

Table S1. Associations between recipient, donor and procedure characteristics and early rejection affecting the allograft vasculature in univariable analyses.

Recipient/ Donor/ Procedure characteristics	Odds ratio (95 % confidence interval)	p-value
Pretransplant autoantibody (<i>reference</i> AT1R - / anti-LG3 -)	1.00	
Single AT1R positivity	0.80 (0.25, 2.51)	0.70
Single anti-LG3 positivity	1.05 (0.58, 1.89)	0.88
Double positivity for AT1R and anti-LG3	2.69 (1.05, 6.87)	0.04
Pretransplant double positivity for AT1R and anti-LG3 (<i>reference</i> all other groups)	2.68 (1.11, 6.49)	0.03
Recipient female sex (<i>reference</i> male)	1.12 (0.63, 2.01)	0.70
Recipient age (<i>per 1 year higher</i>)	1.01 (0.99, 1.03)	0.50
Transplant date 2015-2017 (<i>vs</i> 2013-2014)	0.61 (0.36, 1.05)	0.08
Cause of CKD		
Hypertension/vascular/other or unknown (<i>reference</i>)	1.00	
Glomerular diseases	1.39 (0.68, 2.84)	0.36
Diabetes	1.76 (0.77, 4.02)	0.18
Autoimmune diseases	1.98 (0.68, 5.74)	0.21
Polycystic kidney diseases	1.67 (0.75, 3.73)	0.21
First transplantation (<i>vs</i> repeat transplantations)	0.87 (0.41, 1.87)	0.73
High immunological risk (<i>vs</i> standard risk)	1.10 (0.60, 1.99)	0.76
Pretransplant PRA \geq 80% (<i>vs</i> <80%)	1.67 (0.42, 6.63)	0.47
HLA mismatches (<i>reference</i> 0-2)		
3-4	0.80 (0.33, 1.92)	0.61
5-6	1.18 (0.52, 2.66)	0.69
Thymoglobulin induction (<i>vs</i> all other induction)	0.63 (0.31, 1.77)	0.20
Cold ischemic time (<i>per 1-hour higher</i>)	1.03 (0.98, 1.07)	0.24
Use of plasma exchange with or without intravenous immunoglobulins or eculizumab (<i>vs</i> none)	1.71 (0.82, 3.55)	0.15
Donor type (<i>reference</i> living donor)		
Neurologically deceased	0.55 (0.25, 1.19)	0.13
Donor after cardiac arrest	0.74 (0.28, 1.98)	0.55
Donor age (<i>per 1-year higher</i>)	1.02 (1.00-1.04)	0.048
Delayed graft function (<i>reference</i> immediate graft function)	2.07 (1.06, 4.08)	0.03

Table S2a. Association between double positivity for AT1R and anti-LG3 and early acute rejection with vascular injury: sensitivity analysis excluding all ABO incompatible transplants and transplantations in patients with pretransplant donor-specific antibodies, n=228^a

Recipient/ Donor/ Procedure characteristics	Odds ratio (95 % confidence interval)	p-value
Pretransplant double positivity for AT1R and anti-LG3 (<i>reference</i> all other groups)	4.17 (1.33, 13.10)	0.01
Transplant date 2015-2017 (<i>vs</i> 2013-2014)	0.70 (0.34, 1.41)	0.32
Cold ischemic time (<i>per 1-hour higher</i>)	1.03 (0.98, 1.09)	0.27
Use of plasma exchange with or without intravenous immunoglobulins and/or eculizumab (<i>vs</i> none)	1.48 (0.33, 6.64)	0.60
Donor type (<i>reference</i> living donor)		
Neurologically deceased	0.67 (0.22, 2.06)	0.48
Donor after cardiac arrest	1.25 (0.31, 5.02)	0.75
Donor age (<i>per 1-year higher</i>)	1.02 (1.00, 1.05)	0.03

^aThe multivariable model comprises all and only the variables listed in this table based on their association with the exposure (Table 1) and the outcome (Suppl Table 1).

Table S2b. Association between double positivity for AT1R and anti-LG3 and early acute rejection with vascular injury: sensitivity analysis excluding the 6 suspected (not confirmed) antibody-mediated rejection cases, n=322^a

Recipient/ Donor/ Procedure characteristics	Odds ratio (95 % confidence interval)	p-value
Pretransplant double positivity for AT1R and anti-LG3 (<i>reference</i> all other groups)	2.98 (1.14, 7.75)	0.03
Transplant date 2015-2017 (<i>vs</i> 2013-2014)	0.66 (0.36, 1.2)	0.17
Cold ischemic time (<i>per 1-hour higher</i>)	1.05 (1.00, 1.10)	0.04
Use of plasma exchange with or without intravenous immunoglobulins and/or eculizumab (<i>vs</i> none)	1.68 (0.77, 3.67)	0.19
Donor type (<i>reference</i> living donor)		
Neurologically deceased	0.58 (0.23, 1.51)	0.27
Donor after cardiac arrest	0.78 (0.23, 2.60)	0.68
Donor age (<i>per 1-year higher</i>)	1.02 (1.00, 1.05)	0.08

Table S3. Associations between recipient, donor and procedure characteristics and death-censored graft loss in univariable analyses.

Recipient/ Donor/ Procedure characteristics	Hazard ratio (95 % confidence interval)	p-value
Pretransplant double positivity for AT1R and anti-LG3 (<i>reference</i> all other groups)	0.95 (0.22, 4.07)	0.95
Recipient female sex (<i>reference</i> male)	1.06 (0.44, 2.56)	0.90
Recipient age (<i>per 1 year higher</i>)	0.98 (0.95, 1.01)	0.14
Transplant date 2015-2017 (<i>vs</i> 2013-2014)	0.93 (0.39, 2.21)	0.87
Cause of CKD	1.00	
Hypertension/vascular/other or unknown (<i>reference</i>)		
Glomerular diseases	0.43 (0.14, 1.36)	0.15
Diabetes	1.41 (0.52, 3.83)	0.50
Autoimmune diseases	0.90 (0.20, 4.08)	0.89
Polycystic kidney diseases	0.15 (0.02, 1.22)	0.07
First transplantation (<i>vs</i> repeat transplantations)	0.57 (0.21, 1.49)	0.24
High immunological risk (<i>vs</i> standard risk)	1.23 (0.53, 2.88)	0.63
Pretransplant PRA \geq 80% (<i>vs</i> <80%)	2.38 (0.56, 10.16)	0.24
HLA mismatches (<i>reference</i> 0-2)		
3-4	0.64 (0.15, 2.66)	0.53
5-6	1.37 (0.40, 4.71)	0.62
Thymoglobulin induction (<i>vs</i> all other induction)	1.53 (0.63, 3.67)	0.35
Cold ischemic time (<i>per 1-hour higher</i>)	1.04 (0.98, 1.10)	0.22
Use of plasma exchange (with or without intravenous immunoglobulins) or eculizumab (<i>vs</i> none)	2.95 (1.22, 7.13)	0.02
Donor age (<i>per 1-year higher</i>)	1.02 (1.00, 1.05)	0.11
Delayed graft function (<i>reference</i> immediate graft function)	2.04 (0.70, 5.98)	0.19
Early rejection with vascular injury (<i>vs</i> absence the former)	2.93 (1.30, 6.60)	0.01