

**Supplementary table 1. Main demographic and baseline lung function information of the ASSD-ILD+ and IPF patients included in this study.** ASSD: antisynthetase syndrome; DLCO: diffusing capacity of the lung for carbon monoxide; FVC: forced vital capacity; ILD: interstitial lung disease; IPF: idiopathic pulmonary fibrosis; SD: standard deviation.

	ASSD-ILD+ patients	IPF patients
Age at the time of the study (years), mean $\pm$ SD	59.1 $\pm$ 13.9	64.4 $\pm$ 7.1
Sex (men/women), n (%)	48/98 (32.9 / 67.1)	144/30 (82.8 / 17.2)
Smoking history, n (%)	54 (42.5)	139 (81.8)
Lung function		
FVC (% predicted), mean $\pm$ SD	77.6 $\pm$ 25.3	74.5 $\pm$ 21.0
DLCO (% predicted), mean $\pm$ SD	58.7 $\pm$ 22.6	35.1 $\pm$ 15.6

**Supplementary table 2.** Genotype and allele frequencies of *MUC1* rs4072037 in women with ASSD-ILD+ and IPF. ASSD: antisynthetase syndrome; CI: confidence interval; ILD: interstitial lung disease; IPF: idiopathic pulmonary fibrosis; OR: odds ratio. Statistically significant results are highlighted in **bold**.

	ASSD-ILD+	IPF	<i>p</i>	OR [95% CI]	<i>p</i> *	OR [95% CI]*
	% (n)	% (n)				
<b>Genotypes</b>						
TT	18.4 (18)	40.0 (12)	-	Ref.	-	Ref.
TC	57.1 (56)	43.3 (13)	<b>0.03</b>	<b>2.87 [1.11-7.41]</b>	<b>0.04</b>	<b>2.89 [1.06-7.89]</b>
CC	24.5 (24)	16.7 (5)	0.06	3.20 [0.96-10.72]	<b>0.04</b>	<b>3.72 [1.04-13.29]</b>
<b>Alleles</b>						
T	46.9 (92)	61.7 (37)	-	Ref.	-	Ref.
C	53.1 (104)	38.3 (23)	<b>0.05</b>	<b>1.82 [1.01-3.28]</b>	<b>0.03</b>	<b>1.96 [1.05-3.64]</b>

\*Adjusted for age.

**Supplementary table 3.** Genotype and allele frequencies of *MUC1* rs4072037 in men with ASSD-ILD+ and IPF. ASSD: antisynthetase syndrome; CI: confidence interval; ILD: interstitial lung disease; IPF: idiopathic pulmonary fibrosis; OR: odds ratio. Statistically significant results are highlighted in **bold**.

	ASSD-ILD+	IPF	<i>p</i>	OR [95% CI]	<i>p</i> *	OR [95% CI]*
	% (n)	% (n)				
<b>Genotypes</b>						
TT	20.8 (10)	31.3 (45)	-	Ref.	-	Ref.
TC	45.9 (22)	49.3 (71)	0.44	1.39 [0.60-3.22]	0.43	1.41 [0.61-3.26]
CC	33.3 (16)	19.4 (28)	<b>0.04</b>	<b>2.57 [1.02-6.45]</b>	0.07	2.40 [0.95-6.08]
<b>Alleles</b>						
T	43.8 (42)	55.9 (161)	-	Ref.	-	Ref.
C	56.2 (54)	44.1 (127)	<b>0.04</b>	<b>1.63 [1.02-2.60]</b>	0.06	1.57 [0.98-2.52]

\*Adjusted for age.