

**Table S4 Comparison of demographic data between PM/DM-ILD patients with or without complication of serious infection<sup>a</sup>.**

PM/DM-ILD ( <i>n</i> = 116)		Infection ( <i>n</i> = 38)	Non-infection ( <i>n</i> = 78)	<i>p</i> -Value	
Women <i>n</i> (%)		24 /38 (63.2%)	59 /78 (75.6%)	0.16	
Type ( <i>n</i> )		PM 7, DM 24, CADM 7	PM 15, DM 27, CADM 36	0.007**	
Age (year)		58.9 ± 13.9 <sup>b</sup>	54.7 ± 15.2 <sup>b</sup>	0.15	
Smoking <i>n</i> (%)		10 /35 (28.6%)	27 /71 (38.0%)	0.34	
Follow-up period (months)		32.1 [2.8-62.1] <sup>c</sup>	49.1 [31.6-79.6] <sup>c</sup>	0.024*	
Manifestation <i>n</i> (%)	Eruption	32 /38 (84.2%)	65 /77 (84.4%)	0.98	
	Muscle weakness	28 /38 (73.7%)	48 /77 (62.3%)	0.23	
	Dysfunction of swallowing	9 /38 (23.7%)	13 / 76 (17.1%)	0.40	
	Fever	21 /38 (55.3%)	32 / 77 (41.6%)	0.17	
Baseline data	CK (U/l)	418 [191-1,136] <sup>c</sup>	220 [76-1,887] <sup>c</sup>	0.40	
	LDH (U/l)	420 [335-574] <sup>c</sup>	343 [258-486] <sup>c</sup>	0.005**	
	KL-6 (U/ml)	848 [605-1,231] <sup>c</sup>	572 [405-978] <sup>c</sup>	0.014*	
	CRP (mg/dl)	0.9 [0.34-1.99] <sup>c</sup>	0.30 [0.10-1.51] <sup>c</sup>	0.032*	
	Lymphocyte (/μl)	848 [552-1,177] <sup>c</sup>	1,008 [735-1,435] <sup>c</sup>	0.040*	
	Albumin (g/dl)	3.18 ± 0.52 <sup>b</sup>	3.53 ± 0.55 <sup>b</sup>	0.003**	
	PaCO <sub>2</sub> (mmHg)	36.0 [31.5-38.8] <sup>c</sup>	38.0 [35.5-41.5] <sup>c</sup>	0.016*	
	Ferritin (ng/ml)	462 [223-1,369] <sup>c</sup>	313 [142-666] <sup>c</sup>	0.071	
Autoantibody <i>n</i> (%)	IgG (mg/dl)	1,420 [1,208-1,714] <sup>c</sup>	1,475 [1,287-1,784] <sup>c</sup>	0.12	
	Anti-Jo-1 Ab	7 /38 (18.4%)	14 /76 (18.4%)	1.00	
	Anti-ARS Ab	4 /17 (23.5%)	5 /28 (17.9%)	0.71	
	Anti-MDA5 Ab	4 /15 (26.7%)	4 /16 (25.0%)	1.00	
	Anti-TIF-1γ Ab	-	2 /2 (100%)	NA <sup>c</sup>	
	ANA (>80×)	10 /35 (28.6%)	23 /76 (30.3%)	0.86	
	Anti-SS-A Ab	3 /23 (13.0%)	12 /57 (21.1%)	0.54	
Malignancy (<3 years) <i>n</i> (%)		8 /36 (22.2%)	13 /76 (17.1%)	0.52	
HRCT	Zone A	1.0 [0-2.0] <sup>c</sup>	1.0 [0-1.0] <sup>c</sup>	0.054	
	Zone B	1.0 [1.0-2.0] <sup>c</sup>	1.0 [0-1.0] <sup>c</sup>	0.049*	
	Zone C	2.0 [1.0-3.0] <sup>c</sup>	1.0 [1.0-2.0] <sup>c</sup>	0.036*	
	Zone D	3.0 [2.0-4.0] <sup>c</sup>	3.0 [2.0-4.0] <sup>c</sup>	0.068	
	Zone total	7.0 [4.0-11.0] <sup>c</sup>	6.0 [4.0-8.0] <sup>c</sup>	0.031*	
Treatment	Initial PSL dose (mg/kg/day)	0.94 ± 0.30 <sup>b</sup>	0.76 ± 0.29 <sup>b</sup>	0.005**	
	Accumulative	1 month	23.7 ± 7.5 <sup>b</sup>	21.5 ± 7.7 <sup>b</sup>	0.38
	PSL dose (mg/kg)	2 months	41.4 ± 15.2 <sup>b</sup>	38.7 ± 13.3 <sup>b</sup>	0.62
		4 months	64.2 ± 28.0 <sup>b</sup>	64.0 ± 20.9 <sup>b</sup>	0.61
		6 months	90.0 ± 31.9 <sup>b</sup>	82.8 ± 27.2 <sup>b</sup>	0.60
	mPSL pulse <i>n</i> (%)	31 /38 (81.6%)	46 /78 (59.0%)	0.016*	
	IVCY <i>n</i> (%)	25 /38 (65.8%)	23 /78 (29.5%)	<0.001**	

	Calcineurin inhibitor <i>n</i> (%)	34 /38 (89.5%)	47 /77 (61.0%)	0.002**
	Combination therapy <sup>d</sup> <i>n</i> (%)	23 /38 (60.5%)	17 /78 (21.8%)	<0.001**
	IVIg <i>n</i> (%)	6 /38 (15.8%)	7 /77 (9.1%)	0.35
Outcome	ICU management <i>n</i> (%)	10 /38 (26.3%)	3 /78 (3.8%)	0.001**
	Death <i>n</i> (%)	11 /38 (28.9%)	3 /78 (3.8%)	<0.001**

<sup>a</sup>The infection group includes the PM/DM-ILD patients who have the complication of serious infections which need intravenous antibiotic therapy or longer hospitalization within 6 months after the diagnosis.

<sup>b</sup>The data are shown as the mean  $\pm$  standard deviation

<sup>c</sup>Values are the median [interquartile range]

<sup>d</sup>Combination therapy including mPSL, IVCY, and calcineurin inhibitor

<sup>e</sup>Not applicable

\* $p < 0.05$ , \*\* $p < 0.01$