evidence suggests amiodarone is not monitored appropriately, less than one-third of Welsh study's patients monitored for side effects, 13% and 17% of Scottish patients had no ALT or TSH testing in a retrospective analysis, 1413 patients, over 22 years, 27.3% of South Worcestershire patients had no thyroid function tests recorded over 5 years. The study also suggested that when randomized to a computerized system vs usual care, amiodarone baseline monitoring increased from 51 to 79%7. In Torbay and South Devon NHS Foundation Trust,

	Total	AF	Flutter	VT
Deranged LFTs	3		1	1
Subclinical hypothyroid	4	3	1	
Hypothyroid	4	3		
Hyperthyroid	2	1		1
Dyspnoea	1	1		
Eye problems	1	1		
	15	9	2	2

Abstract 112 Figure 5 Complications of amiodarone prescription detected in 14 of 95 patients (1 patient had dyspnoea and hypothyroidism). Two thirds of all issues were to do with thyroid problems

	n	% of indication	% of problems
AF	65	74.7%	60.0%
Flutter	13	14.9%	13.3%
VT	9	10.3%	13.3%

Abstract 112 Figure 6 Complications of amiodarone according to the indication

Outcome	Freq.	Percent
Discharged	9	9.5%
Followed up	61	64%

Abstract 112 Figure 7 Median follow-up time was 4 months

the arrhythmia nurses follow up the patients for potential side effects who are on Amiodarone. We investigated the clinic follow-up process required for the patients who are on Amiodarone, the proportion of total arrhythmia nurse-led clinics were related to Amiodarone, the tests are done in the follow-up clinics, adverse effect identified, the outcome of the appointments. Between 2nd October 2019 to 27th December 2020, there were total of 562 appointments in arrhythmia nurse-led clinics. Amiodarone-related appointments were 17% (95 of 562). The mean age of the patient was 75 with a range of 40-93 and an SD of 9.9. The most common indication was AF 74.7%, Atrial Flutter 14.9%, and VT 10.3% **(table 1)**. The mean duration of prescription was 272 days. Complications were noted in 14.7% of cases (14 of 95). Complications were related to the duration of treatment (no complication vs complications- 8.23 vs 11.33 months) **(figure 2)**. 60% (57 of 95) outcomes were to continue ongoing monitoring of amiodarone **(table 3)**. We have noticed 10%(57 of 562) of arrhythmia nurse-led clinics are related to Amiodarone monitoring only. A new setup for Amiodarone clinic titled 'Amiodarone Tracker clinic' is developed. An automated clinic letter will be generated 4 monthly requesting patients to provide a blood sample for renal function and liver function tests. One of the team members from Arrhythmia nurses will review the blood test results and will send a letter to the patient and his/her GP with the outcome. This 'Tracker clinic will open up 10% of the face-to-face clinic appointments, reduce patient's inconvenience for frequent visits to the hospital. There remains a question of clinical identification of adverse effects but effective patient education will subside the risk.

Conflict of Interest No

Heart failure

113 IN-DEPTH PROTEOMIC CHARACTERISATION OF DIFFERENT AETIOLOGIES OF CARDIOMYOPATHY

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Introduction The purpose of this study was to gain greater understanding of the pathogenesis of hypertrophic obstructive cardiomyopathy (HOCM), dilated cardiomyopathy (DCM) and ischemic cardiomyopathy (ISCM). These conditions lead to heart failure (HF) and the prognosis for HF differs based on the underlying aetiology. Cardiac tissue represents a challenging sample from the proteomics perspective due to the dominant signal from of a small number of high abundance proteins. Thus, a diaPASEF [1] workflow was applied in order to achieve deep quantitative coverage of cardiac tissue from HOCM (n=12), DCM (n=9), ISCM (n=9) and age/sex matched controls (NF, n=9). RNA-seq analysis has already been performed on these samples.

Methods Unbiased, deep proteomic analysis of individual samples was performed using the diaPASEF workflow on a timsTOF Pro mass spectrometer. Analysis of high pH-reversed phase fractionated sample pools was performed in ddaPASEF mode to generate spectral library data. Raw data files were

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processed through Spectronaut 14 software for spectral library building, protein identification and quantification. Differentially expressed proteins were identified based on an observed fold change of ≥ 1.5 or ≤-1.5 and q-value ≤ 0.005. Pathway analysis was performed using Ingenuity Pathway Analysis (IPA) software.

Results and Conclusions/Implications Label-free MS analysis led to over 4,000 protein identifications, with 3,484 proteins commonly identified across all patient samples. Over 1,000 significantly differentially expressed protein candidates were identified for comparisons between NF and DCM, HOCM or ISCM. DCM-specific protein changes were strongly associated with glutamine biosynthesis, HOCM-specific protein changes were strongly associated with LXR/RXR Activation, while ISCM-specific protein changes were most associated with tryptophan degradation pathways. DCM vs NF, ISCM vs NF and HOCM v NF had shared differentially expressed proteins that were also significantly altered at gene level (n=106). Canonical pathway analysis revealed that Choline Degradation and Lysine Degradation pathways were most strongly associated with these candidates. Expression changes for some of the top over- and under-expressed HF candidates were validated in an independent replicate dataset (PXD008934) [2]. This represents one of the largest and deepest proteomic datasets for myocardial tissue reported to date. The dataset, which compliments existing transcriptomic data for these samples, has highlighted a number of significant proteins associated with different underlying aetiologies of HF. Prognosis for HF differs depending on the aetiology from which it arises. Hence, the dataset here will help in further understanding the pathogenesis of the disease, leading towards more personalised treatment.

Conflict of Interest N/A

114 CLINICAL, PHYSICAL, COGNITIVE AND SOCIAL FRAILTY IN PATIENTS WITH CHRONIC HEART FAILURE: PREVALENCE AND ASSOCIATIONS WITH OUTCOME

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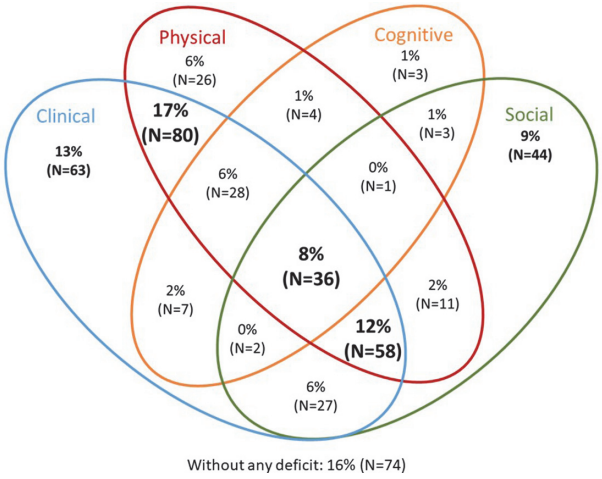
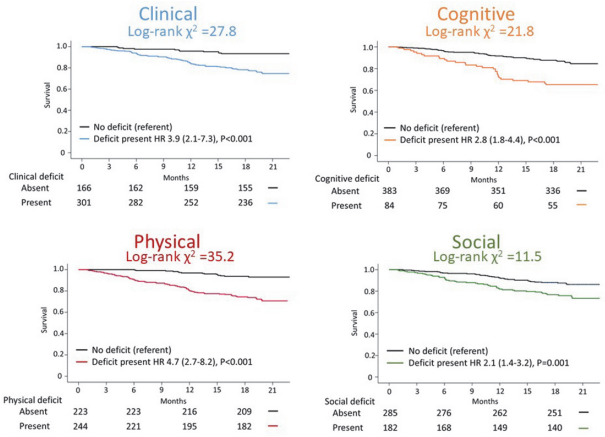
Background Recently, the American College of Cardiology (ACC) and the Heart Failure Association (HFA) of the European Society of Cardiology (ESC) proposed a four-domain approach to assess frailty in patients with heart failure (HF), to tailor treatment and potentially improve outcomes.Aim: To study the prevalence and prognostic value of four different types of frailty deficits: clinical, physical, cognitive and social frailty in ambulatory patients with HF.

Methods We assessed prospectively consecutive patients attending a routine follow-up visit. Patients with ≥5 non-HF comorbidities were classified as having a clinical deficit. Those who scored ≥ 3 using the Fried criteria were classified as having a physical deficit. Those who failed to complete a clock test accurately were classified as having a cognitive deficit. Those who lived alone or in a residential home were classified as having a social deficit.

Results 467 patients (67% male, median (25th-75th centile) age 76 (69-82) years, median (25th-75th centile) NT-proBNP 1156 (469-2463) ng/L) were enrolled. 65% of patients had clinical deficits, 52% had a physical deficit, 39% had a social deficit and 18% had a cognitive deficit. 28% had 2, 19% had 3, 8% of patients had all 4 deficits; 16% had none. (Figure 1). During a median follow-up of 554 days, 82 patients died. The presence of any frailty deficit was associated with increased risk of mortality. (Figure 2) Patients with all 4 frailty deficits have a 15-fold increased risk of mortality compared to patients with no frailty deficit. A base model (including age, body mass index, NYHA class and log [NT-proBNP]) for predicting mortality at 1 year achieved a C-statistic of 0.78. Addition of all four deficits improved the performance of the base model (C-statistic = 0.82).



Abstract 114 Figure 1



Abstract 114 Figure 2

Conclusion Clinical, physical, cognitive and social deficits are common in patients with HF and are associated with a poor outcome. Future studies should evaluate how to optimise care for frail patients with HF using a domain management model.

Conflict of Interest none

115 GENDER DISPARITY IN HEART FAILURE RESEARCH

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Background Cardiovascular disease is one of the leading causes of mortality in women, accounting for 49% of all deaths,

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