

Supplementary data

	Jo1 (n=19)	PL7 (n=6)	PL12 (n=4)	OJ (n=1)	EJ (n=2)	KS (n=2)
cNSIP	7	1	3	0	1	1
fNSIP	10	7	4	1	1	0
OP	8	2	2	0	0	0
cNSIP/OP overlap	6	3	2	0	0	0
fNSIP/OP overlap	3	2	0	0	1	0
fNSIP/UIP	0	0	0	0	1	0
DAD	1	0	0	0	0	0
Definite UIP	1	0	1	0	0	1
Indeterminate	1	0	0	0	0	0

Supplementary Table 1. HRCT pattern of interstitial lung disease (ILD) at presentation of anti-synthetase patients (ASyS) as determined by auto-antibody expression (n=66 available with imaging). The most common radiological pattern of ILD associated with ASyS was non-specific interstitial pneumonia (fibrotic NSIP (fNSIP) and cellular NSIP (cNSIP)), although patients also presented organising pneumonia (OP), usual interstitial pneumonia (UIP) or overlap radiological patterns. One patient presented acutely with an acute interstitial pneumonia and a radiological pattern consistent with diffuse alveolar damage (DAD).

	Respiratory ASyS	Rheumatology ASyS	P value
FVC (actual)	2.54 (1.82-3.08), n=52	2.53 (2.0-3.57), n=23	0.308
FVC % predicted	70 (62-83), n=52	76 (67-89), n=23	0.289
TLco	4.35 (3.33-5.84), n=40	4.05 (3.18-5.70), n=23	0.540
TLco % predicted	50 (44-63), n=43	49(39-69), n=23	0.354

Supplementary Table 2. Lung function in anti-synthetase patients (ASyS) presenting to respiratory and rheumatology services. There was no significant difference in the baseline FVC and TLco of patients presenting to respiratory and rheumatology services ($p>0.05$, Mann Whitney U test). Abbreviations: FVC, forced vital capacity; TLco, transfer factor for carbon monoxide; % percentage; n, number.

	Respiratory	Rheumatology	P value
Non-Jo1	34 PL7 (n=15), PL12 (n=12), EJ (n=4), KS (n=2), OJ (n=1)	4 PL12 (n=3), PL7 (n=1)	0.0027
Jo1	18	19	

Supplementary Table 3. Detection of Jo1 vs non-Jo1 antibodies in anti-synthetase patients initially presenting to respiratory and rheumatology services. Patients presenting to respiratory services were more likely to express non-Jo1 antibodies compared to those presenting to rheumatology services (Fisher's exact test, $p < 0.05$).

Outcome of 1 year FVC % predicted	Jo1 antibody status	Non-Jo1 antibody status
Stable	19	19
Improvement	9	9
Progression	2	3

Supplementary Table 4: Outcome in Forced vital capacity at 1 year follow up (% predicted), comparing those with Jo1 versus non-Jo1 antibodies. There was no significant difference in the number of patients demonstrating stability, improvement or decline in lung function between groups (Chi squared testing $p > 0.05$, $n = 61$).