

Table S1. T-tests comparing parameters among patients without EAD and those with EAD.

	No EAD	EAD	P-value
<i>Patient characteristics</i>			
Age (years)	56±9	57±6	0.84
Body-mass index (kg/m ²)	27±5	27±3	0.71
MELD score	16±5	17±5	0.78
<i>Intraoperative characteristics</i>			
Warm ischemia time (min)	87±18	111±24	0.007
PRBC units transfused (n)	4±4	4±4	0.17
FFP units transfused (n)	7±6	8±7	0.05
Thrombocyte units transfused (n)	1±1	1±1	0.82
<i>Donor characteristics</i>			
Donor age (years)	51±15	50±7	0.82
Donor body-mass index (kg/m ²)	24±3	26±5	0.21
Cold ischemia time (min)	310±88	336±155	0.42
Hospitalization length (days)	4±3	8±4	0.008
<i>Sdc-1</i>			
Serum BL	212±145	306±187	0.99
Serum D0	3544±2394	4348±1915	0.46
Serum D1	1175±833	2889±1830	0.004
Serum D2	1016±882	1736±1101	0.58
Serum D3	762±681	1011±658	0.95
Effluent	3825±955	4735±455	<0.001
<i>Effluent parameters</i>			
Effluent AP	167±422	1189±2291	0.09
Effluent AST	1329±1259	4519±3717	0.002
Effluent ALT	948±737	3376±4462	0.018
Effluent CK	121±116	233±129	0.07
Effluent LDH	3150±2968	8220±6451	0.072
Effluent lactate	16±38	33±51	0.4

Data are shown as mean $\pm$ standard deviation. P-values indicate differences between groups, Abbreviations: AP, alkaline phosphatase, AST, aspartate aminotransferase; ALT, alanine aminotransferase; BL, baseline; CK, creatine kinase; D, day; EAD, early allograft dysfunction; FFP, fresh frozen plasma; LDH, lactate dehydrogenase; MELD, model of end stage liver disease; PRBC, packed red blood cells; Sdc-1, syndecan-1

Table S2. T-test comparing parameters according to 1-year patient survival.

	1-year survival		
	Yes	No	P-value
<i>Patient characteristics</i>			
Age (years)	58±9	54±10	0.37
Body-mass index (kg/m ²)	27±5	24±3	0.09
MELD score	15±5	14±4	0.62
<i>Intraoperative characteristics</i>			
Warm ischemia time (min)	93±23	85±17	0.39
PRBC units transfused (n)	5±4	2±1	0.08
FFP units transfused (n)	8±7	7±7	0.76
Thrombocyte units transfused (n)	1±1	0±1	0.29
<i>Donor characteristics</i>			
Donor age (years)	49±13	62±11	0.04
Donor body-mass index (kg/m ²)	25±3	26±3	0.54
Cold ischemia time (min)	485±138	414±123	0.24
Hospitalization length (days)	5±3	6±5	0.62
<i>Sdc-1</i>			
Serum BL	2448±164	141±54	0.12
Serum D0	3439±1900	5022±3766	0.12
Serum D1	1482±1303	1587±1068	0.85
Serum D2	1069±969	1581±808	0.23
Serum D3	768±710	1047±437	0.36
Effluent	3935±971	4396±737	0.37
<i>Effluent parameters</i>			
Effluent AP	112±332	273±540	0.45
Effluent AST	1341±1371	1404±570	0.91
Effluent ALT	961±756	1027±660	0.85
Effluent CK	121±122	146±96	0.66
Effluent LDH	3267±3164	3099±1750	0.91
Effluent lactate	12±31	28±51	0.35

Data are shown as mean ± standard deviation. P-values indicate differences between groups, Abbreviations: AP, alkaline phosphatase, AST, aspartate aminotransferase;

ALT, alanine aminotransferase; BL, baseline; CK, creatine kinase; D, day; EAD, early allograft dysfunction; FFP, fresh frozen plasma; LDH, lactate dehydrogenase; MELD, model of end stage liver disease; PRBC, packed red blood cells; Sdc-1, syndecan-1

Table S3. Perioperative laboratory values of patients according to given group

	No EAD					EAD					P-values				
	Baseline	Day 1	Day 2	Day 3	Day 7	Baseline	Day 1	Day 2	Day 3	Day 7	Baseline	Day 1	Day 2	Day 3	Day 7
ALT, U/L	28 ±44	566±392	508±443	275±296	113±120	28±44	2382±1133	2305±1099	1066±689	283±206	0.65	< 0.001	< 0.001	< 0.001	0.03
AST, U/L	50 ±61	954 ±637	925±675	157±124	43±19	50±20	4341 ±2199	3886±2160	479±329	74±57	0.59	< 0.001	< 0.001	< 0.001	0.02
Bil, mg/dL	3.1 ±8.0	4.9 ±3.8	4.5±4.0	2.0±4.4	1.0±4.5	3.3±2.0	4.4 ±1.4	4.0±1.7	2.5±1.4	3.4±2.7	0.64	0.42	0.66	0.55	0.56
AP	116±42	150±49	163±45	187±53	174±99	124±56	87±67	86±57	114±66	124±72	0.7	0.026	< 0.001	0.017	0.16
PTZ, %	38 ±15	35±22	32 ±17	46±14	56±12	41 ±15	34±10	47±19	57±14	62±18	0.89	0.32	0.84	0.51	0.48
	Yes - 1-year survival					No - 1-year survival					P-values				
	Baseline	Day 1	Day 2	Day 3	Day 7	Baseline	Day 1	Day 2	Day 3	Day 7	Baseline	Day 1	Day 2	Day 3	Day 7
ALT, U/L	34±38	1083±913	889±864	646±681	163±137	50±53	1096±581	1368±989	816±454	227±191	0.37	0.97	0.23	0.56	0.37
AST, U/L	56±55	1842±1761	1342±1738	522±665	48±32	71±65	1365±1362	1382±1108	612±524	50±24	0.56	0.52	0.95	0.75	0.9
Bil, mg/dL	4.7±8	5.4±3.6	4.4±3.8	3.4±3.9	2.5±4.5	3±3	5±1.8	5.1±2.5	2.5±1.5	1.8±0.8	0.60	0.80	0.65	0.60	0.7
AP	115±41	83±46	87±49	115±61	126±76	172±83	173±108	155±90	163±99	156±100	0.014	0.002	0.015	0.134	0.447
PTZ, %	39±16	42±22	47±18	55±17	66±13	45±8	38±9	39±13	48±12	63±6	0.94	0.68	0.31	0.31	0.59

Data are depicted as mean ± standard deviation. P-values indicated differences between groups (t-test) at indicated time point.

Abbreviations: ALT, alanine aminotransferase; AP, alkaline phosphatase; AST, aspartate aminotransferase; Bil, bilirubin; EAD, early allograft dysfunction. PTZ. prothrombine time.

Table S4. ROC curve analyses for EAD after OLT.

<i>Intraoperative characteristics</i>	AUC	[CI]	P-value
Warm ischemia time	0.79	0.65-0.94	0.016
PRBC units transfused	0.72	0.50-0.94	0.08
FFP units transfused	0.73	0.51-0.96	0.06
Intraoperative crystalloids	0.82	0.68-0.97	0.009
<i>Donor characteristics</i>			
Donor age	0.47	0.14-0.80	0.79
Donor hospitalization length	0.55	0.32-0.79	0.70
Cold ischemia time	0.68	0.46-0-89	0.15
<i>Sdc-1</i>			
Serum D0	0.68	0.49-0.86	0.15
Serum D1	0.84	0.69-0.99	0.006
Serum D2	0.73	0.54-0.93	0.057
Serum D3	0.66	0.45-0.87	0.19
Effluent	0.82	0.67-0.96	0.017
<i>Effluent</i>			
Effluent AP	0.86	0.73-0.99	0.006
Effluent AST	0.77	0.61-0.93	0.04
Effluent ALT	0.71	0.52-0.87	0.12
Effluent CK	0.66	0.43-0.89	0.23
Effluent LDH	0.69	0.48-0.90	0.18
Effluent lactate	0.61	0.39-0.83	0.40

Abbreviations: ALT, alanine aminotransferase; AP, alkaline phosphatase. AST, aspartate aminotransferase; AUC, area under the curve; BL, baseline; CI, confidence intervals; CK, creatine kinase; D, day; FFP, fresh frozen plasma; LDH, lactate dehydrogenase; MELD, model of end stage liver disease; OLT, orthotopic liver transplantation; PRBC, packed red blood cells; ROC, receiver operating characteristics; Sdc-1, syndecan-1.

Table S5. ROC curve analyses for 1-year patient survival after OLT.

	AUC	[CI]	P-value
<i>Intraoperative characteristics</i>			
Warm ischemia time	0.62	0.39-0.84	0.38
PRBC units transfused	0.75	0.58-0.91	0.06
FFP units transfused	0.56	0.32-0.80	0.64
Intraoperative crystalloids	0.51	0.23-0.79	0.92
<i>Donor characteristics</i>			
Donor age	0.63	0.43-0.83	0.39
Donor hospitalization length	0.73	0.55-0.92	0.14
Cold ischemia time	0.66	0.39-0.90	0.27
<i>Sdc-1</i>			
Serum D0	0.67	0.47-0.89	0.19
Serum D1	0.57	0.34-0.79	0.62
Serum D2	0.73	0.54-0.93	0.08
Serum D3	0.75	0.55-0.95	0.06
Effluent	0.62	0.35-0.90	0.44
<i>Effluent</i>			
Effluent AP	0.45	0.17-0.74	0.75
Effluent AST	0.47	0.19-0.79	0.86
Effluent ALT	0.45	0.19-0.76	0.74
Effluent CK	0.34	0.10-0.58	0.26
Effluent LDH	0.38	0.11-0.66	0.45
Effluent lactate	0.27	0.07-0.47	0.13

Abbreviations: ALT, alanine aminotransferase; AP, alkaline phosphatase. AST, aspartate aminotransferase; AUC, area under the curve; BL, baseline; CI, confidence intervals; CK, creatine kinase; D, day; FFP, fresh frozen plasma; LDH, lactate dehydrogenase; MELD, model of end stage liver disease; OLT, orthotopic liver transplantation; PRBC, packed red blood cells; ROC, receiver operating characteristics; Sdc-1, syndecan-1.