

**Supplementary table 1. Comparison of clinical variables between the first and second ramp testing in patients with HeartMate II (N = 8)**

	1st ramp	2nd ramp	P value
<b>Variables at baseline speed</b>			
Rotation speed, rpm	9168.8 ± 441.7	9197.5 ± 397.2	0.484
LVDD, cm	5.29 ± 1.02	5.26 ± 1.09	0.94
PCWP, mmHg	10.6 ± 6.0	12.5 ± 4.4	0.43
CI, L/min/m <sup>2</sup>	3.05 ± 0.45	2.87 ± 0.35	0.23
PAM, mmHg	19.3 ± 4.4	23.4 ± 6.8	0.33
HR, bpm	83.8 ± 11.9	79.8 ± 7.2	0.16
RVSWI, g/m <sup>2</sup>	6.61 ± 2.45	8.44 ± 1.92	0.16
CVP, mmHg	6.4 ± 3.9	6.5 ± 1.8	0.93
PVR, WU	1.31 ± 0.82	1.76 ± 1.10	0.39
PAPi	2.86 ± 1.18	3.12 ± 1.37	0.42
<b>Slopes during ramp testing</b>			
LVDD slope, cm/step	-0.21 ± 0.13	-0.17 ± 0.14	0.28
PCWP slope, mmHg/step	-0.95 ± 0.50	-0.81 ± 0.74	0.60
CI slope, L/min/m <sup>2</sup> /step	0.066 ± 0.089	0.062 ± 0.022	0.90
PAM slope, mmHg/step	-0.71 ± 0.58	-0.64 ± 0.83	0.82
RVSWI slope, g/m <sup>2</sup> /step	-0.21 ± 0.25	-0.044 ± 0.30	0.11
CVP slope, mmHg/step	-0.12 ± 0.30	-0.10 ± 0.27	0.85
<b>Medications</b>			
B-blocker	7 (88%)	8 (100%)	0.30
ACEI or ARB	4 (50%)	6 (75%)	0.30
Spironolactone	3 (38%)	4 (50%)	0.61
Diuretics	8 (100%)	7 (88%)	0.30

Abbreviations as in Table 3.

**Supplementary table 2. Comparison of clinical variables between the first and second ramp testing in patients with HVAD (N = 8)**

	1st ramp	2nd ramp	P value
<b>Variables at baseline speed</b>			
Rotation speed, rpm	2634.7 ± 110.1	2708.2 ± 169.4	0.12
LVDD, cm	6.56 ± 0.88	6.20 ± 0.8	0.16
PCWP, mmHg	13.8 ± 5.0	14.6 ± 7.7	0.72
CI, L/min/m <sup>2</sup>	2.68 ± 0.48	2.45 ± 0.48	0.24
PAM, mmHg	23.5 ± 5.6	24.4 ± 9.1	0.76
HR, bpm	85.4 ± 8.7	80.8 ± 7.7	0.26
RVSWI, g/m <sup>2</sup>	8.16 ± 2.36	7.63 ± 3.47	0.74
CVP, mmHg	7.0 ± 4.3	8.5 ± 5.8	0.15
PVR, WU	1.80 ± 0.50	2.11 ± 1.08	0.46
PAPi	3.34 ± 2.00	4.16 ± 6.11	0.64
<b>Slopes during ramp testing</b>			
LVDD slope, cm/step	-0.098 ± 0.04	-0.072 ± 0.068	0.50
PCWP slope, mmHg/step	-0.91 ± 0.41	-0.54 ± 0.89	0.41
CI slope, L/min/m <sup>2</sup> /step	0.046 ± 0.094	0.040 ± 0.025	0.88
PAM slope, mmHg/step	-0.74 ± 0.46	-0.32 ± 0.77	0.21
RVSWI slope, g/m <sup>2</sup> /step	0.008 ± 0.327	0.053 ± 0.262	0.75
CVP slope, mmHg/step	-0.20 ± 0.20	-0.10 ± 0.25	0.28
PVR slope, WU/step	-0.006 ± 0.091	0.007 ± 0.179	0.83
PAPi slope, /step	0.329 ± 0.633	0.048 ± 0.133	0.23
<b>Medications</b>			
B-blocker	4 (50%)	4 (50%)	1.00
ACEI or ARB	6 (75%)	7 (88%)	0.52
Spironolactone	5 (63%)	3 (38%)	0.32
Diuretics	6 (75%)	7 (88%)	0.52

Abbreviations as in Table 3.