

**eTable 1.** Logistic regression models assessing the predictors of (a) glomerulosclerosis; (b) acute tubular injury; (c) IFTA; and (d) moderate to severe vascular disease among deceased donor kidneys

**(a) Glomerulosclerosis**

Parameters	Crude OR	95% CI	p-value	Adjusted OR	95% CI	p-value
Donor age (years)	1.058	1.038 – 1.078	<b>&lt;0.001</b>	1.044	1.021 – 1.067	<b>&lt;0.001</b>
Donor Male	0.967	0.606 – 1.544	0.889	--	--	--
Donor African-American	1.182	0.668 – 2.091	0.566	--	--	--
Donor BMI	1.067	1.038 – 1.097	<b>&lt;0.001</b>	1.042	1.010 – 1.075	<b>0.009</b>
Donor hypertension	4.833	2.935 – 7.959	<b>&lt;0.001</b>	2.427	1.392 – 4.230	<b>0.002</b>
Donor diabetes	3.112	1.618 – 5.985	<b>0.001</b>	1.404	0.689 – 2.860	0.350
HLA mismatch	1.206	0.981 – 1.483	0.075	--	--	--
Donor Terminal Creatinine	1.058	0.867 – 1.890	0.577	--	--	--

**(b) Acute tubular injury**

Parameters	Crude OR	95% CI	p-value	Adjusted OR	95% CI	p-value
Donor age (years)	1.001	0.992 – 1.010	0.801	1.000	0.991 – 1.011	0.847
Donor Male	0.923	0.655 – 1.300	0.646	0.774	0.528 – 1.135	0.190
Donor African-American	1.614	1.045 – 2.495	<b>0.031</b>	1.487	0.926 – 2.387	0.101
Donor BMI	1.016	0.994 – 1.038	0.150	--	--	--
Donor hypertension	1.279	0.906 – 1.805	0.162	--	--	--
Donor diabetes	1.385	0.764 – 2.510	0.283	--	--	--
Cold ischemia time (hours)	1.012	0.995 – 1.028	0.168	1.008	0.991 – 1.025	0.376
HLA mismatch	0.982	0.858 – 1.124	0.792	--	--	--
Donor Terminal Creatinine	1.659	1.393 – 1.974	<b>&lt;0.001</b>	1.680	1.394 – 2.023	<b>&lt;0.001</b>

**(c) IFTA**

Parameters	Crude OR	95% CI	p-value	Adjusted OR	95% CI	p-value
Donor age (years)	1.068	1.046 – 1.090	<b>&lt;0.001</b>	1.052	1.027 – 1.077	<b>&lt;0.001</b>
Donor Male	0.998	0.623 – 1.598	0.992	--	--	--
Donor African-American	0.935	0.511 – 1.711	0.826	--	--	--
Donor BMI	1.061	1.032 – 1.090	<b>&lt;0.001</b>	1.033	0.999 – 1.068	0.059
Donor hypertension	5.009	3.025 – 8.296	<b>&lt;0.001</b>	2.431	1.348 – 4.383	<b>0.003</b>
Donor diabetes	3.873	2.044 – 7.339	<b>&lt;0.001</b>	1.982	0.978 – 4.020	0.058
Cold ischemia time (hours)	1.027	1.003 – 1.051	<b>0.026</b>	1.018	0.990 – 1.047	0.212
HLA mismatch	1.073	0.885 – 1.302	0.472	--	--	--
Donor Terminal Creatinine	1.029	0.841 – 1.259	0.780	--	--	--

**(d) Moderate to severe vascular disease**

Parameters	Crude OR	95% CI	p-value	Adjusted OR	95% CI	p-value
Donor age (years)	1.101	1.080 – 1.122	<b>&lt;0.001</b>	1.089	1.066 – 1.111	<b>&lt;0.001</b>
Donor Male	0.617	0.432 – 0.881	<b>0.008</b>	0.777	0.504 – 1.198	0.254
Donor African-American	1.260	0.808 – 1.964	0.308	--	--	--
Donor BMI	1.088	1.060 – 1.117	<b>&lt;0.001</b>	1.043	1.012 – 1.074	<b>0.006</b>
Donor hypertension	4.699	3.228 – 6.841	<b>&lt;0.001</b>	1.689	1.076 – 2.651	<b>0.023</b>
Donor diabetes	3.501	1.895 – 6.470	<b>&lt;0.001</b>	1.550	0.771 – 3.117	0.219
HLA mismatch	1.065	0.922 – 1.230	0.394	--	--	--
Donor Terminal Creatinine	1.102	0.945 – 1.285	0.214	--	--	--

**eTable 2.** Logistic regression models assessing the predictors of (a) glomerulosclerosis; (b) acute tubular injury; (c) IFTA; and (d) moderate to severe vascular disease among living donor kidneys

(a) Glomerulosclerosis

Parameters	Crude OR	95% CI	p-value	Adjusted OR	95% CI	p-value
Donor age (years)	1.052	1.014 – 1.093	<b>0.008</b>	--	--	--
Donor Male	0.595	0.249 – 1.422	0.243	--	--	--
Donor African-American	1.228	0.351 – 4.291	0.748	--	--	--
Donor BMI	0.972	0.892 – 1.059	0.521	--	--	--
Donor hypertension	1.903	0.231 – 15.673	0.550	--	--	--
HLA mismatch	1.139	0.885 – 1.465	0.312	--	--	--
Donor Terminal Creatinine	0.351	0.370 – 3.320	0.361	--	--	--

(b) Acute tubular injury

Parameters	Crude OR	95% CI	p-value	Adjusted OR	95% CI	p-value
Donor age (years)	1.004	0.978 – 1.031	0.763	0.999	0.941 – 1.060	0.978
Donor Male	0.478	0.243 – 0.941	<b>0.033</b>	2.196	0.521 – 9.258	0.284
Donor African-American	0.834	0.284 – 2.451	0.742	0.308	0.028 – 3.430	0.338
Donor BMI	1.026	0.975 – 1.079	0.332	--	--	--
Cold ischemia time (hours)	0.294	0.026 – 3.271	0.319	0.172	0.011 – 2.686	0.209
Donor hypertension	2.232	0.459 – 10.858	0.320	--	--	--
HLA mismatch	1.032	0.858 – 1.241	0.741	--	--	--
Donor Terminal Creatinine	0.300	0.0542 – 1.661	0.168	--	--	--

(c) IFTA

Parameters <sup>1</sup>	Crude OR	95% CI	p-value	Adjusted OR	95% CI	p-value
Donor age (years)	1.073	1.022 – 1.125	<b>0.004</b>	1.083	1.027 – 1.141	<b>0.003</b>
Donor Male	1.602	0.585 – 4.384	0.359	--	--	--
Donor African-American	4.216	1.395 – 12.745	<b>0.011</b>	5.323	1.420 – 19.960	<b>0.013</b>
Donor BMI	1.095	1.033 – 1.160	<b>0.002</b>	1.097	1.029 – 1.170	<b>0.005</b>
Donor obese	5.175	1.818 – 14.728	<b>0.002</b>	--	--	--
Cold ischemia time (hours)	0.009	0.00001 – 7.213	0.168	--	--	--
HLA mismatch	1.083	0.802 – 1.462	0.603	--	--	--
Donor Terminal Creatinine	6.114	0.515 – 72.523	0.151	--	--	--

(d) Moderate to severe vascular disease

Parameters <sup>2</sup>	Crude OR	95% CI	p-value	Adjusted OR	95% CI	p-value
Donor age (years)	1.066	1.042 – 1.090	<b>&lt;0.001</b>	1.069	1.044 – 1.095	<b>&lt;0.001</b>
Donor Male	1.150	0.719 – 1.841	0.559	1.465	0.885 – 2.425	0.138
Donor African-American	0.685	0.295 – 1.590	0.378	--	--	--
Donor BMI	1.017	0.977 – 1.059	0.412	1.018	0.976 – 1.062	0.405
Donor hypertension	1.674	0.424 – 6.610	0.462	0.811	0.195 – 3.360	0.772
HLA mismatch	1.000	0.871 – 1.148	0.996	--	--	--
Donor Terminal Creatinine	0.956	0.279 – 3.273	0.973	--	--	--

<sup>1</sup>Donor hypertension predicts failure perfectly; <sup>2</sup>Donor diabetes predicts failure perfectly

**eTable 3.** Multivariable Cox model using optimal histology DDRT as the reference group

Parameters	HR	Std. Err.	P value	95% Confidence Interval
Donor Race (Black)	1.344	0.237	0.093	0.951 - 1.900
Donor Hypertension	0.993	0.178	0.967	0.698 - 1.411
Recipient Race (Black)	1.043	0.185	0.811	0.737 - 1.476
Recipient Diabetes	0.886	0.138	0.435	0.653 - 1.201
HLA Mismatch	1.062	0.055	0.248	0.959 - 1.177
Optimal DDRT	Ref			
Suboptimal DDRT	1.477	0.267	0.031	1.036 - 2.104
Suboptimal LRT	0.571	0.153	0.036	0.338 - 0.964
Optimal LRT	0.516	0.113	0.002	0.337 - 0.792