

The Combined Roles of Race/Ethnicity and Substance Use in Predicting Likelihood of Kidney Transplantation

DeBlasio et al., *Transplantation*

Supplemental Information

Cox proportional hazard model results for race/ethnicity in combination with any substance use at the time of the evaluation for transplantation

Multivariable models were fit using a Cox model instead of a competing risk model (i.e., assuming death to be ignorable). The models included the covariates enumerated in the main body of the paper. Effects (“cause-specific” hazard ratios) for race/ethnicity in combination with any substance use are shown in Table S1 below.

The coefficients from the Cox models indicate the effect of a covariate on the instantaneous rate of occurrence of an outcome. Participants who experience the competing risk (here, death) are assumed to be the same (i.e., can be represented by) participants who remained alive at a given point in time. See Austin et al., 2016, for further discussion of situations where this may or may not be a realistic assumption.

Table S1. Predictors of kidney transplantation and waitlist-related outcomes, multivariable (Cox model) analysis.

Race/ethnicity by current substance use groups ^a	Process toward kidney transplantation					
	Kidney transplantation in total cohort		Waitlisted for transplant		Among waitlisted patients, received transplant	
	HR (CI)	P	HR (CI)	P	HR (CI)	P
White, no substance use (referent)	---		---		---	
Black, no substance use	0.75 (0.56, 1.00)	0.054	0.69 (0.55, 0.87)	0.001	0.96 (0.72, 1.29)	0.790
Other, no substance use	1.02 (0.68, 1.53)	0.910	0.78 (0.57, 1.09)	0.147	0.97 (0.65, 1.45)	0.867
White, current substance use	0.79 (0.57, 1.09)	0.150	0.55 (0.42, 0.73)	<0.001	1.08 (0.78, 1.50)	0.629
Black, current substance use	0.50 (0.30, 0.84)	0.009	0.32 (0.21, 0.49)	<0.001	0.71 (0.42, 1.19)	0.193
Other, current substance use	0.32 (0.13, 0.81)	0.016	0.63 (0.35, 1.13)	0.121	0.70 (0.28, 1.75)	0.442

^a See main body of paper for covariates included in the modeling

Abbreviations: CI, confidence interval; HR, hazard ratio

Reference (see also body of paper for additional references pertinent to the statistical modeling (numbers 71, 75-80))

Austin PC, Lee DS, Fine JP. Introduction to the analysis of survival data in the presence of competing risks. *Circulation*. 2016;133(6):601-609.