"classic" enrichment statistic, the recommended approach for RNA-sequencing data.

Results: According to GSEA analysis of DEGs applied to SSc and HC, we identified 305 DEGs that were upregulated or downregulated at least 2-fold. In particular, 175 genes were upregulated and 130 genes were downregulated. A marked upregulation of genes involved in Wnt signaling, including Wnt family members, was present in HC if compared with SSc. The upregulation of collagen type VI, extracellular matrix protein 2, vascular endothelial growth factor D, among others, was also observed. Conversely, a marked downregulation of late cornified envelope and of genes encoding for keratins, was present in HC versus SSc samples. GSEA revealed that HC were characterized, among others, by gene signatures related to stromal stem cells proliferation, cytokine-cytokine receptor interaction, macrophage-enriched metabolic network, whereas SSc tissues were enriched in signatures related to keratinization, cornification, retinoblastoma (RB) 1 and tumour suppressor (TP) 53 signaling. Figure 1 displays GSEA in HC *vs* SSc tissues.

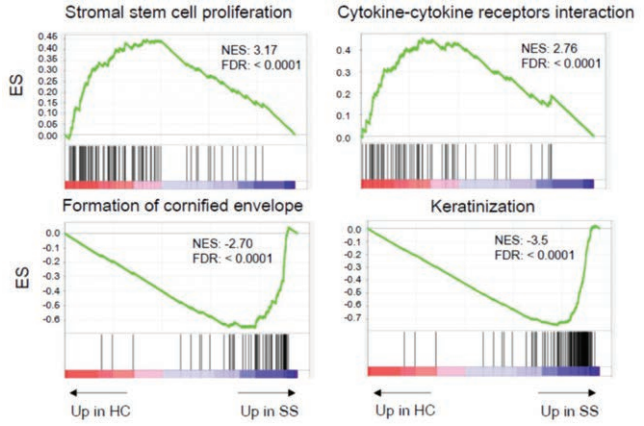

Figure 1. GSEA in HC vs SSc tissues.Enrichment of gene signature was analyzed in transcriptomic data from HC and SSc samples.ES=enrichment score. NES=normalized enrichment score. FDR=false discovery rate.

Conclusion: According to our preliminary data, RNA-seq, differential gene expression and pathway analysis revealed that SSc patients show a discrete pattern of gene expression associated with keratinization, extracellular matrix generation, and negative regulation of angiogenesis and stromal stem cells proliferation. Further analysis on larger numbers of patients are needed; however, our results provide an interesting framework for the development of biomarkers representing vascular injury and fibrotic changes in SSc in order to explore potential future therapeutic targets.

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POS0383 CLINICAL CHARACTERISTICS AND PROGNOSIS OF PATIENTS WITH SYSTEMIC SCLEROSIS SINE SCLERODERMA: DATA FROM THE INTERNATIONAL EUSTAR DATABASE.

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Background: LeRoy's classification defines two main subsets of Systemic Sclerosis (SSc) based on the extent of skin fibrosis: limited cutaneous SSc (lcSSc) with skin thickening sparing the trunk and distal to the elbow and knees, and diffuse cutaneous SSc (dcSSc) with proximal and distal skin thickening. These two subsets notably differ in terms of survival and frequency of visceral involvement, dcSSc being less prevalent but having a higher mortality rate with more frequent visceral manifestations. SSc sine scleroderma (ssSSc) is a third subset initially described by Rodnan *et al.* and characterized by the absence of skin fibrosis but with the existence of SSc-associated visceral manifestations.

Objectives: This study aimed to characterise the main clinical features of patients with ssSSc in comparison with the lcSSc and dcSSc subsets within the international EUSTAR database.

Methods: All patients from the EUSTAR database fulfilling the ACR2013 or 1980 classification criteria for SSc assessed by the modified Rodnan Skin score (mRSS) at inclusion and with at least one follow-up visit were eligible. Sine scleroderma (ssSSc) was defined by the absence of skin thickening (mRSS=0 and no sclerodactyly) at all available visits. The clinical characteristics of these ssSSc patients were compared to those of patients with lcSSc and dcSSc with similar disease duration at last follow-up visit. Descriptive statistics were applied.

Results: Among the 4263 patients fulfilling the inclusion criteria, 376 (8.8%) were classified as ssSSc. Among them, 40.3% had puffy fingers, 39.4% had interstitial lung disease (ILD), 1.6% had a history of scleroderma renal crisis at inclusion visit. At last available visit, in comparison with 708 lcSSc and 708 dcSSc with the same disease duration, ssSSc patients had a lower prevalence of previous or current digital ulcers (28.2% versus 53.1% in lcSSc (P<0.001) and 68.3% in dcSSc (P<0.001)), of joint synovitis (16.9% versus 24.3% in lcSSc (P<0.01) and 30.8% in dcSSc (P<0.0001)), and of elevated sPAP on echocardiogram (15.2% versus 23.9% in lcSSc (P<0.01) and 28.7% in dcSSc (P<0.0001)). Despite similar disease duration, disease activity at follow up visit (assessed by the EScSG disease activity index 2001 and 2016) was lower in ssSSc in comparison with lcSSc and dcSSc. By contrast, the prevalence of ILD was almost similar in ssSSc and lcSSc (49.8% and 57.1% (P=0.03)) but significantly higher in dcSSc (75.0%, P<0.0001). Based on forced vital capacity, ILD was less severe in ssSSc in comparison with the other subsets (mean FVC 100% (SD=22)(%pred) versus 93% (SD=21) in lcSSc and 82% (SD=23) in dcSSc (P<0.0001 for both)). Anti-centromere antibodies were most represented in ssSSc (61.7% versus 41.9% in lcSSc (P<0.0001) and 16.3% in dcSSc (P<0.0001), whereas the opposite distribution was observed for anti-Scl70 antibodies. Survival was significantly higher in ssSSc patients compared to lcSSc (P<0.05) and dcSSc (P<0.0001).

Conclusion: This study highlights that ssSSc patients account for almost 10% of SSc patients with milder disease severity compared to both lcSSc and dcSSc.

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POS0384 ULTRA SHORT ECHO TIME MRI (UTE) SEQUENCE IN THE ASSESSMENT OF INTERSTITIAL DISEASE IN PATIENTS WITH SYSTEMIC SCLEROSIS: CORRELATION WITH DISEASE EXTENSION AT CT AND WITH PULMONARY LUNG FUNCTION TESTS.

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Background: Interstitial lung disease (ILD) is the major cause of death in Systemic sclerosis (SSc). Computed tomography (CT) is the gold standard imaging