TREATMENT-RESISTANT BLOOD PRESSURE AMONG PATIENTS WITH CORONARY ARTERY DISEASE - CAUSE FOR CONCERN: NEW DATA FROM THE EXTENDED FOLLOW-UP OF THE INTERNATIONAL VERAPAMIL SR-TRANDOLAPRIL STUDY (INVEST)

ACC Moderated Poster Contributions
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Session Title: Lipids, Hypertension, Hyperglycemia: New Tricks for Old Targets
Abstract Category: 2. Chronic CAD/Stable Ischemic Heart Disease: Clinical
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Background: Data regarding prevalence, impact and predictors of resistant HTN among patients with CAD are lacking, although overall prevalence is 25-30%.

Methods: INVEST randomized patients with HTN and CAD to two BP lowering strategies and followed patients for CV outcomes. For this analysis, BP at visit prior to event or censoring was categorized as Resistant (RES) (<140/90mmHg on 4 or more drugs or >140/90mmHg on 3 or more drugs), Controlled (CON) (≥130-<140mmHg on 3 or fewer drugs) and Uncontrolled (UNCON) (>140mmHg on 2 or fewer drugs). Multivariable adjusted Cox and logistic regression analyses were used to investigate associations between BP group and outcome, and baseline predictors of RES BP, respectively.

Results: 17,190 patients are included, with 5 year extended follow up in the US patients totaling 99,854 patient years. Prevalence of RES BP was 38%. Median number of anti-HTN drugs in the RES, CON and UNCON groups was 4, 2 and 2 respectively. CV outcomes according to group are shown in the Figure. Strongest predictors of RES BP include Black race (vs White OR 1.50, 95% CI 1.36-1.65), and history of CHF (1.73, 1.5-1.99), renal impairment (1.34, 1.06-1.70), and diabetes (1.63, 1.52-1.74).

Conclusions: RES BP is highly prevalent in those with CAD, and has similarly hazardous impact on CV outcomes as UNCON BP in this population. Our data suggest emphasis should be placed on recognizing CAD patients at risk for RES BP and optimizing pharmacologic and other therapies to maximally reduce risk.

Primary outcome was all-cause mortality, nonfatal MI or nonfatal stroke. Extended follow-up for all-cause mortality was by search of national death registry for US patients.