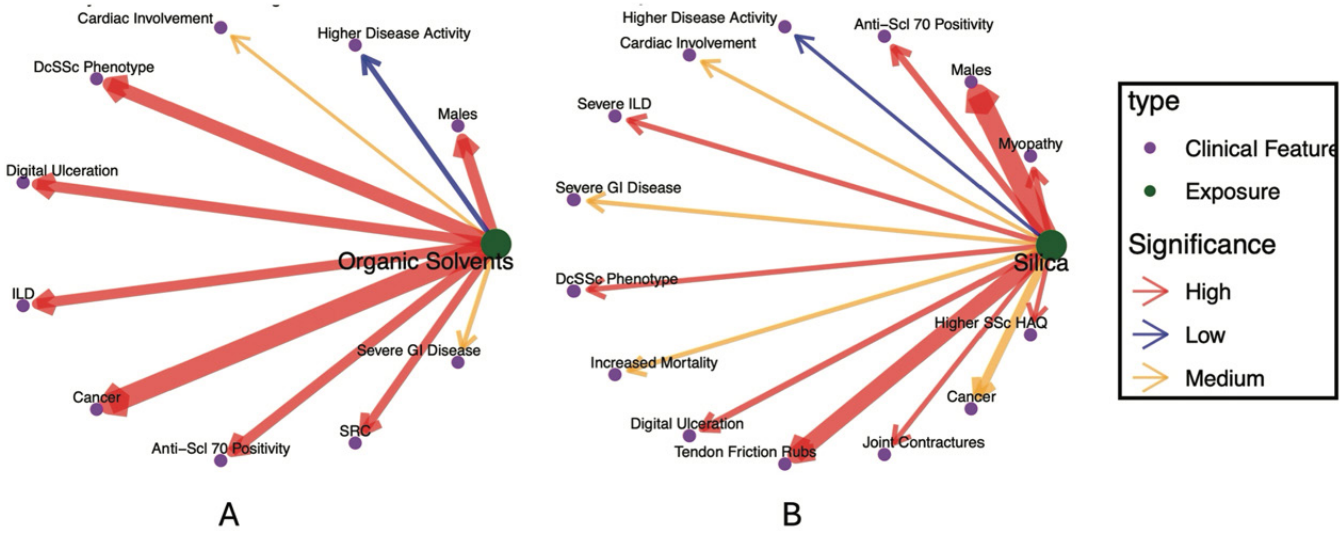

Supplementary Fig. S1. Network diagram depicting the association between occupational exposures and specific clinical phenotypes in systemic sclerosis.

The green central nodes represent occupational exposure to silica and organic solvents. The arrows link the exposure to the associated specific clinical feature and the arrow thickness is proportional to the strength of the association based on odds ratios and frequencies in the cited studies. The colour of the arrows indicates statistical significance. Edge width and colour reflect the strength of association, derived from reported odds ratios, hazard ratios, or frequencies. Associations were categorised as high (OR or HR ≥2.0 or $p<0.05$), medium (OR/HR 1.2–1.99 or borderline p-values), or low (OR/HR <1.2 or frequency only), and are shown in red, orange, and blue respectively.

Software: Diagram constructed using R (version 4.3.1) with the packages igraph, tidygraph, and ggraph.

A: Organic solvents demonstrate significant links to male sex, anti-Scl 70 positivity, DcSSc phenotype, ILD, digital ulceration and cancer.

B: Silica exposure shows strong associations with male sex, anti-Scl 70 positivity, DcSSc phenotype, severe ILD and myopathy.

SSc: systemic sclerosis; DcSSc: diffuse cutaneous systemic sclerosis; ILD: interstitial lung disease; Anti-Scl-70: antibody to scleroderma 70; SRC: scleroderma renal crisis; GI: gastrointestinal; SSc-HAQ: scleroderma health assessment questionnaire.