Supplementary material

Supplement Tables

Supplement Table 1. Difference in LV and RV Function Metrics between Male and Female Subjects Measured with AI-CS-CINE excluding Outliers (n=89)

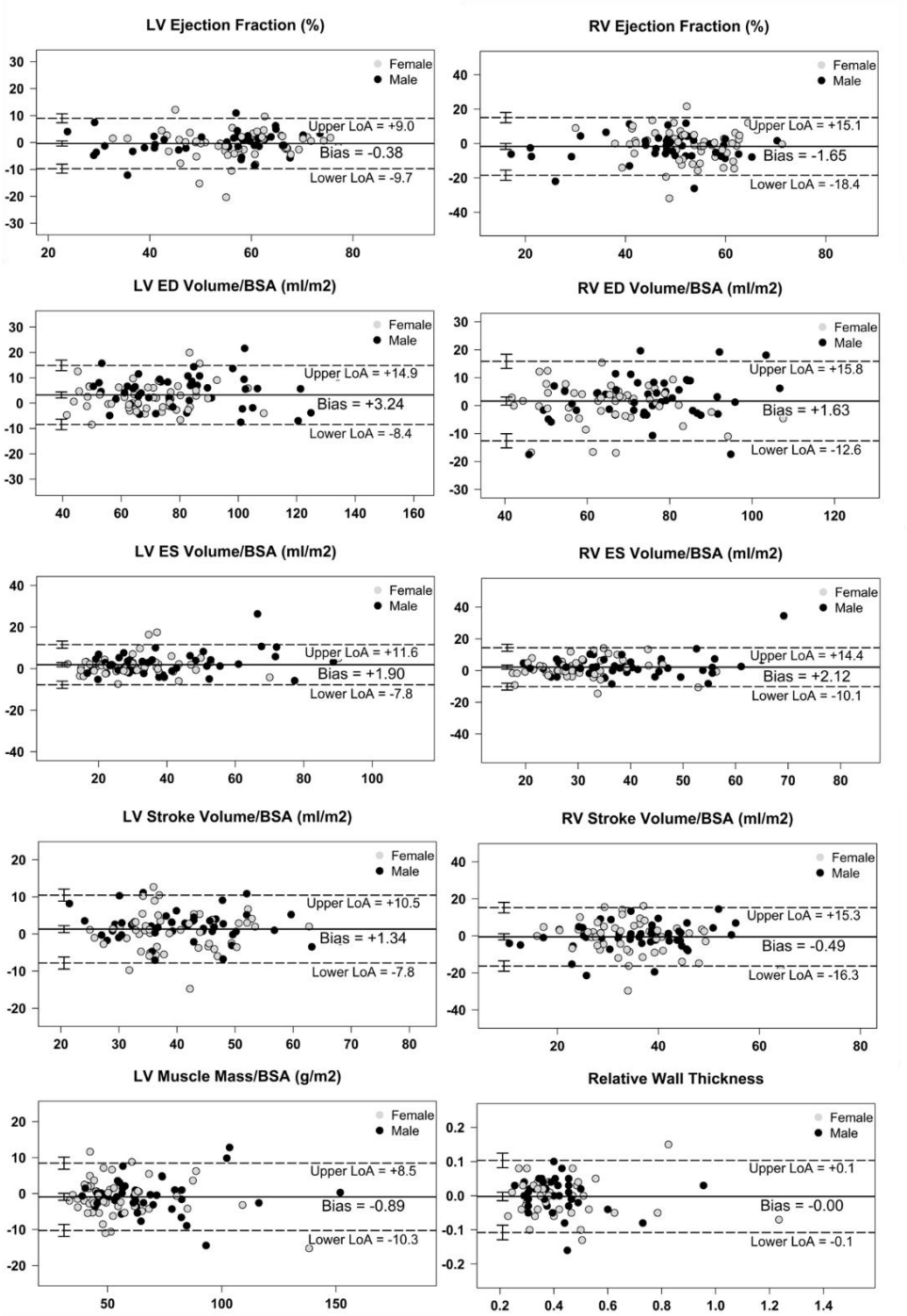
	Male	Female	P value
LVEF (%)	52.9	57.8	0.08
LVEDVi (ml/m^2)	78.0	69.3	0.005
LVESVi (ml/m^2)	37.9	30.2	0.02
LVSVi (ml/m^2)	40.1	39.1	0.22
Relative Wall Thickness	0.40	0.40	0.99
RVEF (%)	49.4	53.2	0.03
RVEDVi (ml/m^2)	73.6	64.7	0.001
RVESVi (ml/m^2)	37.5	30.0	0.0001
RVSVi (ml/m^2)	36.1	34.7	0.46

AI = artificial intelligence, C-CINE = conventional CINE, EDV = end-diastolic volume, EF = ejection fraction, ESV = end-systolic volume, LV = left ventricle, RV= right ventricle, SV = stroke volume, I = normalized to body surface area

Supplement Table 2. Alignment of LV and RV Function Metrics with C-CINE vs. AI-CS-CINE including Outliers (n=97)

	Mean±SD		Bland Altman		ICC	
	C-CINE	AI-CS-CINE	Bias±SD	LoA	r	95% CL
LVEF (%)	55.2±11.9	55.5±11.5	-0.38±4.75	-9.68,8.93	0.92	0.88,0.94
LVEDVi (ml/m^2)	76.6±19.4	73.3±18.9	3.24±5.92	-8.36,14.84	0.94	0.87,0.97
LVESVi (ml/m^2)	35.7±17.3	33.8±16.1	1.90±4.90	-7.70,11.51	0.95	0.92,0.97
LVSVi (ml/m^2)	40.9±9.4	39.6±9.5	1.34±4.64	-7.76,10.43	0.87	0.80,0.91
LVMi (ml/m^2)	59.2±21.3	60.1±21.6	-0.89±4.75	-10.20,8.41	0.97	0.96,0.98
Relative Wall Thickness	0.4±0.2	0.4±0.2	0.00±0.05	-0.11,0.10	0.95	0.92,0.97
RVEF (%)	49.8±11.1	51.4±10.9	-1.65±8.52	-18.34,15.04	0.69	0.57,0.78
RVEDVi (ml/m^2)	70.5±15.4	68.9±14.7	1.63±7.21	-12.51,15.77	0.88	0.82,0.92
RVESVi (ml/m^2)	35.6±12.2	33.5±10.8	2.12±6.22	-10.07,14.30	0.84	0.75,0.89
RVSVi (ml/m^2)	34.9±10.3	35.4±10.6	-0.49±8.01	-16.19,15.21	0.70	0.59,0.79

AI = artificial intelligence, C-CINE = conventional CINE, EDV = end-diastolic volume, EF = ejection fraction, ESV = end-systolic volume, LV = left ventricle, RV= right ventricle, SV = stroke volume, I = normalized to body surface area



Supplement Figure 1. C-CINE and AI-CS-CINE still show good correlation in function metrics in left and right ventricle including the outlying cases where image quality of C-CINE is notably lower than AI-CS-CINE (n=97). The x-axis represents the mean of C-CINE and AI-CS-CINE values, while the y-axis shows the difference between C-CINE and AI-CS-CINE. Dashed lines indicate the mean difference and 95% limits of agreement.