

**Supplemental Material****Supplemental Table 1: Multivariable analyses of the associations with recurrent disease in recipients of kidney allograft from living-related donors**

Variables	Multivariable (n=90), N events=29	
	aHR (95% CI)	P value
Recipient age at transplant (per each year)	0.95 (0.92-0.99)	0.006
Medical Sites		
CUIMC	Ref	–
OHSU	2.29 (0.71-7.37)	0.2
HUC	6.57E-08 (0-inf)	0.99
Year of transplantation	1.16 (1.05-1.29)	0.004
# HLA matches (per antigen: 0-6)	1.40 (1.07-1.83)	0.01
Induction with Thymoglobulin	0.65 (0.36 – 1.15)	0.8

Only variables with P<0.1 on univariable analysis in Table 2 were included in this multivariable analysis.

Abbreviations: CUIMC, Columbia University Irving Medical center; OHSU, Oregon Health & Science University; HUC, Hospitais da Universidade de Coimbra

**Supplemental Table 2: Multivariable analyses of the associations with recurrent disease in recipients of kidney allograft from living-unrelated or deceased donors**

Variables	Multivariable (n=177), N events=40	
	aHR (95% CI)	P value
Recipient age at transplant (per each year)	0.97 (0.94-0.99)	0.03
Medical Sites		
CUIMC	Ref	–
OHSU	0.91 (0.38-2.20)	0.8
HUC	0.58 (0.22-1.55)	0.3
Year of transplantation	1.04 (0.98-1.11)	0.2
# HLA matches (per antigen: 0-6)	1.02 (0.81-1.29)	0.9
Induction with Thymoglobulin	0.46 (0.21-1.00)	0.05

Only variables with P<0.1 on univariable analysis in Table 2 were included in this multivariable analysis.

Abbreviations: CUIMC, Columbia University Irving Medical center; OHSU, Oregon Health & Science University; HUC, Hospitais da Universidade de Coimbra

**Supplemental Table 3: Clinical, laboratory and histologic characteristics of recurrent IgAN at diagnosis**

<b>Variables</b>	<b>Recurrent IgAN (n=80)</b>
Recipient age at biopsy (years)	43 (34, 49)
Post-transplant biopsy type	
Clinical	73/80 (91%)
Protocol	7/80 (9%)
Post-transplant interval to biopsies (months)	43 (13, 111)
Serum creatinine (mg/dL) <sup>1</sup>	1.9 (1.5, 2.5)
Proteinuria (g/g) <sup>2</sup>	0.5 (0.2, 2.0)
Concurrent acute rejection	16/80 (20%) [11 T-cell mediated, 2 antibody-mediated, and 3 mixed]
Diffuse mesangial proliferation (M1) <sup>3</sup>	36/79 (46%)
Endocapillary proliferation (E1) <sup>3</sup>	26/79 (33%)
Cellular/fibrocellular crescents <sup>3</sup> (involving <25% of glomeruli in all cases C1)	13/79 (16%)
Segmental sclerosis (S1) <sup>3</sup>	40/79 (51%)
Tubular atrophy/interstitial fibrosis (T)	
- 26-50% (T1)	26/79 (33%)
- >50% (T2)	12/79 (15%)
Combined MEST-C score (0-7) <sup>3</sup>	2 (1, 3)

<sup>1</sup> Information on serum creatinine was not available for 4 patients

<sup>2</sup> Information on proteinuria was not available for 11 patients; proteinuria was estimated from spot urine protein in 6 patients

<sup>3</sup> Histologic Oxford scores could not be assessed in 1 patient

**Supplemental Table 4: Treatment of recurrent IgAN**

<b>Treatment *</b>	<b>Recurrent IgAN (n=71)</b>
Conservative treatment only	32/71 (45%)
Corticosteroids	32/71 (45%)
Thymoglobulin	3/71 (4%)
Rituximab	2/71 (3%)
Others	2/71 (3%)

Conservative treatment was defined as treatment that did not involve additional immunosuppressive therapy (e.g. no specific treatment, angiotensin converting enzyme inhibitors, angiotensin-receptor blockers, and fish oil)

- Of patients treated with Thymoglobulin, 1 patient also received IVIG. All three patients had concurrent T cell mediated rejection

- Of patients treated with corticosteroids: 3 patients received concurrent IVIG (two for antibody-mediated rejection and the other for plasma cell-rich T cell mediated rejection)

- Of patients treated with Rituximab, 1 of the 2 patients had concurrent antibody-mediated rejection

- For others: 1 patient was treated with increased dose mycophenolate mofetil and the other was converted from tacrolimus to belatacept given the presence of significant arteriolar hyalinosis