

**Item S1.** Hazard ratios for adverse transplant outcomes estimated from a frailty model clustered by transplant center.

**Table a.** Hazard ratios for adverse transplant outcomes for permanent residents and nonresident aliens combined vs. U.S. citizens estimated from a frailty model clustered by transplant center. Patients were followed for up to 5 years.

Model	Hazard Ratio (95% Confidence Interval)		
	All-cause graft loss	Death-censored graft loss <sup>a</sup>	Death
1) unadjusted	0.61 (0.54-0.69)	0.63 (0.54-0.73)	0.61 (0.51-0.72)
2) adjusted for demographics <sup>b</sup>	0.68 (0.60-0.77)	0.73 (0.63-0.86)	0.61 (0.51-0.73)
3) model 2+ dialysis factors <sup>c</sup>	0.70 (0.61-0.79)	0.75 (0.63-0.88)	0.63 (0.52-0.76)
4) model 3+ transplant factors <sup>d</sup>	0.70 (0.61-0.80)	0.76 (0.65-0.90)	0.62 (0.51-0.75)
5) model 4 + comorbidity count <sup>e</sup>	0.70 (0.61-0.82)	0.75 (0.63-0.90)	0.62 (0.50-0.77)

<sup>a</sup>: Hazard ratios for death-censored graft loss are cause-specific.

<sup>b</sup>: age, sex, race/ethnicity (Hispanic, non-Hispanic black, non-Hispanic white or other)

<sup>c</sup>: time on dialysis (<1 or ≥1 year) cause of kidney failure (diabetes, other, or unknown)

<sup>d</sup>: 0-HLA mismatch, living/deceased donor, transplant before 2000

<sup>e</sup>: Count included peripheral vascular disease, cerebrovascular disease, lung disease, cancer, and diabetes

**Table b.** Hazard ratios for adverse transplant outcomes with up to 3-year follow-up for nonresident aliens vs. U.S. citizens estimated from a frailty model clustered by transplant center.

Model	Hazard Ratio (95% Confidence Interval) <sup>a</sup>		
	All-cause graft loss	Death-censored graft loss <sup>b</sup>	Death
1) unadjusted	0.50 (0.35-0.71)	0.53 (0.35-0.81)	0.41 (0.23-0.73)
2) adjusted for demographics <sup>c</sup>	0.60 (0.42-0.86)	0.60 (0.39-0.92)	0.55 (0.31-0.99)
3) model 2+ dialysis factors <sup>d</sup>	0.62 (0.43-0.88)	0.61 (0.40-0.93)	0.57 (0.32-1.01)
4) model 3+ transplant factors <sup>e</sup>	0.69 (0.44-1.00)	0.68 (0.44-1.05)	0.66 (0.44-1.18)
5) model 4 + comorbidity count <sup>f</sup>	0.71 (0.48-1.06)	0.68 (0.42-1.09)	0.73 (0.40-1.34)

<sup>a</sup> Citizenship was a three-level variable. See table e of Item S1 for hazard ratios for permanent residents vs. US citizens. Type II p-values of the Wald test (i.e. null hypothesis of no difference across all three groups) was <0.01 for all outcomes.

<sup>b</sup> Hazard ratios for death-censored graft loss are cause-specific.

<sup>c</sup> age, sex, race/ethnicity (Hispanic, non-Hispanic black, non-Hispanic white or other)

<sup>d</sup> time on dialysis (<1 or ≥1 year) cause of kidney failure (diabetes, other, or unknown)

<sup>e</sup> 0-HLA mismatch, living/deceased donor, transplant before 2000

<sup>f</sup> Count included peripheral vascular disease, cerebrovascular disease, lung disease, cancer, and diabetes

**Table c.** Hazard ratios for adverse transplant outcomes with up to 1-year follow-up for nonresident aliens vs. U.S. citizens estimated from a frailty model clustered by transplant center.

Model	Hazard Ratio (95% Confidence Interval) <sup>a</sup>					
	All-cause graft loss	p-value <sup>a</sup>	Death-censored graft loss <sup>b</sup>	p-value <sup>a</sup>	Death	p-value <sup>a</sup>
1) unadjusted	0.55 (0.35-0.88)	<0.001	0.46 (0.25-0.84)	<0.001	0.63 (0.32-1.24)	0.06
2) adjusted for demographics <sup>c</sup>	0.69 (0.43-1.10)	0.01	0.54 (0.30-1.00)	0.01	0.83 (0.42-1.63)	0.05
3) model 2+ dialysis factors <sup>d</sup>	0.69 (0.43-1.10)	0.01	0.53 (0.29-0.99)	0.01	0.85 (0.43-1.67)	0.10
4) model 3+ transplant factors <sup>e</sup>	0.83 (0.52-1.32)	0.03	0.64 (0.35-1.19)	0.03	1.00 (0.51-1.98)	0.15
5) model 4 + comorbidity count <sup>f</sup>	0.82 (0.49-1.38)	0.01	0.61 (0.31-1.21)	0.03	1.05 (0.51-2.17)	0.27

<sup>a</sup> Citizenship was a three-level variable. See table *f* of Item S1 for hazard ratios for permanent residents vs. US citizens. Type II p-values of the Wald test (i.e. null hypothesis of no difference across all three groups) are shown.

<sup>b</sup> Hazard ratios for death-censored graft loss are cause-specific.

<sup>c</sup> age, sex, race/ethnicity (Hispanic, non-Hispanic black, non-Hispanic white or other)

<sup>d</sup> time on dialysis (<1 or ≥1 year) cause of kidney failure (diabetes, other, or unknown)

<sup>e</sup> 0-HLA mismatch, living/deceased donor, transplant before 2000

<sup>f</sup> Count included peripheral vascular disease, cerebrovascular disease, lung disease, cancer, and diabetes

**Table d.** Hazard ratios for adverse transplant outcomes for permanent residents vs. U.S. citizens estimated from a frailty model clustered by transplant center. Patients were followed up to 5 years.

Model	Hazard Ratio (95% Confidence Interval) <sup>a</sup>		
	All-cause graft loss	Death-censored graft loss <sup>b</sup>	Death
1) unadjusted	0.64 (0.56-0.73)	0.65 (0.55-0.76)	0.64 (0.53-0.78)
2) adjusted for demographics <sup>c</sup>	0.70 (0.61-0.81)	0.77 (0.65-0.91)	0.61 (0.51-0.75)
3) model 2+ dialysis factors <sup>d</sup>	0.72 (0.63-0.83)	0.78 (0.66-0.93)	0.63 (0.52-0.77)
4) model 3+ transplant factors <sup>e</sup>	0.71 (0.62-0.82)	0.79 (0.66-0.94)	0.61 (0.50-0.75)
5) model 4 + comorbidity count <sup>f</sup>	0.71 (0.61-0.83)	0.77 (0.63-0.93)	0.61 (0.49-0.77)

<sup>a</sup> Citizenship was a three-level variable. See Table 3 for hazard ratios for non-resident aliens vs. US citizens. Type II p-values of the Wald test (i.e. null hypothesis of no difference across all three groups) was <0.001 for all outcomes.

<sup>b</sup> Hazard ratios for death-censored graft loss are cause-specific.

<sup>c</sup> age, sex, race/ethnicity (Hispanic, non-Hispanic black, non-Hispanic white or other)

<sup>d</sup> time on dialysis (<1 or ≥1 year) cause of kidney failure (diabetes, other, or unknown)

<sup>e</sup> 0-HLA mismatch, living/deceased donor, transplant before 2000

<sup>f</sup> Count included peripheral vascular disease, cerebrovascular disease, lung disease, cancer, and diabetes

**Table e.** Hazard ratios for adverse transplant outcomes with up to 3-year follow-up for permanent residents vs. U.S. citizens estimated from a frailty model clustered by transplant center.

Model	Hazard Ratio (95% Confidence Interval) <sup>a</sup>		
	All-cause graft loss	Death-censored graft loss <sup>b</sup>	Death
1) unadjusted	0.63 (0.54-0.74)	0.61 (0.50-0.75)	0.66 (0.53-0.83)
2) adjusted for demographics <sup>c</sup>	0.70 (0.59-0.82)	0.73 (0.60-0.90)	0.62 (0.49-0.78)
3) model 2+ dialysis factors <sup>d</sup>	0.72 (0.61-0.85)	0.75 (0.61-0.92)	0.65 (0.51-0.83)
4) model 3+ transplant factors <sup>e</sup>	0.71 (0.61-0.85)	0.75 (0.61-0.85)	0.64 (0.61-0.82)
5) model 4 + comorbidity count <sup>f</sup>	0.69 (0.57-0.84)	0.69 (0.54-0.87)	0.65 (0.50-0.86)

<sup>a</sup> Citizenship was a three-level variable. See Table b of Item S1 for hazard ratios for non-resident aliens vs. US citizens. Type II p-values of the Wald test (i.e. null hypothesis of no difference across all three groups) was <0.01 for all outcomes.

<sup>b</sup> Hazard ratios for death-censored graft loss are cause-specific.

age, sex, race/ethnicity (Hispanic, non-Hispanic black, non-Hispanic white or other)

<sup>c</sup> time on dialysis (<1 or ≥1 year) cause of kidney failure (diabetes, other, or unknown)

<sup>d</sup> 0-HLA mismatch, living/deceased donor, transplant before 2000

<sup>e</sup> Count included peripheral vascular disease, cerebrovascular disease, lung disease, cancer, and diabetes

**Table f.** Hazard ratios for adverse transplant outcomes with up to 1-year follow-up for permanent residents vs. U.S. citizens estimated from a frailty model clustered by transplant center.

Model	Hazard Ratio (95% Confidence Interval) <sup>a</sup>					
	All-cause graft loss	p-value <sup>a</sup>	Death-censored graft loss <sup>b</sup>	p-value <sup>a</sup>	Death	p-value <sup>a</sup>
1) unadjusted	0.68 (0.55-0.84)	<0.001	0.62 (0.48-0.81)	<0.001	0.71 (0.52-0.99)	0.06
2) adjusted for demographics <sup>c</sup>	0.73 (0.59-0.91)	0.01	0.71 (0.54-0.93)	0.01	0.66 (0.43-0.92)	0.05
3) model 2+ dialysis factors <sup>d</sup>	0.74 (0.59-0.93)	0.01	0.71 (0.54-0.94)	0.01	0.69 (0.49-0.97)	0.10
4) model 3+ transplant factors <sup>e</sup>	0.74 (0.59-0.94)	0.03	0.71 (0.53-0.94)	0.03	0.71 (0.50-1.01)	0.15
5) model 4 + comorbidity count <sup>f</sup>	0.71 (0.55-0.92)	0.01	0.62 (0.44-0.86)	0.03	0.73 (0.50-1.08)	0.27

<sup>a</sup> Citizenship was a three-level variable. See Table c of Item S1 for hazard ratios for non-resident aliens vs. US citizens. Type II p-values of the Wald test (i.e. null hypothesis of no difference across all three groups) are shown.

<sup>b</sup> Hazard ratios for death-censored graft loss are cause-specific.

age, sex, race/ethnicity (Hispanic, non-Hispanic black, non-Hispanic white or other)

<sup>c</sup> time on dialysis (<1 or ≥1 year) cause of kidney failure (diabetes, other, or unknown)

<sup>d</sup> 0-HLA mismatch, living/deceased donor, transplant before 2000

<sup>e</sup> Count included peripheral vascular disease, cerebrovascular disease, lung disease, cancer, and diabetes