the junior doctors in the prescription of MRAs however ($p \leq 0.05$). Self-reported competency in initiating and up-titrating HF medications is reported in table 2. Of participants who felt comfortable with initiation and up-titration of beta blockers ($N=89$), only 26% ($N=27$) correctly identified an optimal target heart rate of less than 70 beats per minute. Twenty-four percent of respondents ($N=28$) were unaware of a specialist HF service that catered to their institution, and how to refer to it, but 97% ($N=113$) felt that their practice would benefit from further education on HF pharmacotherapy.

Conclusion The high prevalence of HF in Ireland and costs associated with admission for decompensation necessitates a sound knowledge of its management amongst generalists. Results of this survey suggest a need, and indeed a demand, for further education and support surrounding pharmacotherapy of stable heart failure.

31 APICAL HYPERTROPHIC CARDIOMYOPATHY: THE VARIANT LESS KNOWN

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Introduction Hypertrophic cardiomyopathy (HCM) is a heterogeneous disease. Apical HCM is a comparatively rare subtype. Apical HCM tends to be sporadic with different clinical features and lower frequency of detected gene mutations [figure 1]. We evaluated the spectrum of apical HCM-associated gene mutations, genotype-phenotype correlations, and clinical outcomes of patients in our cohort.

Methods 30 patients (29 probands) with apical HCM were retrospectively identified at a specialist cardiomyopathy clinic. Records were reviewed and variables were recorded including: demographics, clinical characteristics, family history, presenting symptoms, device therapy, arrhythmia burden, and other comorbidities. ECG, cardiac imaging and genetic test results were analyzed.

Results The group consisted of 21/30 (70%) men; mean age 57 years. 3 probands (10.3%) in the study had a family history of HCM. Another 3 probands (10.3%) had a family history of sudden cardiac death in a first degree relative. Women were older than men at initial visit, 57 years versus 49 years. Of the 26 patients who had an ECG available for analysis, all were abnormal by established criteria. Female patients were more likely to have a family history of HCM (22% versus 4.7% of males). They have a higher burden of symptoms and higher rates of mid-cavity obstruction compared to males

Abstract 31 Figure 1 Apical HCM ECG

Abstract 31 Table 1 Genotypes of apical HCM

AAD	Sex	Presentation	FHx	SCD	Mutation
63	F	Palpitations	No	No	MYBPC3 p.Arg502Gln
68	F	Palpitations	No	No	MYH7 p.Arg1079Gln
66	F	Palpitations	No	No	TNNI3 p.Arg162Gln
61	F	Palpitations	Apical	No	MYBPC3 p.Lys814del
21	F	Syncope	Septal	No	TNNI3 p.Arg141Gln
16	F	Syncope	LVNC	Yes	ACTC1 p.Glu101Lys
41	M	Family screening	Apical	No	MYBPC3 c.2441_2443delAga
59	M	Chest pain	No	No	PTPN11 p.Thr468Met
47	M	Chest pain	No	No	SCL22A5 p.Arg83Le

AAD: age at diagnosis, FHx : family history of apical or classical HCM or other cardiomyopathy, SCD in a first degree relative from HCM

(88% versus 33%). Genetic analysis was performed on 24/30 patients (80%). The results are summarized in table 1. 75% of female probands had a pathogenic variant in a sarcomere gene. No male proband had a sarcomere mutation. One male relative of a female proband inherited the familial MYBPC3 mutation.

Conclusion The two most commonly affected genes in our cohort were MYBPC3 (3 patients) and TNNI3 (2 patients), with mutations also found in MYH7, ACTC1, PTPN11 and SCL22A5 [table 1]. De-novo mutations in ACTC1, specifically the p.Glu101Lys variant, have been shown to consistently produce an apical HCM phenotype. Apical HCM is a global HCM variant with phenotypic expression that is modulated by environmental and genetic factors. There was a striking variation in the frequency of causative gene variant identification between probands by sex. This may relate to the interplay of genetic, epigenetic and polygenic factors. This finding warrants further investigation, and may inform future family screening and genetic testing strategies.

32 PREVALENCE AND CHARACTERISTICS OF ABNORMALITIES ON CARDIAC MRI IN PRIMARY CARE FOLLOWING RECOVERY FROM ACUTE SARS-COV-2 INFECTION AND CORRELATION WITH MARKERS OF IMMUNITY AND COAGULATION: PRIMARY RESULTS OF THE SETANTA STUDY

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Introduction Tissue characterization using cardiac magnetic resonance (CMR) imaging has the potential to delineate early signs of inflammatory cardiomyopathy. Recent CMR studies in patients recovered from SARS-CoV-2 patients suggested a high prevalence of abnormal findings on CMR, including lower left ventricular ejection fraction, higher left ventricle volumes, and raised native T1 and T2 signal values. Concerns persist,

Study of HEarT DiseAse and ImmuNiTy After COVID-19 in Ireland (SETANTA)

Primary objective: To investigate the incidence of cardiac abnormalities as assessed by cardiac magnetic resonance imaging in unselected patients after acute SARS-CoV-2 infection and the correlation with immunological response and biomarkers of coagulation

Secondary objectives: (i) to investigate the incidence of SARS-CoV-2 immunity and, (ii) to investigate the incidence of persistent coagulopathy markers after acute SARS-CoV-2 infection

INCLUSION CRITERIA	EXCLUSION CRITERIA
<ol style="list-style-type: none"> 1. Patients 18 years or older 2. Recent COVID-19 infection $\geq$ 6 weeks and $\leq$ 12 months before enrolment, as evidenced by positive reverse-transcriptase polymerase chain reaction (RT-PCR) SARS-CoV-2 nasopharyngeal swab 3. Written informed consent 	<ol style="list-style-type: none"> 1. Prior history of myocarditis or ischemic heart disease 2. Contraindication to gadolinium (eGFR $<$ 30 ml/min) 3. Contraindication to regadenoson, including cardiac conduction disease, asthma, seizures, pregnancy or breast-feeding 4. Inability to provide written informed consent, to fill out the safety questionnaire, or to fully cooperate with the scan and breath holds 5. Insufficient CMR image quality

Abstract 32 Figure 1

however, regarding the influence of selection bias for inclusion into studies.

Methods The Study of HEarT DiseAse and ImmuNiTy After COVID-19 in Ireland (SETANTA) is a prospective, community-based, observational, cross-sectional population study investigating the incidence of cardiac abnormalities as assessed by CMR imaging in 100 participants recruited from general practice following acute SARS-CoV-2 infection and evaluating correlation with immunological response and presence and extent of coagulopathy. Consecutive patients with recent COVID-19 infection ($\geq$ 6 weeks and $\leq$ 12 months) as evidenced by positive reverse-transcriptase polymerase chain reaction (RT-PCR) were identified from two primary care sites and invited to participate in the study. At inclusion, written informed consent, followed by baseline clinical data and blood collection, ECG and holter monitor recording and perfusion CMR imaging will be performed for all included participants. Follow-up assessment of major adverse cardiovascular events (MACE), comprised of myocardial infarction, revascularization, pulmonary embolism, deep venous thromboembolism, heart failure or stroke will be performed at 1, 6- and 12-months after

inclusion. Patient reported outcome measures using a modified Seattle Angina (SAQ7) and the EuroQol (EQ-5D-5L) questionnaires will be assessed at inclusion as well as at 6- and 12-month follow-up. Primary and secondary endpoints of the study, inclusion/exclusion criteria and study flow are depicted in detail in figure 1. The study is funded by the Cardiovascular Research Institute Dublin, Mater Private Network and Women As One. The study is registered at www.clinicaltrials.gov (study identifier: NCT04823182).

Results A pilot study of 30 patients has completed enrolment. Full cohort (n=100) enrolment and analysis will be completed by September 2021. Primary results of the full cohort study will be available to be presented during the Annual Scientific Meeting of Irish Cardiac Society.

Conclusion The SETANTA study will evaluate the prevalence and characteristics of abnormalities on cardiac MRI in primary care patients in Ireland following recovery from acute SARS-CoV-2 infection and assess correlation with immune response and coagulopathy. Data from the study will help inform the long-term management of patients recovered from SARS-CoV-2 and assist in planning of health care service provision.