

Supplementary Table 2. Biological measures and body composition among groups

	Baseline			4 wk			8 wk			12 wk		
	Control	P	NMES	NMES + P	Control	P	NMES	NMES + P	Control	P	NMES	NMES + P
	Control	P	NMES	NMES + P	Control	P	NMES	NMES + P	Control	P	NMES	NMES + P
Change of	-12.0 ±	-6.5 ±	-14.9 ±	-28.3 ±	-6.1 ±	-24.0 ±	-7.8 ±	-28.2 ±	-20.6 ±	-18.9 ±	-8.3 ±	-23.3 ±
SBP	40.6	31.0	31.5	26.5	29.4	20.9	30.2	33.7	16.7	31.1	29.1	37.9
Change of PR	-7.6 ±	-3.4 ±	-5.3 ±	-4.5 ±	-2.5 ±	-1.2 ±	-8.6 ±	-0.8 ±	-5.2 ±	2.8 ±	-9.7 ±	-0.9 ±
	11.9	11.6	11.8	10.6	12.2	10.0	15.0	11.0	10.6	14.1	15.7	10.9
Albumin	3.97 ±	3.91 ±	3.95 ±	4.04 ±	4.09 ±	4.01 ±	4.02 ±	4.17 ±	3.99 ±	3.97 ±	4.01 ±	4.15 ±
	0.46	0.38	0.31	0.43	0.37	0.32	0.34	0.36	0.33	0.34	0.33	0.36
BUN	59.4 ±	58.9 ±	59.4 ±	58.3 ±	58.3 ±	64.1 ±	57.8 ±	67.1 ±	54.3 ±	63.4 ±	59.7 ±	63.9 ±
	18.6	14.5	12.3	11.0	17.2	12.9	14.0	15.0	9.3	15.0	15.3	17.7
sCr	9.1 ±	10.0 ±	10.1 ±	10.5 ±	9.4 ±	10.2 ±	10.1 ±	10.5 ±	9.1 ± 2.41	10.6 ±	9.9 ±	10.3 ±
	1.77	1.87	2.87	2.20	1.54	2.08	2.47	2.29	1.84	2.45	2.45	1.92
Phosphorus	4.71 ±	4.19 ±	4.57 ±	4.87 ±	4.97 ±	3.85 ±	4.51 ±	5.24 ±	4.42 ±	4.09 ±	3.96 ±	4.67 ±
	1.22	1.47	0.95	1.28	1.07	1.02	1.08	2.06	1.38	1.01	1.02	1.12
Total CO ₂	22.3 ±	22.3 ±	22.2 ±	22.2 ±	22.2 ±	23.0 ±	22.1 ±	21.9 ±	21.7 ±	22.1 ±	21.8 ±	21.7 ±
	2.5	2.9	2.0	3.2	2.78	2.69	2.47	3.22	2.31	3.08	2.24	2.55
iPTH	207.6 ±	201.1 ±	143.4 ±	216.6 ±	193.8 ±	171.7 ±	139.1 ±	225.6 ±	157.7 ±	143.9 ±	145.3 ±	265.8 ±
	122.1	142.2	100.4	103.6	102.6	136.8	80.8	126.3	92.3	91.1	75.8	156.7
hs-CRP	0.46 ±	0.67 ±	0.21 ±	0.07 ±	0.43 ±	0.33 ±	0.15 ±	0.09 ±	0.23 ±	0.19 ±	0.15 ±	0.19 ±
	0.84	1.51	0.33	0.10	1.00	0.77	0.17	0.12	0.27	0.19	0.15	0.24
Kt/V	1.51 ±	1.52 ±	1.42 ±	1.42 ±	1.51 ±	1.49 ±	1.39 ±	1.40 ±	1.51 ±	1.48 ±	1.41 ±	1.42 ±
	0.25	0.19	0.15	0.19	0.22	0.17	0.17	0.21	0.22	0.18	0.19	0.18
nPCR	0.91 ±	0.96 ±	1.02 ±	0.89 ±	0.92 ±	1.03 ±	0.93 ±	0.97 ±	0.92 ±	0.92 ±	0.95 ±	0.93 ±
	0.25	0.18	0.37	0.14	0.23	0.17	0.28	0.16	0.26	0.12	0.26	0.20
SMM	23.9 ±	23.6 ±	27.3 ± 5.8	26.4 ±	23.8 ±	23.5 ±	27.1 ± 5.3	25.9 ±	23.9 ±	23.2 ±	26.8 ±	25.8 ±
	4.6	5.0	4.1	4.1	4.8	4.9	4.0	4.0	4.7	5.0	5.4	3.9
ASM	18.2 ±	17.9 ± 4.0	20.8 ±	20.6 ±	18.3 ±	17.6 ± 3.8	20.4 ±	20.1 ±	18.4 ±	17.5 ± 4.2	20.5 ±	20.0 ±
	4.3		5.0	3.6	4.4	4.6	4.6	3.5	4.4	4.6	4.6	3.5
LESM	13.4 ±	13.2 ±	15.1 ±	15.2 ±	13.6 ±	13.1 ±	14.8 ±	14.9 ±	13.7 ±	12.9 ±	15.0 ±	14.8 ±
	3.1	3.0	3.5	2.6	3.4	2.8	3.2	2.5	3.2	3.3	3.2	2.5

Data are expressed as mean ± standard deviation.

ASM, appendicular skeletal muscle mass; BUN, blood urea nitrogen; CO₂, carbon dioxide; hs-CRP, high sensitivity-C-reactive protein; iPTH, intact parathyroid hormone; LESM, lower extremity skeletal mass; nPCR, normalized protein catabolic rate; NMES, neuromuscular electrical stimulation; NMES + P, neuromuscular electrical stimulation combined with protein supplementation; P, protein supplementation; PR, pulse rates; SBP, systolic blood pressure; sCr, serum creatinine; SMM, skeletal muscle mass.