

**Supplemental Digital Content:**

**Supplemental Table 1.** Risk of kidney graft survival. DBD, donation by brainstem death.

DCD, donation by cardiac death. cPRA, calculated panel reactive antibody

Variable	Multivariate Analysis	
	HR (95% CI)	<i>P</i> value
Induction group	1	
• Anti-thymocyte globulin	3.83 (0.42-35.01)	0.23
• Alemtuzumab	1.01 (0.40-2.53)	0.98
• Basiliximab		
Race	1	
• White	0.53 (0.16-1.77)	0.30
• Black	0.58 (0.18-1.91)	0.37
• Other		
Donor type	1	
• Live	1.52 (0.65-3.56)	0.33
• DBD	2.33 (0.94-5.80)	0.07
• DCD		
Age at transplant, years	1.03 (0.99-1.06)	0.07
End cPRA	0.99 (0.98-1.01)	0.34
Transplant to discharge, days	1.07 (0.99-1.16)	0.10
Maintenance steroids	3.50 (0.35-34.96)	0.29
Belatacept	0.91 (0.08-10.13)	0.94

**Supplemental Table 2.** Risk of patient survival. DBD, donation by brainstem death. DCD, donation by cardiac death. cPRA, calculated panel reactive antibody

Variable	Multivariate Analysis	
	HR (95% CI)	<i>P</i> value
Induction group	1	
• Anti-thymocyte globulin	3.6 (0.08-168.32)	0.51
• Alemtuzumab	0.5 (0.14-1.63)	0.24
Race	1	
• White	0.3 (0.04-2.76)	0.32
• Black	0.0 (0.0-)	0.99
• Other		
Donor type	1	
• Live	4.3 (1.04-17.34)	0.04
• DBD	2.0 (0.35-11.31)	0.44
• DCD		
Age at transplant, years	1.1 (1.02-1.13)	0.01
End cPRA	0.99 (0.97-1.01)	0.26
Transplant to discharge, days	1.0 (0.84-1.17)	0.95
Maintenance steroids	23.8 (0.23-2475.58)	0.18
Belatacept	9.99 (0.31-325.89)	0.20

**Supplemental Table 3.** Risk of rejection. DBD, donation by brainstem death. DCD, donation by cardiac death. cPRA, calculated panel reactive antibody

Variable	Multivariate Analysis	
	HR (95% CI)	<i>P</i> value
Induction group		
• Anti-thymocyte globulin	1	
• Alemtuzumab	0.4 (0.07-2.60)	0.36
• Basiliximab	1.3 (0.43-4.0)	0.63
Race		
• White	1	
• Black	2.1 (0.65-6.68)	0.22
• Other	2.4 (0.85-6.50)	0.10
Donor type		
• Live	1	
• DBD	0.4 (0.16-0.96)	0.04
• DCD	0.1 (0.01-0.91)	0.04
Age at transplant, years	1.0 (0.95-1.01)	0.20
End cPRA	1.0 (0.99-1.02)	0.19
Transplant to discharge, days	0.7 (0.48-1.01)	0.054
Maintenance steroids	1.8 (0.27-11.53)	0.56
Belatacept	3.6 (0.61-22.15)	0.16

**Supplemental Table 4.** Risk of antibody mediated rejection. DBD, donation by brainstem death. DCD, donation by cardiac death. cPRA, calculated panel reactive antibody

Variable	Multivariate Analysis	
	HR (95% CI)	<i>P</i> value
Induction group		
• Anti-thymocyte globulin	1	
• Alemtuzumab	2.3 (0.23-22.8)	0.48
• Basiliximab	0.4 (0.09-1.86)	0.25
Race		
• White	1	
• Black	0.9 (0.10-7.51)	0.88
• Other	2.0 (0.41-10.12)	0.39
Donor type		
• Live	1	
• DBD	0.3 (0.07-1.47)	0.14
• DCD	0.5 (0.08-2.74)	0.41
Age at transplant, years	1.0 (0.95-1.04)	0.81
End cPRA	1.0 (0.97-1.01)	0.40
Transplant to discharge, days	1.0 (0.71-1.32)	0.82
Maintenance steroids	16.3 (0.69-387.66)	0.08
Belatacept	6.9 (0.38-125.07)	0.19

**Supplemental Table 5.** Risk of acute cellular rejection. DBD, donation by brainstem death. DCD, donation by cardiac death. cPRA, calculated panel reactive antibody

Variable	Multivariate Analysis	
	HR (95% CI)	<i>P</i> value
Induction group		
• Anti-thymocyte globulin	1	
• Alemtuzumab	0.9 (0.22-3.22)	0.81
• Basiliximab	1.9 (0.69-5.31)	0.21
Race		
• White	1	
• Black	2.0 (0.83-4.92)	0.12
• Other	2.0 (0.84-4.61)	0.12
Donor type		
• Live	1	
• DBD	0.7 (0.31-1.46)	0.32
• DCD	0.9 (0.34-2.41)	0.85
Age at transplant, years	1.0 (0.96-1.01)	0.22
End cPRA	1.0 (0.99-1.01)	0.54
Transplant to discharge, days	0.7 (0.55-0.97)	0.03
Maintenance steroids	1.1 (0.23-5.55)	0.88
Belatacept	5.4 (1.36-22.11)	0.02

**Supplemental Table 6.** Risk of CMV viremia. DBD, donation by brainstem death. DCD, donation by cardiac death. cPRA, calculated panel reactive antibody

Variable	Multivariate Analysis	
	HR (95% CI)	<i>P</i> value
Induction group		
• Anti-thymocyte globulin	1	
• Alemtuzumab	0.9 (0.54-1.67)	0.85
• Basiliximab	0.6 (0.41-0.78)	0.0004
Race		
• White	1	
• Black	0.9 (0.57-1.27)	0.43
• Other	1.2 (0.85-1.83)	0.26
Donor type		
• Live	1	
• DBD	1.1 (0.82-1.59)	0.44
• DCD	1.5 (1.07-2.23)	0.02
Age at transplant, years	1.0 (1.001-1.02)	0.04
End cPRA	1.0 (1.0-1.01)	0.04
Transplant to discharge, days	1.02 (0.97-1.07)	0.43
Maintenance steroids	0.8 (0.48-1.50)	0.56
Belatacept	0.6 (0.29-1.20)	0.15

**Supplemental Table 7.** Risk of BK >1,000 copies/mL. DBD, donation by brainstem death.

DCD, donation by cardiac death. cPRA, calculated panel reactive antibody

Variable	Multivariate Analysis	
	HR (95% CI)	<i>P</i> value
Induction group		
• Anti-thymocyte globulin	1	
• Alemtuzumab	1.4 (0.68-2.81)	0.38
• Basiliximab	1.0 (0.70-1.55)	0.84
Race		
• White	1	
• Black	1.4 (0.94-2.09)	0.10
• Other	1.1 (0.68-1.70)	0.75
Donor type		
• Live	1	
• DBD	1.0 (0.74-1.47)	0.81
• DCD	0.7 (0.45-1.11)	0.13
Age at transplant, years	1.0 (1.00-1.03)	0.02
End cPRA	1.0 (0.99-1.0)	0.35
Transplant to discharge, days	1.0 (0.97-1.07)	0.43
Maintenance steroids	1.7 (0.83-3.67)	0.15
Belatacept	1.5 (0.70-3.42)	0.28

**Supplemental Table 8.** Risk of BK >10,000 copies/mL. DBD, donation by brainstem death. DCD, donation by cardiac death. cPRA, calculated panel reactive antibody

Variable	Multivariate Analysis	
	HR (95% CI)	<i>P</i> value
Induction group		
• Anti-thymocyte globulin	1	
• Alemtuzumab	1.6 (0.68-3.98)	0.27
• Basiliximab	1.3 (0.76-2.13)	0.36
Race		
• White	1	
• Black	1.8 (1.14-2.94)	0.01
• Other	1.4 (0.84-2.42)	0.19
Donor type		
• Live	1	
• DBD	1.0 (0.68-1.61)	0.84
• DCD	0.79 (0.46-1.36)	0.40
Age at transplant, years	1.0 (1.0-1.03)	0.02
End cPRA	1.0 (0.99-1.003)	0.23
Transplant to discharge, days	1.0 (0.92-1.06)	0.64
Maintenance steroids	1.3 (0.51-3.13)	0.61
Belatacept	0.9 (0.32-2.64)	0.88