

Appendix 1: Twelve genes associated with long QT syndrome

LQTS type	Gene	Function
1*	<i>KCNQ1</i>	α -Subunit of I_{Ks}
2*	<i>KCNH2</i>	α -Subunit of I_{Kr}
3*	<i>SCN5A</i>	α -Subunit of I_{Na}
4	<i>ANK4</i>	Ankyrin B: cytoskeletal membrane adapter
5	<i>KCNE1</i>	β -Subunit of I_{Ks}
6	<i>KCNE2</i>	β -Subunit of I_{Kr}
7	<i>KCNJ2</i>	α -Subunit of I_{K1}
8	<i>CACNA1C</i>	α -Subunit of I_{CaL}
9	<i>CAV3</i>	Caveolin 3: trafficking
10	<i>SCN4B</i>	β -Subunit of I_{Na}
11	<i>AKAP9</i>	Yotiao: accessory protein for I_{Ks}
12	<i>SNTA1</i>	α_1 -Syntrophin: scaffolding protein

Note: LQTS = long QT syndrome.
 *75% of all clinically defined instances of LQTS and 95% of all genetically identifiable instances are due to mutations in *KCNQ1*, *KCNH2* and *SCN5A*.^{3,4}