RELATIONSHIP BETWEEN NONSUSTAINED VENTRICULAR TACHYCARDIA AND VASCULAR DEATH IN PATIENTS WITH ACUTE CORONARY SYNDROME IN THE PLATO (PLATELET INHIBITION AND PATIENT OUTCOMES) TRIAL

ACC Moderated Poster Contributions
McCormick Place South, Hall A
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Session Title: Ventricular Arrhythmias in 2012: From the J-Wave and Early Repolarization to LVADs
Abstract Category: 17. Arrhythmias: VT
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Background: Ventricular arrhythmias are common after ACS and are a marker of increased risk of arrhythmogenic death. However, the clinical implications of NSVT across the spectrum of ACS remain uncertain. We investigated the incidence and prognostic implications of NSVT in a cohort of patients admitted with ACS in the PLATO Trial.

Methods: The PLATO continuous ECG assessment included 2,866 pts with ACS. 7-day cECG recordings were initiated at the time of hospitalization. Vascular death (n=92) and overall mortality (n=119) were assessed over a median f/u of 1yr. NSVT was defined as at least 4 consecutive ventricular beats >100 bpm. Cox models were adjusted for TIMI Risk Score and other baseline characteristics

Results: Patients with NSVT (n=1023, 36%) showed a trend towards increased risk of vascular death over the entire year of f/u (4.9 v 3.2%, adjHR 1.5, p=0.07) and had significantly higher risk of death within the 1st 30-days (2.4% v. 1.1%, p=0.005). Landmark analysis beginning at day 30 after ACS demonstrated similar rates of vascular death in pts with and without NSVT detected during the index event(3.3% v. 2.9%, p=0.92)(Figure). The relationship between NSVT and overall mortality had a similar pattern.

Conclusion: NSVT was associated with an increased risk of vascular death and overall mortality in the first 30 days after ACS. This observation has significant implications for the timing of potential therapeutic interventions such as ICD or pharmacologic therapy during this vulnerable period.