

Suppl. Table 1. Baseline characteristics of organ donors

Clinical parameters	cfDNA low (90 bp) <i>n</i> = 41	cfDNA high (90 bp) <i>n</i> = 9	*<i>p</i>-value
Age (years)	56 (19–86)	50 (39–66)	0.181
Sex			0.722
<i>Female</i>	17	3	
<i>Male</i>	24	6	
BMI (kg/m ²)	26.1 (19.5–34.9)	27.7 (20.6–34.2)	0.451
Reanimation (yes/no)	11/30	7/2	<0.001
ROSC (<i>min</i>)	0 (0–125)	7 (0–45)	0.107
Brain death due to			
<i>Intracranial bleeding</i>	18	5	0.525
<i>Traumatic brain injury</i>	8	1	0.658
<i>Thrombembolic event</i>	8	0	0.178
<i>Hypoxia</i>	7	3	0.177
Microscopic liver fat (%)	5 (0–90)	0 (0–60)	0.427
Stay at ICU (days before donation)	3.5 (0–16)	1.5 (0–11)	0.095
Diuresis during last 24 h (ml)	3600 (1131–9800)	4939 (1860–6400)	0.420
Bilirubin total, mg/dl	0.57 (0.17–4.1)	0.64 (0.3–2.8)	0.924
Creatinine, mg/dl	1.0 (0.20–2.25)	0.86 (0.44–2.11)	0.705
Aspartate transaminase, U/l	90 (16–684)	145 (12–436)	0.643
Alanine transaminase, U/l	52 (4–484)	80 (20–828)	0.571

Continuous values are presented as median values and categorical values as numbers. Continuous variables were assumed to be non-normally distributed, and were tested using the Kruskal-Wallis test or the Mann-Whitney U test for pairwise analyses. The χ^2 test or Fisher's exact test were used to test univariate differences between categorical variables.

Suppl. Table 2. Surgical and clinical parameters of the study cohort.

Clinical parameters	cfDNA low (90 bp) <i>n</i> = 41	cfDNA high (90 bp) <i>n</i> = 9	*<i>p</i>-value
Surgical time, min	344 (235–557)	320 (266–424)	0.414
Cold ischemia time, min	526 (280–850)	592 (360–770)	0.264
Warm ischemia time, min	40 (25–58)	40 (21–60)	0.829
Red blood cell transfusion (intraop.)	6 (0–20)	4 (0–27)	0.837
Fresh frozen plasma (intraop.)	17 (0–57)	18 (13–59)	0.257
International normalized ratio	1.52 (1.17–2.93)	1.79 (1.33–2.27)	0.124
Bilirubin, mg/dl	3.7 (1.1–17.0)	4.23 (0.73–11.8)	0.905
Creatinine, mg/dl	0.95 (0.57–4.49)	1.19 (0.58–1.8)	0.780
Aspartate transaminase, U/L	710 (182–7000)	2013 (1075–7000)	<0.001
Alanine transaminase, U/L	376 (48–3301)	1391 (706–2576)	0.001
Acute rejection 1 year (yes/no)	20/21	7/2	0.114
BANF > 1	12	2	0.669
Length of stay (days)	28 (13–122)	29 (17–158)	0.436
ICU stay (days)	8 (3–87)	11 (5–98)	0.027
EROD (yes/no)	11/30	4/5	0.296
Death due to			
Vascular complication	0	0	
Liver abscess/sepsis (yes/no)	2/37	3/6	0.004
Bile leakage (yes/no)	2/39	0/9	1.000

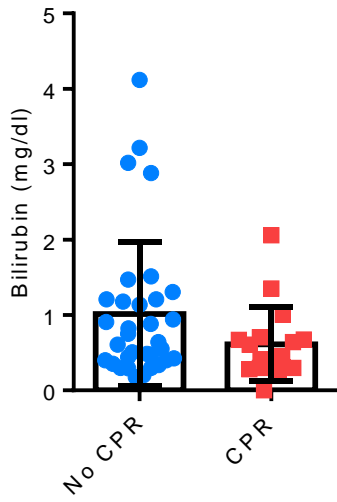
Listed laboratory results were determined simultaneously alongside cfDNA when patients arrived at the ICU after transplantation. Continuous values are presented as median values and categorical values as numbers. Continuous variables were assumed to be non-normally distributed, and were tested using the Kruskal-Wallis test or the Mann-Whitney U test for pairwise analyses. The χ^2 test or Fisher's exact test were used to test univariate differences between categorical variables.

Suppl. Table 3: Preoperative renal replacement therapy

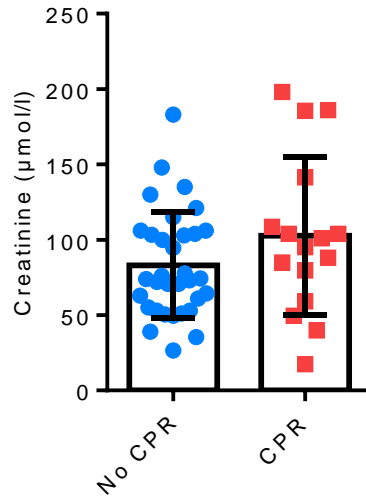
	Preoperative RRT n = 4	No RRT n = 46	*p-value
cfDNA 90bp, ng/ml	20.62 (5.77–79.73)	30.2 (0.47–143.6)	0.769

cfDNA was determined when patients arrived at the ICU after transplantation. Continuous values are presented as median values and were assumed to be non-normally distributed, and were tested using the Kruskal-Wallis test or the Mann-Whitney U test for pairwise analyses. Renal replacement therapy (RRT)

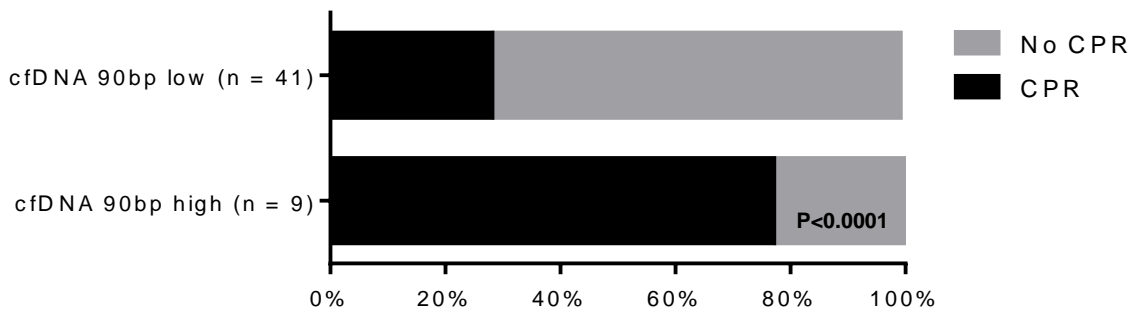
A



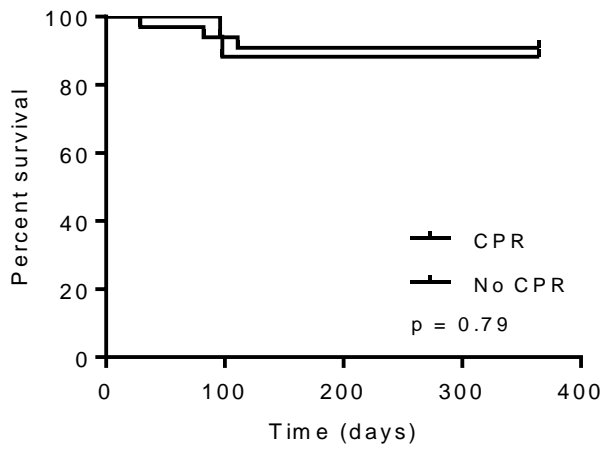
B



Suppl. Figure 1: The patients were grouped in cardiopulmonary resuscitation. Statistics: Mann-Whitney U-Test; Log-rank test (for survival); * P < 0.05; ** P < 0.01; *** P < 0.001.

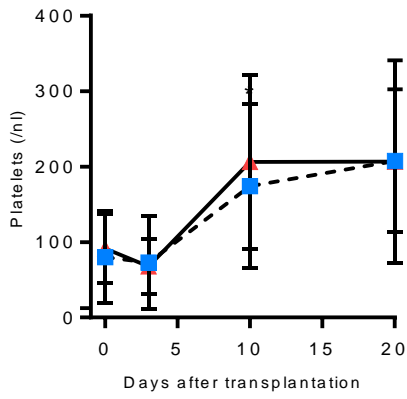


Suppl. Figure 2: Cell-free DNA (cfDNA) was determined in plasma from the liver transplanted patients (n = 50) and analyzed according to cardiopulmonary resuscitation (CPR). Samples were taken, when patients were admitted postoperatively to the intensive care unit. L1PA2 element non-coding sequence 90bp was determined by qPCR (L1PA2 element, 90bp, LINE sequence, non-coding). Statistics: Mann-Whitney U-Test; * P < 0.05; ** P < 0.01; *** P < 0.001.

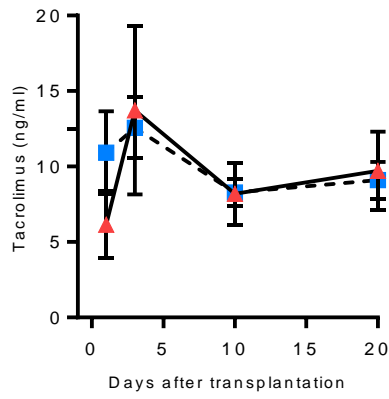


Suppl. Figure 3: Patients were analyzed according 1-year survival grouped in CPR and no CPR of the donor. Statistics: Mann-Whitney U-Test; Log-rank test (for survival); * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$.

A



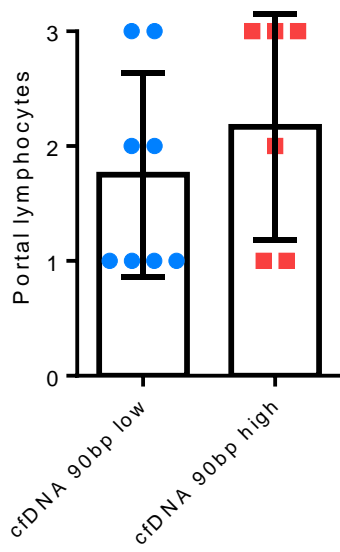
B



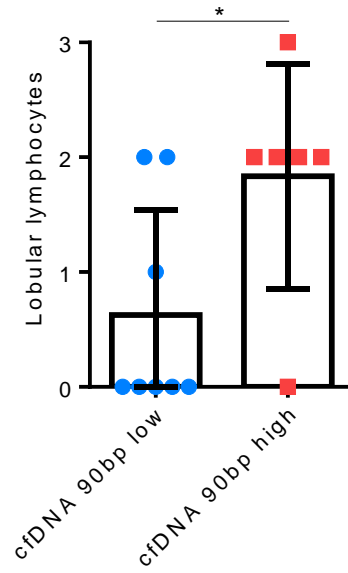
■ cfDNA 90bp low
▲ cfDNA 90bp high

Suppl. Figure 4: Presentation of the course of monocytes, platelets after liver transplantation (n = 50). Patients were classified according to cfDNA concentration (L1PA2 element, 90bp, LINE sequence, non-coding). Statistics: Mann-Whitney U-Test; * P < 0.05; ** P < 0.01; *** P < 0.001

A



B



Suppl. Figure 5: Liver biopsies as part of clinical diagnostics were evaluated based on hematoxylin-eosin stained-tissue sections. The presence and quantity of lymphocytes was determined and patients were grouped in high and low cfDNA levels (L1PA2 element, 90bp, LINE sequence, non-coding). Note, rejection > BANFF 1 were excluded. Statistics: Mann-Whitney U-Test; * P < 0.05; ** P < 0.01; *** P < 0.001