Abstract 22 Figure 2  Median time from decision to refer to acceptance onto the waiting list

(135 days vs 60.5 days, p-value 0.021), and elective patients with priority (233 days vs 57 days, p-value 0.015) but not acute patients (77.5 days vs 42 days, p-value 0.054) (graph 2).

Conclusion Rates of CAD in ACHD patients undergoing valvular heart surgery appear to be lower than those previously reported in acquired VHD patients, but are difficult to predict. The investigation of CAD in ACHD patients has implications in surgical delays and financial expense. Further investigation into the risk factor profile and cost benefit analysis of CAD assessment in this demographic could help determine whether the current guidance for CAD assessment in VHD should be applied to ACHD patients and whether new criteria with greater specificity could be used.

Conflict of Interest None

Abstract 23 Figure 1  Survival free of the composite outcome according to predicted probability in the model. Strata = cohorts were divided into four quartiles according to predicted probability.

A VALIDATED MODEL FOR THE PREDICTION OF ADVERSE CARDIAC OUTCOME IN PATIENTS WITH FABRY DISEASE DERIVED FROM READILY AVAILABLE CLINICAL DATA

1Chris Orsborne, 2Peter Woolfson, 3Joshua Bradley, 4Anna Jovanovic, 5Anna Reid, 6Matthias Schmitt, 7Christopher Miller, 8Thomas Anderson, 9Nik Abidin, 10Laura Bonnett, 1The University of Manchester; 2SRFT; 3University of Manchester; 4MCMR; 5North West Heart Centre; 6Department of Health Data Science, University of Liverpool

Background The cardiac manifestations of Fabry disease are common and are the leading cause of death. Recently, we developed a prognostic model for the prediction of adverse cardiac outcome in Fabry disease which incorporated cardiac magnetic resonance (CMR) imaging and performed excellently. However, CMR is not accessible or pragmatic in all patients.

Objective To develop, internally validate, and evaluate the performance of a prognostic model, incorporating readily available clinical data, to generate an individualised risk estimate for adverse cardiac outcome for all patients with Fabry disease.

Methods A retrospective cohort of 406 patients with Fabry disease attending a tertiary Fabry clinic. Median follow-up 5.2
Calibration plots for the optimism-adjusted parsimonious multivariable at 1- and 5-years. The black line is the observed calibration, and the blue line is the bootstrap optimism-corrected calibration, both estimated by adaptive linear spline hazard regression. The grey line is the line of identity and represents perfect calibration. Mean |error| is equivalent to the Integrated Calibration Index (ICI) and 0.9 quantile is equivalent to E90.17 Rug plots of the distribution of predicted outcome probabilities are at the top of the panels. 1-year (A), 5-years (B).

Abstract 23 Table 1 Final optimism-adjusted pooled model coefficients for the parsimonious multivariable for time to the composite outcome

<table>
<thead>
<tr>
<th>Hazard Ratio</th>
<th>95% Confidence Interval</th>
<th>Wald $\chi^2$</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.051</td>
<td>1.035 - 1.066</td>
<td>6.573</td>
</tr>
<tr>
<td>IVSd</td>
<td>2.424</td>
<td>1.612 - 3.645</td>
<td>4.254</td>
</tr>
<tr>
<td>LAd</td>
<td>1.298</td>
<td>1.061 - 1.588</td>
<td>2.537</td>
</tr>
<tr>
<td>AF</td>
<td>1.924</td>
<td>1.235 - 2.999</td>
<td>2.892</td>
</tr>
<tr>
<td>TIA/CVA</td>
<td>1.581</td>
<td>0.969 - 2.580</td>
<td>1.833</td>
</tr>
</tbody>
</table>

n=406, number of events=130
IVSd – Interventricular septal thickness, LAd – Left atrial dimension, AF – History of atrial fibrillation, TIA/CVA – history of transient ischemic attack or cerebrovascular accident, Wald $\chi^2$ – Wald Chi squared statistic.

years. Prognostic models were developed using Cox proportional hazards modelling. Outcome was a composite of adverse cardiac events. Model performance was evaluated using discrimination and calibration.

**Results** Age, interventricular septal dimension, left atrial dimension, atrial fibrillation and a history of transient ischemic attack or cerebrovascular accident, were included in the parsimonious model. The median optimism adjusted c-statistic across the 5 imputed datasets was 0.85 (95% confidence interval 0.82–0.88) and the model-fitting optimism-adjusted calibration slope was 0.91. Model calibration at 3-, 5- and 7-years was poor in moderate and high-risk patients which precluded the development of a risk estimator for future use in clinical practice.

**Conclusions** Future prognostic models and risk estimators for adverse cardiac outcome in Fabry disease may wish to incorporate CMR imaging biomarkers if they are to guide more standardised, personalized and cost-effective care.

**Conflict of Interest** CO has received research support from Amicus Therapeutics.

**Abstract 24**

**Epidemiology of Infective Endocarditis (IE) and Application of Modified Dukes Criteria in Tertiary Teaching Hospital from 2015-2020**

Emma Langan, Bara Erhayiem. Nottingham University Hospitals NHS Trust

**Background** With the change in NICE guidance for the prophylactic management of patients at risk of IE in 2008, coupled with increasing rate of valve replacement and ICD insertion, the scope for the epidemiology of infective endocarditis to change is high, meaning ongoing research is paramount.

**Aim** The aims of this study were to review epidemiology in IE patients and to assess if the Modified Dukes criteria remains useful in predicting diagnosis of IE.

**Methods** All patients who had a transoesophageal echocardiogram for the investigation of IE in a tertiary teaching hospital between 2015-2020 were analysed. 218 patients were included in the study and demographics, pathogen isolated, Modified Dukes score and diagnosis of IE were collected from discharge summaries.

**Results** 36.3% had echocardiographic evidence of IE, with further 19.3% treated due to high clinical suspicion, with aortic valve being the most affected and mortality of 30.26% at 1 year.

Of IE patients, 89.8% had a positive blood culture, 43.2% isolating Strep variants and 28.2% isolating S.aureus. Extracardiac source of infection was found in 36.6%, with main source spread equally between skin, spinal and intrabdominal.

Of those with ‘Definite’ Dukes criteria, 92.1% had echocardiographic evidence of IE and 21.1% mortality.

**Conclusions** This study showed evidence of evolving pathogenic cause and extracardiac sources for IE, compared with previous studies suggesting S.aureus and dental as most