



## EFFECT OF ANGIOTENSIN RECEPTOR BLOCKER (ARB) THERAPY ON LONG TERM SURVIVAL IN AFRICAN AMERICANS (AA) WITH HEART FAILURE (HF)

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**Background:** The Candesartan in Heart failure Assessment of Reduction in Mortality and morbidity (CHARM) trial confirmed the non inferiority of ARBs to Angiotensin Converting Enzyme inhibitors (ACEI) in mortality benefit in Systolic HF (SHF) but not in HF Preserved Ejection Fraction (HFPEF). However extrapolation of these data to AAs with HF is uncertain due to underrecruitment

**Methods:** All cause death rates were assessed in an AA cohort (N=510) from a quality improvement registry for HF who had been on therapy with either ACEIs or ARBs since 2004. Survival analysis performed in SHF (EF<45%) and HFPEF (EF>45%) to determine effect of ARBs on mortality compared with ACEIs, with Kaplan-Meier & multivariate Cox regression models. Analysis adjusted for age, gender, NYHA class, EF, DM, HTN, hypercholesterolemia, smoking, angina, beta blockers, ACE inhibitors, ARBs, statins, aldactone and bidil therapy

**Results:** Death occurred in 90 (34.7%) on ACEIs, 11(34.4%) in ARBs in SHF (N=291) and 57 (33.3%) on ACEIs, 9 in ARBs (18.8%) HFPEF (N=219) after median follow up of 4.5 years. Age was the only predictor of death at multivariate level. Therapy with ARBs was associated with higher survival than with ACEIs in HFPEF patients (adj HR=0.42; 95% CI: 0.21-0.86; p=0.01) but not in SHF patients (adj HR=0.99; 95% CI: 0.53 - 1.87 p=0.99) (curves superimposed)

**Conclusions:** In AAs with HF ARB therapy appears superior to therapy with ACEIs in HFPEF but not in SHF. Further analysis of larger data sets and registries is required for confirmation.



