

# **Supplemental Material**

**Table S1. Cardiac magnetic resonance left and right ventricular mechanical parameters in non-ischemic cardiomyopathy patients with and without septal fibrosis.**

Variables	No septal LGE	Septal LGE	P value
	N = 187	N = 52	
LVEDVi (ml/m <sup>2</sup> )	130 ± 36	140 ± 35	0.236
LVESVi (ml/m <sup>2</sup> )	88 ± 40	101 ± 40	0.046*
LVSVi (ml/m <sup>2</sup> )	42 ± 12	39 ± 12	0.175
LVEF (%)	35 ± 14	30 ± 12	0.032*
LVMi (g/m <sup>2</sup> )	71 ± 21	74 ± 18	0.317
RVEDVi (ml/m <sup>2</sup> )	91 ± 25	89 ± 25	0.594
RVESVi (ml/m <sup>2</sup> )	50 ± 28	52 ± 27	0.724
RVSVi (ml/m <sup>2</sup> )	42 ± 11	37 ± 11	0.026*
RVEF (%)	46 ± 14	44 ± 15	0.436
RVEF/LVEF	1.4 ± 0.4	1.6 ± 0.5	0.023*
RVEDV/LVEDV	0.73 ± 0.20	0.66 ± 0.18	0.039*
GCS (%)	-9.7 ± 4.4	-7.9 ± 3.5	0.045*
SSR <sub>C</sub> (1/s)	-0.54 ± 0.22	-0.44 ± 0.22	0.007*
DSR <sub>C</sub> (1/s)	0.52 ± 0.26	0.41 ± 0.18	0.042*
GLS (%)	-8.9 ± 4.2	-8.0 ± 3.5	0.161
SSR <sub>L</sub> (1/s)	-5.00 ± 0.21	-0.45 ± 0.21	0.143
DSR <sub>L</sub> (1/s)	0.48 ± 0.19	0.44 ± 0.18	0.178
GRS (%)	13.3 ± 7.7	10.7 ± 5.2	0.023*
SSR <sub>R</sub> (1/s)	0.71 ± 0.35	0.59 ± 0.29	0.022*
DSR <sub>R</sub> (1/s)	-0.69 ± 0.46	-0.55 ± 0.28	0.045*

### Basal systolic rotation

Net Clockwise (°)	-1.5 ± 1.1	-1.4 ± 1.1	0.653
Magnitude (°)	-1.3 ± 1.5	-1.2 ± 1.5	0.682

### Apical systolic rotation

Net Counterclockwise (°)	2.1 ± 1.8	1.9 ± 1.7	0.756
Magnitude (°)	1.4 ± 2.8	1.1 ± 2.8	0.593
Twist (°)	2.7 ± 2.6	2.3 ± 2.7	0.423
Twist per length (°/cm)	0.39 ± 0.39	0.35 ± 0.43	0.504
Torsion (°s <sup>-1</sup> )	1.23 ± 1.08	1.19 ± 1.21	0.856

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DSR<sub>C</sub>= circumferential diastolic strain rate; DSR<sub>L</sub>= longitudinal diastolic strain rate; DSR<sub>R</sub>= radial diastolic strain rate; GCS= global circumferential strain; GLS= global longitudinal strain; GRS= global radial strain; LGE= late-gadolinium enhancement; LVEDVi= left ventricular end-diastolic volume index; LVESVi= left ventricular end-systolic volume index; LVEF=left ventricular ejection fraction; LVMi= left ventricular mass index; LVSVi= left ventricular stroke volume index; RVEDV= right ventricular end-diastolic volume; RVEDVi= right ventricular end-diastolic volume index; RVESVi= left ventricular end-systolic volume index; RVEF= right ventricular ejection fraction; RVSVi= right ventricular stroke volume index; SSR<sub>C</sub>= circumferential systolic strain rate; SSR<sub>L</sub>= longitudinal systolic strain rate; SSR<sub>R</sub>= radial systolic strain rate; \*Significant value (P < 0.05)

**Table S2. Cardiac magnetic resonance left ventricular mechanical parameters in non-ischemic cardiomyopathy patients with and without free wall fibrosis.**

Variables	No free wall LGE	Free wall LGE	P value
	N = 191	N = 48	
LVEDVi (ml/m <sup>2</sup> )	133 ± 35	128 ± 39	0.397
LVESVi (ml/m <sup>2</sup> )	91 ± 38	88 ± 45	0.540
LVSVi (ml/m <sup>2</sup> )	41 ± 12	41 ± 12	0.898
LVEF (%)	34 ± 14	35 ± 15	0.473
LVMi (g/m <sup>2</sup> )	72 ± 20	73 ± 20	0.599
GCS (%)	-8.9 ± 4.0	-9.9 ± 4.7	0.102
SSR <sub>C</sub> (1/s)	-0.51 ± 0.22	-0.54 ± 0.26	0.377
DSR <sub>C</sub> (1/s)	0.50 ± 0.26	0.50 ± 0.19	0.923
GLS (%)	-8.5 ± 3.4	-9.7 ± 4.5	0.058
SSR <sub>L</sub> (1/s)	-0.48 ± 0.20	-0.52 ± 0.21	0.291
DSR <sub>L</sub> (1/s)	0.47 ± 0.19	0.48 ± 0.16	0.751
GRS (%)	12.4 ± 6.9	14.4 ± 8.7	0.085
SSR <sub>R</sub> (1/s)	0.67 ± 0.34	0.77 ± 0.36	0.096
DSR <sub>R</sub> (1/s)	-0.65 ± 0.44	-0.7 ± 0.39	0.45
Basal systolic rotation			
Net Clockwise (°)	-1.6 ± 1.1	-1.1 ± 1.2	0.032*
Magnitude (°)	-1.4 ± 1.4	-0.7 ± 1.7	0.008*
Apical systolic rotation			
Net Counterclockwise (°)	1.9 ± 1.7	2.6 ± 2.2	0.033*
Magnitude (°)	1.1 ± 2.7	1.9 ± 3.2	0.141

Twist (°)	2.6 ± 2.4	2.6 ± 3.4	0.954
Twist per length (°/cm)	0.38 ± 0.37	0.38 ± 0.51	0.951
Torsion (°s <sup>-1</sup> )	1.23 ± 1.00	1.17 ± 1.52	0.714

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DSRc= circumferential diastolic strain rate; DSRL= longitudinal diastolic strain rate; DSRR= radial diastolic strain rate; GCS= global circumferential strain; GLS= global longitudinal strain; GRS= global radial strain; LGE= late-gadolinium enhancement; LVEDVi= left ventricular end-diastolic volume index; LVESVi= left ventricular end-systolic volume index; LVEF=left ventricular ejection fraction; LVMi= left ventricular mass index; LVSVi= left ventricular stroke volume index; SSRC= circumferential systolic strain rate; SSRL= longitudinal systolic strain rate; SSRR= radial systolic strain rate; \*Significant value (P < 0.05)

**Table S3. Cardiac magnetic resonance left ventricular mechanical parameters in non-ischemic cardiomyopathy patients with and without left bundle branch block (LBBB).**

	<b>LBBB+</b>	<b>LBBB-</b>	
<b>Variables</b>	<b>N = 56</b>	<b>N = 183</b>	<b>P value</b>
<b>Basal systolic rotation</b>			
Net Clockwise (°)	-2.2 ± 1.2	-1.3 ± 1.1	0.040*
Magnitude (°)	-2.0 ± 1.4	-1.0 ± 1.5	0.001*
<b>Apical systolic rotation</b>			
Net Counterclockwise (°)	0.8 ± 1.1	2.4 ± 1.8	0.001*
Magnitude (°)	-0.9 ± 2.7	2.0 ± 2.5	0.001*
Twist (°)	1.3 ± 2.1	3.3 ± 2.6	0.001*
Torsion (°s <sup>-1</sup> )	1.0 ± 0.8	1.5 ± 1.1	0.002*