

Supplementary file

Univariable logistic regression analysis for patients with DcSSc and LcSSc separately

Table 1. Univariable logistic regression analysis of 64 DcSSc patients with progressive and stable disease

	Adjusted* Univariable Odds Ratio (95% CI)	p-value
Sociodemographics		
Age, years, mean (SD)	1.014 (0.977-1.051)	0.471
Female, N (%)	0.871 (0.283-2.684)	0.810
Body weight, kg, mean (SD)	0.997 (0.959-1.036)	0.869
Disease characteristics, N (%)		
Friction rubs	7.816 (0.792-77.165)	0.078
Proximal muscular weakness	5.176 (0.931-28.771)	0.060
Pulmonary crackles	2.101 (0.734-6.018)	0.167
MRSS, median (IQR)	1.043 (0.996-1.092)	0.075
Laboratory investigations		
EGFR, ml/min, median (IQR)	1.008 (0.993-1.023)	0.281
Cardiopulmonary investigations		
FVC % of predicted, mean (SD)	0.994 (0.986-1.020)	0.635
DLCO % of predicted, mean (SD)	0.976 (0.946-1.007)	0.123
Maximum VO2 % of predicted, mean (SD)		
SF-36, median (IQR)	0.988 (0.974-1.002)	0.091
Physical Component Summary Scale	0.959 (0.914-1.006)	0.088
SHAQ (0-3), median (IQR)†	2.257 (0.967-5.039)	0.059

FVC: forced vital capacity; DLCO: diffusing capacity for carbon monoxide; VO2: volume oxygen uptake; SF-36: Short Form-36; IQR: interquartile range.

* Adjusted for previous or current treatment on baseline evaluation with cyclophosphamide, methotrexate or autologous hemapoietic stem cell transplantation.

Table 2. Univariable logistic regression analysis of 79 LcSSc patients with progressive and stable disease

	Adjusted* Univariable Odds Ratio (95% CI)	p-value
Sociodemographics		
Age, years, mean (SD)	1.012 (0.977-1.047)	0.506
Female, N (%)	2.763 (0.837-9.124)	0.095
Body weight, kg, mean (SD)	0.993 (0.953-1.791)	0.732
Disease characteristics, N (%)		
Friction rubs	NA	
Proximal muscular weakness	NA	
Pulmonary crackles	1.957 (0.554-6.909)	0.297
MRSS, median (IQR)	0.985 (0.798-1.218)	0.887
Laboratory investigations		
EGFR, ml/min, median (IQR)	1.003 (0.997-1.009)	0.311
Cardiopulmonary investigations		
FVC % of predicted, mean (SD)	0.980 (0.957-1.003)	0.093
DLCO % of predicted, mean (SD)	0.970 (0.940-1.001)	0.054
Maximum VO2 % of predicted, mean (SD)	0.980 (0.964-0.997)	0.017
SF-36, median (IQR)		
Physical Component Summary Scale	0.947 (0.901-0.996)	0.034
SHAQ (0-3), median (IQR)†	1.861 (0.766-4.414)	0.168

FVC: forced vital capacity; DLCO: diffusing capacity for carbon monoxide; VO2: volume oxygen uptake; SF-36: Short Form-36; IQR: interquartile range.

* Adjusted for previous or current treatment on baseline evaluation with cyclophosphamide, methotrexate or autologous hemapoietic stem cell transplantation.

Table 3. Independent predictive variables for progressive disease in LcSSc based on multivariable logistic regression analysis

Predictors	B	OR	95% CI	P-value
Age, years	0.020	1.020	0.983-1.058	0.296
Female	0.932	2.539	0.725-8.893	0.145
Maximum VO ₂ , % of predicted*	-0.014	0.986	0.966-1.006	0.173
Missing indicator variable CPET	0.437	1.548	0.073-32.738	0.779

VO₂: volume oxygen uptake; CPET: cardiopulmonary exercise test.

* Beta is 0 if CPET is missing

Figure 1. Percentage of patients fulfilling criteria contributing to overall progressive disease

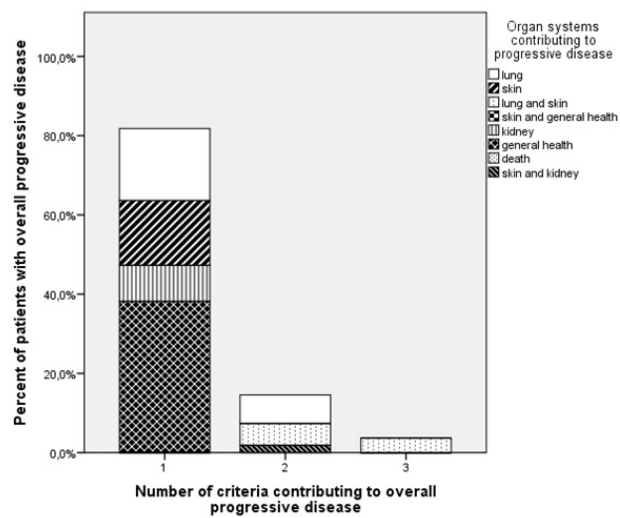


Figure 2. Calibration plot of patients with observed progressive disease versus predicted probability of progressive disease

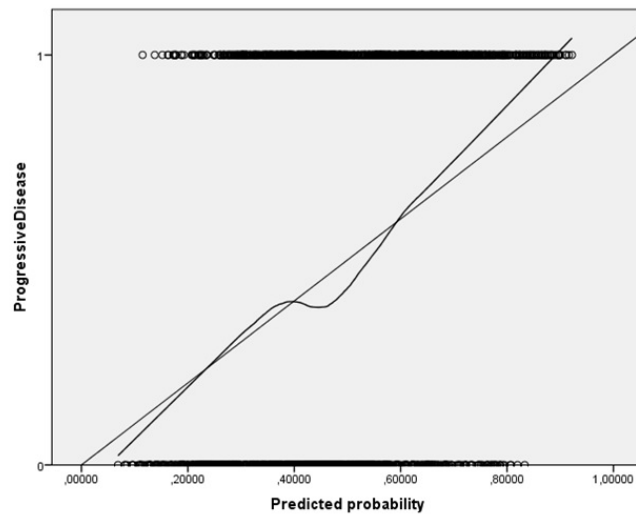


Figure 3. Receiver operation characteristic curve for the prediction model

