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 ≥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.

**PO-626-05**

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

Megan Labreck PharmD; Sreedhar R. Billakanty MD, FHRS; Nagesh Chopra MD; Eugene Y. Fu MD, FHRS; Auroa Badin MD; Jaret Tyler MD, FHRS; James M. Kleman MD; Andrea Robinson MSN, ACNP; Jill Swinning MSN, APRN, CCDS; Beth Loessin CNP; Jennifer Lynn James CNP; Victoria Murnane MSN and Anish K. Amin MD, FHRS

**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.
catheter and the CARTO® navigation system (Biosense Webster, Inc.). A specialized imaging program was trained to quantify the overall % surface area represented by normal, intermediate, and low voltages as defined by corresponding color thresholds of 0.1 and 0.5mV. Medical records were reviewed for each patient to confirm AF type (paroxysmal vs. persistent), CHA²DS₂-VASc Score, and time from initial AF diagnosis to PVI.

**Results:** Overall PW voltages are shown in Fig. 1 for 358 ablation patients (45% paroxysmal, 55% persistent). Multiple linear regression (R²=0.24) identified persistent AF (p=3.2E-06), higher CHA²DS₂-VASc Score (p=3.6E-06, Fig 2.) and greater time from initial AF diagnosis to PVI (p=0.007) as significantly predictive of the extent of PW low voltage areas. Age, gender, LV ejection fraction, LA volume, and LA volume index were not predictive. More extensive low voltages abnormalities were more common after 4 years following initial AF diagnosis.

**Conclusion:** We have developed a method to accurately quantify LA voltage distributions in patients undergoing AF ablation. The extent of PW low voltage abnormalities at index PVI is correlated with persistent AF type, longer history of AF, and higher CHA²DS₂-VASc Score. It will be important in the future to evaluate the distribution of low voltage abnormalities has on ablation outcomes, as well as their temporal evolution and potential implications for ablation timing.

**PO-626-07**

**VALIDATION OF A PORTABLE DEVICE FOR HF-ECG IN ISCHEMIA DETECTION DURING CORONARY BALLOON INFLATION IN ANGIOPLASTY - BRINGING THE PHYSIOLOGY LAB TO THE BEDSIDE !**

Deepak Padmanabhan; Shannugam K MD DM; Prabha vathi MD DM; Sugandhi Gopal MRCP(UK); Aishwarya Srinivasan Mtech and Poulami Roy M.tech

**Background:** High frequency QRS (HFQRS) analysis for rapid assessment of myocardial ischemia has never been evaluated owing to the logistical challenges of signal recording. We aim to evaluate, in a pilot study, the correlation between the HFQRS changes recorded on a novel wearable Sydantek 12 lead ECG patch with balloon inflation induced ischaemia.

**Objective:** To document utility of a portable device, Sydantek, in ECG and HFECG during multiple balloon inflations.

**Methods:** 10 patients (M:F = 8:2) undergoing coronary intervention for medically refractory chronic stable angina were screened for enrolment into the study ; 9/10 patients underwent the final recording. 1 patient was excluded owing to signal noise in the device due to reluctance in chest preparation. The mean recording time per case was 60+/15 mins. ECG including HFQRS was recordable continuously during all intended times, using Sydantek at 2k samples/secs.

**Results:** In 33 balloon inflation ischemia episodes, changes were seen on the HFQRS onset ~ 10 secs, offset ~ 45 secs after deflation. No significant changes were seen in the conventional ECG analysed for these upto ~ 45 secs. Decrease in the amplitude of the HFQRS, and decrease in the real time RMS voltage of QRS in leads V2-V5 and the presence of RAZ (reduced amplitude zone) were considered to be changes suggestive of ischemia. RAZ disappeared ~ 45 secs after the balloon deflation. The mean total ischemic was 1 +/-0.5 min per patient per balloon inflation. In this study, all 9 of the conventional ECGs were reported independently by 2 docs as not having significant ST-T changes of ischaemia. RAZ presence in HFQRS was seen in all 33 of complete coronary artery occlusion by balloon, in our study. There was reduction in the amplitude of HFQRS(mean 12+/1 μV) and RMSv2-v5 (mean 7+/0.5 μV) from the baseline during the inflation. Post intervention, both of the above parameters had a mean increase of 22+/1 μV and 10+/0.3 μV respectively.

**Conclusion:** HFQRS measured using our novel, portable real time 12 lead ECG recording patch can reliably detect onset of coronary ischemia in a complete coronary occlusion even in absence of ST-T changes of ischaemia. RAZ presence in HFQRS was seen in all 33 of complete coronary artery occlusion by balloon, in our study. We submit this proof of concept for use in detecting ischemia in a variety of clinical situations including chest pain triage and post intervention monitoring.

**PO-626-08**

**LEFT ATRIAL APPENDAGE OCCLUSION WITH LEFT ATRIAL FOUR DIMENSIONAL INTRACARDIAC ECHOCARDIOGRAPHY**

Mitchell Stelzer DO, MPH; Jasyn Blankenship; Jordan Luli; James M. Kleman MD; Eugene Y. Fu MD, FHRS; Sreedhar R. Billakanty MD, FHRS; Nagesh Chopra MD; Auroa Badin MD; Jaret Tyler MD, FHRS and Anish K. Amin MD, FHRS