

**CARDIAC FUNCTION AND HEART FAILURE**

**USE OF BETA-BLOCKERS AND REDUCTION IN ALL-CAUSE MORTALITY IN HOSPITALIZED MEDICARE BENEFICIARIES WITH ACUTE DIASTOLIC HEART FAILURE: A PROPENSITY-MATCHED STUDY OF THE OPTIMIZE-HF**

ACC Poster Contributions

Ernest N. Morial Convention Center, Hall F

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**Background:** Beta-blockers (BB) reduce mortality in systolic heart failure (HF). However, evidence of their benefits is unclear in diastolic HF. We tested the hypothesis that BB use would lower mortality in diastolic HF enrolled into the OPTIMIZE-HF (Organized Program to Initiate Lifesaving Treatment in Hospitalized Patients With Heart Failure) registry.

**Methods:** Of the 9165 unique OPTIMIZE-HF patients hospitalized with acute diastolic HF (LVEF  $\geq$ 45%) linked with Medicare outcomes data, 5434 (59%) were prescribed BBs at discharge. Propensity scores for BB use were estimated for each of the 9165 patients and were used to assemble a cohort of 3382 pairs of patients receiving and not receiving BBs who were balanced on 38 baseline characteristics.

**Results:** Patients (n=6764) had a mean ( $\pm$ SD) age of 78 ( $\pm$ 11) years, 65% were women, 12% were African American, and a mean ( $\pm$ SD) LVEF of 0.58 ( $\pm$ 0.09) %. During ~6 years of follow-up, all-cause mortality occurred in 69% and 72% of matched patients receiving and not receiving BBs respectively (HR when BB use was compared with its non-use, 0.90; 95% CI, 0.85-0.96;  $p < 0.001$ ; Figure). The association was unchanged when we repeated the analysis using a multivariable Cox regression model adjusting for the same 38 variables among the 6614 pre-match patients (HR, 0.90; 95% CI, 0.85-0.94;  $p < 0.001$ ).

**Conclusions:** Discharge prescription of BB was associated with significant lower risk of all-cause mortality in Medicare beneficiaries hospitalized with acute decompensated diastolic HF.

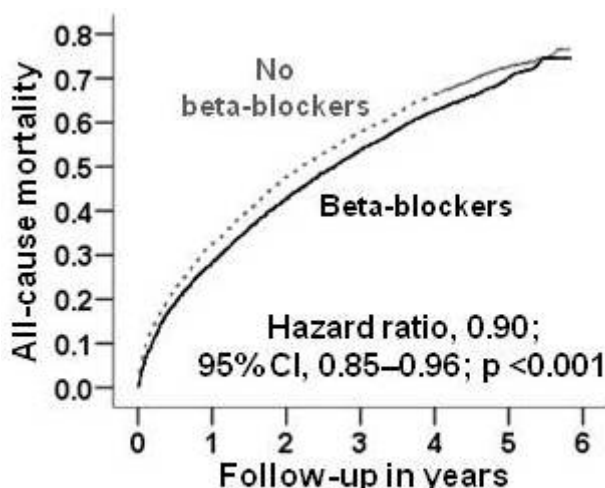


Figure: Kaplan Meier plots