In this large dataset of ambulatory cardiac monitors by cardiology and EP specialists, patients with NSVT on event monitor were more likely to be seen TKI related arrhythmias. Needed to optimize strategies to diagnose, monitor, and manage treatment interruption due to arrhythmia burden. More research is required antiarrhythmic drugs vs 5% (n = 5) of patients on ibrutinib.

Objective: To determine safety and vector biodistribution of AdKCNH2-G628S atrial gene painting to prevent POAF. Clinical trial design will be reviewed in the abstract presentation.

Background: Current sudden cardiac death (SCD) risk stratification relies heavily on left ventricular ejection fraction (LVEF), but markers to refine risk assessment are needed. Dense core fibrosis (DCF) and peri-infarct “gray zone” of myocardial fibrosis (GZF) on late gadolinium enhancement (LGE) cardiac magnetic resonance (CMR) have been proposed as arrhythmogenic substrates.

Objective: We aimed to determine whether DCF and GZF could predict the occurrence of ventricular arrhythmias in patients with previous myocardial infarction.

Methods: We performed a single centre retrospective study enrolling consecutive patients with previous myocardial infarction undergoing CMR before implantable cardioverter-defibrillator (ICD) implantation. Areas of LGE were subdivided into “core DCF” and “peri-infarct” GZF zones based on signal intensity (>5 SD, and 2-5 SD above the mean of reference myocardium, respectively). The primary endpoint was a composite of sudden arrhythmic death, appropriate ICD shock, ventricular fibrillation (VF), or sustained ventricular tachycardia (VT) as detected by the device.

Background: Post-operative atrial fibrillation (POAF) occurs in 30% of cardiac surgeries, increasing risk of stroke, MI, and death. We propose gene therapy with an adenovirus encoding the G628S mutation of KCNH2 (AdKCNH2-G628S) to prevent arrhythmic death, appropriate ICD shock, ventricular fibrillation (VF), or sustained ventricular tachycardia (VT) as detected by the device.
During a median follow-up of 23 months [IQR 9-38], 13 patients reached the primary endpoint. Patients who attained the primary endpoint had similar DCF (30.4g ± 14.7 vs. 28.0g ± 15.3; \( P = 0.601 \)) but a greater amount of GZF (18.1g ± 9.6 vs. 11.9g ± 6.7; \( P = 0.005 \)). On univariate analysis, GZF was associated with the composite endpoint (HR: 1.09 per gram; 95%CI: 1.02-1.15; \( P = 0.006 \)), whereas DCF was not (HR: 1.01 per gram; 95%CI: 0.98-1.05; \( P = 0.571 \)). After adjustment for LVEF, GZF remained independently associated with the primary endpoint (adjusted HR: 1.06 per gram; 95% CI: 1.01-1.12; \( P = 0.035 \)). Decision tree analysis identified 11.9g of GZF as the best cut-off to predict arrhythmic events. The primary endpoint occurred in 11 out of the 35 patients (31.4%) with GZF \( \geq 11.9g \), but in only 2 of the 53 patients (3.8%) with GZF \(< 11.9g \) - Figure.

**Conclusion:** The extent of peri-infarct GZF seems to be a better predictor of ventricular arrhythmias than DCF. This parameter may be useful to identify a subgroup of patients with previous myocardial infarction at increased risk of life-threatening arrhythmic events.

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**PO-626-05**

**PHARMACIST-LEAD CLASS III ANTIARRHYTHMIC CLINIC: FINANCIAL AND QUALITY OF CARE IMPACT**

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**Background:** Class III Antiarrhythmic Drug (AAD) monitoring consumes a large portion of electrophysiology access. Routine drug monitoring as outlined by FDA labeling should be completed every 3-6 months, dependent on the antiarrhythmic drug chosen. Pharmacist-led AAD monitoring and management can facilitate routine outpatient electrophysiology clinician access and has been demonstrated to improve patient safety and adherence. The financial impact of an AAD clinic has not been fully evaluated.

**Objective:** To quantify the financial impact of a pharmacist-led Class III antiarrhythmic drug clinic to the health system measuring downstream revenue generated and cost savings.

**Methods:** Cost savings and downstream revenue from outpatient procedures were captured for the first sixteen months of clinic operation.

**Results:** Class III lab review and documentation has saved an estimated 44.45 business days in physician time over a sixteen-month period. Indirect revenue from outpatient cardioversions and ablations from clinic patients have generated just over $200,000. Outpatient loading of sotalol saves nearly $6800 per patient over inpatient loading. In sixteen months, 71 patients have been loaded through the outpatient program, saving approximately $482,800. Without considering any clinical intervention cost savings or direct billing from face-to-face visits, the addition of a pharmacist lead antiarrhythmic clinic is a financially advantageous model to improve safety and efficiency for AAD monitoring.

**Conclusion:** The utilization of a pharmacist in class III drug monitoring improves patient safety, increases access for acute and non-acute patients, allows for new revenue generation, and provides cost-savings for the institution.