The impact of baseline systolic blood pressure (SBP) on outcomes in patients with advanced chronic systolic heart failure (HF) has not been studied using a propensity-matched design. Of the 2,706 participants in the Beta-Blocker Evaluation of Survival Trial (BEST) with chronic HF, New York Heart Association class III to IV symptoms and left ventricular ejection fraction \( \leq 35\% \), 1,751 had SBP \( \leq 120 \) mm Hg (median 108, range 70 to 120) and 955 had SBP >120 mm Hg (median 134, range 121 to 192). Propensity scores for SBP >120 mm Hg, calculated for each patient, were used to assemble a matched cohort of 545 pairs of patients with SBPs \( \leq 120 \) and >120 mm Hg who were balanced in 65 baseline characteristics. Matched Cox regression models were used to estimate associations between SBP < or =120 mm Hg and outcomes over 4 years of follow-up. Matched participants had a mean age +/- SD of 62 +/- 12 years, 24% were women, and 24% were African-American. HF hospitalization occurred in 38% and 32% of patients with SBPs < or =120 and >120 mm Hg, respectively (hazard ratio 1.33 SBP < or =120 was compared to >120 mm Hg, 95% confidence interval 1.04 to 1.69, \( p = 0.023 \)). All-cause mortality occurred in 28% and 30% of matched patients with SBPs < or =120 and >120 mm Hg, respectively (hazard ratio 1.13 SBP < or =120 compared to >120 mm Hg, 95% confidence interval 0.86 to 1.49, \( p = 0.369 \)). In conclusion, in patients with advanced chronic
Impact of baseline systolic blood pressure on long-term outcomes in patients with advanced chronic systolic heart failure (insights from the BEST trial).

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systolic HF, baseline SBP < or =120 mm Hg is associated with increased risk of HF hospitalization, but had no association with all-cause mortality.

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