

**Supplementary file I.** Details on search strategy following the PRISMA 2009 checklist <http://www.prisma-statement.org>

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- 1) Description of information sources:
    - 1.1 Pubmed search:
      - First search upon 28<sup>th</sup> of February 2015
      - Second search upon 28<sup>th</sup> of February 2016
    - 1.2 Cochrane database:
      - First search upon February 28<sup>th</sup> of 2015
      - Second search upon February 28<sup>th</sup> of 2016
    - 1.3 Biomed Central search:
      - Search upon 28<sup>th</sup> of February 2015
      - (Second search was not performed since Biomed Central search builder was unavailable due to working.)
  - 2) Full electronic search strategy
    - on **Pubmed**
    - Combination of two searches:
    - ("scleroderma, systemic"[MeSH Terms] OR "scleroderma"[All Fields])
    - AND ("disease activity score"[All Fields] OR "disease activity" OR "response index")
    - ("scleroderma, systemic"[MeSH Terms] OR "scleroderma"[All Fields]) AND ("disease activity score"[All Fields] OR "disease activity" OR "index") AND ("truth" OR "discrimination" OR "feasibility" OR "validity" OR "sensitivity to change" OR "reliability" OR OMERACT)
    - Language limits were added after reviewing title selection.
    - Duplicates were manually removed.
    - Titles without abstract or full texts were excluded.
    - No date limits were used in the first search. In the search update the limits from 1<sup>st</sup> March 2015 upon 28<sup>th</sup> February 2016 were added.
    - on **Biomed Central**: ("systemic sclerosis" [All Fields]) AND ("disease activity" [All Fields]) AND (validity, OMERACT, truth, discrimination, reliability [Any word, All Fields])
    - on **Cochrane library**: ("scleroderma, systemic"[MeSH Terms]) AND ("disease activity" OR "disease activity index" OR "response index")
  - 3) Results with reasons for full text exclusions (n=55).
    - a. Not about the topic.
      - i. Opinions/reviews/editorials, n=8
      - ii. About Disease severity index, n=1
      - iii. About criteria of Fiocco, n=3
      - iv. About self assessment questionnaire, n=1
    - b. Disease activity was measured based on another activity outcome (other than a disease activity index), n=28.
    - c. Disease activity index was mentioned in article, but the article did not fulfil the inclusion criteria (content did not concern the development of DAI, did not discuss about the validation status of DAI, neither used a DAI in their analysis), n=6.
    - d. No full text available, n=8.
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**Supplementary file 2.** Overview of studies assessing an association between the Disease Activity Score (DAS), determined by the European Scleroderma Study Group (EScSG) activity index, and variable constructs (n=45).

Study	Country	Population	Assessed associations (method)	Results (univariate analysis, except when otherwise specified)
Yalcinkaya <i>et al.</i> 2015 (1)	Turkey	59 with SSc	Association of presence of DU* and DAS (Pearson's Chi square test) Association of severity of PVI <sup>A</sup> and DAS (Pearson's Chi square test)  In DU <sup>+</sup> positive groups: correlation of scores of ramification and disorganisation with DA In DU <sup>+</sup> negative groups: correlation of scores of capillary loss, ramifications, disorganisation and microangiopathy with DA (Mann-Whitney U-test)	DU positive: DAS 1.9 ± 2.1 vs DU negative: DAS 1.2 ± 2.0 ( <i>p</i> =0.11) PVI severe: DAS 2.1 ± 2.4 vs PVI non severe: DAS 1.3 ± 1.9 ( <i>p</i> =0.19) R=0.396, <i>p</i> =0.041; R=0.702, <i>p</i> <0.001  R=0.427, <i>p</i> =0.015; R=0.750, <i>p</i> <0.001; R=0.370, <i>p</i> =0.037; R=0.673, <i>p</i> <0.001
Favoino <i>et al.</i> 2015 (2)	Italy	77 with SSc	Association of HLA-G <sup>1</sup> and DAS (Mann-Whitney U-test)  Association of HLA-G <sup>2</sup> negative patients and active disease	HLA-G positive: DAS 1.48 ± 1.23 vs HLA-G negative: DAS 2 ± 1.69 ( <i>p</i> =0.373) OR 0.34, <i>p</i> =0.046
Koca <i>et al.</i> 2014 (3)	Turkey	37 with SSc	Correlation Galectin-3 level and DAS (Pearson correlation) Association Galectin-3 level and active disease	No correlation found  Active: Gal-3 4.6 ± 5.8 vs Inactive: Gal-3 1.3 ± 1.1 ng/ml ( <i>p</i> =0.015)
Rosato <i>et al.</i> 2014 (4)	Italy	40 patients with SSc, 20 controls	Correlation pulmonary vasculopathy (VE/VCO <sub>2</sub> slope <sup>3</sup> ) and DAS (Spearman's rank correlation)	R=0.59, <i>p</i> <0.001
Tomcik <i>et al.</i> 2014 (5)	Czech-republic	33 patients with SSc, 20 controls	Correlation S100A4 level and DAS	R=0.750, <i>p</i> =0.0001
Keck <i>et al.</i> 2014 (6)	Multinational	86 men with SSc	Association abnormal nailfold capillaroscopy and median DAS	<i>p</i> =0.02
Soydinc <i>et al.</i> 2014 (7)	Turkey	76 with SSc and 45 controls	Correlation mean MPV <sup>4</sup> and DAS	R=-0.310, <i>p</i> =0.006
Lambrecht <i>et al.</i> 2014 (8)	Belgium	119 with SSc and 29 controls	Correlation GDF15 <sup>5</sup> level and DAS	R=0.338, <i>p</i> <0.001
Tedeschini <i>et al.</i> 2014 (9)	Italy	78 with SSc	Association of depressive symptoms (BDI <sup>6</sup> ) and DAS (Pearson's Chi square test)	BDI<10: DAS 1.7 ± 1.2 vs BDI≥10: DAS 2.8 ± 1.9 ( <i>p</i> =0.003).
Lanteri <i>et al.</i> 2014 (10)	France	134 with SSc and 401 controls	Correlation sFLC level** and DAS (Spearman's rank correlation) Correlation clinical and biological parameters and DAS\$	R=0.28, <i>p</i> =0.0009
Sambataro <i>et al.</i> 2014 (11)	Italy	107 patients with SSc	Correlation Nailfold videocapillaroscopic determinants and DAS (Spearman's rank correlation): - NEMO <sup>5</sup> - GC score <sup>5</sup> - Cs score <sup>5</sup>	R=0.65, <i>p</i> <0.0001 R=0.47, <i>p</i> <0.0001 R=-0.27, <i>p</i> =0.004
Sariyildiz <i>et al.</i> 2013 (12)	Turkey	48 with SSc and 42 controls	Correlation sleep quality (Pittsburgh Sleep Quality Index) and DAS (Spearman's rank correlation)	No correlation found
Giovannetti <i>et al.</i> 2013 (13)	Italy	30 with SSc  71 with SSc and 90 controls	Correlation antiERα-antibody level <sup>8</sup> and DAS (Spearman's rank correlation)  Association between presence of antiERα-antibodies and DAS	R=0.3, <i>p</i> =0.003  <i>p</i> =0.001
Perrot <i>et al.</i> 2013 (14)	France	82 with SSc	Correlation pain (VAS <sup>9</sup> ) and DAS (Pearson correlation)	No correlation found

Study	Country	Population	Assessed associations (method)	Results (univariate analysis, except when otherwise specified)
Golemati <i>et al.</i> 2013 (15)	Greece	85 patients with SSc, 120 controls	Association psychological wellbeing and active disease Depression (CES-D <sup>3</sup> >16) Negative life events (LES <sup>3</sup> >2) Positive reappraisal (WoC <sup>3</sup> >2)	OR 2.761 (95% CI 1.131–6.739), <b>p=0.029</b> OR 3.677 (95% CI 1.217–11.110), <b>p=0.026</b> OR 0.348 (95% CI 0.142–0.854), <b>p=0.028</b>
Dunne <i>et al.</i> 2013 (16)	Canada	26 patients with lcSSc, 14 patients with dcSSc	Correlation Ang2/Tie2 ratio <sup>4</sup> and DAS (Spearman's rank correlation)	- lcSSc: R=0.50, <b>p=0.0157</b> - dcSSc: R=0.60, <b>p=0.0317</b>
Budulgan <i>et al.</i> 2013 (17)	Turkey	30 patients with SSc, 30 controls	Association leptin level and active disease Association leptin level/BMI and active disease	Active: leptin 1.92 ± 2.90 vs Inactive: leptin 7.02 ± 7.65 ng/ml ( <b>p=0.02</b> ). Active: 0.07 ± 0.11 vs Inactive 0.26 ± 0.28 ( <b>p=0.02</b> ).
Perosa <i>et al.</i> 2013 (18)	Italy	121 patients with SSc 75 ACA-positive patients with SSc	Association ACA-positivity <sup>Δ</sup> and DAS (Mann-Whitney U-test) Association anti-FOXE3p53-62 Ab negativity <sup>ΔΔ</sup> and DAS (Mann-Whitney U-test) Association anti-FOXE3p53-62 Ab negativity <sup>ΔΔ</sup> and active disease	No association found <b>p=0.038</b> <b>p=0.045</b>
Muangchan <i>et al.</i> 2012 (19)	Canada	1043 patients with SSc	Correlation elevated CRP level (>8mg/L) and DAS (Spearman's rank correlation)	R=0.229, <b>p&lt;0.0001</b>
Caporali <i>et al.</i> 2012 (20)	Italy	160 patients with SSc	Correlation malnutrition and DAS (multiple regression analysis)	OR 3.72 (95%CI 1.84-7.52), <b>p&lt;0.001</b>
Martin <i>et al.</i> 2012 (21)	Brazil	18 patients with SSc, 10 controls	Correlation collagen V deposition in skin and DAS (Spearman's rank correlation)	R=0.45, <b>p=0.03</b>
Deuschle <i>et al.</i> 2011 (22)	Germany	101 patients with SSc	Correlation 6 minutes' walk distance and DAS (Spearman's rank correlation)	R=-0.321, <b>p&lt;0.01</b>
Bonella <i>et al.</i> 2011 (23)	Italy	25 patients with SSc	Correlation with DAS (Spearman's rank correlation) - serum level of KL-6 - serum level of Anti-Scl-70 <sup>o</sup> - serum level of SP-D <sup>1</sup>	R=0.73, <b>p&lt;0.0001</b> R=0.42, <b>p=0.03</b> No correlation found
Müller <i>et al.</i> 2011 (24)	Brazil	96 patients with SSc	Association ATA-1/anti-PolIII <sup>o</sup> antibodies and active disease	<b>p&lt;0.01/p=0.05</b>
Michalska-Jakubus <i>et al.</i> 2011 (25)	Poland	47 patients with SSc, 27 controls	Correlation Ang2 level and active disease (multivariate regression analysis) Correlation Ang2 level and DAS (Spearman's rank correlation)	β=0.305, <b>p=0.038</b> R=0.403, <b>p&lt;0.01</b>
Walker <i>et al.</i> 2010 (26)	Canada	326 patients with SSc	Association SSc subset (dcSSc vs lcSSc) and DAS (in patients with the same disease duration and depression scores) Association disease duration and DAS Association depression score (CES-D <sup>3</sup> ) and DAS (overdispersed Poisson regression model)	<b>RR=1.42 (95% CI 1.21-1.65)</b> <b>RR=0.88 (95% CI 0.82-0.95)</b> <b>RR=1.22 (95% CI 1.14-1.31)</b>
Minier <i>et al.</i> 2010 (27)	Hungary	80 patients with SSc	Correlation cost of illness (total costs) and DAS (Spearman's rank correlation)	R=0.28, <b>p&lt;0.05</b>
Cuomo <i>et al.</i> 2010 (28)	Italy	46 patients with SSc	Correlation exercise performance (maximum oxygen uptake) and DAS (Spearman's rank correlation)	No correlation found
Vettori <i>et al.</i> 2010 (29)	Italy	50 patients with SSc, 41 controls	Association atherosclerosis (IMT <sup>00</sup> ) and DAS (multiple regression analysis)	No association found

**Disease activity indices in SSc / K. Melsens et al.**

Study	Country	Population	Assessed associations (method)	Results (univariate analysis, except when otherwise specified)
Minier <i>et al.</i> 2010 (30)	Hungary	131 patients with SSc	Correlation serum markers and DAS at both time points (Y0,Y1) Correlation clinical outcome measures and DAS (CATPCA <sup>1</sup> )	<b>Correlation</b> with albumin, VEGF, vWF, PSGL-1 and CRP <b>Correlation</b> with HAQ-DI, ulcer score, mRSS, the 17-area thickness score, number of joint contractures and the hand anatomic index
Slobodin <i>et al.</i> 2010 (31)	Israel	10 patients with SSc, 10 controls	Correlation numbers of Tregulatory cells (expressed as patient-to-control ratio) and DAS (Spearman's rank correlation)	R=0.71, <b>p=0.034</b>
Fan <i>et al.</i> 2010 (32)	Canada	520 with SSc	Correlation PGA <sup>W</sup> and DAS (Pearsons correlation)	R=0.375, <b>p&lt;0.001</b>
Allanore <i>et al.</i> 2010 (33)	Multinational	7073 with SSc	Association left ventricular dysfunction (ejection fraction <55%) and active disease (multiple regression analysis)	OR=1.42 (95% CI 1.09-1.86), <b>p&lt;0.011</b>
Vacca <i>et al.</i> 2009 (34)	Italy/France	156 patients with SSc	Correlation vitamin D level and DAS (Spearman's rank correlation)	R=-0.17, <b>p=0.04</b>
Vanhuynne <i>et al.</i> 2009 (35)	Belgium	156 patients with SSc	Correlation manual ability and active disease	R=-0.4, <b>p&lt;0.001</b>
Hanke <i>et al.</i> 2009 (36)	Germany	266 patients with SSc	Correlation signal strength Anti-topol (with LIA <sup>·</sup> ) and DAS (Spearman's rank correlation)	R=0.234, <b>p=0.01</b>
Volpe <i>et al.</i> 2009 (37)	Italy	65 with SSc	Correlation antiCENP-B <sup>Δ</sup> /antiScl70 and DAS (Pearson's correlation)	No correlation found
Cuomo <i>et al.</i> 2008 (38)	Italy	302 with SSc	Association hypocomplementemia and DAS	<b>p&lt;0.0003</b>
Nevskaya <i>et al.</i> 2008 (39)	Russia	40 patients with SSc, 24 controls	Association EPC level <sup>  </sup> (median % of positive cells) and active disease	Active: EPC 0.02 ± 0.024 vs Inactive: EPC 0.009 ± 0.008, <b>p&lt;0.05</b>
Allanore <i>et al.</i> 2007 (40)	France	32 patients with SSc	Association EPC level <sup>  </sup> (median % of positive cells) and active disease	Active: EPC 1.49 (0.38-3.04) vs Inactive: EPC 0.62 (0.31-1.8), <b>p&lt;0.05</b>
Sfrent-Cornateanu <i>et al.</i> 2006 (41)	Romania	20 patients with SSc, 26 controls	Association homozygotes/heterozygotes promotor gen of IL6 and DAS (Mann Whitney test)	5.0 ± 3.3 vs 2.4 ± 3.6, <b>p&lt;0.05</b>
Volpe <i>et al.</i> 2006 (42)	Italy	28 patients with SSc, 28 controls	Correlation FVIIa level and active disease (Kendall's rank correlation)	No correlation found
Volpe <i>et al.</i> 2006 (43)	Italy	43 patients with SSc	Correlation urinary level of isoprostane and DAS	No correlation found
Danieli <i>et al.</i> 2005 (44)	Italy	76 patients with SSc	Correlation HR-QOL <sup>§</sup> (by SF-36) and DAS (Spearman's rank correlation)	Poor correlation (only vitality and social functioning dimensions were correlated [ <b>p&lt;0.05</b> ])
La Montagna <i>et al.</i> 2004 (45)	Italy	44 patients with SSc, 20 controls	Correlation prolactin level and DAS (Spearman's rank correlation)	No correlation found

DAS: Disease Activity Score, determined by the European Scleroderma Study Group activity index; Active disease is DAS ≥ 3; DA: disease activity; \*DU: digital ulcers; <sup>Δ</sup>PVI: peripheral vascular involvement; <sup>†</sup>HLA-G: Human Leucocyte Antigen-G; <sup>‡</sup>VE/VCO<sub>2</sub> slope: minute ventilation over CO<sub>2</sub> ventilation, which is an indirect sign of ventilation perfusion mismatch when elevated (>34); <sup>§</sup>MPV: mean platelet volume; <sup>||</sup>GDF: growth differentiation factor; <sup>¶</sup>BDI: Beck Depression Inventory; <sup>\*\*</sup>sFLC: serum Free Light Chains of immunoglobulins, marker of B-cell activity; <sup>§</sup>NEMO: number of micro-haemorrhages; <sup>§</sup>GC scores: giant capillaries scores; <sup>§</sup>Cs scores: mean number of capillaries; <sup>§</sup>antiERα: anti-estrogen receptor alpha; <sup>†</sup>VAS: visual analogue scale; <sup>‡</sup>CES-D: Centre for Epidemiologic Studies–Depression Scale; <sup>‡</sup>LES: life experiences survey; <sup>‡</sup>WoC: ways of coping; <sup>‡</sup>Ang2/Tie2: Angiopoietin2 and its receptor Tie2; <sup>Δ</sup>ACA: anti-centromere protein antibody; <sup>ΔΔ</sup>anti-FOXE3p53-62 Ab: FOXE3-derived peptide; <sup>°</sup>anti-Scl-70, ATA-1: antitopoisomerase-1 antibody; <sup>!SP-D</sup>: surfactant protein D; <sup>°</sup>Anti-polIII: anti-RNA polymerase III antibody; <sup>‡‡</sup>IMT: intima-media thickness of carotid arteries; <sup>!CATPCA</sup>: categorical principal component analysis; <sup>W</sup>PGA: physician's global assessment of disease activity; <sup>·</sup>LIA: line immuno-assay; <sup>Δ</sup>anti-CENP-B: Anti-centromere proteinB antibody; <sup>||</sup>EPC level: endothelial progenitor cells, estimate of the number of functional EPC in bloodstream on the expression of CD34+ and/or CD133+; <sup>§</sup>HR-QOL: health related-quality of life, measured by Short Form-36. § See Supplemental Table in Lanteri *et al.*

**Significant associations/correlations in bold**

## References

1. YALCINKAYA Y, PEHLIVAN O, OMMMA A *et al.*: The relationship between nailfold capillaroscopic assessment and telangiectasia score with severity of peripheral vascular involvement in systemic sclerosis. *Clin Exp Rheumatol* 2015; 33: S92-7.
2. FAVOINO E, FAVIA IE, VETTORI S *et al.*: Clinical correlates of human leucocyte antigen (HLA)-G in systemic sclerosis. *Clin Exp Immunol* 2015; 181: 100-9.
3. KOCA SS, AKBAS F, OZGEN M *et al.*: Serum galectin-3 level in systemic sclerosis. *Clin Rheumatol* 2014; 33: 215-20.
4. ROSATO E, ROMANIELLO A, MARGRI D *et al.*: Exercise tolerance in systemic sclerosis patients without pulmonary impairment: correlation with clinical variables. *Clin Exp Rheumatol* 2014; 32: S103-8.
5. TOMCIK M, CEREZO LA, SKACELOVA S *et al.*: Serum S100A4 correlates with skin fibrosis, lung involvement and disease activity in systemic sclerosis. *Ann Rheum Dis* 2014; 73: A48.
6. KECK AD, FOCHAROEN C, ROSATO E *et al.*: Nailfold capillary abnormalities in erectile dysfunction of systemic sclerosis: a EUSTAR group analysis. *Rheumatology (Oxford)* 2014; 53: 639-43.
7. SOYDINC S, TURKBEYLER IH, PEHLIVAN Y *et al.*: Mean platelet volume seems to be a valuable marker in patients with systemic sclerosis. *Inflammation* 2014; 37: 100-6.
8. LAMBRECHT S, SMITH V, DE WILDE K *et al.*: Growth differentiation factor 15, a marker of lung involvement in systemic sclerosis, is involved in fibrosis development but is not indispensable for fibrosis development. *Arthritis Rheumatol* 2014; 66: 418-27.
9. TEDESCHINI E, PINGANI L, SIMONI E *et al.*: Correlation of articular involvement, skin disfigurement and unemployment with depressive symptoms in patients with systemic sclerosis: a hospital sample. *Int J Rheum Dis* 2014; 17: 186-94.
10. LANTERIA, SOBANSKI V, LANGLOIS C *et al.*: Serum free light chains of immunoglobulins as biomarkers for systemic sclerosis characteristics, activity and severity. *Autoimmun Rev* 2014; 13: 974-80.
11. SAMBATARO D, SAMBATARO G, ZACCARA E *et al.*: Nailfold videocapillaroscopy microhaemorrhage and giant capillary counting as an accurate approach for a steady state definition of disease activity in systemic sclerosis. *Arthritis Res Ther* 2014; 16: 462.
12. SARIYILDIZ MA, BATMAZ I, BUDULGAN M *et al.*: Sleep quality in patients with systemic sclerosis: relationship between the clinical variables, depressive symptoms, functional status, and the quality of life. *Rheumatol Int* 2013; 33: 1973-9.
13. GIOVANNETTI A, MASELLI A, COLASANTI T *et al.*: Autoantibodies to estrogen receptor alpha in systemic sclerosis (SSc) as pathogenetic determinants and markers of progression. *PLoS One* 2013; 8: e74332.
14. PERROT S, DIEUDE P, PEROCHOU D, ALLANORE Y: Comparison of pain, pain burden, coping strategies, and attitudes between patients with systemic sclerosis and patients with rheumatoid arthritis: a cross-sectional study. *Pain medicine* 2013; 14: 1776-85.
15. GOLEMATI C, MOUTSPOULOS H, VLAHOYIANNPOULOS P: Psychological characteristics of systemic sclerosis patients and their correlation with major organ involvement and disease activity. *Clin Exp Rheumatol* 2013; 31: S37-S45.
16. DUNNE JV, KEEN KJ, VAN EEDEN SF: Circulating angiopoietin and Tie-2 levels in systemic sclerosis. *Rheumatol Int* 2013; 33: 475-84.
17. BUDULGAN M, DILEK B, BAG SB *et al.*: Relationship between serum leptin level and disease activity in patients with systemic sclerosis. *Clin Rheumatol* 2014; 33: 335-9.
18. PEROSA F, FAVOINO E, CUOMO G *et al.*: Clinical correlates of a subset of anti-CENP-A antibodies cross-reacting with FOX-E3p53-62 in systemic sclerosis. *Arthritis Res Ther* 2013; 15: R72.
19. MUANGCHAN C, HARDING S, KHIMDAS S *et al.*: Association of C-reactive protein with high disease activity in systemic sclerosis: results from the Canadian Scleroderma Research Group. *Arthritis Care Res (Hoboken)* 2012; 64: 1405-14.
20. CAPORALI R, CACCIALANZA R, BONINO C *et al.*: Disease-related malnutrition in outpatients with systemic sclerosis. *Clin Nutr* 2012; 31: 666-71.
21. MARTIN P, TEODORO WR, VELOSA AP *et al.*: Abnormal collagen V deposition in dermis correlates with skin thickening and disease activity in systemic sclerosis. *Autoimmun Rev* 2012; 11: 827-35.
22. DEUSCHLE K, WEINERT K, BECKER MO, BACKHAUS M, HUSCHER D, RIEMEKAESTEN G: Six-minutes walk distance as a marker for disability and complaints in patients with systemic sclerosis. *Clin Exp Rheumatol* 2011; 29: S53-9.
23. BONELLA F, VOLPE A, CARAMASCHI P *et al.*: Surfactant protein D and KL-6 serum levels in systemic sclerosis: correlation with lung and systemic involvement. *Sarcoidosis Vasc Diffuse Lung Dis* 2011; 28: 27-33.
24. MÜLLER CDE S, PAIVA EDOS S, AZEVEDO VF, RADOMINSKI SC, LIMA FILHO JH: Autoantibody profile and clinical correlation in a group of patients with systemic sclerosis in southern Brazil. *Rev Bras Reumatol* 2011; 51: 314-8, 23-4.
25. MICHALSKA-JAKUBUS M, KOWAL-BIELECKA O, CHODOROWSKA G, BIELECKI M, KRASOWSKA D: Angiopoietins-1 and -2 are differentially expressed in the sera of patients with systemic sclerosis: high angiopoietin-2 levels are associated with greater severity and higher activity of the disease. *Rheumatology (Oxford)* 2011; 50: 746-55.
26. WALKER JG, STEELE RJ, SCHNITZER M *et al.*: The association between disease activity and duration in systemic sclerosis. *J Rheumatol* 2010; 37: 2299-306.
27. MINIER T, PENTEK M, BRODSZKY V *et al.*: Cost-of-illness of patients with systemic sclerosis in a tertiary care centre. *Rheumatology (Oxford)* 2010; 49: 1920-8.
28. CUOMO G, SANTORIELLO C, POLVERINO F, RUOCCO L, VALENTINI G, POLVERINO M: Impaired exercise performance in systemic sclerosis and its clinical correlations. *Scand J Rheumatol* 2010; 39: 330-5.
29. VETTORI S, MARESCA L, CUOMO G, ABBADESSA S, LEONARDO G, VALENTINI G: Clinical and subclinical atherosclerosis in systemic sclerosis: consequences of previous corticosteroid treatment. *Scand J Rheumatol* 2010; 39: 485-9.
30. MINIER T, NAGY Z, BALINT Z *et al.*: Construct validity evaluation of the European Scleroderma Study Group activity index, and investigation of possible new disease activity markers in systemic sclerosis. *Rheumatology* 2010; 49: 1133-45.
31. SLOBODIN G, AHMAD MS, ROSNER I *et al.*: Regulatory T cells (CD4(+)/CD25(bright) FoxP3(+)) expansion in systemic sclerosis correlates with disease activity and severity. *Cell Immunol* 2010; 261: 77-80.
32. FAN X, POPE J, CANADIAN SCLERODERMA RESEARCH G, BARON M: What is the relationship between disease activity, severity and damage in a large Canadian systemic sclerosis cohort? Results from the Canadian Scleroderma Research Group (CSRG). *Rheumatol Int* 2010; 30: 1205-10.
33. ALLANORE Y, MEUNE C, VONK MC *et al.*: Prevalence and factors associated with left ventricular dysfunction in the EULAR Scleroderma Trial and Research group (EUSTAR) database of patients with systemic sclerosis. *Ann Rheum Dis* 2010; 69: 218-21.
34. VACCA A, CORMIER C, PIRAS M, MATHIEU A, KAHAN A, ALLANORE Y: Vitamin D deficiency and insufficiency in 2 independent cohorts of patients with systemic sclerosis. *J Rheumatol* 2009; 36: 1924-9.
35. VANTHUYNE M, SMITH V, ARAT S *et al.*: Validation of a manual ability questionnaire in patients with systemic sclerosis. *Arthritis Rheum* 2009; 61: 695-703.
36. HANKE K, DAHNRIK C, BRUCKNER CS *et al.*: Diagnostic value of anti-topoisomerase I antibodies in a large monocentric cohort. *Arthritis Res Ther* 2009; 11: R28.
37. VOLPE A, RUZZENENTE O, CARAMASCHI P *et al.*: Clinical associations of anti-CENP-B and anti-Scl70 antibody levels measured by multiplexed fluorescent microsphere immunoassay in systemic sclerosis. *Rheumatol Int* 2009; 29: 1073-9.
38. CUOMO G, ABIGNANO G, RUOCCO L, VETTORI S, VALENTINI G: [Hypocomplementemia in systemic sclerosis]. *Reumatismo* 2008; 60: 268-73.
39. NEVSKAYA T, BYKOVSKAIA S, LYSSUK E *et al.*: Circulating endothelial progenitor cells in systemic sclerosis: relation to impaired angiogenesis and cardiovascular manifestations. *Clin Exp Rheumatol* 2008; 26: 421-9.
40. ALLANORE Y, BATTEUX F, AVOUAC J, ASSOUS N, WEILL B, KAHAN A: Levels of circulating endothelial progenitor cells in systemic sclerosis. *Clin Exp Rheumatol* 2007; 25: 60-6.
41. SFRENT-CORNATEANU R, MIHAI C, BALAN S, IONESCU R, MOLDOVEANU E: The IL-6 promoter polymorphism is associated with disease activity and disability in systemic sclerosis. *J Cell Mol Med* 2006; 10: 955-9.
42. VOLPE A, SALVAGNO GL, LIPPI G *et al.*: Low levels of activated factor VII in systemic sclerosis. *J Thromb Thrombolysis* 2006; 22:

- 133-8.
43. VOLPE A, BIASI D, CARAMASCHI P *et al.*: Levels of F2-isoprostanes in systemic sclerosis: correlation with clinical features. *Rheumatology* (Oxford) 2006; 45: 314-20.
44. DANIELI E, AIRO P, BETTONI L *et al.*: Health-related quality of life measured by the Short Form 36 (SF-36) in systemic sclerosis: correlations with indexes of disease activity and severity, disability, and depressive symptoms. *Clin Rheumatol* 2005; 24: 48-54.
45. LA MONTAGNA G, MELI R, CRISCUOLO T, D'ANGELO S, VALENTINI G: Bioactivity of prolactin in systemic sclerosis. *Clin Exp Rheumatol* 2004; 22: 145-50.