

Table 1: Clinical description of the 28 index patients carrying a *FLNC* variant

Patient	Gender	Variant		Variant Type	Protein Domain	Familial / Sporadic	Age at diagnostic	Symptoms 1- Palpitations, 2-Dyspnea (NYHA) 3-Syncope	Muscle symptoms	IVS (mm)	Post wall (mm)	Max LV wall thickness (mm)	LV EF (%)	LV D (mm)	Diameter of left atrium	Obstruction (gradient max >30 mmHg, t)	PR interval (ms)	RBB Y/N	LBB Y/N	AVB Y/N	nsTV Y / N	Severe sinus Dysfunction Y / N	Clinical event during follow up	Device or HTx	Cardiovascular Death Y / N	Family history of SCD <50 years	
1	M	c.711del	p.Glu238Argfs*14	Fs	ABD	Fam	51	Dyspnea	N	NC	NC	NC	30	60	NC	NC	NC	NC	NC	NC	NC	NC	AHF	NC	N	Y	
2	F	c19del	p.Tyr7Thrfs*51	Fs	ABD	Fam	28	NYHA IV	N	7	9	9	30	64	42mm	N	160	N	N	N	N	N	AHF	N	N	N	
3	M	c.601+1G>T	/	Splice	ABD	Spo	28	NA	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	SCD	NA	Y (SCD)	N	
4	F	c.2784C>G	p.Tyr928*	STOP	ROD1	Fam	36	N	N	9	7	9	40	NC	NC	N	140	N	Y	N	N	N	N	N	N	Y	
5	F	c.3592dup	p.Val1198Glyfs*64	Fs	ROD1	Spo	0.5	N	NC	NC	NC	NC	27	34	NA	N	120	Y	N	N	N	N	N	N	N	N	
6	F	c.2041-2047 dup	p.Ile683Argfs*9	Fs	ROD1	Fam	28	Dyspnea	N	8	7	8	28	NA	NC	NA	128	N	N	N	Y	NC	SCD	NA	Y (SCD)	Y	
7	M	c.1412-1G>A	/	Splice	ROD1	Spo	21	Dyspnea	NC	NC	NC	NC	40	71	NC	N	NC	N	N	N	Y	N	AHF-SCD	NA	Y (SCD)	N	
8	M	c.7645C>T	p.Gln2549*	STOP	ROD2	Spo	34	N	NC	NC	NC	NC	46	51	Not dilated	NC	120	N	N	N	PVC	N	N	ICD (primary prev)	N	Y	
9	F	c.7118_7119del	p.Tyr2373Cysfs*7	Fs	ROD2	Fam	40	NA	N	NC	NC	NC	40	56	24 ml/m ²	N	140	N	N	N	Y	N	AF	N	N	N	
10	F	c.7665T>A	p.Cys2555*	STOP	ROD2	Fam	42	NYHA II	N	NC	NC	NC	25	NA	59ml/m ²	NC	NI	N	Y	N	N	NC	N	ICD (primary prev)	N	Y	
11*	F	c.4271G>T	p.Gly1424Val	MS	ROD1	Fam	40	Dyspnea	N	14	NC	14	NI	NC	35ml/m ²	NC	NI	N	N	N	N	N	N	N	ICD (primary prev)	N	Y
12	F	c.4871C>T	p.Ser1624Leu	MS	ROD1	Fam	42	Y	N	11	17	17	NI	NC	NC	N	NC	N	Y	Y (Degree 1)	N	N	AF	N	N	N	
13	M	c.3581C>T	p.Ser1194Leu	MS	ROD1	Spo	30	Dyspnea	N	17	19	19	NI	NC	NC	NC	NC	N	N	NC	N	N	AF AVC	N	N	N	
14*	M	c.6895G>A	p.Gly2299Ser	MS	ROD2	Fam	16	NA	N	13.8	11.8	14	69	45	37.5ml/m ²	N	134	N	N	N	N	N	N	N	N	N	N
15*	F	c.7484G>A	p.Arg2495His	MS	ROD2	Fam	54	NA	N	14	11	14	73	45	45mm	N	160	N	N	N	N	N	N	N	N	Y	
16	M	c.7076T>C	p.Ile2359Thr	MS	ROD2	Fam	49	Syncope	N	16	14	16	85	NC	24ml/m ²	N	NC	NC	NC	N	NC	NC	N	N	N	N	
17	M	c.7250A>C	p.Gln2417Pro	MS	ROD2	Fam	35	N	N	17	9	17	75	56	45mm	N	210	N	N	Y (Degree 1)	Y	N	N	N	NA		
18	M	c.6032G>A	p.Gly2011Glu	MS	ROD2	Fam	17	NYHA II, Syncope	N	18	24	24	NC	NC	54ml/m ²	NC	164	NC	NC	N	NC	NC	N	ICD (primary prev)	N	N	
19*	M	c.7228C>T	p.Arg2410Cys	MS	ROD2	Fam	9	N	NC	11	9.9	13	68	N	Not dilated	NC	178	N	N	N	N	N	N	N	N		
20	M	c.6952C>T	p.Arg2318Trp	MS	ROD2	Spo	14	Dyspnea	N	17	NC	26	NI	NC	54mm	Y	NC	Y	NC	NC	NC	NC	AF, AHF	N	N	N	

	21	M	c.7123G>C	p.Val2375Leu	MS	ROD2	Spo	19	NA	N	17	13	22	77	49	39mm	N	NC	N	N	N	N	N	N	N	N	N	N
	22	F	c.6419G>A	p.Arg2140Gln	MS	ROD2	Fam	65	NYHA II	N	26	20	26	60	NC	NC	N	120	N	N	N	N	N	N	AHF	N	N	N
	23	F	c.6115G>A	p.Gly2039Arg	MS	ROD2	Fam	72	N	NC	17	NC	17	N	NC	NC	N	NI	N	N	N	NC	NC	N	ICD (primary prev)	N	N	N
RCM	24	F	c.6889G>A	p.Val2297Met	MS	ROD2	Fam	45	NYHA II	N	11.7	9.2	11.7	70	NC	50,4mm	N	NI	NC	NC	NC	NC	NC	NC	AHF, AF	ICD - waiting for HTx	Y	N
	25	F	c.6893C>T	p.Pro2298Leu	MS	ROD2	Fam	35	NC	N	NC	NC	NC	51	N	NC	N	200	N	N	N	N	N	AHF, AF	HTx	N	N	
	26	M	c.5836-5841dup	p.Ile1946Thr1947dup	Inframe dup	ROD2	Fam	43	NYHA III	N	15	NC	15	70	26	Dilated	N	NC	NC	NC	NC	NC	N	AF	ICD - waiting for HTx	N	Y	
	27	M	c.7927_7935del	p.Pro2643Leu2645del	Inframe del	D	Fam	23	NYHA II	N	11.6	11.2	11.6	55	N	49,7mm	35	210	N	N	N	N	NC	AF	N	N	N	
LVNC	28	M	c.4997T>C	p.Ile1666Thr	MS	ROD1	Spo	37	NYHA II	N	8	5	8	49	N	38mm	N	NI	Y	N	N	Y	N	AF	ICD (primary prev)	N	N	

ICD: implanted cardioverter defibrillator, AHF : acute heart failure, SCD : sudden cardiac death , HTx: heart transplantation, AF : atrial fibrillation, PVC: Premature ventricular contraction: ventricular extra-systol, Spo:sporadic case, Fam: familial case, Fs : framshift, MS: missense, Inframe dup: inframe duplication, Inframe del: inframe deletion, Splice: splice variant, STOP: Nonsense variant. D : dimerisation domain of filamin C, ABD : actin binding domain of filamin C, ROD1-ROD2 ROD domain of filamin C, Primary Prev: primary prevention.F: female, M: male, NC: Not communicated, NA: Not applicable, Y: yes, N: No, NI : normal

***In the 4 patients with mild hypertrophy, the diagnosis was retained on the basis of additional 3 criteria: (i) child or teen-ager or adult with a MWT that was above the theoretical value (> 2 Z-score for 3 patients including a 15 years old with 13 mm but > the theoretical value of 11.1 mm), (ii) patients had a relative with more obvious HCM form but deceased or not available for genetic analysis (for two patients including a patient with LV MWT 14 mm but her deceased father had HCM with MWT 30 mm).**