

Supplement Table 1. Time-course changes in body measurements and physical indices in Groups A and B

			body mass index (BMI)						
			V1	V2	V3	V4	V5	V6	V7
Group A	whole	Mean	22.2	22.0	22.0	21.7	21.3	21.5	21.7
		SD	3.5	3.7	3.7	3.8	3.8	3.7	3.8
		p value	—	NS	0.041	0.006	<0.001	<0.001	0.005
	Sa (-)	Mean	26.4	26.9	26.2	26.1	25.8	25.7	26.1
		SD	4.0	4.5	4.2	4.7	4.6	4.7	4.7
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (+)	Mean	21.2	21.1	21.0	20.8	20.5	20.8	20.9
		SD	2.7	2.8	2.9	2.9	3.1	3.0	3.1
		p value	—	NS	NS	0.009	0.003	0.006	0.020
Group B	whole	Mean	22.7	22.7	22.4	22.3	22.2	22.2	22.3
		SD	3.5	3.5	3.5	3.6	3.7	3.6	3.6
		p value	—	NS	<0.001	<0.001	<0.001	0.002	0.004
	Sa (-)	Mean	27.2	27.1	26.8	26.8	26.8	26.8	26.8
		SD	1.1	1.1	1.4	1.5	1.7	1.7	1.4
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (+)	Mean	21.3	21.3	21.0	20.9	20.7	20.8	20.8
		SD	2.7	2.7	2.6	2.8	2.8	2.7	2.8
		p value	—	NS	<0.001	<0.001	<0.001	<0.001	0.01
			body weight (kg)						
			V1	V2	V3	V4	V5	V6	V7
Group A	whole	Mean	58.4	58.1	58.2	57.8	56.4	57.5	57.9
		SD	11.5	11.6	11.6	12	11.7	11.2	11.4
		p value	—	0.083	0.008	0.004	<0.001	<0.001	0.003
Group B	whole	Mean	61.5	61.3	60.7	60.5	60.1	60.2	60.4
		SD	10.4	10.5	10.6	10.9	11.2	11.2	11.0
		p value	—	0.241	0.002	0.003	0.001	0.005	0.005
			lower leg circumference (cm) right						
			V1	V2	V3	V4	V5	V6	V7
Group A	whole	Mean	32.6	32.9	32.8	32.7	32.3	32.9	32.7
		SD	3.8	4.0	4.2	4.3	4.3	4.2	4.4
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (-)	Mean	37.4	37.4	37.6	38.0	37.1	37.2	36.9
		SD	3.0	3.0	2.9	3.6	3.6	4.2	4.2
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (+)	Mean	31.5	31.8	31.7	31.5	31.5	32.1	32.0
		SD	3.0	3.6	3.7	3.6	3.9	3.7	4.0
		p value	—	NS	NS	NS	NS	NS	NS
Group B	whole	Mean	32.7	32.7	32.8	32.9	32.7	32.7	32.9
		SD	3.0	3.3	3.2	3.3	3.6	3.4	3.3
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (-)	Mean	36.4	36.8	36.9	37.1	37.1	36.9	36.7
		SD	1.7	1.9	1.7	2.2	2.2	2.0	2.2
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (+)	Mean	31.6	31.4	31.5	31.6	31.3	31.4	31.7
		SD	2.4	2.4	2.4	2.4	2.8	2.6	2.6
		p value	—	NS	NS	NS	NS	NS	NS
			lower leg circumference (cm) left						
			V1	V2	V3	V4	V5	V6	V7
whole	Mean	32.9	32.9	32.8	32.7	32.2	32.6	32.6	
	SD	3.7	3.9	4.0	4.3	4.1	3.9	4.2	
	p value	—	NS	NS	NS	0.038	NS	NS	

Group A	Sa (-)	Mean	37.8	37.4	37.5	38.0	37.1	37.2	37.1
		SD	2.8	2.9	2.9	3.7	3.4	3.6	3.5
		p value	—	NS	0.007	NS	NS	NS	NS
	Sa (+)	Mean	31.8	31.9	31.7	31.6	31.3	31.8	31.7
		SD	2.9	3.4	3.5	3.4	3.6	3.4	3.7
		p value	—	NS	NS	NS	NS	NS	NS
	whole	Mean	33.0	32.9	33.1	32.9	32.6	32.8	32.9
		SD	3.3	3.0	3.3	3.1	3.5	3.4	3.4
		p value	—	NS	NS	NS	0.008	NS	NS
Group B	Sa (-)	Mean	37.2	36.7	37.1	36.7	36.7	36.8	36.7
		SD	2.0	1.7	1.8	2.1	2.5	2.3	2.4
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (+)	Mean	31.7	31.7	31.8	31.7	31.3	31.5	31.6
		SD	2.4	2.2	2.6	2.4	2.7	2.7	2.7
		p value	—	NS	NS	NS	0.018	NS	NS

		femoral circumference (cm) right							
		V1	V2	V3	V4	V5	V6	V7	
	whole	Mean	41.6	41.6	41.7	41.6	40.6	40.9	41.1
		SD	5.9	5.9	5.9	6.2	5.6	5.5	6.2
		p value	—	NS	NS	NS	NS	NS	NS
Group A	Sa (-)	Mean	48.8	47.9	48.4	48.0	46.7	46.8	46.7
		SD	4.8	4.6	4.4	4.8	4.5	4.7	5.7
		p value	—	0.034	NS	NS	0.044	0.049	0.015
	Sa (+)	Mean	40.1	40.2	40.2	40.2	39.5	39.9	40.0
		SD	5.0	5.2	5.2	5.6	5.1	5.0	5.8
		p value	—	NS	NS	NS	NS	NS	NS
	whole	Mean	42.2	42.1	42.1	42.4	41.9	41.6	42.4
		SD	4.3	4.5	4.5	4.4	5.0	4.8	4.7
		p value	—	NS	NS	NS	NS	NS	NS
Group B	Sa (-)	Mean	46.8	47.4	47.5	47.5	47.6	47.3	47.9
		SD	1.3	2.3	2.2	2.6	3.1	2.6	2.8
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (+)	Mean	40.7	40.4	40.5	40.8	40.1	39.9	40.6
		SD	3.9	3.6	3.6	3.4	4.1	3.8	3.7
		p value	—	NS	NS	NS	0.047	0.033	NS

		femoral circumference (cm) left							
		V1	V2	V3	V4	V5	V6	V7	
	whole	Mean	41.6	41.8	41.6	41.6	40.7	41.2	41.3
		SD	5.5	5.6	5.4	5.6	5.2	5.1	5.5
		p value	—	NS	NS	NS	NS	NS	NS
Group A	Sa (-)	Mean	47.8	47.5	47.6	47.5	46.6	46.7	45.5
		SD	3.3	3.9	3.3	3.8	4.0	4.4	5.6
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (+)	Mean	40.3	40.5	40.2	40.3	39.6	40.2	40.5
		SD	5.0	5.1	4.9	5.1	4.7	4.6	5.2
		p value	—	NS	NS	NS	NS	NS	NS
	whole	Mean	41.9	42.0	42.0	42.4	41.6	41.4	42.2
		SD	4.4	4.2	4.3	4.4	4.8	4.7	4.6
		p value	—	NS	NS	0.047	NS	NS	NS
Group B	Sa (-)	Mean	46.6	47.0	47.2	47.5	47.1	46.9	47.5
		SD	0.9	2.1	1.5	2.5	2.3	2.1	2.1
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (+)	Mean	40.4	40.4	40.4	40.8	39.9	39.7	40.4
		SD	4.0	3.4	3.6	3.6	4.0	3.9	3.7
		p value	—	NS	NS	NS	NS	0.030	NS

			grip strength (kpf) right						
			V1	V2	V3	V4	V5	V6	V7
Group A	whole	Mean	32.1	32.2	32.3	32.1	31.1	32.5	32.0
		SD	8.5	8.6	8.8	9.4	9.0	8.0	7.7
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (-)	Mean	37.8	39.8	39.6	41.8	37.3	37.3	37.8
		SD	8.9	2.8	5.9	7.5	7.5	7.1	8.3
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (+)	Mean	30.9	30.5	30.7	30.0	30.0	31.6	30.9
		SD	8.1	8.5	8.6	8.6	8.9	7.9	7.2
		p value	—	NS	NS	NS	NS	NS	NS
Group B	whole	Mean	33.4	34.8	34.8	34.2	34.0	33.7	35.2
		SD	9.0	8.3	8.7	8.9	8.7	8.3	7.8
		p value	—	NS	NS	NS	NS	NS	0.045
	Sa (-)	Mean	37.7	37.8	39.0	37.0	36.0	35.7	39.2
		SD	7.7	6.9	6.6	6.3	4.9	6.1	5.4
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (+)	Mean	31.8	33.7	33.2	32.9	32.8	32.6	33.3
		SD	8.8	8.5	8.7	9.0	8.8	8.1	7.5
		p value	—	0.028	NS	NS	NS	NS	NS
			grip strength (kpf) left						
			V1	V2	V3	V4	V5	V6	V7
Group A	whole	Mean	29.4	28.6	28.4	28.3	27.4	27.9	27.5
		SD	9.4	9.3	9.3	9.8	10.0	9.1	8.9
		p value	—	NS	NS	NS	0.025	0.043	NS
	Sa (-)	Mean	36.2	36.6	36.6	38.6	35.8	36.3	35.0
		SD	7.5	5.2	3.1	4.8	4.8	3.3	6.6
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (+)	Mean	27.9	26.8	26.7	26.1	25.8	26.4	26.0
		SD	9.2	9.1	9.2	9.2	10.0	9.0	8.7
		p value	—	0.039	0.019	0.005	0.009	0.009	0.042
Group B	whole	Mean	31.7	31.8	32.4	32.3	31.5	31.5	32.3
		SD	9.0	7.7	7.9	9.0	9.0	8.7	8.3
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (-)	Mean	35.2	34.3	35.8	35.8	34.5	35.0	34.2
		SD	5.5	6.0	6.7	5.8	5.4	4.7	4.4
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (+)	Mean	30.1	30.7	30.9	30.4	29.9	29.7	30.4
		SD	9.1	7.8	7.4	8.5	9.0	8.3	7.7
		p value	—	NS	NS	NS	NS	NS	NS
			finger pinch strength (kpf) right						
			V1	V2	V3	V4	V5	V6	V7
Group A	whole	Mean	8.37	8.31	8.61	8.87	9.62	9.82	9.96
		SD	2.08	2.27	2.47	2.81	2.55	2.50	2.21
		p value	—	NS	NS	NS	<0.001	0.001	<0.001
	Sa (-)	Mean	8.28	8.54	9.60	10.40	11.55	11.73	11.35
		SD	0.89	0.37	1.25	3.66	2.20	2.19	2.43
		p value	—	NS	NS	NS	0.020	0.019	0.031
	Sa (+)	Mean	8.39	8.25	8.40	8.53	9.26	9.47	9.70
		SD	2.28	2.51	2.63	2.57	2.49	2.44	2.12
		p value	—	NS	NS	NS	0.011	0.015	0.006
Group B	whole	Mean	8.88	9.25	9.50	9.54	10.97	11.04	11.11
		SD	2.33	2.34	2.18	2.39	2.41	2.25	2.16
		p value	—	NS	NS	NS	<0.001	<0.001	<0.001
	Sa (-)	Mean	9.00	8.82	9.57	9.42	11.90	11.58	11.57
		SD	2.14	1.62	1.93	2.74	2.06	2.52	1.77

		p value	—	NS	NS	NS	0.032	0.037	0.017
Sa (+)	Mean	8.84	9.38	9.48	9.57	10.68	10.86	10.96	
	SD	2.44	2.55	2.30	2.35	2.48	2.20	2.31	
	p value	—	0.045	NS	0.039	0.001	<0.001	<0.001	
		finger pinch strength (kpf) left							
		V1	V2	V3	V4	V5	V6	V7	
Group A	whole	Mean	7.93	7.77	8.45	8.05	8.88	9.00	9.36
		SD	2.12	2.18	2.26	2.77	2.55	2.53	2.27
		p value	—	NS	0.04	NS	0.015	0.013	<0.001
	Sa (-)	Mean	8.04	8.18	9.24	8.86	10.31	10.43	11.07
		SD	0.68	0.97	1.68	3.09	1.35	1.28	1.59
		p value	—	NS	NS	NS	NS	0.026	0.045
	Sa (+)	Mean	7.90	7.67	8.28	7.87	8.62	8.75	9.06
		SD	2.33	2.38	2.36	2.74	2.64	2.63	2.31
		p value	—	NS	NS	NS	NS	NS	0.004
Group B	whole	Mean	7.78	8.13	8.76	8.93	9.81	10.16	10.23
		SD	2.49	2.13	2.10	2.04	2.11	2.25	2.31
		p value	—	NS	0.021	0.006	<0.001	<0.001	<0.001
	Sa (-)	Mean	8.50	7.97	10.00	9.82	11.02	11.57	11.44
		SD	2.05	1.18	2.58	1.58	2.09	2.95	2.48
		p value	—	NS	NS	NS	NS	NS	NS
	Sa (+)	Mean	7.55	8.18	8.37	8.65	9.43	9.72	9.71
		SD	2.62	2.38	1.83	2.13	2.02	1.87	2.10
		p value	—	0.037	0.024	0.015	<0.001	<0.001	<0.001

p value: paired t test

Abbreviations: Sa(-): COPD patients with no sarcopenia, Sa(+): COPD patients with sarcopenia, NS: no statistical significance

Supplement Table 2. Results of examination of correlations between items (week 0–week 12 change)

Upper right: Pearson's correlation coefficient, lower left: *p*-value in the significance test of Pearson's correlation coefficient

Group A	Body measurements and physical indices														Items related to quality of life (QOL) questionnaires							Respiratory function test		
	knee extension leg strength (right)	knee extension leg strength (left)	walking speed	6MWD	grip strength (right)	grip strength (left)	finger pinch strength (right)	finger pinch strength (left)	lower leg circumference (right)	lower leg circumference (left)	femoral circumference (right)	femoral circumference (left)	BMI	SMI	symptom of fatigue (VAS scale)	symptom of apathy (VAS scale)	anxiety scale (HADS)	depression scale (HADS)	SNAQ	CAT	mMRC	FEV _{1,0%}	%FEV _{1,0}	%VC
knee extension leg strength (right)		0.791	0.002	0.640	0.140	0.431	0.434	0.374	0.045	0.307	0.194	0.298	0.415	0.215	0.652	0.572	0.423	0.708	0.283	-0.287	0.222	0.120	0.006	-0.136
knee extension leg strength (left)	<0.0001		0.008	0.448	0.374	0.674	0.468	0.341	0.248	0.408	0.223	0.101	0.490	0.267	0.235	0.916	0.358	0.458	0.286	-0.392	0.091	0.052	-0.126	-0.053
walking speed	0.560	0.488		0.568	0.097	0.119	0.317	0.188	-0.005	0.021	0.341	0.196	0.207	0.165	0.141	0.116	0.673	0.515	0.148	-0.295	0.399	0.035	0.044	0.239
6MWD	0.000	0.017	0.002		0.250	0.047	0.531	0.384	0.438	0.083	0.106	0.007	0.432	0.295	0.835	0.895	0.499	0.884	0.178	-0.322	0.025	-0.233	0.060	-0.038
grip strength (right)	0.478	0.050	0.622	0.200		0.414	0.521	0.286	0.026	0.053	0.820	0.839	0.450	0.246	0.802	0.422	0.075	0.864	0.390	-0.278	0.073	0.003	-0.212	-0.045
grip strength (left)	0.022	<0.0001	0.548	0.811	0.028		0.313	0.098	0.151	0.379	0.748	0.391	0.214	-0.016	0.185	0.969	0.171	0.509	0.343	-0.196	0.297	-0.270	-0.034	0.112
finger pinch strength (right)	0.021	0.012	0.101	0.004	0.004	0.105		0.760	0.028	0.013	0.386	0.157	0.435	0.427	0.791	0.143	0.086	0.273	0.228	-0.179	0.339	-0.157	0.138	-0.164
finger pinch strength (left)	0.050	0.076	0.338	0.044	0.140	0.622	<0.0001		0.800	0.406	0.911	0.622	0.193	0.277	0.539	0.073	0.205	0.138	0.342	-0.203	-0.135	-0.604	-0.306	0.541
lower leg circumference (right)	0.820	0.204	0.979	0.153	0.421	0.279	0.415	0.050		0.822	0.096	0.032	0.632	0.486	0.336	0.287	0.624	0.674	0.182	-0.155	-0.005	-0.464	-0.237	0.323
lower leg circumference (left)	0.112	0.031	0.914	0.334	0.370	0.173	0.463	0.163	<0.0001		0.158	0.214	0.639	0.549	0.115	0.268	0.765	0.765	0.082	-0.168	-0.094	-0.215	-0.012	0.048
femoral circumference (right)	0.323	0.254	0.076	0.312	0.045	-0.064	0.170	0.022	0.627	0.424		0.698	0.469	0.434	0.203	0.972	0.831	0.636	0.156	-0.238	-0.041	-0.104	0.068	0.004
femoral circumference (left)	0.124	0.609	0.316	0.499	0.040	-0.169	0.275	0.098	0.873	0.274	<0.0001		0.469	0.438	0.043	0.453	0.780	0.642	0.040	-0.202	-0.005	-0.040	0.236	0.125
BMI	0.028	0.008	0.290	0.022	0.016	0.275	0.021	0.326	0.000	0.000	0.012	0.012		0.797	0.360	0.258	0.676	0.612	0.370	-0.355	-0.232	-0.568	-0.108	0.098
SMI	0.271	0.170	0.401	0.128	0.207	0.936	0.023	0.153	0.009	0.003	0.021	0.020	<0.0001		0.449	0.519	0.842	0.546	0.323	-0.372	-0.003	-0.483	-0.191	0.133
symptom of fatigue (VAS scale)	0.089	0.232	0.285	0.041	0.050	0.258	-0.053	-0.121	-0.189	-0.305	-0.248	-0.385	-0.180	-0.149		0.563	0.117	0.039	-0.168	0.098	0.167	0.324	0.083	0.176
symptom of apathy (VAS scale)	0.112	0.021	0.304	0.026	-0.158	-0.008	-0.284	-0.344	-0.209	-0.217	-0.007	-0.148	-0.221	-0.127	0.002		-0.080	-0.118	-0.328	0.148	0.092	0.336	-0.139	0.194
anxiety scale (HADS)	-0.158	-0.181	-0.084	-0.133	-0.342	-0.266	-0.330	-0.247	-0.097	-0.059	-0.042	-0.055	-0.083	0.039	0.554	0.684		0.506	-0.137	0.061	0.000	0.156	0.176	-0.076
depression scale (HADS)	-0.074	-0.146	-0.128	-0.029	-0.034	-0.130	-0.215	-0.288	-0.083	0.059	0.094	0.092	-0.100	-0.119	0.844	0.551	0.006		-0.105	0.266	0.191	0.229	0.438	0.069
SNAQ	0.145	0.141	0.454	0.366	0.040	0.074	0.243	0.075	0.355	0.678	0.428	0.842	0.053	0.093	0.392	0.088	0.488	0.596		-0.666	-0.051	-0.194	0.160	-0.072
CAT	0.139	0.039	0.128	0.095	0.152	0.318	0.363	0.300	0.430	0.394	0.222	0.302	0.064	0.052	0.619	0.453	0.757	0.171	0.000		0.102	0.123	-0.067	-0.063
mMRC	0.256	0.644	0.035	0.979	0.898	0.711	0.125	0.077	0.495	0.979	0.635	0.835	0.235	0.987	0.395	0.640	1.000	0.331	0.797	0.607		0.067	0.063	0.095
FEV _{1,0%}	0.543	0.791	0.861	0.841	0.232	0.987	0.166	0.425	0.001	0.013	0.272	0.599	0.002	0.009	0.093	0.081	0.427	0.242	0.323	0.534	0.735		0.313	-0.179
%FEV _{1,0}	0.976	0.523	0.824	0.227	0.760	0.279	0.863	0.483	0.113	0.226	0.951	0.733	0.583	0.330	0.674	0.480	0.371	0.020	0.416	0.733	0.750	0.105		0.017
%VC	0.491	0.788	0.220	0.527	0.850	0.822	0.570	0.404	0.003	0.094	0.810	0.985	0.620	0.499	0.370	0.322	0.701	0.727	0.717	0.749	0.632	0.363	0.931	

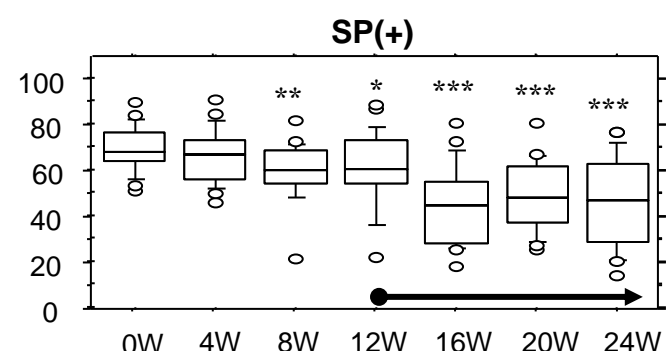
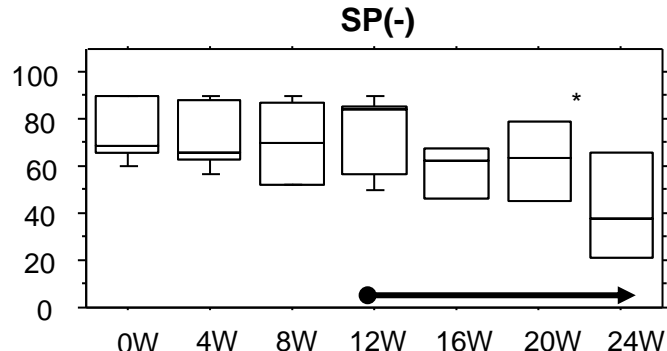
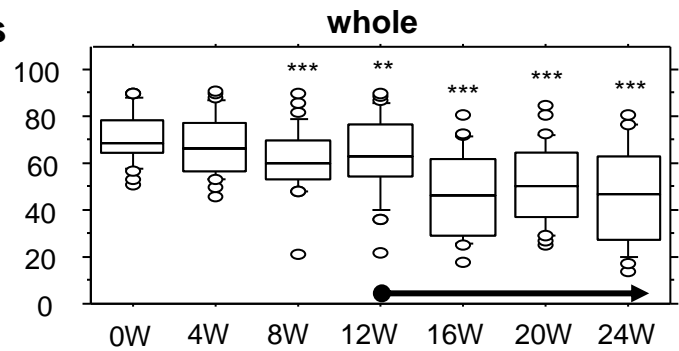
Upper right: Pearson's correlation coefficient, lower left: p -value in the significance test of Pearson's correlation coefficient

group B	Body measurements and physical indices														Items related to quality of life (QOL) questionnaires							Respiratory function test		
	knee extension leg strength (right)	knee extension leg strength (left)	walking speed	6MWD	grip strength (right)	grip strength (left)	finger pinch strength (right)	finger pinch strength (left)	lower leg circumference (right)	lower leg circumference (left)	femoral circumference (right)	femoral circumference (left)	BMI	SMI	symptom of fatigue (VAS scale)	symptom of apathy (VAS scale)	anxiety scale (HADS)	depression scale (HADS)	SNAQ	CAT	mMRC	FEV _{1,0%}	%FEV _{1,0}	%VC
knee extension leg strength (right)		0.566	0.607	0.256	0.554	0.380	0.133	0.418	0.302	0.299	-0.038	0.057	0.401	0.064	0.663	0.116	0.827	0.445	0.008	-0.060	-0.360	0.111	0.118	0.082
knee extension leg strength (left)	0.003		0.848	0.457	0.323	0.446	0.355	0.340	0.389	0.288	-0.117	-0.171	0.070	-0.069	0.426	0.887	0.871	0.476	0.031	-0.220	-0.067	0.234	0.048	-0.133
walking speed	0.108	0.040		0.482	0.176	0.058	-0.164	0.031	-0.168	-0.459	-0.382	-0.250	0.035	0.021	0.370	0.161	0.860	0.359	-0.084	0.084	0.114	-0.450	-0.713	-0.411
6MWD	0.216	0.022	0.015		0.425	0.377	0.163	0.124	0.338	0.993	0.530	0.837	0.215	-0.015	0.186	0.860	0.604	0.175	-0.272	-0.104	-0.101	-0.029	-0.177	-0.127
grip strength (right)	0.004	0.116	0.401	0.034		0.682	0.037	0.124	0.819	0.559	0.810	0.751	0.464	0.318	0.385	0.495	0.185	0.936	-0.186	-0.037	0.078	-0.014	-0.058	0.052
grip strength (left)	0.061	0.026	0.782	0.063	0.000		-0.040	-0.021	0.473	0.609	0.462	0.166	0.342	-0.016	0.451	0.577	0.819	0.703	-0.069	-0.343	0.010	0.246	-0.043	-0.161
finger pinch strength (right)	0.528	0.082	0.433	0.437	0.862	0.849		0.648	0.661	0.587	0.610	0.272	0.307	0.504	0.096	0.263	0.689	0.748	-0.017	-0.361	0.017	0.264	0.172	-0.128
finger pinch strength (left)	0.038	0.096	0.882	0.555	0.556	0.922	0.001		0.346	0.900	0.587	0.546	0.737	0.580	0.375	0.601	0.869	0.299	-0.046	-0.085	-0.036	-0.048	-0.092	-0.247
lower leg circumference (right)	0.143	0.055	0.424	0.200	0.048	0.151	0.092	0.197		0.491	0.111	0.544	0.262	0.094	0.461	0.214	0.484	0.257	0.025	-0.088	-0.224	0.287	-0.033	-0.236
lower leg circumference (left)	0.146	0.163	0.021	0.002	0.123	0.108	0.114	0.026	0.013		0.062	0.279	0.462	0.369	0.335	0.174	0.748	0.390	0.158	-0.068	-0.174	0.502	0.427	0.233
femoral circumference (right)	0.859	0.576	0.059	-0.132	-0.051	0.154	-0.107	-0.114	0.596	0.770		0.557	-0.140	-0.154	0.536	0.224	0.768	0.720	-0.156	-0.043	-0.332	0.368	0.219	0.163
femoral circumference (left)	0.786	0.414	0.228	-0.043	-0.067	0.286	-0.228	-0.127	0.005	0.177	0.004		-0.165	-0.141	0.905	0.385	0.114	0.710	0.043	-0.247	-0.333	0.287	-0.032	-0.192
BMI	0.047	0.740	0.868	0.303	0.205	0.020	0.504	0.430	0.019	0.094	0.136	<0.0001		0.546	0.500	0.279	0.412	0.860	0.072	-0.242	-0.253	0.294	-0.069	-0.109
SMI	0.760	0.744	0.922	0.942	0.654	0.070	0.463	0.502	0.121	0.940	0.010	0.002	0.005		0.859	0.381	0.283	0.742	-0.099	-0.155	-0.196	0.351	-0.136	-0.247
symptom of fatigue (VAS scale)	0.092	-0.167	0.187	-0.274	0.182	0.158	-0.340	-0.186	-0.155	-0.201	-0.130	0.025	0.141	-0.038		0.552	0.094	0.100	0.220	-0.003	0.114	-0.115	-0.276	0.116
symptom of apathy (VAS scale)	-0.322	-0.030	0.289	-0.037	-0.143	0.117	-0.233	-0.110	-0.257	-0.281	-0.252	-0.182	-0.226	-0.183	0.004		-0.090	-0.095	0.285	-0.067	0.353	-0.141	-0.364	-0.027
anxiety scale (HADS)	0.046	0.034	-0.037	-0.109	0.274	-0.048	-0.084	0.035	-0.147	0.068	-0.062	-0.324	-0.172	-0.224	0.655	0.669		0.536	-0.239	0.679	0.481	-0.217	-0.042	0.016
depression scale (HADS)	0.160	0.150	-0.192	-0.280	0.017	-0.080	-0.068	0.216	0.236	0.180	-0.076	0.078	-0.037	0.069	0.636	0.652	0.006		0.201	0.301	0.090	-0.219	-0.194	-0.192
SNAQ	0.969	0.885	0.689	0.189	0.374	0.744	0.938	0.828	0.907	0.450	0.458	0.837	0.733	0.639	0.290	0.167	0.250	0.335		-0.384	-0.193	-0.147	-0.097	0.163
CAT	0.777	0.290	0.690	0.623	0.862	0.093	0.077	0.688	0.674	0.746	0.838	0.235	0.244	0.459	0.990	0.749	0.000	0.144	0.058		0.424	-0.177	-0.059	-0.027
mMRC	0.077	0.751	0.589	0.633	0.710	0.962	0.937	0.864	0.283	0.406	0.106	0.104	0.223	0.349	0.588	0.084	0.015	0.668	0.356	0.035		-0.074	-0.320	-0.415
FEV _{1,0%}	0.596	0.260	0.024	0.892	0.946	0.235	0.202	0.821	0.164	0.011	0.070	0.164	0.154	0.085	0.584	0.501	0.298	0.293	0.485	0.399	0.727		0.458	0.121
%FEV _{1,0}	0.575	0.819	<0.0001	0.398	0.783	0.838	0.410	0.662	0.876	0.033	0.293	0.880	0.745	0.516	0.182	0.074	0.842	0.352	0.646	0.781	0.119	0.021		0.624
%VC	0.696	0.527	0.041	0.546	0.804	0.443	0.541	0.234	0.256	0.262	0.437	0.357	0.604	0.235	0.581	0.897	0.941	0.358	0.437	0.899	0.039	0.565	0.001	

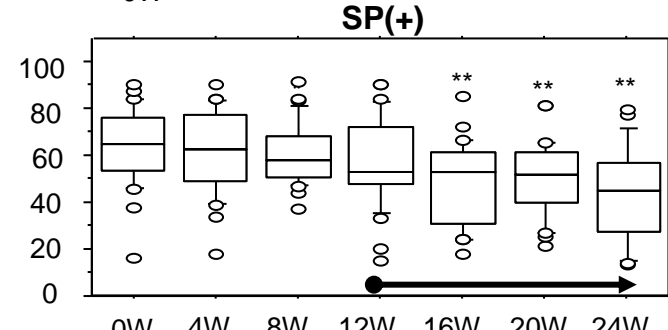
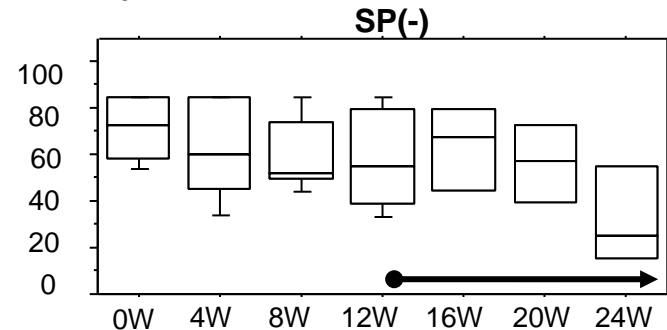
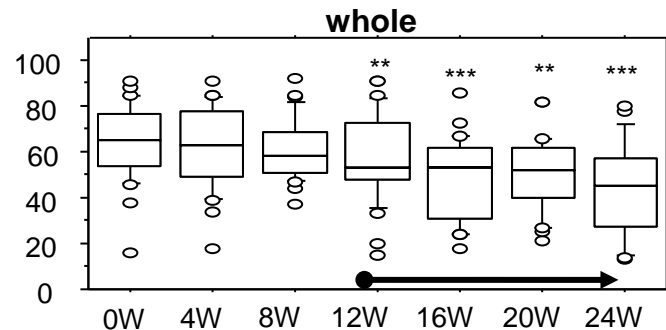
A) VAS scales

Group A

fatigue

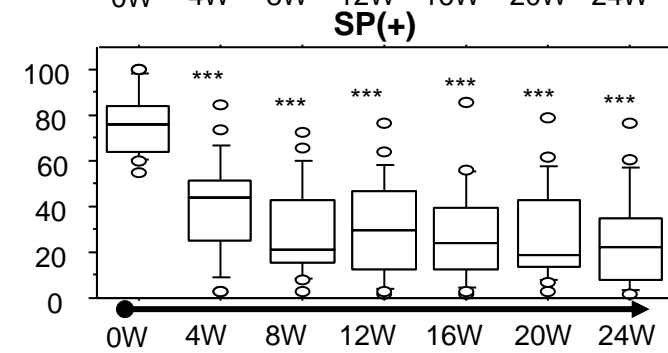
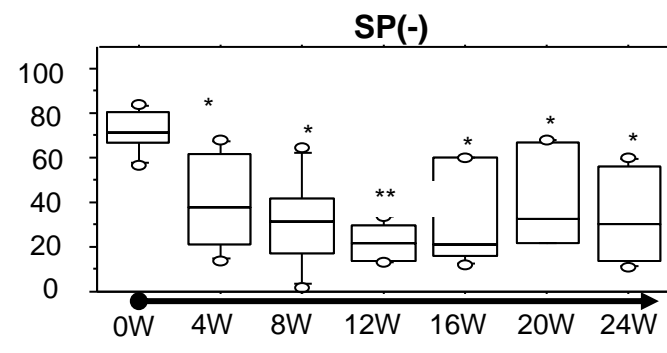
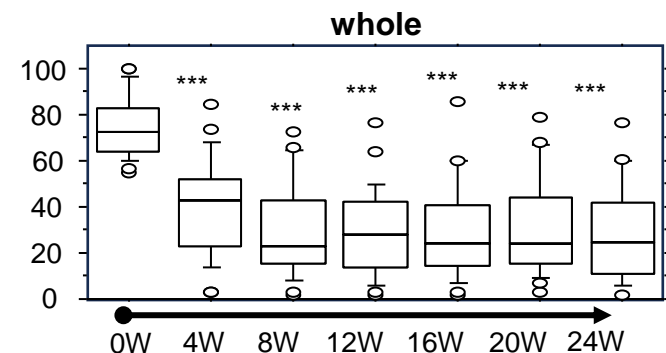


motivated

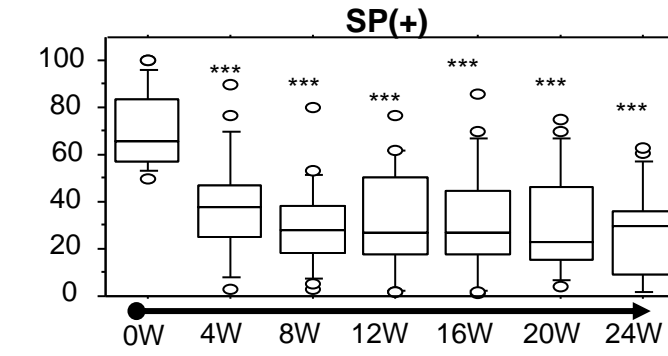
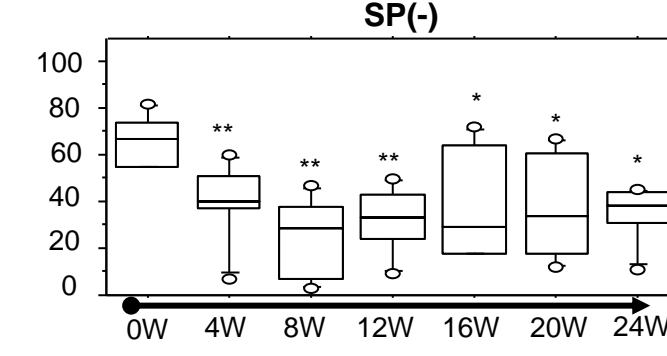
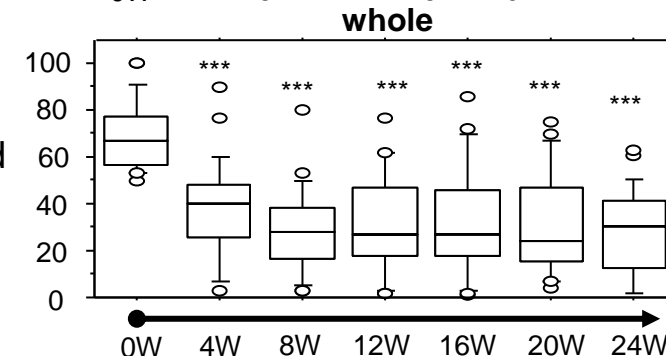


Group B

fatigue

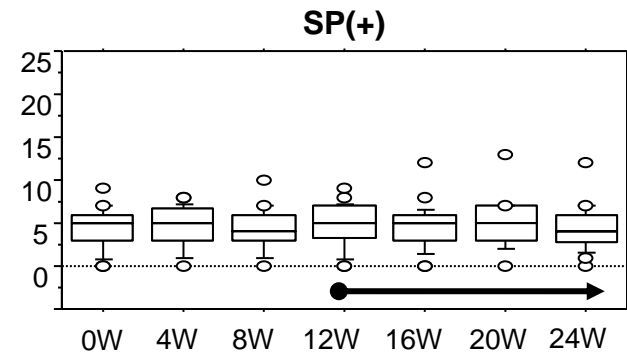
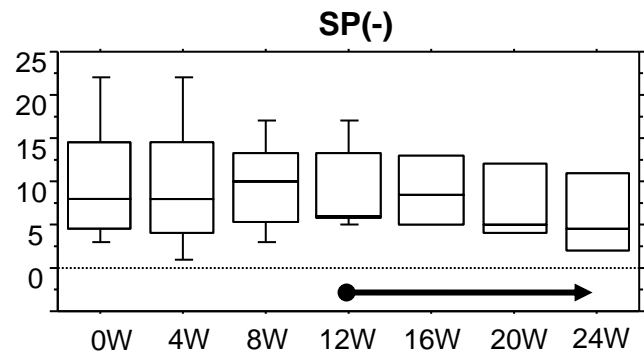
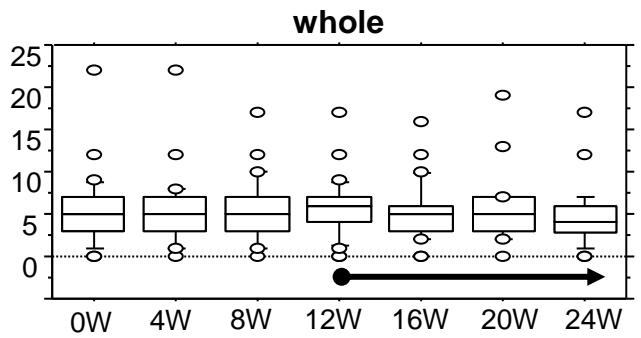


motivated

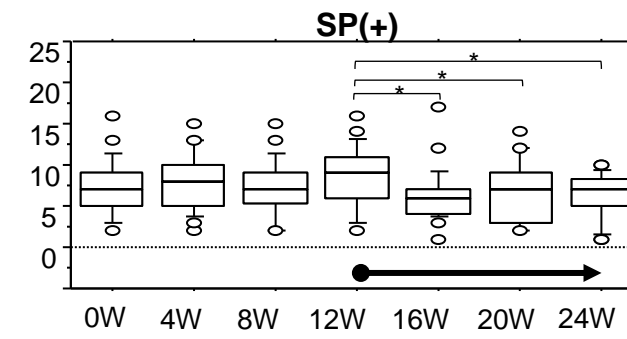
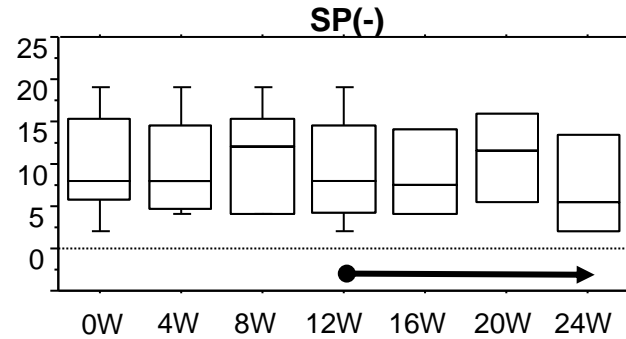
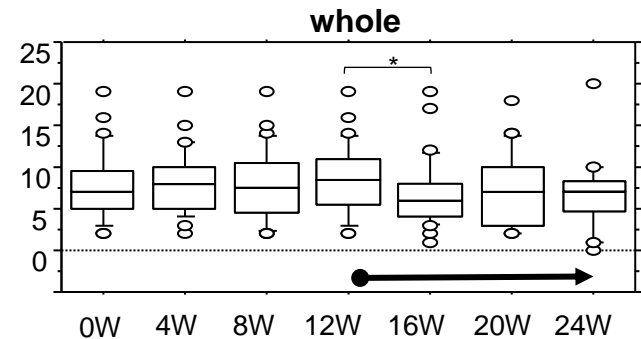


B) HADS**Group A**

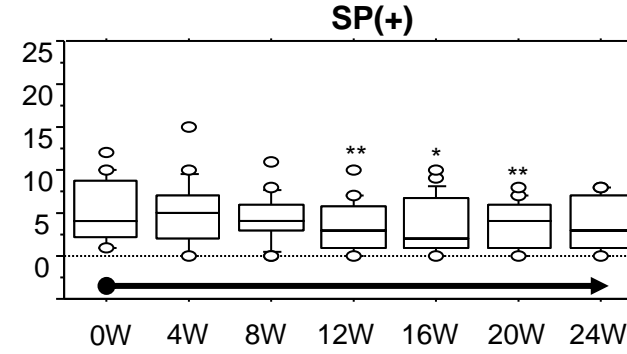
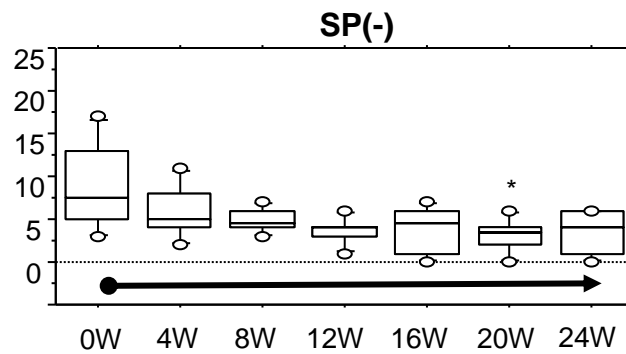
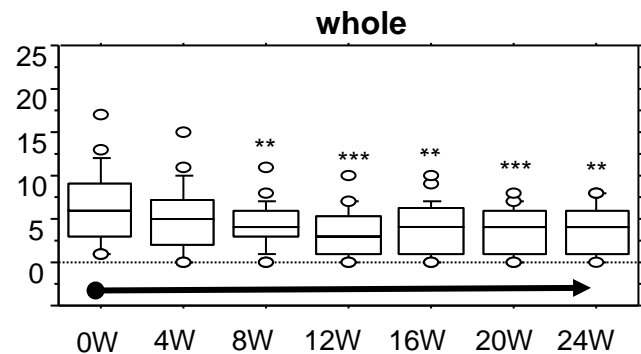
Anxiety Scale



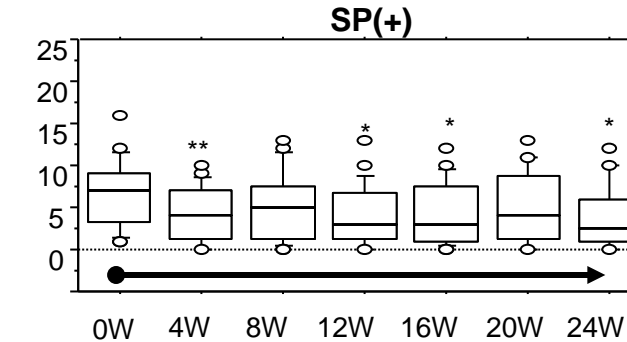
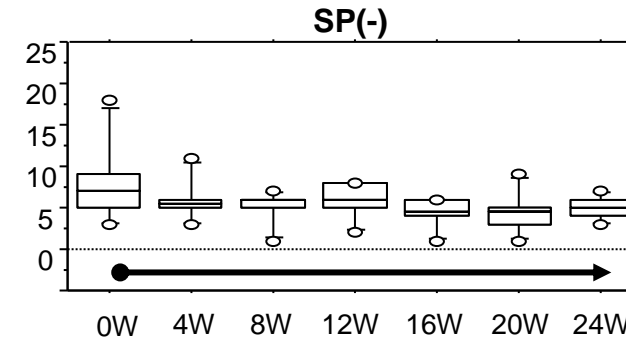
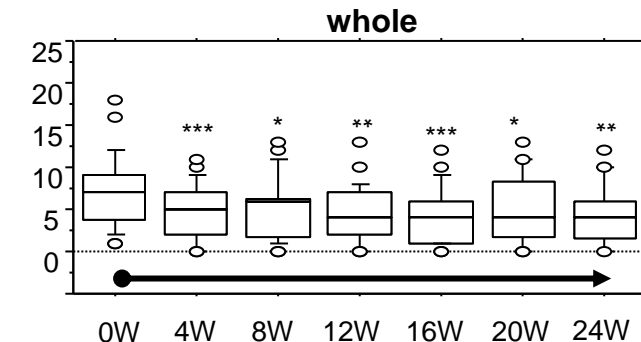
Depression Scale

**Group B**

Anxiety Scale

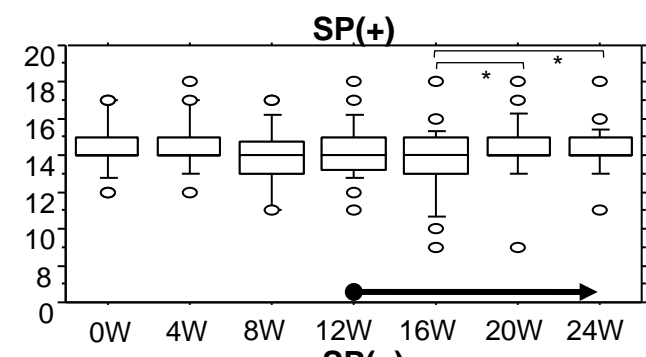
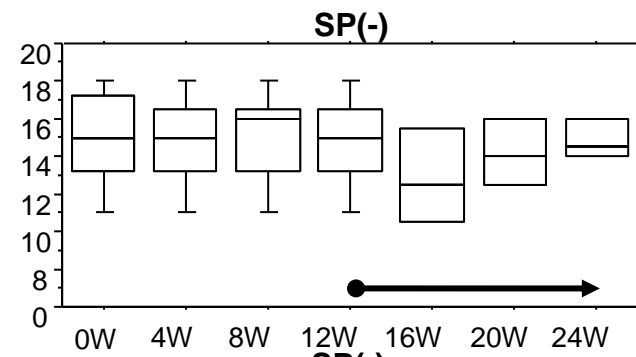
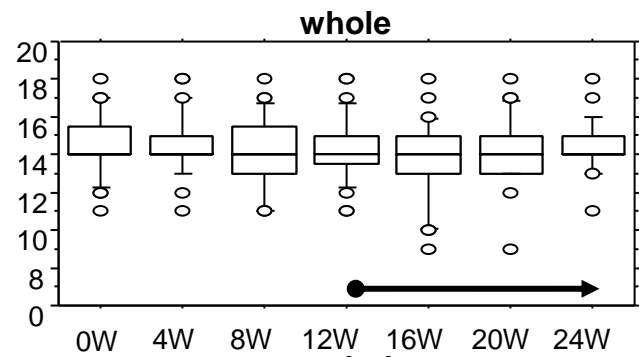


Depression Scale

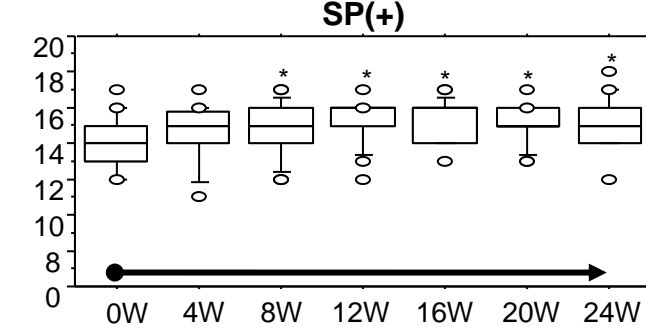
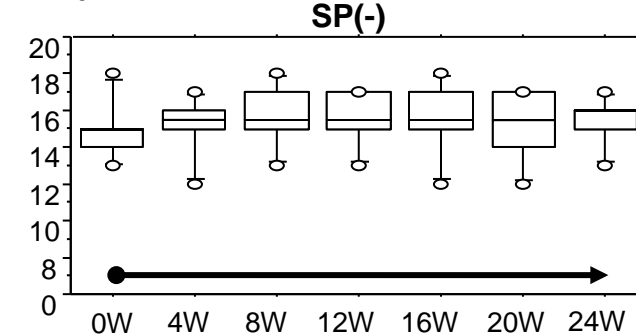
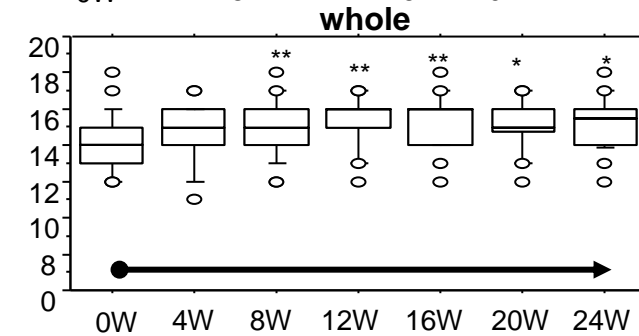


C) SNAQ

Group A

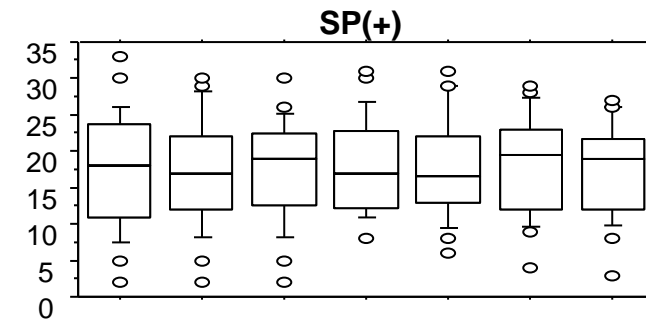
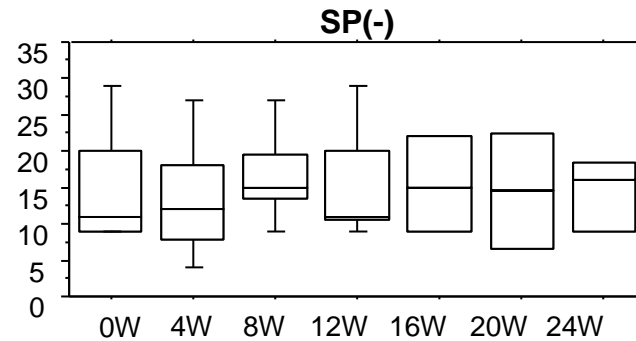
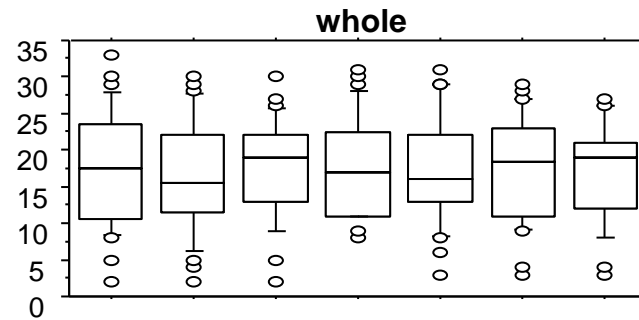


Group B

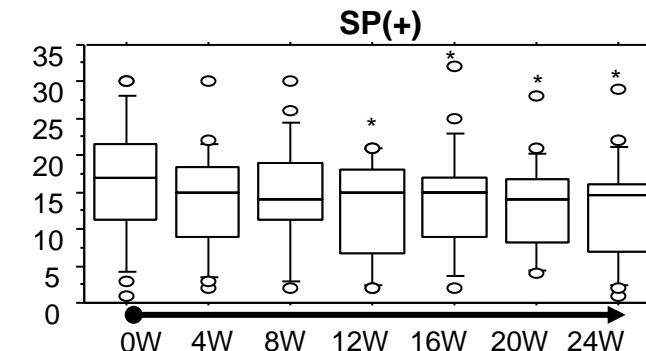
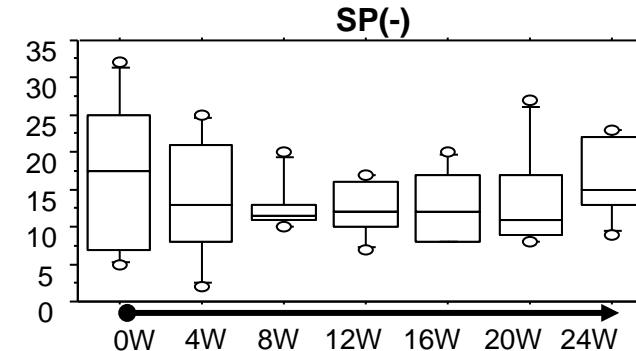
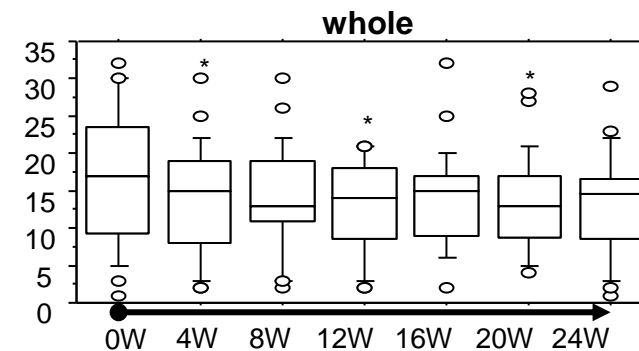


D) CAT

Group A

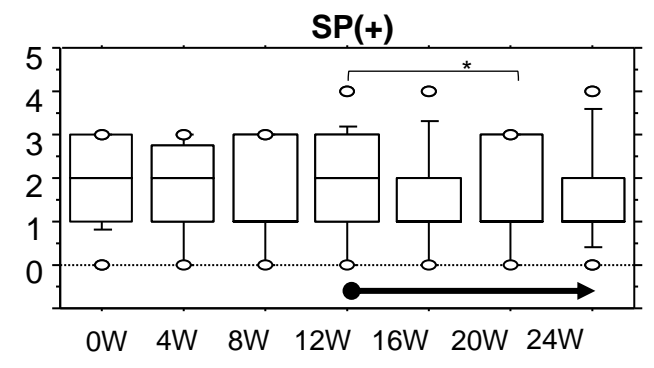
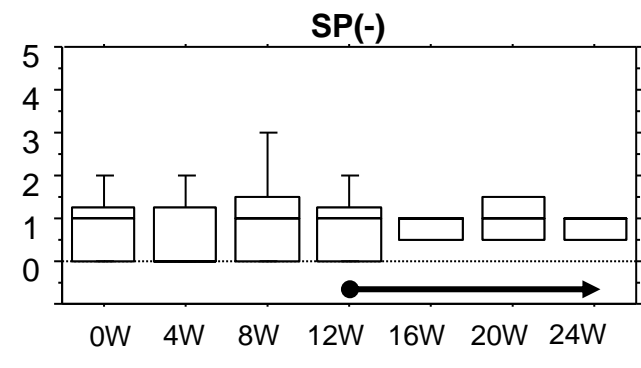
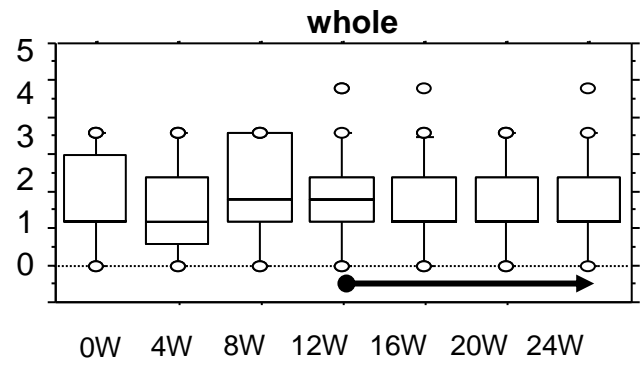


Group B

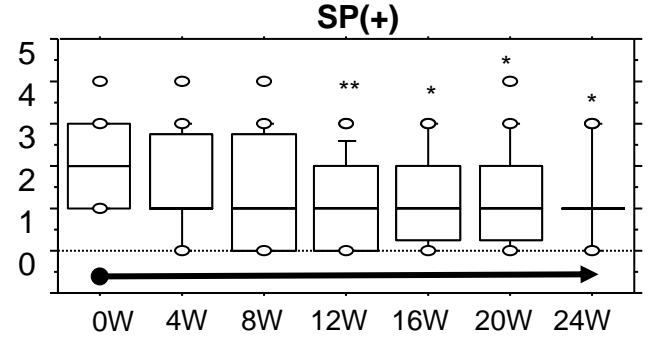
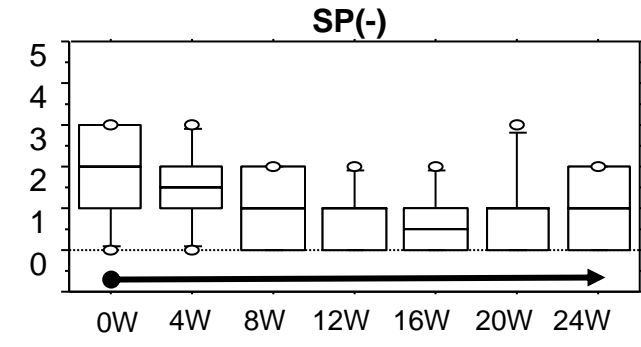
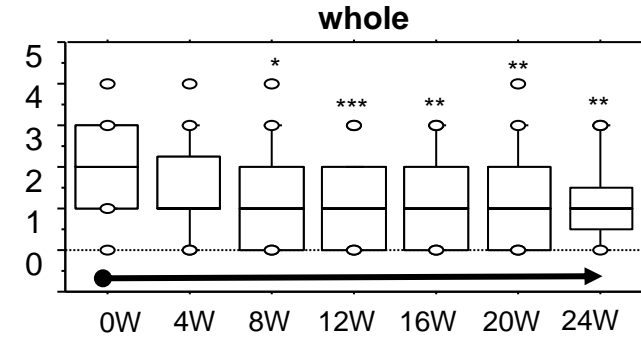


E) mMRC

Group A

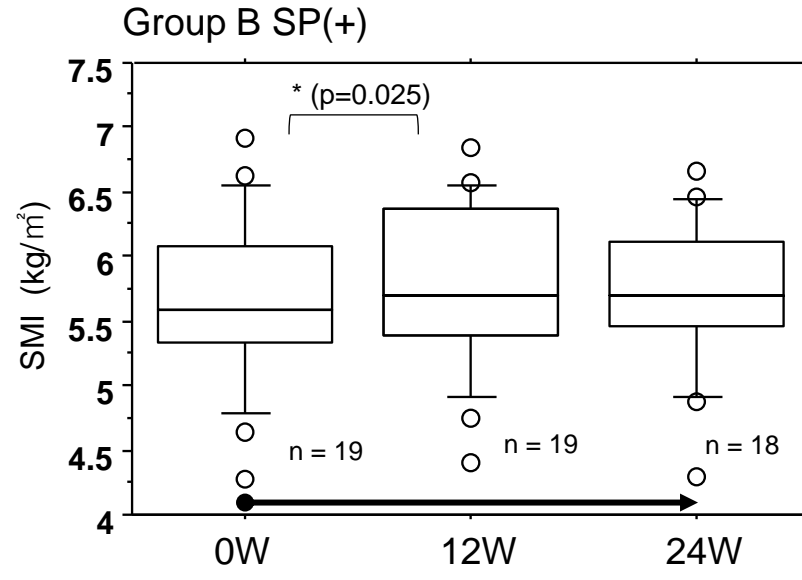
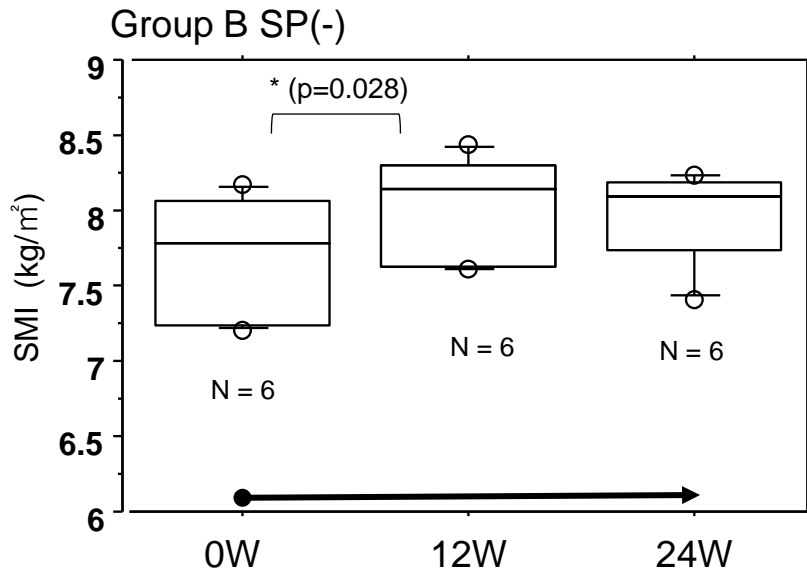
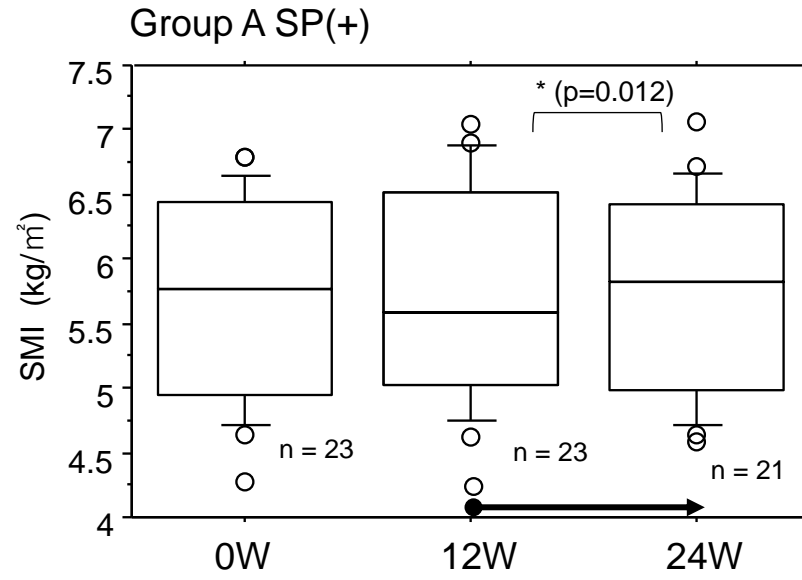
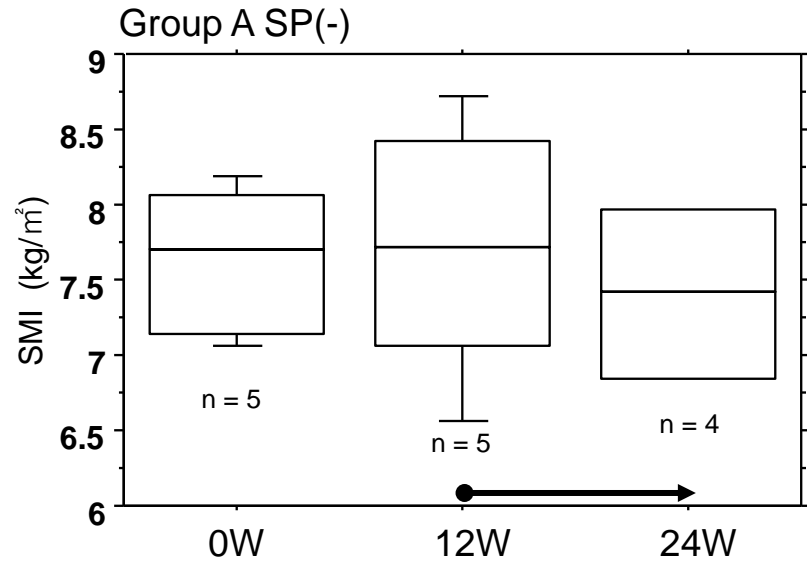


Group B



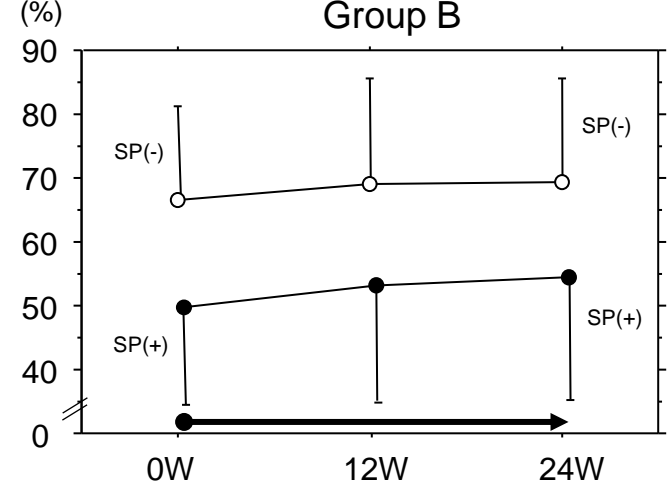
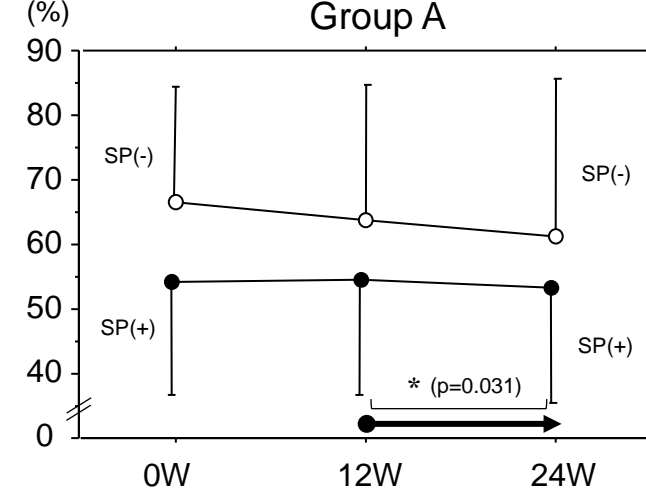
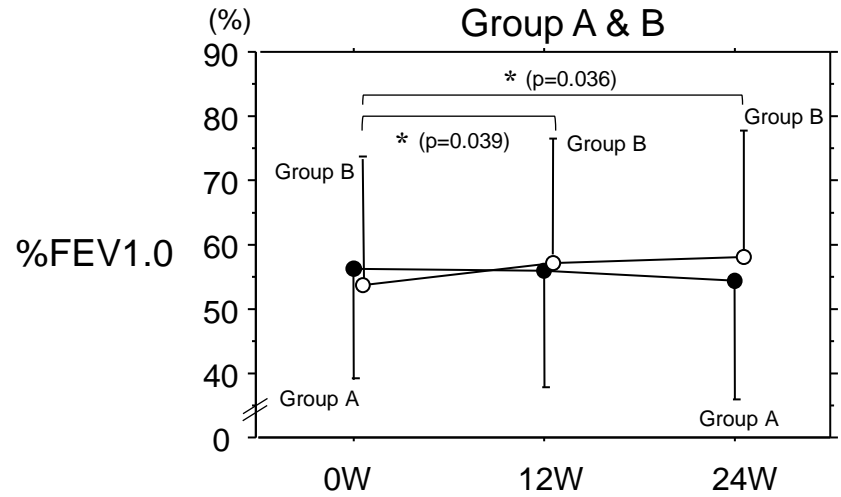
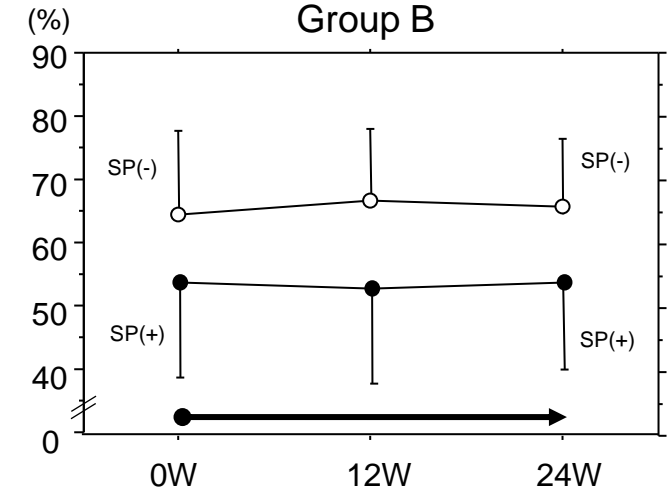
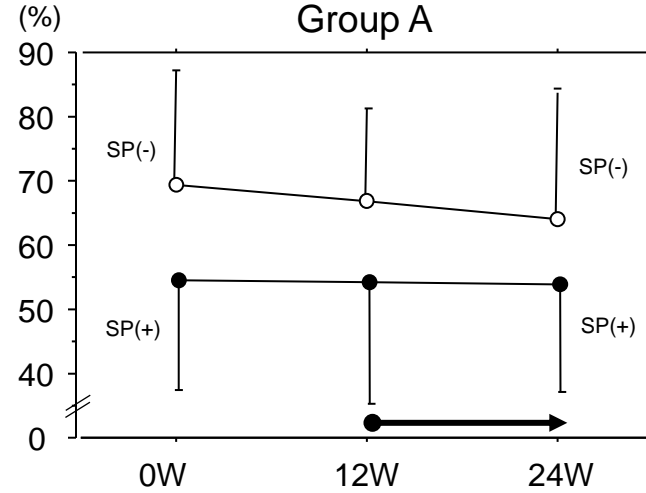
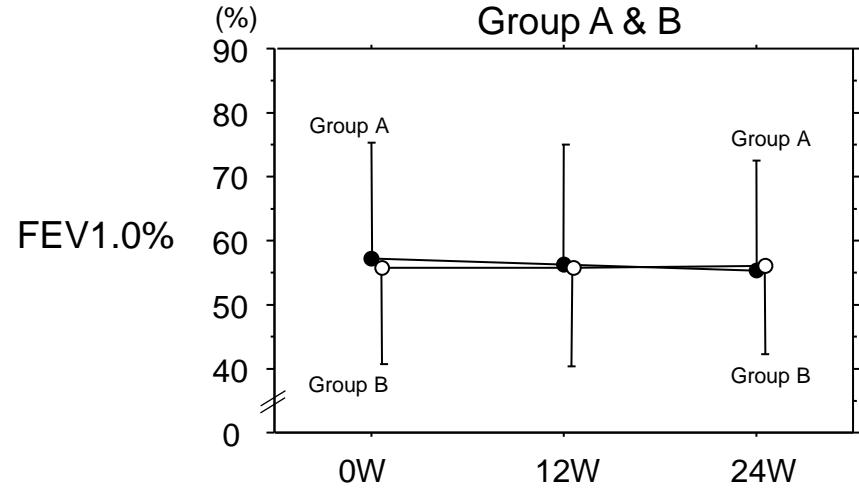
● → Duration of administration of Ninjin'yoeito

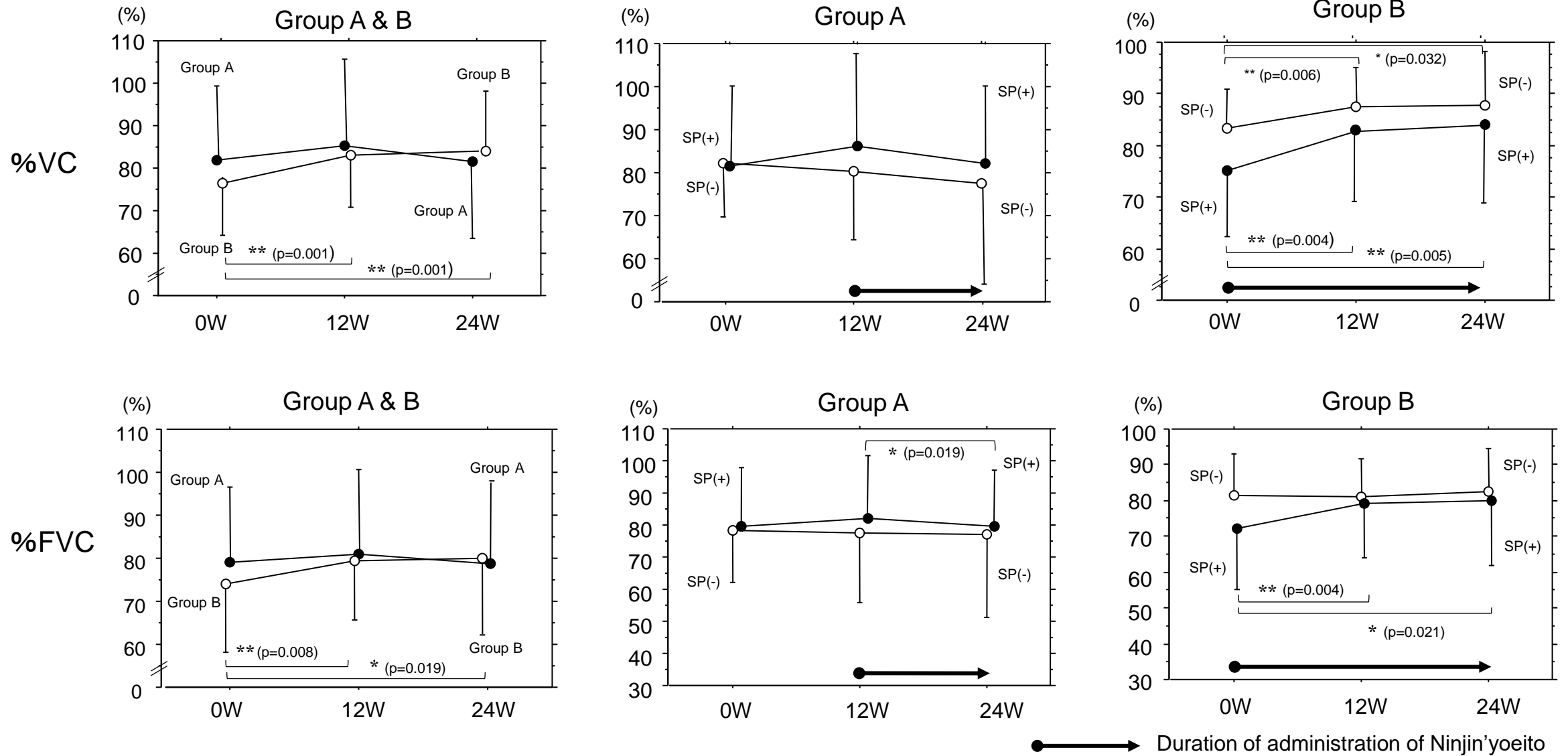
F) SMI



● → Duration of administration of Ninjin'yoeito

G) pulmonary function tests





Supplement Figure 1: Time-course changes in A) VAS scales, B) HADS, C) SNAQ, D) CAT, E) mMRC, F) SMI, and G) pulmonary function tests in Groups A and B with or without sarcopenia (SP). Comparison with the values at 0W in each group. * $p < 0.05$, ** $p < 0.01$ and *** $p < 0.001$, A and G: paired student *t*-test, B, C, D, E, and F: Wilcoxon rank order test