

**Additional File 3.** Association of pre- and intraoperative recipient and donor factors with postoperative development of AKI

	Univariable analysis				Multivariable analysis			
	$\beta$	Odds ratio	95% CI	p	$\beta$	Odds ratio	95% CI	p
<i>Preoperative recipient factors</i>								
Age (years)	-0.009	0.991	0.969–1.014	0.457				
Sex (male vs. female)	-0.250	0.779	0.488–1.243	0.295				
Body mass index (kg/m <sup>2</sup> )	0.077	1.080	1.023–1.140	0.005				
Nephrotoxic drug exposure	0.314	1.369	0.690–2.715	0.368				
Calcineurin inhibitor level	0.083	1.087	0.959–1.232	0.192				
<i>Comorbidity</i>								
Diabetes mellitus	0.506	1.659	1.052–2.616	0.029	0.555	1.743	1.079–2.814	0.023
Hypertension	0.240	1.272	0.763–2.118	0.356				
MELD score (point)	0.041	1.041	1.022–1.062	< 0.001	0.033	1.033	1.012–1.055	0.002
<i>Hepatic decompensation</i>								
Encephalopathy (West-Haven criteria I or II)	0.230	1.259	0.565–2.804	0.573				
Varix	0.301	1.352	0.850–2.149	0.202				
Ascites	0.499	1.647	1.077–2.516	0.021				
<i>Cardiac function</i>								
Ejection fraction (%)	0.020	1.020	0.974–1.069	0.392				
Diastolic dysfunction	-0.036	0.965	0.634–1.469	0.867				
<i>Laboratory variables</i>								
Hemoglobin (g/L)	-0.086	0.918	0.831–1.013	0.090				
White blood cell count ( $\times 10^9$ /L)	0.034	1.034	0.995–1.076	0.092				
Albumin (g/dL)	0.037	1.038	0.985–1.094	0.165				
Platelet count ( $\times 10^9$ /L)	-0.006	0.994	0.989–0.998	0.009				
Sodium (mEq/L)	-0.017	0.983	0.946–1.022	0.385				
Potassium (mEq/L)	-0.080	0.923	0.651–1.309	0.654				
Calcium (mg/dL)	-0.194	0.824	0.617–1.099	0.187				
Glucose (mg/dL)	0.001	1.001	0.997–1.004	0.780				
Creatinine (mg/dL)	0.049	1.050	0.886–1.245	0.573				
Ammonia ( $\mu$ g/dL)	0.000	1.000	0.998–1.003	0.795				
<i>Intraoperative recipient factors</i>								

Surgical duration (min)	0.001	1.001	0.999–1.003	0.333				
Postreperfusion syndrome	0.301	1.351	0.884–2.063	0.165				
Average of vital signs								
MBP (mmHg)	-0.004	0.996	0.988–1.004	0.337				
HR (beats/min)	0.015	1.015	0.999–1.031	0.059				
CVP (mmHg)	0.006	1.006	0.932–1.086	0.882				
Mean lactate (mmol/L)	0.056	1.061	0.977–1.152	0.161				
<i>Blood product transfusion (unit)</i>								
Packed red blood cells	0.033	1.034	1.011–1.057	0.003				
Fresh frozen plasma	0.041	1.042	1.014–1.071	0.003				
Platelet concentrate	-0.003	0.997	0.983–1.011	0.655				
Hourly fluid infusion (mL/kg/h)	0.010	1.097	0.992–1.028	0.295				
Hourly urine output (mL/kg/h)	-0.503	0.605	0.474–0.771	< 0.001	-0.382	0.682	0.530–0.879	0.003
<i>Donor-graft factors</i>								
Age (years)	0.006	1.006	0.987–1.025	0.543				
Sex(male)	-0.385	0.680	0.428–1.083	0.104				
GRWR (%)	0.081	1.084	0.983–1.196	0.107				
Graft ischemic time (min)	0.001	1.001	1.000–1.002	0.030				
Fatty change (%)	0.028	1.028	0.999–1.058	0.055	0.032	1.033	1.001–1.065	0.040

**Abbreviations:** AKI, acute kidney injury; MELD, model for end-stage liver disease; GRWR, graft-recipient-weight-ratio; MBP, mean blood pressure; HR, heart rate; CVP, central venous pressure