**Additional file 1: Table S1:** Forty-eight OMIM genes implicated in dilated and hypertrophic familial cardiomyopathy that were screened for all the homozygous variants detected by whole exome sequencing. All of the identified 62 variants have been previously reported in the dbSNP and/or 1000 Genomes databases as polymorphisms, except for two novel variants in *TNN* and *SGCD* genes, which were found to be intronic.

|  |  |  |  |
| --- | --- | --- | --- |
| Gene | Number of all homozygous variants | Number of reported SNPs | Number of novel variants |
| *NEXN* | 0 | 0 | 0 |
| *LMNA* | 0 | 0 | 0 |
| *TNNT2* | 0 | 0 | 0 |
| *PSEN2* | 0 | 0 | 0 |
| *ACTN2* | 0 | 0 | 0 |
| *CMYA3* | 0 | 0 | 0 |
| *TTN* | 17 | 16 | 1 (intronic) |
| *DES* | 4 | 4 | 0 |
| *CAV3* | 0 | 0 | 0 |
| *SCN5A* | 1 | 1 | 0 |
| *CMYA1* | 0 | 0 | 0 |
| *MYL3* | 0 | 0 | 0 |
| *TNNC1* | 0 | 0 | 0 |
| *MYOZ2* | 0 | 0 | 0 |
| *SLC25A4* | 0 | 0 | 0 |
| *SDHA* | 0 | 0 | 0 |
| *CMYA5* | 0 | 0 | 0 |
| *SGCD* | 2 | 1 | 1 (intronic) |
| *DSP* | 5 | 5 | 0 |
| *MYO6* | 0 | 0 | 0 |
| *LAMA4* | 4 | 4 | 0 |
| *PLN* | 0 | 0 | 0 |
| *EYA4* | 1 | 1 | 0 |
| *GATAD1* | 0 | 0 | 0 |
| *PRKAG2* | 1 | 1 | 0 |
| *FKTN* | 0 | 0 | 0 |
| *MYPN* | 3 | 3 | 0 |
| *VCL* | 3 | 3 | 0 |
| *LDB3* | 1 | 1 | 0 |
| *RBM20* | 2 | 2 | 0 |
| *BAG3* | 0 | 0 | 0 |
| *CSRP3* | 0 | 0 | 0 |
| *MYBPC3* | 2 | 2 | 0 |
| *CRYAB* | 3 | 3 | 0 |
| *ABCC9* | 3 | 3 | 0 |
| *TMPO* | 0 | 0 | 0 |
| *MYL2* | 0 | 0 | 0 |
| *MYH6* | 1 | 1 | 0 |
| *MYH7* | 3 | 3 | 0 |
| *PSEN1* | 0 | 0 | 0 |
| *ACTC1* | 0 | 0 | 0 |
| *TPM1* | 4 | 4 | 0 |
| *TCAP* | 0 | 0 | 0 |
| *DSG2* | 0 | 0 | 0 |
| *CALR3* | 0 | 0 | 0 |
| *TNNI3* | 1 | 1 | 0 |
| *MYLK2* | 0 | 0 | 0 |
| *JPH2* | 1 | 1 | 0 |