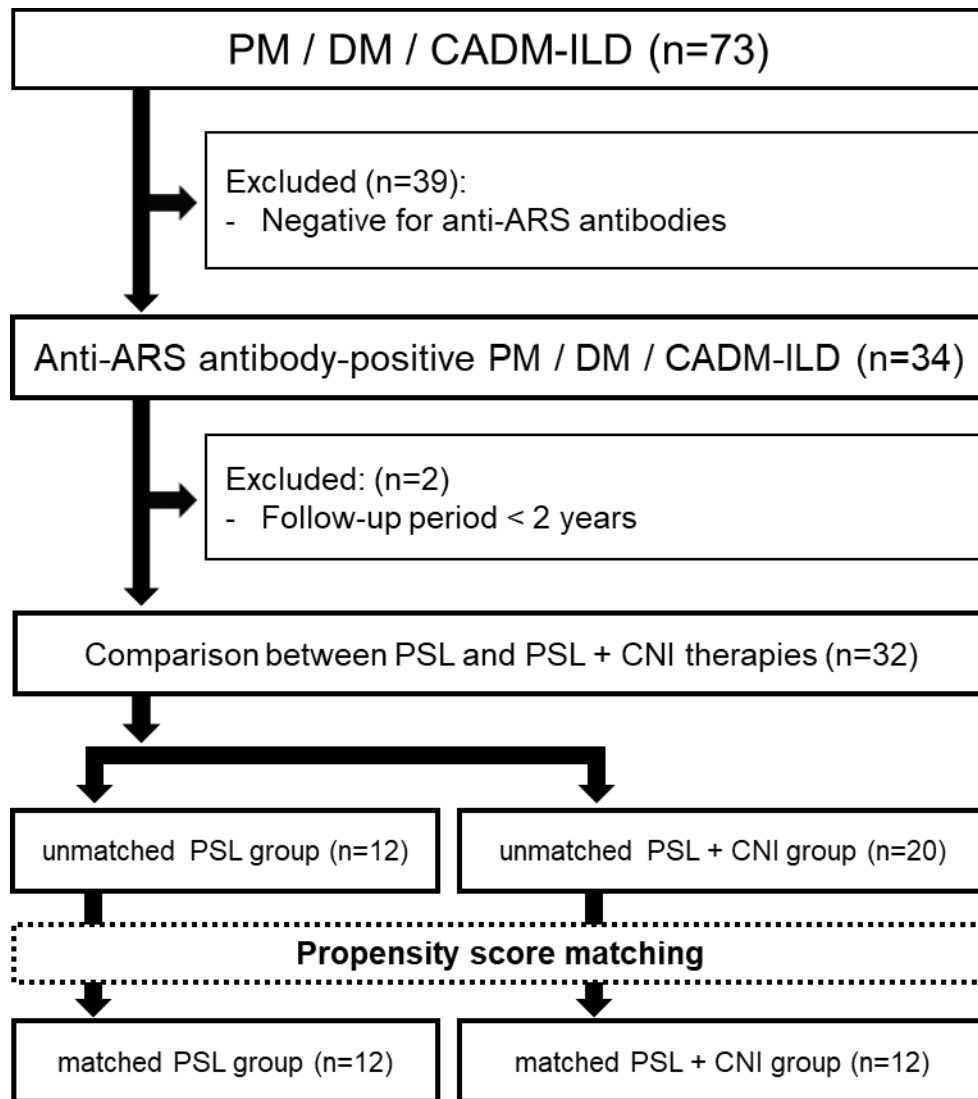**Supplementary Figure 1.** Flow of this study.

Supplementary Table 1. Characteristics of unmatched patients.

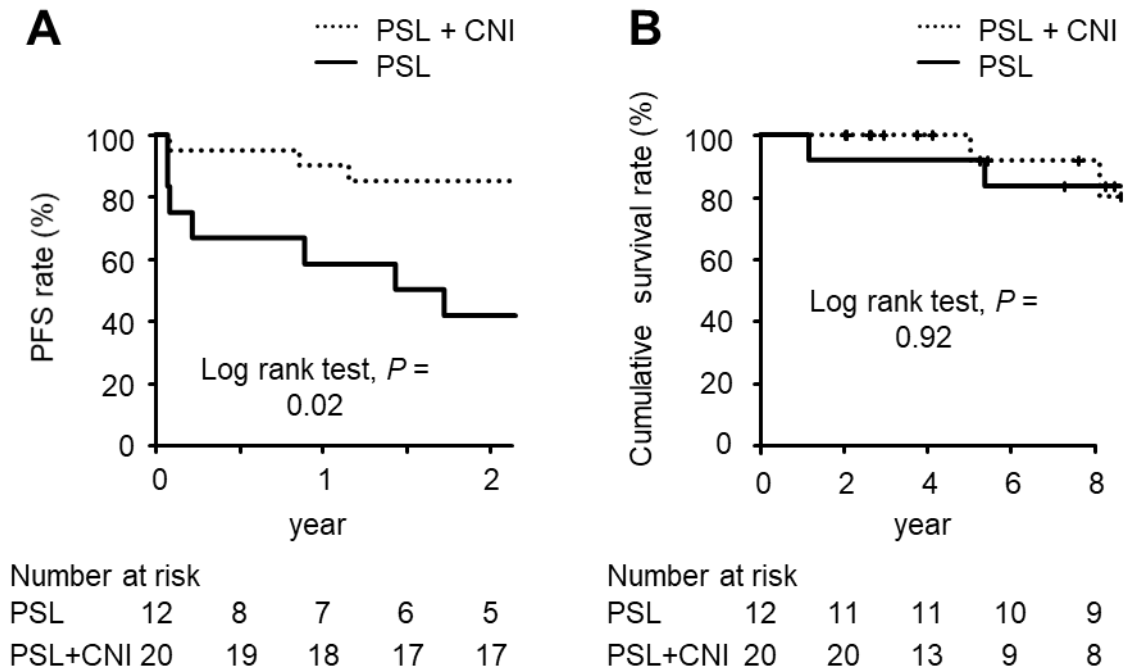|	PSL, $n = 12$	PSL + CNI[‡], $n = 20$	*P* value
Baseline characteristics			
Age, years	56 (33–71)	57 (42–77)	0.70
Male/Female	10 (83.3)/2 (16.7)	17 (85)/3 (15)	1.00
Smoking, never/former/current	8 (66.7)/2 (16.7)/2 (16.7)	13 (65)/2 (10)/5 (25)	0.78
ILD onset, chronic/subacute/acute	8 (66.7)/3 (25)/1 (8.3)	12 (60)/5 (25)/3 (15)	0.85
Myositis diagnosis, DM/CADM/PM	6 (50)/6 (50)/0 (0)	9 (45)/7 (35)/4 (20)	0.23
ARS, PL7/Jo1/EJ/PL12/KS/OJ	5 (41.2)/3 (25)/1 (8.3)/2 (16.7)/1 (8.3)/0 (0)	7 (35)/4 (20)/5 (25)/1 (5)/2 (10)/1 (5)	0.70
CPK, IU/L	128 (48–476)	198 (30–5274)	0.33
Aldolase, U/L	8.3 (3.6–19.1)	7.4 (3.1–133)	0.39
Ferritin, ng/mL	66 (16–342)	119 (16–524)	0.43
KL-6, U/mL	821 (430–3250)	1046 (278–6192)	0.82
SP-D, ng/mL	130 (84–497)	173 (53–1090)	0.51
PaO_2, Torr	81 (63–95)	75 (60–97)	0.23
% FVC	69 (48–99)	70 (38–93)	0.97
$FEV_{1.0}$/FVC, %	82 (72–93)	86 (68–100)	0.37
Disease duration, days [#]	41 (8–169)	14 (5–2088)	0.25
Initial PSL dose, mg/kg body weight	0.75 (0.5–1.0)	0.78 (0.7–1.0)	0.71
mPSL pulse therapy	6 (50)	7 (35)	0.47

Data presented as median (range) or frequency (%).

From the date of diagnosis until the date of treatment initiation.

‡ Cyclosporin A, $n = 16$; tacrolimus, $n = 4$.

ILD, interstitial lung disease; DM, dermatomyositis; CADM, clinically amyopathic dermatomyositis; PM, polymyositis; ARS, anti-ARS antibodies; CPK, creatine phosphokinase; KL-6, Krebs von den Lungen-6; SP-D, Surfactant Protein-D; PaO_2, arterial oxygen pressure; %FVC, predicted forced vital capacity; $FEV_{1.0}$, forced expiratory volume 1.0 (s); %DLCO, predicted diffusing capacity of the lung carbon monoxide; PSL, prednisolone; mPSL, methyl PSL; CNI, calcineurin inhibitor.
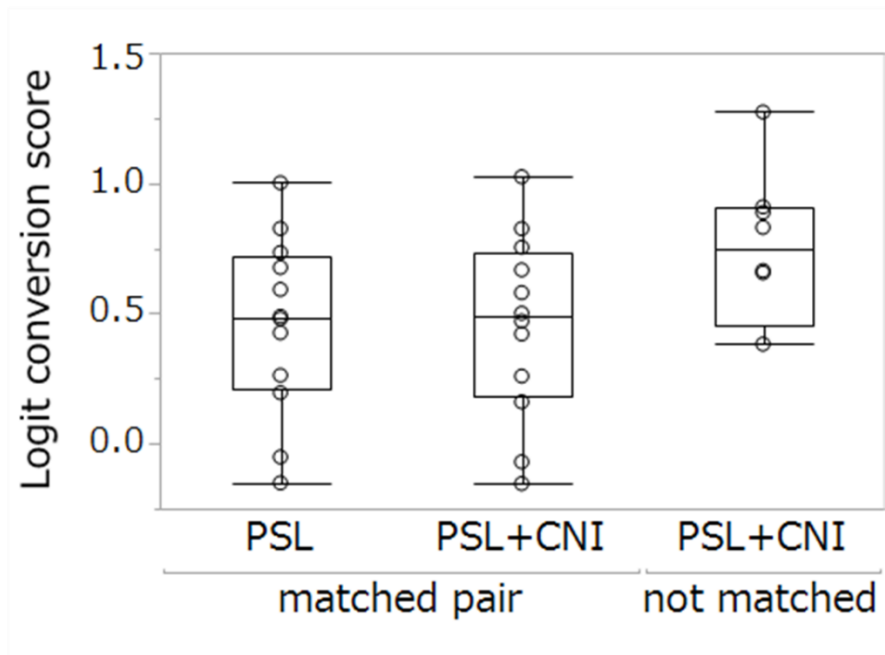
Supplementary Figure 2. Kaplan–Meier survival curves for the unmatched PSL and PSL + CNI groups.
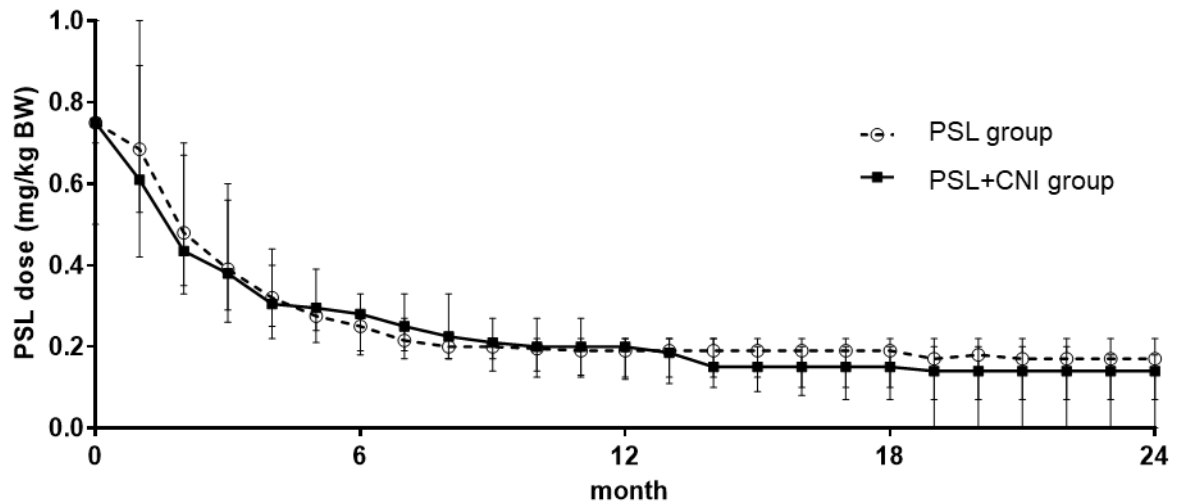

(A) The 2 year PFS rate was 85% in the unmatched PSL + CNI group and 41.7% in the unmatched PSL group ($P = 0.02$).

(B) The cumulative 5 year survival rate was 100% in the unmatched PSL + CNI group and 91.7% in the unmatched PSL group ($P = 0.92$).

Supplementary Figure 3. Distribution of logit conversion score in propensity score matching.

Supplementary Figure 4. Dosage of PSL administered during the first 24 months of first-line therapy.

No significant differences were observed between the matched PSL and PSL + CNI groups with respect to PSL dose in any month. Error bars represent the range. White circles on the dotted line and black squares on the black line represent median PSL doses in the matched PSL and PSL + CNI groups, respectively.