may be barriers to enrolling patients with AF into exercise-based cardiac rehabilitation; a holistic approach that targets these factors may result in improved clinical outcomes.

Conflict of Interest None to declare.

ABSTRACT WITHDRAWN

COST-EFFECTIVENESS OF VENTRICULAR TACHYCARDIA CATHETER ABLATION: LIMITATIONS IN THE CURRENT TRIAL EVIDENCE BASE

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Introduction Comparative effectiveness research has emerged as a main area of focus in order to highlight and develop more cost-effective evidence based treatments. Within cardiovascular medicine, randomised clinical trials (RCTs) have suffered from criticisms including a lack of generalisability as well as a lack of analysis of the cost-effectiveness of the different interventions being studied. Such analyses are used by organisations including the National institute for Health and Care excellence (NICE) to inform system-level decisions regarding which treatments the NHS should fund. In cardiology, treatments often involve expensive technologies, with the potential for a growing chasm to exist between what is the latest and greatest innovation and what can be afforded on the frontline.

Aim To evaluate the cost-effectiveness of ventricular tachycardia (VT) catheter ablation versus anti-arrhythmic drug (AAD) therapy in ischemic heart disease.

Methods A decision-analytic Markov model was used to calculate the costs and health outcomes of catheter ablation or AAD treatment of VT for a hypothetical cohort of patients with ischaemic cardiomyopathy and an implantable cardioverter defibrillator (ICD). Model inputs where informed using RCT-level evidence [table 1] wherever possible and health states were selected according to evidence of pragmatically measurable differences between each state [figure 1]. Health states that did not have any patient-reported HRQL data supporting the calculation of a QALY value were excluded. Costs were calculated from a UK perspective.

Results Catheter ablation versus AAD therapy had an incremental cost-effectiveness ratio (ICER) of £144,150 (£161,448) per quality adjusted life year (QALY) gained, over a five-year time horizon [table 2]. The ICER for a ten-year time horizon was £75,074 (£84,083) and £69,986 (£78,384) over the cohort’s lifetime. Using probabilistic sensitivity analyses to account for model parameter uncertainty, the likelihood of catheter ablation being cost-effective was only 11%, assuming a willingness to pay threshold of £30,000 used by the NICE [figure 2]. One-way sensitivity analyses suggested that cost-effectiveness inferences were robust to a wide range of departures from base-case assumptions, including changes in baseline mortality, procedural mortality and readmission rate.

Conclusion Catheter ablation of VT is unlikely to be cost-effective compared with AAD therapy alone in patients with ischaemic cardiomyopathy implanted with an ICD based on pooled trial evidence. However, better designed studies incorporating detailed and more frequent quality of life assessment are needed to advise health policy in this field and to provide more informed cost-effectiveness analyses.

Conflict of Interest None relevant

Abstract 33 Figure 1  Schematic of model structure used in simulation A) represents the model for the ablation arm B) represents the model for the AAD arm