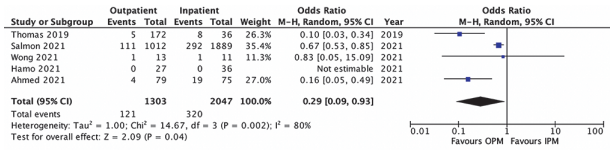
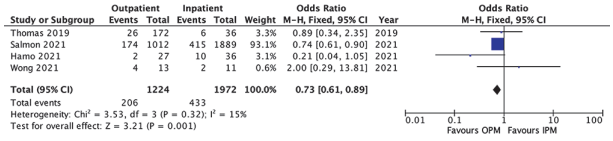
Abstract 126 Table 1 Assessment of Quality for the RCTs comparing OPM vs IPM, using the RoB2 tool

Author	Randomisation	Deviations from the intended interventions	Missing outcome data	Measurement of outcome data	Selection of reported result	Overall risk of bias
Hamo et al (2021)	RoB Low	RoB Low	RoB Low	RoB Low	RoB Low	RoB Low
Wong et al (2021)	RoB Low	RoB Low	RoB Low	RoB Low	RoB Low	RoB Low

RoB= Risk of Bias



Abstract 126 Figure 1 OPM vs IPM IV Diuretics 30-day mortality



Abstract 126 Figure 2 OPM vs IPM IV Diuretics: 30-day hospitalisation

analysis to investigate the safety and efficacy of OPM compared to in-patient management (IPM) of ADHF.

Methods A systematic literature review and meta-analysis. Prespecified endpoints were 30-day mortality and 30-day hospitalisation. The meta-analysis was conducted using RevMan 5.4 software.

Results 29 studies of OPM were identified. Only 5 directly compared OPM with IPM -including 3 observational studies [1–3], and two randomised controlled trials (RCTs) [4–5]. In the 5 papers comparing IPM vs OPM, the mean age of the IPM cohort was 77 (compared with 75 in OPM), with a similar proportion of male patients (55.5 v 55.6%). In the study-level aggregate analysis, 30-day all-cause mortality was 9.3% (121/1303) for OPM, compared with 15.6% (320/2047) for IPM (OR 0.29[0.09,0.93] p=0.04) [Fig. 1]. Four studies reported 30-day all-cause hospitalisation; 22.0% for IPM vs 16.8% for OPM (OR 0.73 [95% CI 0.61,0.89], p=0.001) [Fig. 2] However, in the 2 RCTs, we found no difference in 30-day mortality or hospitalisation. Overall risk of bias was low in the trials [Table 1].

Conclusion In observational studies, OPM of ADHF is associated with lower 30-day re-hospitalisation and lower 30-day mortality. Such differences were not observed in two small single-centre RCTs. A substantial multicentre RCT is required to confirm the safety and efficacy of OPM for ADHF.

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Conflict of Interest None

127 A RETROSPECTIVE OBSERVATIONAL STUDY INVESTIGATING HYPERTENSIVE HEART DISEASE IN AN ETHNICALLY DIVERSE SOUTH-EAST LONDON POPULATION

[1]gabriel wisenfeld paine, [2]Alfred So, [2]Thomas Page, [2]Richard Dalton, [2]Ciaran Finnegan, [2]Fatuma Nageye, [3]Terrence Chan, [2]Wilfred Umeojiako, [4]Khaled Alfakih. *[1]University Hospital Lewisham, University Hospital Lewisham, Lewisham High St, London, LND SE13 6LH, United Kingdom; [2]University Hospital Lewisham; [3]Kingston Hospital NHS Foundation Trust; [4]Department of Cardiology, Lewsiham & Greenwich NHS Trust*

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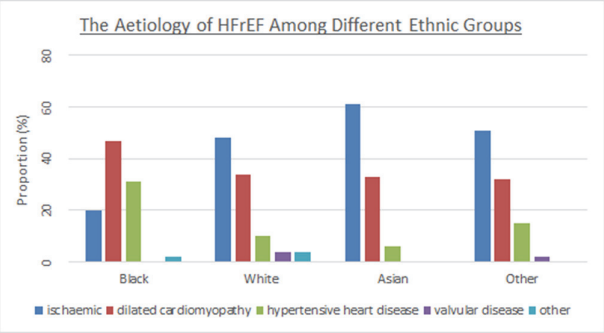
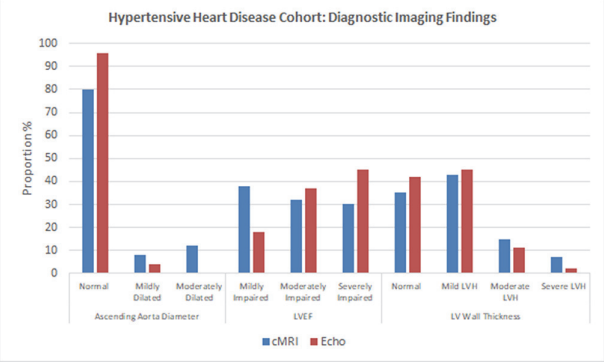
Introduction ESC guidelines emphasise the importance of an aetiology-based approach for the diagnosis and treatment of heart failure. Hypertension is a highly prevalent comorbidity in the heart failure cohort and a significant, potentially reversible, cause of heart failure. Although commonly associated with diastolic impairment, hypertensive heart disease also causes left ventricular systolic dysfunction. We sought to assess the aetiologies of heart failure in our ethnically diverse heart failure with reduced ejection fraction (HFrEF) cohort, specifically assessing the prevalence of hypertensive heart disease, and further characterising this cohort with respect to both demographics and diagnostic imaging. Methods We retrospectively searched our HFrEF database and included all patients with a new diagnosis of heart failure and an LVEF < 50% from April 2019 – April 2020. Descriptive data analysis was undertaken; statistical analysis was by paired t-test. Results 363 patients met inclusion criteria. 73.8% were male. Mean age was 66 years. Of the total population, 58% were White, 26% Black, 5% Asian, and 12% 'Other'. 65% had comorbid hypertension. The majority of patients with HFrEF had an ischaemic aetiology (41%), followed by dilated cardiomyopathy (38%), hypertensive heart disease (16%), valvular disease (3%), and other (2%). In the hypertensive cardiomyopathy group, 50% of patients were Black, 38% White, 2% Asian, and 10% 'Other'. All patients in this cohort had undergone echocardiography, 70% had cardiac MRI (cMRI), 35% had invasive angiography, and 7% had CT coronary angiograms (CTCA). The hypertensive cardiomyopathy cohort had a mean LVEF of 27% and 30% on echo and cMRI, respectively; the difference was statistically significant (p value=0.004). LVH was identified in 58% and 65% of these patients on echo and cMRI, respectively. A dilated ascending aorta was identified in 3.8% and 20% of these patients on echo and cMRI, respectively. 55% had no late gadolinium enhancement on cMRI; 45% had a non-ischaemic pattern of enhancement. T1



Abstract 127 Figure 1 The Aetiology of HFrEF Among Different Ethnic Groups



Abstract 127 Figure 2 Hypertensive Heart Disease Cohort: Diagnostic Imaging Findings

mapping and extracellular volume (ECV), the newer measurements of myocardial fibrosis and markers of an adverse prognosis, were measured in 18% and 8% of patients undergoing cMRI, respectively; T1 value and ECV were raised 43% and 33% of the time when measured, respectively. Of those who underwent invasive angiography or CTCA only 1 patient had significant coronary artery disease. cMRI did not reveal any inducible ischaemia in those undergoing stress perfusion testing.

Conclusion Hypertensive heart disease is a common cause of HFrEF in our patient population, particularly in those from African/Afro-Caribbean descent. This cohort have heterogenous diagnostic imaging findings and rarely have significant concomitant coronary artery disease, contrary to previous studies. Early identification and aggressive management of hypertensive heart disease is key to preventing the development of HFrEF.

Conflict of Interest N/A

128 PROGRESS AND EARLY OUTCOMES OF A CARDIOMETABOLIC CLINIC IN A UK TERTIARY CARDIOLOGY CENTRE

[1]Rajay Narain, [2]Laura Bijman, [2]Mimi Chen. *[1]St Georges University of London, Heart Failure Unit, Atkinson Morly Wing, Tooting, London, LND SW170RE, United Kingdom; [2]St Georges University Hospital, London*

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Introduction Diabetes mellitus confers a two-fold risk of adverse cardiovascular (CV) outcomes and up to four-fold risk of heart failure (HF). Cardiovascular outcome trials (CVOT) have demonstrated that new classes of antidiabetic drugs confer beneficial effects on cardiovascular (CV) including heart failure (HF) outcomes and cardiometabolic risk factors such as adiposity. International guidelines have been updated accordingly to reflect ongoing publication of evidence. However changes in prescribing practice have been limited by clinical inertia and limitations on patient encounters and resources, exacerbated by the covid-19 pandemic. 1,2,3,4 The cardiometabolic clinic (CMC) at St. George's University Hospitals NHS Foundation Trust (SGH) facilitates the optimisation of medications and lifestyle interventions to reduce cardiometabolic risk via multidisciplinary review by a cardiologist and diabetologist.

Purpose To describe the activity, interventions, and clinical impact of the CMC.

Methods Patient investigations and observations and clinical documentation were reviewed retrospectively over a 36-month period (29/09/2020 to 14/03/2022).

Results A total of 174 patients were seen up to and including 14/03/2022.Of patients seen, 71 have been booked for follow up appointments, 98 discharged, 86 referrals have been made to other specialties.In addition to discussion of modifiable risk factors with each patient, numerous successful pharmacological interventions have been made (Table 4). 28 medications were stopped due to contraindication, adverse effects or to permit optimisation of evidence-based treatments.Among the 107 patients in whom antidiabetic drugs have been initiated or titrated, a reduction in HbA1c has been observed in 40 (mean -18 mmol/mol) and a reduction in fructosamine in one patient (-39 umol/L) while for 14 patients HbA1c incidentally increased (mean +7 mmol/mol).Weight loss has been reported thus far in 18/ 88 patients initiated or optimised on SGLT2 inhibitors, 7/27 on metformin, and 12/ 19 on GLP-1 agonists. SGLT2 inhibitors were stopped in 3 patients due to intolerance or contraindication: one due to increased urinary frequency and two due to renal impairment. One male patient reported a urinary tract infection which was treated. No serious adverse effects were reported.Of 103 CMC patients on SGLT2 inhibitors, 8 had further HF-related hospitalisations. Of the 6 patients referred by the bariatric team due to high risk for surgery on account of cardiac disease or diabetes, all have cancelled or delayed proceeding with bariatric surgery. Availability of clinical outcomes is limited by the short period of follow up thus far. Notably, these interventions have been achieved whilst delivering CMC virtually due to the ongoing covid-19 pandemic.

Conclusion The CMC is a novel integrative approach to optimising management of cardiometabolic risk and incorporation of evidence-based cardiometabolic medications. As risk of

Abstract 128 Table 1 Referral origin of patients seen

Clinician / Service	Number
HF consultant cardiologists	88
Other non-interventional cardiologists	4
Interventional cardiologists	27
Electrophysiology consultants	5
Cardiology specialist registrar clinics	8
HF specialist nurse	12
Hospitalisations for HF (HHF)	17
Hospitalisations for acute coronary syndromes (ACS)	12
Endocrine	2
Gastroenterology	2
Bariatric surgery service	6