DONOR-RECIPIENT RACE MISMATCH INCREASES GRAFT FAILURE AND MORTALITY AFTER ADULT HEART TRANSPLANTATION: A PROPSENITY-MATCHED STUDY OF THE UNITED NETWORK FOR ORGAN SHARING DATABASE

Poster Contributions
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Background: Donor-recipient race mismatch (DRRM) has been shown to increase graft failure and mortality among pediatric heart transplant (HT) recipients. However, similar association has not been examined among adult HT recipients.

Methods: Of 40,705 adult HT recipients in the United Network of Organ Sharing (UNOS) databases 1987-2012, 14,801 (36%) had a DRRM. Using propensity scores for DRRM, we assembled a matched cohort of 8,648 pairs of patients balanced on 22 baseline characteristics.

Results: DRRM among adult HT recipients has increased from 16% in 1987 to 47% in 2012 (Ptrend <0.001). Compared to matched patients without vs. with DRRM, hazard ratios (HRs) for 1-year, 5-year and 10-year graft failure were respectively (1.04, P=0.519), (1.09, P=0.010) and (1.07, P=0.011) (Table). The HRs for 1-year, 5-year and 10-year all-cause mortality comparing patients without vs. with DRRM were respectively (1.04, P=0.556), (1.09, P=0.014) and (1.07, P=0.018) (Table, Figure). Median patient survival among patients without and with DRRM was resp. 6.1 years and 5.4 years.

Conclusion: DRRM among adult HT recipients has significantly increased over the last two decades and is a modest predictor of 5-year and 10-year graft failure and mortality. These findings warrant further investigation.