# File S1

## 1- Cardiomyopathy Targeted Panel Sequencing

1a - List of genes sequenced in their coding regions.

| Genes | Reference seq | Genes | Reference seq |
|---|---|---|---|
| ABBC9 | NM_020297 | MYL2 | NM_000432 |
| ACTC1 | NM_005159 | MYL3 | NM_000258 |
| ACTN2 | NM_001103 | MYLK2 | NM_033118 |
| ANKRD1 | NM_014391 | MYOZ2 | NM_016599 |
| BAG3 | NM_004281 | MYPN | NM_032578 |
| CRYAB | NM_001885 | NEBL | NM_006393 |
| CSRP3 | NM_003476 | NEXN | NM_144573 |
| DES | NM_001927 | NKX2-5 | NM_004387 |
| DSG2 | NM_001943 | PLN | NM_002667 |
| DSP | NM_004415 | PRKAG2 | NM_016203 |
| DTNA | NM_001390 | RBM20 | NM_001134363 |
| EMD | NM_000117 | RYR2 | NM_001035 |
| FHL1 | NM_001159702 | SCN5A | NM_198056 |
| FLNC | NM_001458 | TAZ | NM_000116 |
| GATA4 | NM_002052 | TCAP | NM_003673 |
| GLA | NM_000169 | TMPO | NM_003276 |
| LAMA4 | NM_001105206 | TNNC1 | NM_003280 |
| LAMP2 | NM_002294 | TNNI3 | NM_000363 |
| LDB3 | NM_007078 | TNNT2 | NM_001001430 |
| LMNA | NM_170707 | TPM1 | NM_001018005 |
| MYBPC3 | NM_000256 | TTN | NM_001256850 |
| MYH6 | NM_002471 | TTR | NM_000371 |
| MYH7 | NM_000257 | VCL | NM_014000 |

1b - Method for gene sequencing.

Custom targeted genes enrichment and DNA library preparation were performed using the NimbleGen EZ choice probes® and Kappa Library preparation kit according to the manufacturer's instructions (NimbleGen®, Roche Diagnostics, Madison, USA). The targeted regions (coding regions and flanking intronic regions (± 20 bp) were sequenced using the Illumina MiSeq platform on a 500 cycle Flow Cell (Illumina, Santa Cruz, USA) and MiSeq Software generated FASTQ format files after demultiplexing patients' sequences. Merged single reads and paired-end reads were then aligned on Hg19 human reference genome, using BWA-MEM. Variant calling was performed using the GATK Haplotype Caller program then annotated using ANNOVAR. Written informed consent was obtained from all study participants before inclusion in the study.