

Supplemental Tables for

Left Ventricular Noncompaction Detected by Cardiac Magnetic Resonance Screening:

A Reexamination of Diagnostic Criteria

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Supplemental Table I. Calculation of Left Ventricular Trabeculation
Variables in 2 Sample Cases

Supplemental Table II. Summary of Measurements Used in Left Ventricular
Trabeculation Modeling

SUPPLEMENTAL TABLE I. Calculation of Left Ventricular Trabeculation Variables in 2 Sample Cases

Variable	Calculation Formula	Sample Case 1	Sample Case 2
Trabeculae included in the blood pool			
End-diastolic volume ^a	A	140.9	121.7
End-systolic volume ^a	B	63.3	39.8
Stroke volume ^b	$C = A - B$	77.6	81.9
Ejection fraction ^c	$D = C/A$	55.1	67.2
LV mass ^d (LVM _c)	E	73.0	80.0
Trabeculae excluded from the blood pool			
End-diastolic volume ^a	F	85.4	64.4
End-systolic volume ^a	G	26.5	17.3
Stroke volume ^b	$H = F - G$	58.9	47.1
Ejection fraction ^c (EF _o)	$I = H/F$	68.9	73.1
LV mass at end-diastole ^e	J	132.5	143.4
LV mass at end-systole ^e	K	112.4	105.3
Calculated LV trabeculation variables			
Volume of LV trabeculae at end-diastole (V _d ^T)	$L = (J - E)/1.05$	56.7	60.4
Volume of LV trabeculae at end-systole (V _s ^T)	$M = (K - E)/1.05$	37.5	24.1
Fraction of LV trabeculation volume occupied by intertrabecular luminal spaces at end-diastole (f _d ^T)	$N = [(L - M)/L]/I$	0.49	0.82
Net mass of LV trabeculations (m ^T)	$O = L(1 - N) \times 1.05$	30.3	11.4
Net relative trabeculation mass as % total LV mass (NRTM)	$P = 100[O/(O + E)]$	29.4	12.4

LV = left ventricular

^aVolume (mL) of LV cavity containing the blood pool calculated by image-processing software at end-diastole and end-systole

^bDifference between end-diastolic and end-systolic LV cavity volume (mL)

^cCalculated as stroke volume divided by end-diastolic volume

^dMass estimate (g) generated by image-processing software and based on calculated volume of compact myocardium and application of a factor of 1.05 (g/mL)

^eMass estimate (g) based on calculated volume of compact myocardium and adjacent trabeculated region, excluding blood contained in intertrabecular luminal spaces

SUPPLEMENTAL TABLE II. Summary of Measurements Used in Left Ventricular Trabeculation Modeling

Variable	Mean ± SD (range)
V_d^T * (mL/m ²)	25.2 ± 8.1 (5.1–56.2)
V_s^T * (mL/m ²)	11.9 ± 5.2 (0–30.6)
LVM_c * (g/m ²)	48.9 ± 10.5 (23.4–88.4)
EF_e (%)	69.1 ± 6.1 (48.1–84.8)
$\langle I \rangle_d^T$	0.74 ± 0.21 (0.07–1.0)
m^T * (g/m ²)	6.7 ± 5.2 (0–25.3)
NRTM (%)	11.8 ± 8.5 (0–36.7)

EF_e = ejection fraction; LV = left ventricular; LVM_c = mass of LV compact myocardium; m^T = net mass of LV trabeculae; NRTM = net relative trabeculation mass as % total LV mass; $\langle I \rangle_d^T$ = fraction of LV trabeculation volume occupied by intertrabecular luminal spaces at end-diastole; V_d^T = volume of LV trabeculae at end-diastole; V_s^T = volume of LV trabeculae at end-systole

*Indexed to body surface area