CARDIAC FUNCTION AND HEART FAILURE

SHOULD WE ANTICOAGULATE PATIENTS WITH ADVANCED SYSTOLIC HEART FAILURE WITHOUT ATRIAL FIBRILLATION? INSIGHTS FROM THE BETA-BLOCKER EVALUATION OF SURVIVAL TRIAL (BEST)

ACC Poster Contributions
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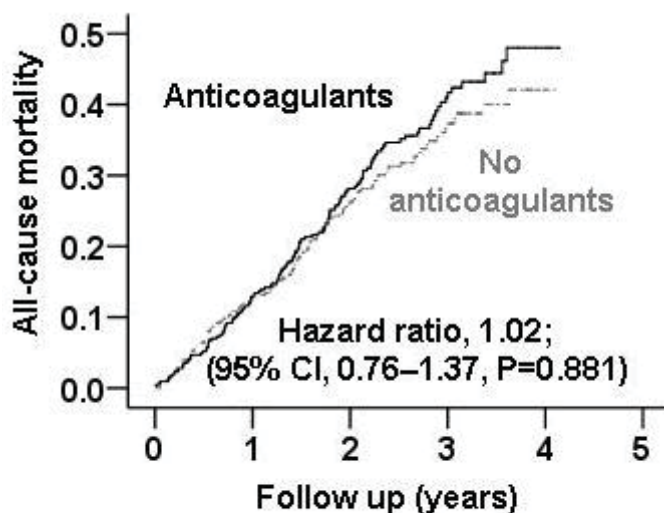Presentation Number: 1179-67

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Background: Anticoagulants are often used in systolic heart failure (HF) patients to prevent adverse outcomes; however, their long-term effect remains controversial.

Methods: Of the 2707 chronic advanced (NYHA class III-IV) systolic (LVEF ≤35%) HF patients receiving ACE inhibitors, beta-blockers, digitalis and diuretics in BEST, 1588 had no baseline history of atrial fibrillation (AF) or thromboembolic disorder. Of these, 748 were receiving anticoagulants. Propensity scores for anticoagulant use, calculated for each patient, were used to assemble a matched cohort of 428 pairs of patients receiving and not receiving anticoagulants who were balanced on 63 baseline characteristics including key risk factors. Matched Cox regression models were used to estimate effects of anticoagulants on outcomes during >4 years of follow-up.

Results: Matched patients had a mean age of 59 (±12) years, 21% were women, and 25% African American. All-cause mortality occurred in 33% and 30% of matched patients receiving and not receiving anticoagulants resp. (matched HR, 1.02; 95% CI, 0.76-1.37; P=0.881; Fig. 1). Before matching, anticoagulant use was associated with increased mortality (unadjusted HR, 1.32; 95% CI, 1.11-1.58; P=0.002).

Conclusions: In contemporary advanced systolic HF patients without AF, anticoagulant use was associated with increased unadjusted mortality, likely due to confounding; but had no independent effect on mortality, when all measured confounders were well-balanced at baseline.

Figure 1