Methods 216 Italian SSc patients, followed between 2006 and 2008, were studied. Sera were tested by immunofluorescence for antinuclear antibodies, counterimmunoelectrophoresis for anti-ENA (anti-topo I, PM-Scl, Ku, U1RNP and others), and ELISA for anti-RNA polymerase III. Available sera (negative for all these) were also tested by immunoprecipitation (IP, protein analyses by 35S-methionine labelled cells; RNA analyses by urea-PAGE and silver staining). Specificities of autoantibodies were verified using reference sera. Charts were reviewed for clinical information.

Results Out of 216 patients, 67 were ACA (+) and 81 were anti-topo I (+). Among the remaining 68 patients, 15 were anti-RNAP III positive. Sera from 12 anti-nucleolar staining positive samples were available for IP: anti-Th/To antibodies were found in 8 of 12 patients (67%). They were all negative for ACA, anti-RNAP III and anti-ENA. Clinical features of eight anti-Th/To patients were compared with 67 ACA (+) patients. All except one ACA (+) patient had ISSc. Anti-Th/To patients were younger ($p=0.0046$), with a predominant male distribution ($p=0.004$) versus ACA (+) group. In anti-Th/To group, alveolitis ($p=0.04$), pericarditis ($p=0.028$) and puffy hands ($p=0.0004$) were more frequently detected. Both groups had low Medsger cardiopulmonary index and excellent 10-year survival.

Conclusions Anti-Th/To are common in anti-nucleolar antibody positive Italian SSc patients. Both anti-Th/To and ACA patients had ISSc with excellent prognosis. Although impairment of pulmonary function appears mild, anti-Th/To group has frequent alveolitis and pericarditis. Testing for anti-Th/To should help to subset SSc patients and to follow-up properly.

A22 ANTI-TH/TO ANTIBODIES IN ITALIAN SCLERODERMA PATIENTS: CLINICAL AND IMMUNOLOGICAL CORRELATIONS AND COMPARISON WITH PATIENTS WITH ANTI-CENTROMERE ANTIBODIES

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Purpose Anti-Th/To antibodies, found in 3–5% of patients with systemic sclerosis (SSc), recognise a nucleolar 7–2/8–2 RNA-protein complex. They are associated with limited SSc (ISSc) with lung involvement and reduced survival comparing with anticentromere (ACA) (+) patients. However, clinical studies on anti-Th/To are limited due to poor availability of serological tests. The aim of our study is to compare the clinical manifestations of patients with two autoantibodies associated with ISSc: anti-Th/To and ACA.

Abstract 22 Table 1

	Anti-Th/To (n=8)	Anticentromere (n=67)	p Value
Female:male	5:3	66:1	0.0006
Mean age (years ($\pm$ SD))	54.5 ($\pm$ 18)	66.6 ($\pm$ 10.1)	0.0046
Mean disease duration (years ($\pm$ SD))	8.5 ($\pm$ 6.5)	8.7 ($\pm$ 5.9)	NS
Limited systemic sclerosis	100%	98.5%	NS
Teleangiectasia	12.5%	49.25%	0.0484
Puffy hands	62.5%	9%	0.0004
Alveolitis	38%	4.5%	0.0435
Pericarditis	25%	4.5%	0.0278