

**SUPPLEMENTAL MATERIAL**

**Table 3** - ED thicknesses of trabeculated, compacted and total layer and trabeculated/compacted ratio in female and male subjects

(Data is presented as mean $\pm$ SEM) Trab = trabecular, C = compacted, F = female, M = male, na=not applicable, 0\* = measurement <0.01, thus, not of clinical utility.

Segment	Trabeculated		<i>p</i>	Compacted		<i>p</i>	Total layer		<i>p</i>	Trab/C ratio		<i>p</i>
	F	M		F	M		F	M		F	M	
1	2.5 $\pm$ 0.3	3.1 $\pm$ 0.3	0.29	7.1 $\pm$ 0.2	8.6 $\pm$ 0.2	<0.01	9.5 $\pm$ 0.4	11.7 $\pm$ 0.4	<0.01	0.3 $\pm$ 0.0	0.3 $\pm$ 0.0	0.92
2	0.1 $\pm$ 0.1	0	0.38	8.6 $\pm$ 0.3	10.5 $\pm$ 0.3	<0.01	8.6 $\pm$ 0.3	10.5 $\pm$ 0.3	<0.01	0*	0*	0.33
3	0	0	na	7.8 $\pm$ 0.2	9.6 $\pm$ 0.2	<0.01	7.8 $\pm$ 0.2	9.6 $\pm$ 0.2	<0.01	0	0	na
4	0.3 $\pm$ 0.1	0.4 $\pm$ 0.1	0.54	6.9 $\pm$ 0.2	8.5 $\pm$ 0.2	<0.01	7.0 $\pm$ 0.2	8.9 $\pm$ 0.2	<0.01	0*	0*	0.97
5	1.9 $\pm$ 0.3	1.8 $\pm$ 0.3	0.79	6.3 $\pm$ 0.2	7.7 $\pm$ 0.2	<0.01	8.2 $\pm$ 0.3	9.5 $\pm$ 0.3	<0.01	0.3 $\pm$ 0.0	0.2 $\pm$ 0.0	0.22
6	1.9 $\pm$ 0.3	1.9 $\pm$ 0.3	0.91	6.3 $\pm$ 0.1	7.7 $\pm$ 0.2	<0.01	8.2 $\pm$ 0.3	9.7 $\pm$ 0.3	<0.01	0.3 $\pm$ 0.0	0.3 $\pm$ 0.0	0.53
7	5.3 $\pm$ 0.4	6.0 $\pm$ 0.4	0.22	6.1 $\pm$ 0.2	7.2 $\pm$ 0.2	<0.01	11.4 $\pm$ 0.4	13.2 $\pm$ 0.4	<0.01	0.9 $\pm$ 0.0	0.8 $\pm$ 0.0	0.38
8	0.6 $\pm$ 0.2	0.4 $\pm$ 0.2	0.39	7.1 $\pm$ 0.2	8.6 $\pm$ 0.2	<0.01	7.8 $\pm$ 0.2	9.0 $\pm$ 0.2	<0.01	0*	0*	0.27
9	0	0	na	7.4 $\pm$ 0.2	8.8 $\pm$ 0.2	<0.01	7.3 $\pm$ 0.2	8.8 $\pm$ 0.2	<0.01	0	0	na

10	$1.6 \pm 0.3$	$1.0 \pm 0.3$	0.20	$6.5 \pm 0.2$	$7.7 \pm 0.1$	<0.01	$7.5 \pm 0.4$	$8.8 \pm 0.3$	<0.01	$0.1 \pm 0.0$	$0.1 \pm 0.0$	0.06
11	$4.0 \pm 0.4$	$4.4 \pm 0.3$	0.44	$5.7 \pm 0.1$	$6.8 \pm 0.1$	<0.01	$9.8 \pm 0.4$	$11.2 \pm 0.3$	<0.01	$0.7 \pm 0.1$	$0.7 \pm 0.0$	0.79
12	$4.4 \pm 0.4$	$4.5 \pm 0.3$	0.81	$5.6 \pm 0.2$	$6.9 \pm 0.1$	<0.01	$9.9 \pm 0.4$	$11.4 \pm 0.3$	<0.01	$0.8 \pm 0.1$	$0.7 \pm 0.1$	0.13
13	$5.5 \pm 0.3$	$5.9 \pm 0.3$	0.42	$6.0 \pm 0.2$	$6.5 \pm 0.2$	<0.05	$11.0 \pm 0.4$	$12.4 \pm 0.4$	<0.05	$0.9 \pm 0.1$	$0.9 \pm 0.2$	0.98
14	$0.7 \pm 0.3$	$0.7 \pm 0.2$	0.98	$6.6 \pm 0.2$	$7.9 \pm 0.2$	<0.01	$7.3 \pm 0.3$	$8.7 \pm 0.3$	<0.01	$0.1 \pm 0.0$	$0.1 \pm 0.0$	0.61
15	$2.3 \pm 0.3$	$2.1 \pm 0.3$	0.76	$5.7 \pm 0.2$	$6.6 \pm 0.2$	<0.01	$8.0 \pm 0.3$	$8.7 \pm 0.2$	<0.05	$0.4 \pm 0.1$	$0.3 \pm 0.1$	0.29
16	$6.7 \pm 0.3$	$7.6 \pm 0.3$	0.05	$5.9 \pm 0.2$	$6.4 \pm 0.2$	<0.05	$12.5 \pm 0.4$	$14.0 \pm 0.4$	<0.05	$1.1 \pm 0.1$	$1.2 \pm 0.1$	0.54

**Table 4** - ES thicknesses of trabeculated, compacted and total layer and trabeculated/compacted ratio in female and male subjects

Segment	Trabeculated		<i>p</i>	Compacted		<i>p</i>	Total layer		<i>p</i>	Trab/C ratio		<i>p</i>
	F	M		F	M		F	M		F	M	
1	0.6±0.2	0.9±0.2	0.22	12.6±0.4	14.9±0.4	<0.01	13.1±0.4	15.9±0.4	<0.01	0	0.1±0.0	0.45
2	0	0	na	13.0±0.4	15.1±0.3	<0.01	13.0±0.4	15.1±0.3	<0.01	0	0	na
3	0	0	na	10.7±0.3	12.7±0.3	<0.01	10.7±0.3	12.7±0.3	<0.01	0	0	na
4	0.1±0.0	0.3±0.1	0.13	12.2±0.3	14.0±0.3	<0.01	12.2±0.3	14.4±0.3	<0.01	0*	0*	0.32
5	0.6±0.1	0.6±0.1	0.97	12.1±0.3	14.0±0.3	<0.01	12.7±0.3	14.5±0.3	<0.01	0.1±0.0	0.1±0.0	0.66
6	0.5±0.1	0.6±0.2	0.47	11.9±0.3	13.5±0.3	<0.01	12.3±0.3	14.2±0.3	<0.01	0.1±0.0	0.1±0.0	0.67
7	5.3±0.4	6.0±0.3	0.22	10.2±0.4	12.5±0.3	<0.01	14.6±0.4	17.1±0.4	<0.01	0.5±0.1	0.4±0.0	0.07
8	0.6±0.2	0.3±0.2	0.28	11.8±0.4	14.0±0.3	<0.01	12.4±0.4	14.3±0.3	<0.01	0*	0*	0.68
9	0	0	na	11.8±0.3	14.0±0.3	<0.01	11.8±0.3	14.0±0.3	<0.01	0	0	na
10	1.2±0.3	0.7±0.2	0.14	11.8±0.4	13.5±0.3	<0.01	12.4±0.4	14.1±0.3	<0.01	0.1±0.0	0.1±0.0	0.09

11	2.8±0.3	3.4±0.4	0.23	10.8±0.4	12.6±0.4	<0.01	13.5±0.4	16.0±0.4	<0.01	0.3±0.0	0.3±0.0	0.84
12	2.4±0.3	3.2±0.3	0.10	10.5±0.4	12.1±0.3	<0.01	13.0±0.4	15.3±0.3	<0.01	0.2±0.0	0.3±0.0	0.52
13	4.1±0.3	4.2±0.3	0.91	11.1±0.3	12.1±0.3	<0.01	15.2±0.3	16.4±0.4	<0.01	0.4±0.0	0.3±0.0	0.30
14	0.5±0.2	0.4±0.2	0.67	12.0±0.3	13.5±0.3	<0.01	12.5±0.3	14.0±0.3	<0.01	0*	0*	0.45
15	1.5±0.3	1.5±0.3	0.93	10.6±0.4	12.2±0.4	<0.01	12.1±0.4	13.7±0.4	<0.01	0.2±0.0	0.2±0.0	0.47
16	4.8±0.2	5.3±0.4	0.24	10.2±0.3	12.3±0.3	<0.01	15.0±0.3	17.6±0.5	<0.01	0.5±0.0	0.5±0.0	0.29

**Table 5** - Trabecular, compacted and total layer thickening in female and male subjects.

Segment	Trabecular		<i>p</i>	Compacted		<i>p</i>	Total layer		<i>p</i>			
	thickening			thickening			thickening					
	F	M		F	M		F	M				
1	-30±7	-30±7	0.68	73±4	71±4	0.83	45±5	42±4	ns			
2	0	0	na	51±3	46±3	0.20	48±4	44±4	ns			
3	0	0	na	36±2	33±2	0.73	30±4	33±3	ns			
4	-34±5	-51±6	0.79	96±2	66±3	0.28	67±6	59±5	ns			
5	-30±6	-32±7	0.48	88±5	80±5	0.54	63±6	59±5	ns			
6	-20±7	-21±7	0.54	84±5	72±4	0.08	59±6	54±5	ns			
7	-21±6	-20±5	0.17	75±5	76±4	0.80	33±3	35±4	ns			
8	-7±2	-4±1	0.56	67±4	63±3	0.40	62±4	60±3	ns			
9	0	0	na	59±4	60±3	0.84	59±4	57±4	ns			
10	-14±6	-10±7	0.03	74±4	74±4	0.96	60±4	63±5	ns			
11	-29±7	-24±7	0.62	88±5	86±5	0.76	80±9	87±7	ns			
12	-42±7	-29±6	0.18	91±6	75±4	0.03	36±5	36±5	ns			
13	-19±5	-14±6	0.70	83±5	90±5	0.31	36±4	37±5	ns			
14	-31±8	-33±9	0.58	84±5	69±5	0.03	78±6	60±6	ns			
15	-31±8	-34±7	0.83	86±6	84±4	0.77	61±6	65±6	ns			
16	-20±5	-29±5	0.19	76±6	94±5	0.06	26±4	27±4	ns			

**Movie 1 Legend:** Typical selection of the basal, mid-cavity and apical movies which was used in selected cases to help locate the boundary between the compact and trabeculated myocardium at end-systole.