

from cardiovascular (CV) cause, hospitalizations and emergency department visits, and patient satisfaction measured by Consultant Satisfaction Questionnaire (CSQ) at 6 months (all compared between groups). We enrolled 150 patients; demographics were similar between groups, with an average age of 64 years, 62% males, and overall AFEQT baseline score of 66.45 +/- 4.86. NP-led care led to more rhythm monitoring and referrals made to EP. AFEQT scores, EuroQOL EQ-5D-3L, and CV outcomes were not different at 6 months. NP-led care showed higher patient satisfaction (CSQ Professional care [76.32 +/- 11.32 vs 65.75 +/- 15.45, $p=0.0006$]).

CONCLUSION: We found no difference between NP-led care and usual cardiologist care in AFEQT score at 6 months. NPs working to their full scope resulted in higher patient satisfaction with care compared to usual cardiologist care.

University Hospital Foundation

**P091
VARIABILITY IN NOAC DOSE ELIGIBILITY AND
ADJUSTMENT ACCORDING TO RENAL
FORMULAE AND CLINICAL OUTCOMES IN AF
PATIENTS WITH AND WITHOUT CKD: INSIGHTS
FROM ORBIT AF II**

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BACKGROUND: Non-Vitamin K Oral Anticoagulants (NOACs) are used for prevention of thromboembolism in patients with atrial fibrillation (AF). Guidelines recommend dose adjustment based on kidney function. The most common estimates of kidney function employed in clinical practice are derived from glomerular filtration rate (eGFR), however, product monographs recommend the use of the Cockcroft-Gault creatinine clearance equation (eCrCl) for dose adjustment. We sought to evaluate misclassification of NOAC renal dosing using eGFR versus eCrCl.

METHODS AND RESULTS: We included patients enrolled in Outcomes Registry for Better Informed Treatment of Atrial Fibrillation AF II (ORBIT-AF II) trial. eGFR was calculated using both the Modified Diet in Renal Disease (MDRD) and Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) formulae. Dose adjustments and eligibility were based on landmark trials, with eCrCl of 30-50ml/min for rivaroxaban, eCrCl of 30ml/min for dabigatran, and eCrCl of 25 ml/min for apixaban. Dosing was considered inappropriate when use of eGFR resulted in a lower (under-treatment) or higher (over-treatment) dose than that recommended by eCrCl. Agreement in NOAC dosing between eCrCl and eGFR was assessed. The primary outcome of major adverse cardiovascular and neurological events (MACNE) was a composite of cardiovascular death, stroke or systemic embolism, new-onset heart failure (HF), and myocardial infarction. Sensitivity analysis was performed for the subgroup of patients with CKD (eCrCl < 60 ml/min.) Among 8,727 in the overall

cohort (median age: 71 (64, 78); median CHADS2 score: 2), agreement between CrCl and eGFR (MDRD and CKD-EPI) was observed in 93.5-93.8% of patients. Among 2,184 patients with CKD, the agreement between eCrCl and eGFR (MDRD and CKD-EPI) was 79.9-80.7%. Dosing misclassification was observed in 11.5% of rivaroxaban and 1.1% of dabigatran and apixaban treated patients. Patients receiving an inappropriate NOAC dose had a lower mean eCrCl and eGFR. Undertreated patients were older and of lower body weight compared to overtreated and appropriately dosed patients. Dosing misclassification was more frequent in the CKD population (41.9% of rivaroxaban, 5.7% of dabigatran and 4.6% apixaban patients). At one-year, undertreated patients in the CKD group had significantly greater MACNE [adjusted HR 2.90 (1.09-7.75) compared to appropriate NOAC dosing group $p = 0.03$].

CONCLUSION: The prevalence of NOAC dosing misclassification NOACs was high when using eGFR, particularly among those with CKD. Among patients with CKD, potential undertreatment due to inappropriate and off-label renal formulae may result in worse clinical outcomes. These findings highlight the importance of using eCrCl, and not eGFR, for dose-adjustment in all AF patients receiving NOACs.

Bayer Inc.

**P092
WAIST-HIGH COMPRESSION GARMENTS
REDUCE ORTHOSTATIC TACHYCARDIA IN
PATIENTS WITH POSTURAL ORTHOSTATIC
TACHYCARDIA SYNDROME IN A COMMUNITY
SETTING**

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BACKGROUND: Postural orthostatic tachycardia syndrome (POTS) is a common form of orthostatic intolerance. POTS patients have excessive tachycardia, and debilitating symptoms, when upright. There are no approved medications for use in POTS. Compression garments are a non-pharmacological treatment. We have previously demonstrated a reduction in heart rate (HR) and symptoms with body compression in an acute laboratory setting, using a proof-of-principle waist-high compression garment (WHC). We sought to determine the effectiveness of commercially available WHC in a community setting (real-life environment). We evaluated acute response to compression, and response after several hours to determine if benefits are sustained over time.

METHODS AND RESULTS: POTS patients completed 4 x 10 minute standing tests with WHC (ON) and without WHC (OFF), in the morning (AM; acute effects) and afternoon after several hours of use (PM; sustained effects) on one study day (Test 1: AM-OFF, Test 2: AM-ON, Test 3: PM-ON, Test 4: PM-OFF). Test 4 was included as a PM baseline due to