

Supplemental Digital Content 1 Delineation of septal and lateral wall (mean $\pm$ SD)
in SA views for RT and CINE CMR in 59 patients with atrial fibrillation at 1.5 and 3 T

1.5 T 3.0 T		Observer 1			Observer 2		
View	Wall	RT	CINE	p	RT	CINE	p
SA basis	Septum	3.8 $\pm$ 0.4	3.1 $\pm$ 0.8	<u>0.0007</u>	3.8 $\pm$ 0.4	2.9 $\pm$ 0.8	<u>< 0.0001</u>
		3.5 $\pm$ 0.9	2.6 $\pm$ 1.0	<u>0.004</u>	3.6 $\pm$ 0.9	2.7 $\pm$ 0.9	<u>0.002</u>
	Lateral	2.7 $\pm$ 0.6	2.0 $\pm$ 0.9	<u>0.0006</u>	3.6 $\pm$ 0.6	2.5 $\pm$ 1.0	<u>< 0.0001</u>
		2.4 $\pm$ 1.2	1.8 $\pm$ 1.1	0.13	2.4 $\pm$ 1.2	2.1 $\pm$ 0.9	0.36
SA mid	Septum	3.7 $\pm$ 0.8	3.1 $\pm$ 0.9	<u>0.0007</u>	3.7 $\pm$ 0.4	2.9 $\pm$ 0.9	<u>0.0002</u>
		3.5 $\pm$ 0.9	2.8 $\pm$ 1.2	<u>0.013</u>	3.7 $\pm$ 0.8	2.9 $\pm$ 0.9	<u>0.001</u>
	Lateral	2.7 $\pm$ 0.9	2.1 $\pm$ 1.1	<u>0.01</u>	3.7 $\pm$ 0.5	2.9 $\pm$ 1.1	<u><0.0001</u>
		2.7 $\pm$ 1.1	2.2 $\pm$ 1.1	<u>0.09</u>	3.0 $\pm$ 1.1	2.3 $\pm$ 1.1	<u>0.029</u>
SA apex	Septum	3.0 $\pm$ 1.1	2.7 $\pm$ 1.1	0.1	3.3 $\pm$ 0.6	2.89 $\pm$ 0.9	<u>0.034</u>
		2.7 $\pm$ 1.1	2.1 $\pm$ 1.0	0.68	2.8 $\pm$ 1.0	2.7 $\pm$ 0.8	0.42
	Lateral	2.3 $\pm$ 1.0	1.9 $\pm$ 0.9	0.07	3.2 $\pm$ 0.56	2.0 $\pm$ 0.9	<u>0.008</u>
		2.5 $\pm$ 1.2	2.0 $\pm$ 1.0	0.14	2.8 $\pm$ 1.1	2.4 $\pm$ 0.9	0.079

Wilcoxon-matched-pairs-test, p<0.05 significant difference

Supplemental Digital Content 2 Reproducibility of scores (mean $\pm$ SD) for both observers in 10 patients and 10 controls for RT and CINE CMR at 3 T

		Patients					
		RT			CINE		
View	Observer	r1	r2	p	r1	r2	p
2C	1	2.2 $\pm$ 0.7	2.1 $\pm$ 1.2	0.20	2.4 $\pm$ 1.0	2.4 $\pm$ 1.5	0.07
	2	3.0 $\pm$ 1.0	2.7 $\pm$ 0.9	0.07	2.5 $\pm$ 0.7	2.7 $\pm$ 1.0	1.0
4C	1	2.4 $\pm$ 0.9	2.8 $\pm$ 1.0	0.47	2.3 $\pm$ 1.1	2.0 $\pm$ 0.8	0.07
	2	2.7 $\pm$ 1.0	2.6 $\pm$ 0.5	0.17	2.5 $\pm$ 0.9	1.7 $\pm$ 1.6	0.04
SA basal	1	2.8 $\pm$ 1.0	2.8 $\pm$ 0.9	0.60	2.2 $\pm$ 1.0	2.0 $\pm$ 0.8	0.59
	2	2.9 $\pm$ 1.0	2.4 $\pm$ 0.9	0.06	2.6 $\pm$ 0.8	1.7 $\pm$ 1.5	0.45
SA mid	1	3.1 $\pm$ 0.9	2.4 $\pm$ 0.8	0.35	2.6 $\pm$ 1.1	2.4 $\pm$ 0.7	0.07
	2	3.2 $\pm$ 0.9	3.3 $\pm$ 0.7	0.26	2.6 $\pm$ 0.9	2.4 $\pm$ 0.6	0.42
SA apical	1	2.6 $\pm$ 1.1	2.5 $\pm$ 0.9	0.41	2.1 $\pm$ 1.0	2.2 $\pm$ 0.8	0.18
	2	2.8 $\pm$ 1.0	2.5 $\pm$ 0.8	0.04	2.5 $\pm$ 0.7	2.3 $\pm$ 0.5	1.0
		Controls					
		RT			CINE		
View	Observer	r1	r2	p	r1	r2	p
2C	1	3.3 $\pm$ 0.0	3.0 $\pm$ 0.7	0.16	4.0 $\pm$ 0.0	4.0 $\pm$ 0.0	0.50
	2	3.4 $\pm$ 0.8	2.3 $\pm$ 1.1	0.13	3.8 $\pm$ 0.3	3.9 $\pm$ 1.1	1.0
4C	1	3.3 $\pm$ 0.2	1.8 $\pm$ 1.6	0.66	3.9 $\pm$ 0.2	3.6 $\pm$ 0.4	1.0
	2	3.4 $\pm$ 0.8	2.8 $\pm$ 0.8	0.13	3.9 $\pm$ 0.3	3.8 $\pm$ 0.8	1.0
SA basal	1	3.0 $\pm$ 0.3	2.4 $\pm$ 1.1	0.32	3.9 $\pm$ 0.3	4.0 $\pm$ 0.0	1.0
	2	3.0 $\pm$ 0.7	3.7 $\pm$ 0.5	0.69	3.7 $\pm$ 0.5	3.7 $\pm$ 0.3	0.63
SA mid	1	3.4 $\pm$ 0.4	3.1 $\pm$ 0.9	0.19	3.9 $\pm$ 0.4	3.8 $\pm$ 0.4	0.50
	2	3.3 $\pm$ 0.5	3.7 $\pm$ 0.6	0.38	3.7 $\pm$ 0.6	3.5 $\pm$ 0.5	0.25
SA apical	1	3.0 $\pm$ 0.4	2.3 $\pm$ 1.1	0.10	3.0 $\pm$ 0.4	3.4 $\pm$ 0.9	0.25
	2	3.0 $\pm$ 0.8	2.6 $\pm$ 0.5	1.0	3.8 $\pm$ 0.4	3.3 $\pm$ 1.0	1.0

* r1 = mean image quality scores in reading 1; r2 = mean image quality scores in reading 2; p <0.05 significant difference

Supplemental Digital Content 3; Bland-Altman analysis of RT vs CINE CMR data in patients with atrial fibrillation (1.5 T and 3 T) and controls (3 T).

	Patients						Controls		
	3 T (n=29)			1.5 T (n=25)			3 T (n=20)		
	Difference (%)	Lower limit (%)	Upper limit (%)	Difference (%)	Lower limit (%)	Upper limit (%)	Difference (%)	Lower limit (%)	Upper limit (%)
ESV [ml]	-12.4	-54.6	29.8	-6.2	-27.4	14.4	-4.5	-27.5	18.4
EDV [ml]	-13.2	-71.3	44.9	-8.4	-32.6	17.6	-12.4	-46.5	21.6
SV [ml]	2.9	-35.1	40.9	-1.2	-26.4	25.8	-6.6	-23.4	10.2
EF [%]	4.3	-16.4	25.1	2.2	-15.7	19.8	0.04	-7.9	7.9
MM [g]	7.9	-47.3	31.6	-11	-45	22	-2.7	-25.1	19.6