

Supplemental Data

Supplement to: Jansweijer JA et al, Heritability in genetic heart disease, the role of genetic background

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Table S1. Measured trait values for the twin pairs in this study.

DCM Pair ID	Mutation	Case/literature	LVEF (%)		LVEDD (mm)	
			Sibling1	Sibling2	Sibling1	Sibling2
M72	N/A	literature ¹	18	20	67	62
M76	N/A	literature ²	20	23	N/A	N/A
M77	N/A	literature ³	32	40	54	57
M78	LMNA R349L	literature ⁴	22	40	61	55
M80	PLN R14del	case	19	33	58	56
M81	N/A (<i>familial disease</i>)	case	32	53	N/A	N/A
M82	PLN R14del	case	N/A	N/A	55	51
M86	N/A (<i>familial disease</i>)	case	44	38	54	54
M87	DES I451M	case	13	44	246*	269*
M88	N/A (<i>familial disease</i>)	case	30	40	55	56
C42	PLN R14del	case	N/A	N/A	50	47
C43	LMNA K208del	case	N/A	N/A	56	63
C45	MYH7 D545N/D955N	case	32	69	59	54
C46	LMNA E84K	case	71	64	49	54
C52	MYH7 M659T	case	69	58	59	54
C53	MYH7 M659T	case	40	56	58	62
C54	PLN R14del	case	80	92	51	55
C56	N/A (<i>familial disease</i>)	case	10	23	58	65
C59	PLN R14del	case	68	70	55	52
C60	PLN R14del	case	N/A	N/A	59	89
C61	PLN R14del	case	41	57	62	51
C62	PLN R14del	case	45	43	51	49
C63	PLN R14del	case	25	48	67	56
C65	PLN R14del	case	N/A	N/A	52	46
C71	PLN R14del	case	45	25	53	51

* For twin pair M87 only MRI values for left ventricular dimensions were available, which are depicted here in ml. M# monozygotic twin pairs; C# control pairs.

HCM Pair ID	Mutation	Case/literature	IVSd	
			Sibling1	Sibling2
M47	N/A	literature ⁵	10	9
M48	N/A	literature ⁶	19	18
M54	N/A	literature ⁷	18	20
M55	N/A	literature ⁸	19	16
M57	N/A	literature ⁹	29	15
M67	MYBPC3 R943*	case	11	23
M89	N/A	case	13	11
M90	MYH7 R723C	case	8	11
M91	MYBPC3 P955fs*95	case	36	13
M95	MYBPC3 K1065fs*12	case	22	18
M96	MYBPC3 G897fs*24	case	20	20
C23	MYBPC3 W792fs*17	case	20	15
C24	MYBPC3 W792fs*17	case	16	10
C25	MYBPC3 W792fs*17	case	12	14
C32	TNNT2 R285C	case	17	12
C33	TNNT2 R285C	case	7	7
C34	MYBPC3 E451*	case	20	25
C38	MYBPC3 W792fs*17	case	11	9
C39	MYL2 E22K	case	10	11
C40	MYBPC3 R943*	case	20	11
C41	MYL2 E22K	case	9	9
C72	MYBPC3 W792fs*17	case	35	19
C86	MYOZ2 S48P	literature ¹⁰	20	26
C90	MYBPC3 R943*	case	9	8
C99	MYBPC3 W792fs*17	case	8	10

M# monozygotic twin pairs; C# control pairs.

LQTS Pair ID	Mutation	Case/ literature	QTc	
			Sibling1	Sibling2
M1	SCN5A (<i>exact mutation not reported</i>)	literature ¹¹	559	528
M16	KCNQ1 G314S	case	626	606
M22	KCNQ1 G189R	case	462	475
M23	KCNH2 E698*	case	431	432
M98	KCNQ1 R518*	case	426	399
M99	KCNQ1 c.1033-1G>C	case	465	424
M100	KCNQ1 S225L	case	436	454
M101	KCNQ1 G314S/R518*	case	404	400
M102	KCNH2 C276fs*84	case	488	448
M103	SCN5A R1623Q	case	447	438
M104	KCNQ1 Q530*	case	417	415
M105	KCNH2 Q376spl	case	540	480
M106	KCNH2 G969Vfs*5	case	470	460
M107	KCNQ1 Q530X	case	470	500
M108	KCNQ1 R555C	case	520	500
M109	KCNH2 del453C	case	477	477
M110	KCNQ1 G589D	case	451	466
M111	KCNH2 R176W	case	476	442
M112	KCNQ1 G589D	case	491	501
M113	KCNH2 P507H	case	437	449
M114	KCNH2 P205S	case	468	439
M115	KCNQ1 R190W	case	459	479
M116	KCNQ1 V516D	case	520	430
M117	KCNQ1 c.1733-1G>A	case	443	474
M118	KCNH2 N633T	case	484	457
C1	KCNH2 G925fs*47	case	477	482
C2	KCNH2 C64Y	case	478	471
C3	KCNH2 P872*4	case	464	531
C4	KCNH2 T613M	case	574	608
C5	KCNH2 3682dup	case	432	398

C6	KCNH2 3682dup	case	417	445
C7	KCNQ1 T322M	case	516	426
C8	KCNQ1 T322M	case	511	520
C9	KCNH2 M645L	case	365	371
C11	KCNH2 Y99S	case	522	434
C12	KCNH2 L987fs*20	case	441	510
C13	KCNH2 L987fs*20	case	469	436
C14	KCNH2 P297S	case	425	453
C15	SCN5A Y1794_E1796insD	case	472	522
C16	SCN5A Y1794_E1796insD	case	506	461
C17	SCN5A Y1794_E1796insD	case	329	395
C18	SCN5A Y1794_E1796insD	case	393	428
C19	KCNQ1 A344V	case	478	474
C20	KCNQ1 A344V	case	569	495
C21	KCNQ1 c.1032+5G>A	case	425	459
C22	SCN5A 1768V	case	564	429
C74	KCNH2 E365*	case	471	537
C75	SCN5A T370M	case	410	400
C76	SCN5A R243C	case	450	430
C77	SCN5A G168R	case	550	450
C78	KCNQ1 D317N	case	501	432
C79	KCNQ1 G589D	case	418	413
C80	KCNQ1 R561G	case	458	458
C81	KCNQ1 G589D	case	488	450
C82	KCNQ1 L266P	case	495	485

M# monozygotic twin pairs; C# control pairs.

Table S2. Age differences for the pairs in which the age difference at time of measurement exceeded 10%.

	Pair ID	Relative age difference (sib2/sib1)
DCM	C42	0.14
	C61	0.31
HCM	M67	0.48
	C23	0.13
	C33	0.13
	C40	0.13
	C41	0.18
	C1	0.22
LQTS	C3	0.12
	C5	0.23
	C7	0.28
	C9	0.12
	C13	0.22
	C15	0.11
	C16	0.11
	C17	0.16
	C18	0.20
	C19	0.88
C20	0.50	
	C74	0.15

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