

**Supplementary Table 3. Echocardiography measurements obtained from the parasternal long axis in SMGRKO mice and control littermates aged 10 weeks.** Echocardiography parameters were obtained from measurements made from the parasternal long-axis view in B-Mode and M-Mode. Data are means  $\pm$  SEM and were analysed using an unpaired t-test, n=10-17 (indicated in brackets), \*p<0.05.

<b>Echocardiography Parameter (Units; Acquisition Mode)</b>	<b>Sex</b>	<b>Control</b>	<b>SMGRKO</b>
LV End-Systolic Area (mm <sup>2</sup> ;B)	Male	15.8 $\pm$ 1.2 (12)	15.3 $\pm$ 0.7 (17)
	Female	11.3 $\pm$ 0.8 (12)	10.1 $\pm$ 0.7 (10)
LV End-Diastolic Area (mm <sup>2</sup> ;B)	Male	24.0 $\pm$ 1.0 (12)	24.9 $\pm$ 0.7 (17)
	Female	20.4 $\pm$ 0.8 (12)	19.3 $\pm$ 10.5 (10)
Endocardial Area Change (mm <sup>2</sup> ;B)	Male	8.38 $\pm$ 0.41 (12)	9.63 $\pm$ 0.39 (17) *
	Female	8.76 $\pm$ 0.56 (12)	8.95 $\pm$ 0.42 (10)
Endocardial %Fractional Area Change (%;B)	Male	35.5 $\pm$ 2.3 (12)	37.7 $\pm$ .1.3 (16)
	Female	43.7 $\pm$ 2.5 (12)	46.6 $\pm$ 2.3 (10)
Ejection Fraction (%;B)	Male	57.2 $\pm$ 2.9 (11)	57.4 $\pm$ 1.7 (16)
	Female	64.8 $\pm$ 2.8 (12)	68.4 $\pm$ 2.9 (10)
Stroke Volume ( $\mu$ l;B)	Male	32.3 $\pm$ 1.7 (12)	38.2 $\pm$ 1.8 (16) *
	Female	30.5 $\pm$ 1.8 (12)	29.0 $\pm$ 1.3 (10)
Cardiac Output (ml/min;B)	Male	15.5 $\pm$ 0.7 (11)	18.7 $\pm$ 0.9 (17) *
	Female	13.7 $\pm$ 0.9 (12)	12.8 $\pm$ 0.6 (9)
LV Wall Thickness (mm;B)	Male	0.95 $\pm$ 0.04 (12)	0.86 $\pm$ 0.02 (17) *
	Female	0.80 $\pm$ 0.02 (12)	0.83 $\pm$ 0.02 (10)
Left Ventricle Anterior Wall; systole (mm;M)	Male	1.24 $\pm$ 0.11 (11)	1.15 $\pm$ 0.05 (16)
	Female	1.51 $\pm$ 0.07 (12)	1.72 $\pm$ 0.07 (10)
Left Ventricle Anterior Wall; diastole (mm;M)	Male	0.82 $\pm$ 0.06 (11)	0.79 $\pm$ 0.03 (16)
	Female	0.96 $\pm$ 0.02 (12)	1.03 $\pm$ 0.05 (10)
Left Ventricle Internal Diameter; systole (mm;M)	Male	2.23 $\pm$ 0.13 (11)	2.45 $\pm$ 0.11 (16)
	Female	1.95 $\pm$ 0.11 (12)	1.67 $\pm$ 0.11(10)
Left Ventricle Internal Diameter; diastole (mm;M)	Male	3.70 $\pm$ 0.08 (11)	3.91 $\pm$ 0.05 (15) *
	Female	3.41 $\pm$ 0.08 (12)	3.27 $\pm$ 0.07(10)
Left Ventricle Paraventricular Wall; systole (mm;M)	Male	1.43 $\pm$ 0.05 (10)	1.44 $\pm$ 0.07 (16)
	Female	1.21 $\pm$ 0.12 (12)	1.45 $\pm$ 0.06 (10)
Left Ventricle Paraventricular Wall ; diastole (mm;M)	Male	0.90 $\pm$ 0.06 (10)	0.90 $\pm$ 0.05 (15)
	Female	0.83 $\pm$ 0.08 (12)	1.03 $\pm$ 0.07 (10)
Fractional Shortening (%;M)	Male	40.0 $\pm$ 2.9 (12)	37.5 $\pm$ 2.0 (16)
	Female	43.2 $\pm$ 2.2 (12)	49.3 $\pm$ 2.7 (10)
Left Ventricle Mass (mg;M)	Male	100.4 $\pm$ 10.9 (11)	96.0 $\pm$ 4.2 (15)
	Female	86.5 $\pm$ 6.9 (12)	98.5 $\pm$ 6.0 (10)

#