

# Supplementary Materials

## **Early postoperative hypoalbuminemia is associated with pleural effusion after donor hepatectomy: A propensity score analysis of 2316 donors**

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**Supplementary Table S1. Baseline characteristics and intraoperative data of unmatched and propensity score matched donors from 2010 to 2014**

Variables	Unmatched (n = 986)			Propensity score matched (n = 386)			Standardized difference
	Synthetic colloid (n = 730)	20% albumin solution (n = 256)	Standardized difference	Synthetic colloid (n = 193)	20% albumin solution (n = 193)	P-value	
<b>Preoperative variables</b>							
Age (years)	27.2 ± 7.6	28.5 ± 9.1	0.137	27.9 ± 7.8	27.6 ± 8.1	0.755	0.027
Sex, male	530 (72.6%)	171 (66.8%)	0.123	137 (71.0%)	132 (68.4%)	0.635	0.055
BMI (kg/m <sup>2</sup> )	22.8 ± 2.8	23.0 ± 3.0	0.061	22.7 ± 2.9	22.8 ± 2.9	0.666	0.044
Haemoglobin (g/dL)	14.6 ± 1.5	14.6 ± 1.4	0.007	14.6 ± 1.5	14.6 ± 1.4	0.928	0.009
Platelet count (×10 <sup>9</sup> /L)	243.0 ± 48.5	240.3 ± 49.1	0.056	239.7 ± 53.4	241.2 ± 46.4	0.770	0.031
PT (INR)	1.00 ± 0.06	1.00 ± 0.06	0.022	1.00 ± 0.06	0.99 ± 0.06	0.602	0.051
Creatinine (mg/dL)	0.8 ± 0.2	0.8 ± 0.2	0.164	0.8 ± 0.2	0.8 ± 0.2	0.751	0.030
Albumin (g/dL)	4.4 ± 0.3	4.3 ± 0.4	0.277	4.4 ± 0.3	4.3 ± 0.3	0.836	0.018
Total bilirubin (mg/dL)	0.9 ± 0.4	0.7 ± 0.3	0.501	0.8 ± 0.3	0.7 ± 0.3	0.541	0.057
AST (IU/L)	19.5 ± 5.7	17.9 ± 4.8	0.335	18.0 ± 4.1	18.3 ± 4.9	0.554	0.059
ALT (IU/L)	17.5 ± 9.5	16.5 ± 9.3	0.110	16.5 ± 7.4	16.8 ± 9.9	0.833	0.029
<b>Intraoperative variables</b>							
Anaesthetic time (min)	450.1 ± 69.6	444.8 ± 75.2	0.070	446.8 ± 67.4	442.8 ± 75.4	0.573	0.053
Right hepatectomy	689 (94.4%)	213 (83.2%)	0.299	172 (89.1%)	170 (88.1%)	0.868	0.028
Crystalloid (L)	2942.1 ± 701.9	3131.8 ± 833.3	0.228	2983.4 ± 765.8	3032.5 ± 734.8	0.513	0.059
Synthetic colloid (mL)	569.7 ± 220.6	0.0 ± 0.0					
20% albumin solution (mL)	0.0 ± 0.0	200.9 ± 21.9					
Urine output (mL)	649.7 ± 323.2	741.3 ± 403.5	0.227	694.9 ± 353.1	724.3 ± 400.7	0.469	0.073
Diuretics use	166 (22.7%)	95 (37.1%)	0.297	69 (35.8%)	68 (35.2%)	1.000	0.011

Ephedrine use	200 (27.4%)	87 (34.0%)	0.139	65 (33.7%)	61 (31.6%)	0.749	0.044
Transfusion	1 (0.1%)	0 (0.0%)	0.052	0 (0.0%)	0 (0.0%)		

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Values are expressed as mean  $\pm$  standard deviation, or number of donors (%), as appropriate.

Abbreviations: BMI, body mass index; PT, prothrombin time; INR, international normalized ratio; AST, aspartate aminotransferase; ALT, alanine transaminase.

## Supplementary Table S2. Outcomes stratified by the use of albumin solution during donor hepatectomy

	Type of colloids	Unadjusted				Multivariable adjusted <sup>a</sup>			Propensity score-matched			
		Event/n	OR	95% CI	<i>P</i> -value	OR	95% CI	<i>P</i> -value	Event/n	OR	95% CI	<i>P</i> -value
Pleural effusion	Albumin solution	83/256	0.63	0.46–0.84	0.002	0.55	0.39–0.77	<0.001	55/193	0.61	0.41–0.92	0.018
	Synthetic colloid	317/730	1			1			76/193	1		
Acute kidney injury	Albumin solution	1/256	0.16	0.02–1.17	0.070				1/193	0.16	0.02–1.37	0.095
	Synthetic colloid	18/730	1						6/193	1		

<sup>a</sup>Adjusted by all variables in Supplementary Table S1 except albumin solution and synthetic colloid.

Abbreviations: OR, odds ratio; CI, confidence interval.