

**Table 1** Comparison of heart failure readmission rate, heart failure readmission/mortality rate and predictions AUCs at 1 and 3 months between PRADO and non-PRADO patients in 2018.

	PRADO patients	Non-PRADO patients
Heart failure readmission rate in 2018		
1 month	15.6% (22/141)	10.5% (16/153)
3 months	29.4% (33/112)	27.7% (31/112)
Heart failure readmission or mortality rate in 2018		
1 month	17.9% (26/145)	12.7% (20/157)
3 months	31.9% (37/116)	31.9% (38/119)
Heart failure readmission AUC [95%CI] in 2018		
1 month prediction	0.52 [0.38–0.66]	0.49 [0.35–0.64]
3 months prediction	0.42 [0.31–0.55]	0.50 [0.50–0.50]
Heart failure readmission or mortality AUC [95%CI] in 2018		
1 month prediction	0.59 [0.47–0.70]	0.63 [0.50–0.77]
3 months prediction	0.48 [0.36–0.60]	0.59 [0.47–0.70]

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### STADE-HF: A Titration based on sST2 is safe but failed to decrease readmissions in patients admitted for acute heart failure



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**Introduction** Heart failure is a leading cause of hospitalization, morbidity and mortality. Treatments are not up-titrated for all patients because of adverse effects. Strategies to better discriminate patients who may benefit most from titration are needed to improve the benefit-risk balance. Soluble suppression of tumorigenicity-2 (sST2) is a new prognostic biomarker of heart failure. Patients with a high baseline sST2 levels could benefit the most from cardioprotective treatments.

**Purpose** The current study considered sST2 value as a guide for medical management in patients admitted for acute HF decompensation, in an attempt to minimize hospital readmission.

**Methods** STADE-HF (sST2 As a help for management of Diagnosis, Evaluation and management of HF) was a blinded prospective randomized controlled trial and included 123 patients admitted for heart failure between January 2017 and August 2018 for acute HF. There were randomized into 2 groups: Usual treatment group, in which patient's sST2 level was unknown, and interventional treatment group, for whom sST2 level was known and used on day 4 of hospitalization for guide the treatment. The main clinical endpoint was the readmission rate for any cause at 1 month.

**Results** The primary endpoint of readmission during the first month follow-up was observed in 28 patients (25%); 10 patients (19%) in the usual group, and 18 (32%) in the sST2 group without statistical difference ( $P=0.11$ ). The mean duration of hospitalization was lower in patients with low sST2 (<37 ng/mL) at

admission ( $8.5 \pm 9.5$  days vs.  $14.8 \pm 14.9$  days when  $sST2 > 37$  ng/mL,  $P=0.003$ ).

**Conclusion** The STADE-HF study failed to decrease readmissions for patients admitted for acute HF. A long-term follow-up is conducted to evaluate the effect on cardiovascular hospitalization and mortality at one year after index hospitalization.

**Disclosure of interest** The authors declare that they have no competing interest.

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### FLNC pathogenic variants in patients with cardiomyopathies: Prevalence and genotype-phenotype correlations



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**Background/Introduction** Pathogenic variants in *FLNC* encoding filamin C have been firstly reported to cause myopathies, and were recently linked to isolated cardiac phenotypes.

**Purpose** Our aim was to estimate the prevalence of *FLNC* pathogenic variants in cardiomyopathies and to study the relations between phenotype and genotype.

**Methods** DNAs from a cohort of 1150 unrelated index-patients with an isolated cardiomyopathy (700 hypertrophic, 300 dilated, 50 restrictive cardiomyopathies, and 100 left ventricle non-compactions) have been sequenced on a custom panel of 52 cardiomyopathy disease-causing genes.

**Results** A *FLNC* pathogenic variant was identified in 28 patients corresponding to a prevalence ranging from 1 to 8% depending on the cardiomyopathy subtypes. Truncating variants were always identified in patients with dilated cardiomyopathy, while missense or in-frame variants were found in other phenotypes. This work reported for the first time a left ventricular non-compaction associated with *FLNC* pathogenic variant.

In the cohort, nine patients (32%) were implanted with an automatic defibrillator. In 7 families (25%), history of sudden cardiac death (SCD) before 50 years was reported. A personal or family history of sudden cardiac death (SCD) was significantly higher in patients with truncating variants than in patients carrying missense variants

( $P=0.01$ ). Four patients died of cardiac cause including 3 from SCD and 1 from heart failure.

**Conclusion** This work highlights the role of *FLNC* in cardiomyopathies. A correlation between the type of the variant and the cardiomyopathy subtype was observed as well as with SCD risk. These new data should be taken into consideration for patient's management and primary prevention of sudden cardiac death.

**Disclosure of interest** The authors declare that they have no competing interest.

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### Hypertrophic cardiomyopathy (HCM) in the young adult: Data from the REMY register of the French Society of Cardiology



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**Background** Hypertrophic cardiomyopathy (HCM) is considered to be the first cause of sudden death in young subjects, including competitive athletes, often in the absence of significant symptoms. However, most of these data come from tertiary centers and the clinical profile of these patients, as well as their management in real life in France, remain poorly understood.

**Purpose** To evaluate the management of young adults with sarcomeric HCM and the predictive factors for major cardiac event (MCE), patients <25 years included in the national HCM register "REMY" of the French Society of Cardiology from 2006 to 2018 were identified.

**Methods** At inclusion was calculated the European 5-year sudden cardiac death (SCD) score and identified the presence of the 5 major classical SCD risk factors (MRF). At follow-up, MCE [SCD or implantable cardioverter defibrillator (ICD) shock, sustained ventricular tachycardia (SVT), atrial fibrillation (AF), stroke, hospitalization for heart failure (HFH) or syncope] were notified.

**Results** Among 61 included patients [ $20.5 \pm 3(16-25)$  years, 16(26%) women], 92% were in NYHA class I/II, 18(30%) obstructive, 37(86%) showed MRI fibrosis, 6(12%) abnormal exercise blood pressure response, 25% a family history of SCD, 13(21%) had a prophylactic ICD. The score ( $4.8 \pm 3.2\%$ ) was <4% in 53% and  $\geq 6\%$  in 25% of patients. After  $4.4 \pm 2.2$  years, 15(25%) patients (7 women) presented 18 MCE: 3 SCD (17%), 5 SVT (28%), 5 AF and 1 stroke (33%), 1 HFH (5%), 3 unexplained syncopal episodes (17%); 10 patients received an ICD (4 in secondary prevention). 61% patients with score  $> 6\%$  had an ICD. Female sex was predictive of MCE ( $P=.02$ ), with a tendency for obstruction ( $P=.09$ ), but not late gadolinium enhancement, prophylactic ICD or MRF.

**Conclusion** Thus, in young adults with HCM, MCE are common, especially in women, more often rhythmic. Prophylactic ICD is frequent, especially if the score exceeds 6%, but MCE are difficult to predict using the current criteria.

**Disclosure of interest** The authors declare that they have no competing interest.

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### Psycho-social impact of predictive genetic testing in hereditary heart diseases (PREDICT Study)



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**Introduction** Hereditary heart diseases are most often characterized by autosomal dominant inheritance and delayed cardiac expression. Predictive genetic testing (PGT) is offered to asymptomatic relatives to allow targeted medical care with early therapeutics in order to reduce the risk of complications.

**Purpose** The aim of this study was to evaluate the psychological and socio-professional impact of predictive genetic testing in hereditary heart diseases through a prospective and retrospective study.

**Methods & results** This multicentric French study involved 20 expert centers in hereditary heart diseases. We included 517 adult relatives ( $42.3 \pm 16.7$  years, 60.6% females) who performed PGT (prospective study:  $n=264$ , retrospective study:  $n=253$ ). The opinion and experience were collected via auto-questionnaires, at various moments in the prospective study, with different items and validated scales (STAI and IES).