

Table 1. Patient characteristics

	Serum periostin level (ng/mL)			<i>P</i> value
	All cases	≥106	< 106	
N	29	9	20	
Age (years)	66.8±9.0	68.3±6.9	66.2±9.8	0.67
Gender				
Male / Female	27 / 2	8 / 1	19 / 1	0.53
No. of SLB undergo	8	2	6	1.0
Smoking status				
Smoker / Non-smoker	26 / 3	7 / 2	19 / 1	0.22
Brinkman index	790.8±559.8	776.7±561.0	797.5±574.6	0.84
Serum biomarkers				
Periostin (ng/mL)	98.0±41.5	-	-	-
LDH (IU/L)	240.5±58.7	233.4±35.8	243.8±67.6	0.82
KL-6 (IU/mL)	1266.6±734.1	1039.6±403.5	1368.8±830.8	0.45
Pulmonary function test				
%VC (%)	78.8±22.8	72.7±25.6	81.5±21.7	0.32
%D _{LCO} (%)	56.0±22.7	44.2±15.8	60.4±23.6	0.064
Mean observation period (days)	1035.2±663.1	697.4±644.3	1187.2±628.3	0.048*
No. of AE complicated	6	1	5	0.63
Drug therapy at the first observation day[†]	5	1	4	1.0

SLB: surgical lung biopsy; AE: acute exacerbation

[†]All 5 study subjects who received drug therapy were administered prednisolone in combination with cyclosporine A.

Table 2. Inter-observer variability: correlation between two observers on the extent of the HRCT abnormalities

HRCT score	Baseline (<i>n</i> = 27)			6 months after baseline (<i>n</i> = 12)		
	Kappa*	<i>r</i>**	<i>P</i>**	Kappa*	<i>r</i>**	<i>P</i>**
Honeycombing (%)	0.78	0.87	< .001	0.77	0.90	< .001
Reticulation (%)	0.75	0.86	< .001	0.56	0.85	< .001
GGA (%)	0.92	0.88	< .001	0.86	0.96	< .001
Airspace consolidation (%)	0.76	0.91	< .001	0.70	0.90	< .001
Emphysema (%)	0.90	0.95	< .001	1.00	0.97	< .001
TBE grade (0-3)	0.72	0.79	< .001	0.70	0.79	< .001

*The two independent inter-observer agreements for the presence of abnormalities,

** Spearman rank correlation coefficient

HRCT: high-resolution computed tomography; GGA: ground-glass attenuation;

TBE: traction bronchiectasis

Table 3. Correlation between the serum level of periostin and the clinical parameters in IPF patients

	Baseline		6 M after baseline			Baseline		Delta values	
	n	Mean	n	Mean	delta values	r	P value	r	P value
Age (years)	29	66.8±9.0		–		-0.050	0.80		
Serum biomarkers									
Periostin (ng/mL)	29	98.0±41.5	12	123.9±40.7	25.3±32.9	–	–	–	–
KL-6 (IU/mL)	29	1266.6±734.1	27	1240.5±812.1	29.6±571.8	-0.29	0.13	0.16	0.43
LDH (IU/L)	28	240.5±58.7	26	267.3±97.0	28.3±87.6	-0.015	0.94	-0.29	0.15
HRCT score (%)									
Total score	27	39.1±21.0	12	44.0±19.2	8.5±10.8	0.13	0.53	0.21	0.51
Fibrosis score	27	28.4±15.8	12	35.1±15.9	5.6±8.6	0.064	0.75	0.36	0.25
Inflammation score	27	10.7±10.8	12	8.9±6.0	2.9±3.6	-0.046	0.82	-0.16	0.61
Honeycombing	27	5.9±6.3	12	8.7± 9.1	1.3±1.9	0.19	0.34	0.59	0.045*
Reticulation	27	5.3±8.8	12	4.2± 6.0	0±2.6	-0.26	0.19	-0.10	0.75
GGA	27	24.4±16.0	12	25.7±13.6	5.1±6.0	-0.12	0.54	-0.18	0.58
Airspace consolidation	27	3.5±7.6	12	5.4± 12.9	2.1±3.8	0.077	0.70	0.083	0.80
Emphysema	27	5.8±5.6	12	6.1±6.1	0.28±0.65	0.11	0.59	0.39	0.21
TBE grade (0–3) on HRCT	27	1.3±0.62	12	1.4±0.81	0.15±0.31	0.088	0.66	-0.029	0.93

† Fibrosis score; the sum of the scores of honeycombing, reticulation and GGA, and airspace consolidation with TBE

§ Inflammation score; the sum of the scores of GGA and airspace consolidation without TBE

‡ Total score; the sum of the fibrosis and inflammation scores

HRCT: high-resolution computed tomography; GGA: ground glass attenuation; N.D.: no data; TBE: traction bronchiectasis

Table 4. Log-rank test for overall survival and time-to-event**A. Overall survival**

	Cut-off				
	level	n	RR	<i>P</i> value	95% CI
Serum biomarkers					
Periostin (ng/mL)	106	29	3.6	0.0072*	1.3-9.9
LDH (IU/L)	193	28	0.44	0.15	0.15-1.6
KL-6 (IU/mL)	1436	29	1.8	0.23	0.67-4.9
HRCT score (%)					
Total score	33.3	27	6.2	0.0081*	1.6-40.0
Fibrosis score	20	27	8.6	0.014*	1.7-157.3
Inflammation score	11.7	27	3.0	0.045*	0.97-9.4
TBE grade (0–3)	0.83	27	2.6	0.018*	1.0-7.9

B. Time-to-event

	Cut-off				
	level	n	RR	<i>P value</i>	95% CI
Serum biomarkers					
Periostin (ng/ml)	106	29	6.0	0.0011*	1.8-21.1
LDH (IU/l)	193	28	0.84	0.75	0.31-2.9
KL-6 (IU/ml)	1436	29	0.98	0.96	0.41-2.3
HRCT score (%)					
Total score	33.3	27	2.3	0.085	0.92-6.4
Fibrosis score	20	27	2.7	0.043*	1.1-8.5
Inflammation score	11.7	27	1.8	0.19	0.71-4.3
TBE grade (0-3)	0.83	27	4.1	0.044*	1.2-25.7

HRCT: high-resolution computed tomography; TBE: traction bronchiectasis;

RR: relative risk; CI: Confidence interval