

Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: Imboden M, Swan H, Denjoy I, et al. Female predominance and transmission distortion in the long-QT syndrome. *N Engl J Med* 2006;355:2744-51.

Online Table: List of LQT1 and LQT2 mutations, frequency of occurrence in independent pedigrees, LQTS referral center and mutation classification.

N: N-terminal missense mutation group, C: C-terminal missense mutation, TM: Transmembrane missense mutation, X/sp: nonsense, splicing, and deletion, insertion mutation group

D –Germany, F –France, FIN –Finland, I –Italy, NL –Netherlands

LQT1

mutation	Pedigrees (n)	center	mutation type
P117L	1	I	N
G168R	1	F	TM
R174C	4	F	TM
R174H	2	F	TM
L175fsX240	1	F	X/sp
A178T	1	D	TM
Y184S	2	NL	TM
R190W	1	I	TM
R190Q	3	D/F	TM
R190L	1	D	TM
S225L	3	D/F/I	TM
R231C	1	F	TM
R243C	1	F	TM
V254M	4	D/F	TM
H258N	1	I	TM
H258P	1	F	TM
E261K	1	F	TM
G269D	1	F	TM
S277W	1	D	TM
V280A	1	D	TM
V280E	1	I	TM
V288fsX347	1	F	X/sp
G306R	1	F	TM
T309R	1	F	TM
T311I	1	F	TM
T312I	1	D	TM
G314S	4	D/F/I	TM
Y315S	3	F	TM
Y315C	1	F	TM
G316E	2	F	TM
P320H	1	D	TM
P320A	2	F	TM
G325R	2	F	TM
F339S	1	F	TM
A341V	4	D/F/I	TM
L342F	1	F	TM
A344V	4	F/NL	TM
sp/A344A	4	F/I	X/sp
Q359-K362 Del	1	F	X/sp
R366W	2	F	C
A371T	1	F	C
S373P	1	NL	C
W379S	1	NL	C

K422fsX462	2	F	X/sp
M476L	1	F	C
M520R	1	D	C
R539W	1	F	C
R555C	4	F	C
R555H	1	F	C
S566P	1	F	C
I567T	1	F	C
T587M	1	D	C
G589D	50	FIN	C
A590T	1	F	C
R591H	2	F	C
R594C	1	NL	C
Q604X	1	F	X/sp
IVS6as -1G>C	1	F	X/sp
ISV6ds+2del 19	1	F	X/sp

LQT2

mutation	pedigrees (n)	center	mutation type
R27fsX 59	1	F	X/sp
Y43C	1	I	N
C44F	1	F	N
C44G	1	D	N
E58K	1	F	N
C64Y	1	NL	N
L87P	2	NL	N
Y99S	1	NL	N
R100G	1	F	N
P114S	1	F	N
A157fsX332	1	F	X/sp
R176W	1	D	N
R232fsX359	1	NL	X/sp
S261N	1	F	N
P297S	1	NL	N
R328C	1	F	N
P334L	1	F	N
T337fsX355	1	F	X/sp
R366X	1	D	X/sp
P426H	1	I	TM
S428L	1	D	TM
M462-I467 Dup	1	F	X/sp
F463L	1	F	TM
P486R	1	D	TM
D501N	1	F	TM
D509N	1	I	TM
L552S	8	FIN	TM
L553V	1	F	TM
F557fsX564	1	D	X/sp

A558P	1	NL	TM
A561V	1	I	TM
A561T	1	F	TM
W563X	1	F	X/sp
A565S	1	F	TM
W568C	1	F	TM
W568X	1	D	X/sp
G572S	1	I	TM
G572D	2	I	TM
H578-R582 Del	1	NL	X/sp
R582C	1	NL	TM
G584S	1	I	TM
D609N	1	F	TM
Y611X	1	D	X/sp
T613M	3	F/NL	TM
A614V	4	D/I	TM
V625E	1	NL	TM
G626-F627insP	1	NL	X/sp
G628S	1	I	TM
N633S	1	F	TM
T634A	1	F	TM
K638Q	1	D	TM
S649L	1	NL	TM
S660L	1	I	TM
Q664X	1	F	X/sp
Q676fsX721	1	NL	X/sp
Q688X	1	D	X/sp
E698X	1	NL	X/sp
W705 fsX713 2	1	F	X/sp
R752P	1	D	C
S783P	1	F	C
R784fsX808	1	NL	X/sp
S818L	1	F	C
S818P	1	I	C
V822M	1	F	C
R863X	1	NL	X/sp
P872fsX876	1	NL	X/sp
R883Q	1	D	C
W927X	1	NL	X/sp
I933A>C	1	NL	C
S960N	1	F	C
S981fsX1056	1	F	X/sp
L987fsX1056	1	NL	X/sp
W1001X	1	F	X/sp
D1003fsX1118	1	D	X/sp
R1014fsX1052	1	D	X/sp
P1034fsX1058	1	D	X/sp
D1037fsX1118	1	F	X/sp
R1055Q	1	D	C
Q1068X	1	F	X/sp
R1084fsX1254	1	F	X/sp
IVS6as -1 g>c	1	F	X/sp

IVS3 -2ins(agGCC)	1	D	X/sp
IVS8as -2a>9	1	F	X/sp

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R174H	2	F	TM
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A178T	1	D	TM
Y184S	2	NL	TM
R190W	1	I	TM
R190Q	3	D/F	TM
R190L	1	D	TM
S225L	3	D/F/I	TM
R231C	1	F	TM
R243C	1	F	TM
V254M	4	D/F	TM
H258N	1	I	TM
H258P	1	F	TM
E261K	1	F	TM
G269D	1	F	TM
S277W	1	D	TM
V280A	1	D	TM
V280E	1	I	TM
V288fsX347	1	F	X/sp
G306R	1	F	TM
T309R	1	F	TM
T311I	1	F	TM
T312I	1	D	TM
G314S	4	D/F/I	TM
Y315S	3	F	TM
Y315C	1	F	TM
G316E	2	F	TM
P320H	1	D	TM
P320A	2	F	TM
G325R	2	F	TM
F339S	1	F	TM
A341V	4	D/F/I	TM
L342F	1	F	TM
A344V	4	F/NL	TM
sp/A344A	4	F/I	X/sp
Q359-K362 Del	1	F	X/sp
R366W	2	F	C
A371T	1	F	C
S373P	1	NL	C
W379S	1	NL	C

K422fsX462	2	F	X/sp
M476L	1	F	C
M520R	1	D	C
R539W	1	F	C
R555C	4	F	C
R555H	1	F	C
S566P	1	F	C
I567T	1	F	C
T587M	1	D	C
G589D	50	FIN	C
A590T	1	F	C
R591H	2	F	C
R594C	1	NL	C
Q604X	1	F	X/sp
IVS5as -1G>C	1	F	X/sp
IVS5ds +2del 19	1	F	X/sp

LQT2

mutation	pedigrees (n)	center	mutation type
R27fsX 59	1	F	X/sp
Y43C	1	I	N
C44F	1	F	N
C44G	1	D	N
E58K	1	F	N
C64Y	1	NL	N
L87P	2	NL	N
Y99S	1	NL	N
R100G	1	F	N
P114S	1	F	N
P157fsX332	1	F	X/sp
R176W	1	D	N
R232fsX359	1	NL	X/sp
P297S	1	NL	N
R328C	1	F	N
P334L	1	F	N
T337fsX355	1	F	X/sp
R366X	1	D	X/sp
P426H	1	I	TM
S428L	1	D	TM
M462-I467 Dup	1	F	X/sp
F463L	1	F	TM
P486R	1	D	TM
D501N	1	F	TM
D509N	1	I	TM
L552S	8	FIN	TM
L553V	1	F	TM
F557fsX564	1	D	X/sp
A558P	1	NL	TM
A561V	1	I	TM
A561T	1	F	TM

W563X	1	F	X/sp
A565S	1	F	TM
W568C	1	F	TM
W568X	1	D	X/sp
G572S	1	I	TM
G572D	2	I	TM
H578-R582 Del	1	NL	X/sp
R582C	1	NL	TM
G584S	1	I	TM
D609N	1	F	TM
Y611X	1	D	X/sp
T613M	3	F/NL	TM
A614V	4	D/I	TM
S621N	1	F	N
V625E	1	NL	TM
G626-F627insP	1	NL	X/sp
G628S	1	I	TM
N633S	1	F	TM
T634A	1	F	TM
K638Q	1	D	TM
S649L	1	NL	TM
S660L	1	I	TM
Q664X	1	F	X/sp
Q676fsX721	1	NL	X/sp
Q688X	1	D	X/sp
E698X	1	NL	X/sp
W705 fsX713	1	F	X/sp
R752P	1	D	C
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S960N	1	F	C
S981fsX1056	1	F	X/sp
L987fsX1056	1	NL	X/sp
W1001X	1	F	X/sp
D1003fsX1118	1	D	X/sp
R1014fsX1052	1	D	X/sp
P1034fsX1058	1	D	X/sp
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