever, Telangiectasia, PAH, Raynaud's, +ANA, dilated capillaries at nailbeds in past (well documented)

### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /	
		Score	
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9	No skin
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2	involvement ever, 0 Telangiectasia, 2
	Whole Finger, distal to MCP	4	PAH, 2 Raynaud's, 3
Finger tip lesions	Digital Tip Ulcers	2	+ANA, 0
(only count the highest score)	Pitting Scars	3	dilated capillaries at
Telangiectasia		2	nailbeds in past
Abnormal nailfold capillaries		2	(well documented)
Pulmonary arterial hypertension and/or Interstitial lung Disease		2	2
Raynaud's phenomenon		3	
Scleroderma related antibodies		3	Total score 9
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)			Criteria are met
	TOTAL SCORE^:		- 11100
Patients having a total score of <u>9 or more</u> a sclerosis. ^ Add the maximum weight (sco			

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

Puffy fingers, Raynaud's, Abnormal nailfold cap, +ANA New dysphagia retrosternally, Scleroderma renal crisis

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA:	

Puffy fingers, 2
Raynaud's, 3
Abnormal
nailfold cap, 2
+ANA 0
New dysphagia
retrosternally, 0
Scleroderma
renal crisis 0

Total score 7
Criteria are not met

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

Puffy fingers,
Raynaud's,
Abnormal
nailfold cap,
+ANA
New dysphagia
retrosternally,
Scleroderma
renal crisis,
tendon friction
rubs

### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCORE^:	

Puffy fingers, 2 Raynaud's, 3 Abnormal nailfold cap, 2 +ANA 0 New dysphagia retrosternally, 0 Scleroderma renal crisis, 0 tendon friction rubs 0

Total score 7 Criteria are not met

#### IUIAL SCORE

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

Puffy fingers, Raynaud's, Abnormal nailfold cap, +ANA 0 New dysphagia retrosternally, 0 Scleroderma renal crisis, 0 +RNApol III

### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOPEA:	

Puffy fingers, 2
Raynaud's, 3
Abnormal nailfold
cap, 2
+ANA 0
New dysphagia
retrosternally, 0
Scleroderma
renal crisis, 0
+RNApol III 3

**Total score 10** 

### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

Puffy fingers,
Raynaud's,
Abnormal
nailfold cap,
+ANA
New dysphagia
retrosternally,
Scleroderma
renal crisis,
+RNApol III,
tendon friction
rubs,
Digital ulcers

### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

Puffy fingers, 2
Raynaud's, 3
Abnormal
nailfold cap, 2
+ANA 0
New dysphagia
retrosternally, 0
Scleroderma
renal crisis, 0
+RNApol III, 3
tendon friction
rubs, 0
Digital ulcers 2

**Total score 12** 

#### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

Sclerodactyly dital to PIPs, Raynaud's, Abnormal nailfold cap in past, +ANA with anti-centromere pattern, Digital pitted scars

### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA:	

Sclerodactyly dital to PIPs, 0
Raynaud's, 3
Abnormal nailfold cap in past, 2
+ANA with anticentromere pattern, 3
Digital pitted scars 3

**Total score 11** 

#### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

Sclerodactyly dital to PIPs, Raynaud's, +ANA with anticentromere Telangiectasia, calcinosis

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOPEA:	

Sclerodactyly dital to PIPs, 0 Raynaud's, 3 +ANA with anticentromere 3 Telangiectasia, 2 calcinosis 0

Total score 8 SSc criteria not met

### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

Sclerodactyly
whole fingers
and tight mouth
and face,
Raynaud's,
+ANA with anticentromere
Telangiectasia,
calcinosis

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA:	

Sclerodactyly
whole fingers and
tight mouth and
face, 4
Raynaud's, 3
+ANA with anticentromere 3
Telangiectasia, 2
calcinosis 0

**Total score 12** 

#### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

Sclerodactyly
whole fingers
and continous
proximal to
MCPs to hand,
Raynaud's,
+ANA
Telangiectasia,
calcinosis
Needing repeat
esophageal
dilations

### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

Sclerodactyly
whole fingers
and continous
proximal to
MCPs to hand, 9
Raynaud's, 3
+ANA 0
Telangiectasia,2
calcinosis 0
Needing repeat
esophageal
dilations 0

**Total score 14** 

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

Tight skin but sparing fingers and hands, Monoclonal gammapathy, neg ANA, Neg ENA No Raynaud's Weight loss No dysphagia No dilated capillaries

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

	Score
	9
Puffy fingers	2
Whole Finger, distal to MCP	4
Digital Tip Ulcers	2
Pitting Scars	3
	2
	2
	2
	3
	3
	Whole Finger, distal to MCP  Digital Tip Ulcers

#### TOTAL SCORE^:

Patients having a total score of <u>9 or more</u> are being classified as having definite systemic sclerosis. ^ Add the maximum weight (score) in each category to calculate the total score.

Tight skin but sparing fingers and hands, Monoclonal gammapathy, neg ANA, Neg ENA No Raynaud's Weight loss No dysphagia No dilated capillaries

Do not apply criteria, no hand involvement ever with skin involvement elsewhere – suspect another diagnosis

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

SLE with +ANA, anti-DNA, +centromere Ab Also finger tip ulcers, Sclerodactyly whole fingers Raynaud's, Telangiectasia, calcinosis Needing repeat esophageal dilations

#### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCORE^:	

Patients having a total score of <u>9 or more</u> are being classified as having definite systemic sclerosis. ^ Add the maximum weight (score) in each category to calculate the total score.

SLE with +ANA, 0 anti-DNA, 0 +centromere Ab 3 Also finger tip ulcers, 2 Sclerodactyly whole fingers 4 Raynaud's, 3 Telangiectasia, 2 calcinosis 0 Needing repeat esophageal dilations 0

Total score 14
Patient has SLE
and SSc overlap

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

Sjögren's with +ANA, centromere Ab +Ro, La, RF Puffy whole fingers Raynaud's, Telangiectasia, ILD

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

Sjögren's with +ANA, 0 centromere Ab 3 +Ro, La, RF 0 Puffy whole fingers 2 Raynaud's, 3 Telangiectasia, 2 ILD 2

Total score 12
Patient has
Sjogren's and
SSc overlap

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

Sjögren's with +ANA, centromere Ab +Ro, La, RF Puffy whole fingers Raynaud's, Telangiectasia, dilated capillaires

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with '**Skin thickening sparing the fingers'** also are not classified as having SSc.

Items	Sub-items	Weight /	
		Score	
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9	Sjögren's with
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2	+ANA, 0 centromere Ab 3
	Whole Finger, distal to MCP	4	+Ro, La, RF 0
Finger tip lesions	Digital Tip Ulcers	2	Puffy whole fingers
(only count the highest score)	Pitting Scars	3	2
Telangiectasia		2	Raynaud's, 3
Abnormal nailfold capillaries		2	Telangiectasia, 2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2	dilated capillaires 2
Raynaud's phenomenon		3	T 1 1 40
Scleroderma related antibodies		3	Total score 12
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)			
	TOTAL SCORE^:		
Patients having a total score of <u>9 or more</u> a sclerosis. ^ Add the maximum weight (sco	re being classified as having defing the repair of the rep	ite systemic e total score.	

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA.	

Sjögren's with +ANA, centromere Ab +Ro, La, RF Puffy whole fingers Raynaud's

#### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA:	

Sjögren's with +ANA, 0 centromere Ab 3 +Ro, La, RF 0 Puffy whole fingers 2 Raynaud's 3

Total score 8, criteria not met for SSc

#### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

Dermatomyositis+
ANA, +Jo1
Puffy whole
fingers
Raynaud's
Digital ulcer
Dilated capillaries
which resolved
with treatment of
myositis
Cape like Rash,
photosensitivity.
ILD

### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

#### **TOTAL SCORE^:**

Patients having a total score of <u>9 or more</u> are being classified as having definite systemic sclerosis. ^ Add the maximum weight (score) in each category to calculate the total score.

Dermatomyositis+
ANA, +Jo1 0
Puffy whole
fingers 2
Raynaud's 3
Digital ulcer 2
Dilated capillaries
which resolved
with treatment of
myositis 2
Cape like Rash, 0
photosensitivity. 0
ILD 2

Total score 11,
BUT you may
choose not to apply
criteria if SSc
overlap is not
suspected and you
think the features
are due to
dermatomyositis

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

sco 9  ngers 2  Finger, distal to MCP 4  Tip Ulcers 2	re
ngers 2 Finger, distal to MCP 4	
Finger, distal to MCP 4	
Tip Ulcers 2	
Scars 3	
2	
2	
2	
3	
3	
	2

Dermatomyositis+
ANA, +Jo1
Sclerodactyly
distally to PIPs
Raynaud's
Dilated capillaries
which resolved
with treatment of
myositis
Cape like Rash,
photosensitivity.
ILD

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

Dermatomyositis+
ANA, +jo1
Raynaud's
Digital ulcer
Dilated capillaries
which resolved
with treatment of
myositis
Cape like Rash,
photosensitivity.
ILD
Tight face and
tight fingers
proximal to MCPs

#### **TOTAL SCORE^:**

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		

Dermatomyositis+A
NA, +Jo1 0
Raynaud's 3
Digital ulcer 2
Dilated capillaries
which resolved with
treatment of
myositis 2
Cape like Rash, 0
photosensitivity. 0
ILD 2
Tight face and tight
fingers proximal to
MCPs 9

Overlap of dermatomyositis and SSc

Total score 18

#### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA:	

Puffy fingers+ANA, Raynaud's Dysphagia Scleroderma Renal crisis

#### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA:	

Puffy fingers 2 +ANA, 0 Raynaud's 3 Dysphagia 0 Scleroderma Renal crisis 0

Total score 5 SSc criteria not met

#### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCOREA:	

Puffy fingers 2 +ANA, 0 Raynaud's 3 Dysphagia 0 Scleroderma Renal crisis 0

Patient returns in two months with skin tightening to above the elbows and tendon friction rubs

#### TOTAL SCORE^:

- 1. These criteria are applicable to any patient considered for inclusion in a SSc study.
- 2. These criteria are **not applicable** to patients having a systemic sclerosis-like disorder better explaining their manifestations, such as: nephrogenic sclerosing fibrosis, scleredema diabeticorum, scleromyxedema, erythromyalgia, porphyria, lichen sclerosis, graft versus host disease, and diabetic chierarthropathy. Patients with 'Skin thickening sparing the fingers' also are not classified as having SSc.

Items	Sub-items	Weight /
		Score
Skin thickening of the fingers of both hands extending proximal to the metacarpophalangeal joints		9
Skin thickening of the fingers (only count the highest score)	Puffy fingers	2
	Whole Finger, distal to MCP	4
Finger tip lesions	Digital Tip Ulcers	2
(only count the highest score)	Pitting Scars	3
Telangiectasia		2
Abnormal nailfold capillaries		2
Pulmonary arterial hypertension and/or Interstitial lung Disease		2
Raynaud's phenomenon		3
Scleroderma related antibodies		3
(any of anti-centromere, anti-topoisomerasel [anti-ScL 70], anti-RNA polymerase III)		
	TOTAL SCORE^:	

Puffy fingers 2 +ANA, 0 Raynaud's 3 Dysphagia 0 Scleroderma Renal crisis 0

Patient returns in two months with skin tightening to above the elbows 9 and tendon friction rubs 0

Total score 14 Criteria now met

## **Backup Slides**

### Early symptoms of SSc

- Raynaud's phenomenon
  - May precede skin changes and visceral disease by several years especially in limited SSc
  - In dcSSc, RP may begin shortly after or coincident with the onset of skin disease
  - SSc patients may have less hyperaemia than in primary Raynaud's due to structural vasculopathy in SSc
- Puffy fingers may be the presenting sign in dcSSc
- Malaise, fatigue, arthralgia, myalgia
- Gastroesophageal symptoms or dyspnoea may be the presenting symptoms

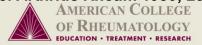




## Which patient does not meet 1980 ACR SSc classification criteria?

- Sclerodactyly and digital pits and Raynaud's, positive anti-centromere
- 2. Sclerodactyly and dysphagia and pulmonary fibrosis
- Sclerodactyly, Raynaud's, anti-centromere, dysphagia, dilated nailfold capillaries, PAH and calcinosis
- 4. Modified Rodnan skin score of 20 including finger involvement

Subcommittee for Scleroderma Criteria of the American Rheumatism Association Diagnostic and Therapeutic Criteria Committee. *Arthritis Rheum* 1980; 23:581-90



## Which patient does not meet 1980 ACR SSc classification criteria?

- Sclerodactyly and digital pits and Raynaud's, positive anti-centromere
- 2. Sclerodactyly and dysphagia and pulmonary fibrosis
- 3. Sclerodactyly, Raynaud's, anti-centromere, dysphagia, dilated nailfold capillaries, PAH and calcinosis
- 4. Modified Rodnan skin score of 20 including finger involvement

Subcommittee for Scleroderma Criteria of the American Rheumatism Association Diagnostic and Therapeutic Criteria Committee. *Arthritis Rheum* 1980; 23:581-90





# LeRoy criteria (2001): Classification criteria early SSc

ISSc	Raynaud's phenomenon (objective) Plus any one: SSc-type nailfold capillary pattern or SSc selective autoantibodies  OR  Raynaud's phenomenon (subjective only) Plus both SSc-type nailfold capillary pattern and SSc selective autoantibodies
IcSSc	Criteria for ISSc plus distal cutaneous changes
dcSSc	Criteria for ISSc plus proximal cutaneous changes

LeRoy EC and Medsger TA, Jr. J Rheumatol 2001; 28:1573-6.





### **Subsets of SSc**

Puffy fingers, RP,
dilated capillaries
This patient has
limited SSc Limited SSc

Limited cutaneous SSc

SSc sine scleroderma

Diffuse cutaneous SSc

? Indeterminate subset,? Overlaps

Adapted from Hachulla E, et al. Clinical Rev Allergy Immunol 2010; Epub ahead of print.



eular