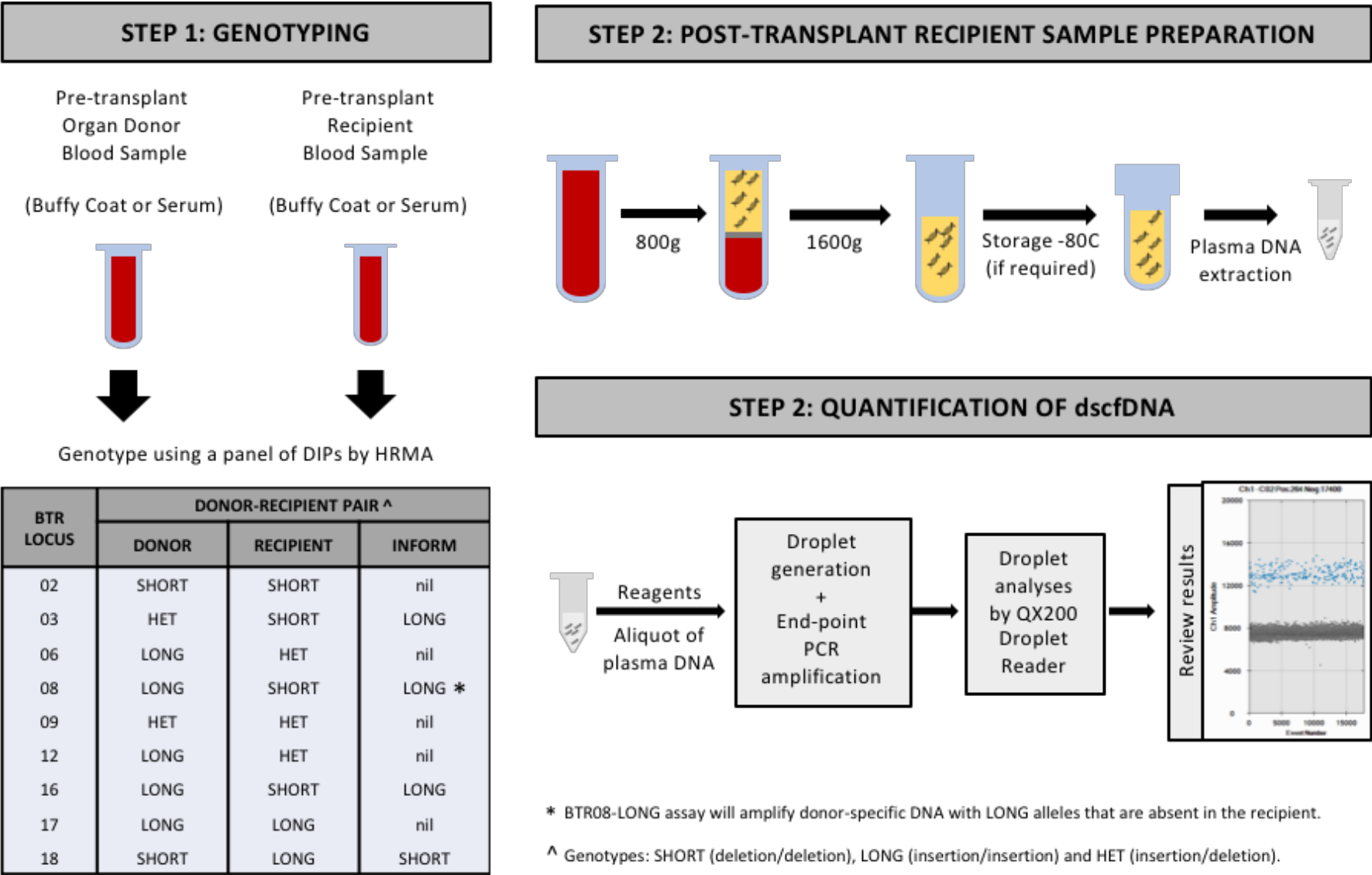
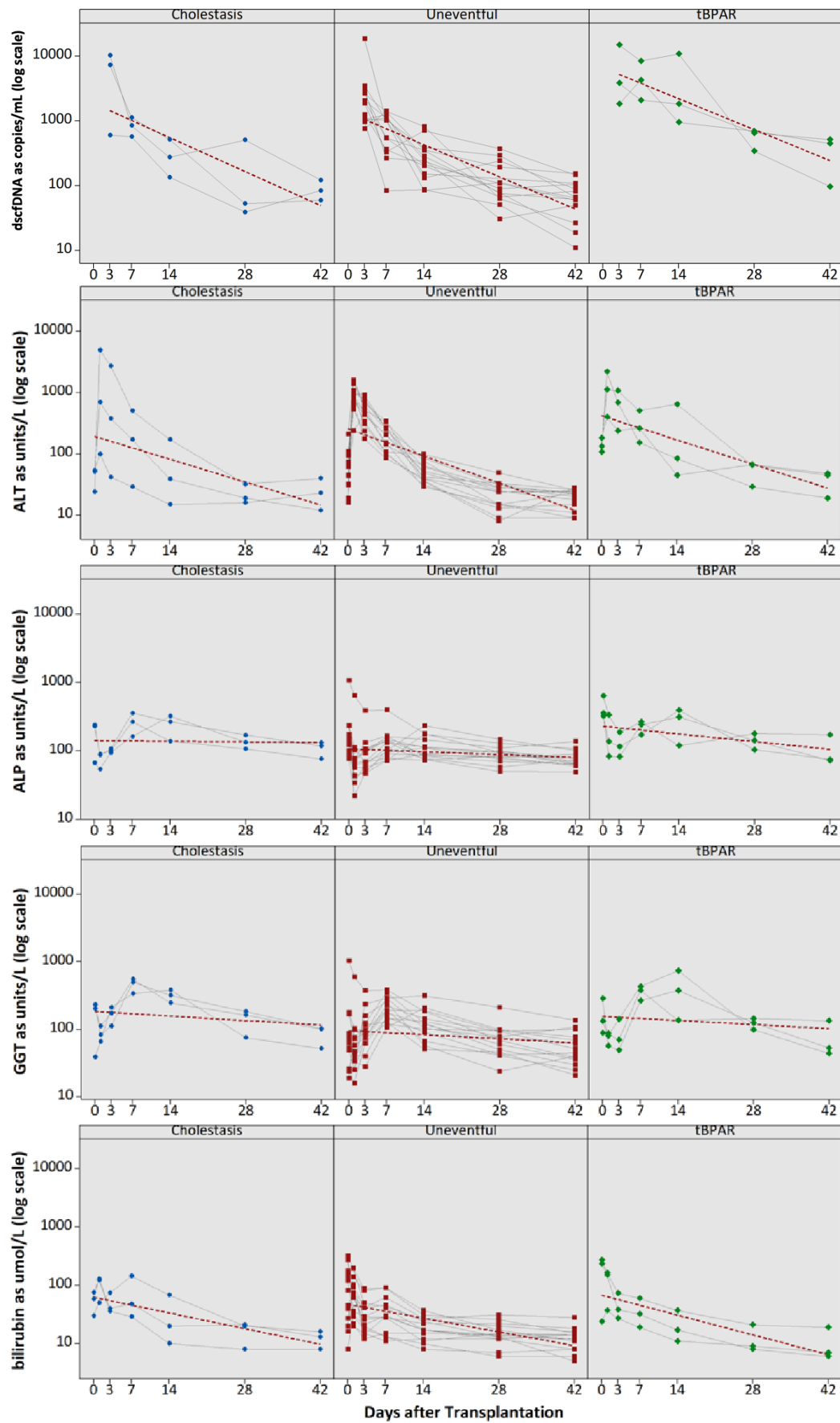


**Figure S1:** Summary of the probe-free ddPCR methodology that was used to measure dscfDNA in this study. Adapted from Goh et al. Clinical Chemistry (2017).



**Figure S2:** Serial monitoring of dscfDNA, ALT, ALP, GGT and bilirubin of the longitudinal cohort (Cohort A). All values are presented in the log scale.



**Table S1:** Overall and pairwise comparison of dscfDNA, ALT, ALP, GGT and bilirubin across the 3 different subgroups over days 3, 7, 14, 28 and 42 of the longitudinal cohort (Cohort A). Only significant p- values (p<0.05) are presented.

Day (dscfDNA)	Median across 3 subgroups	Cholestasis vs tBPAR	Uneventful vs Cholestasis	tBPAR vs Uneventful
3	<i>n.s.</i>	-	-	-
7	0.026	0.042	<i>n.s.</i>	0.008
14	0.026	<i>n.s.</i> (0.053)	<i>n.s.</i>	0.007
28	0.046	0.035	<i>n.s.</i>	0.019
42	<i>n.s.</i>	-	-	-

Day (ALT)	Median across 3 subgroups	Cholestasis vs tBPAR	Uneventful vs Cholestasis	tBPAR vs Uneventful
0	<i>n.s.</i>	-	-	-
1	<i>n.s.</i>	-	-	-
3	<i>n.s.</i>	-	-	-
7	<i>n.s.</i>	-	-	-
14	<i>n.s.</i>	-	-	-
28	<i>n.s.</i>	-	-	-
42	<i>n.s.</i>	-	-	-

Day (ALP)	Median across 3 subgroups	Cholestasis vs tBPAR	Uneventful vs Cholestasis	tBPAR vs Uneventful
0	<i>n.s.</i>	-	-	-
1	<i>n.s.</i>	-	-	-
3	<i>n.s.</i>	-	-	-
7	0.020	<i>n.s.</i>	0.028	0.035
14	0.020	<i>n.s.</i>	0.035	0.028
28	0.020	<i>n.s.</i>	0.035	0.028
42	<i>n.s.</i>	-	-	-

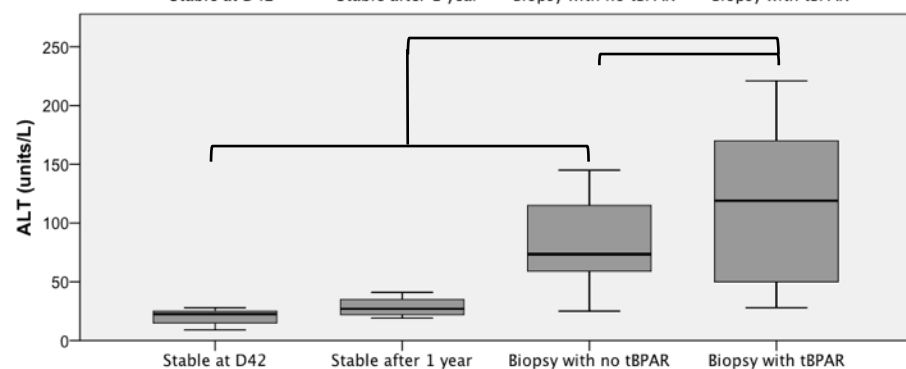
Day (GGT)	Median across 3 subgroups	Cholestasis vs tBPAR	Uneventful vs Cholestasis	tBPAR vs Uneventful
0	<i>n.s.</i>	-	-	-
1	<i>n.s.</i>	-	-	-
3	<i>n.s.</i>	-	-	-
7	0.013	<i>n.s.</i>	0.010	0.063
14	0.012	<i>n.s.</i>	0.016	0.032
28	<i>n.s.</i>	-	-	-
42	<i>n.s.</i>	-	-	-

Day (bilirubin)	Median across 3 subgroups	Cholestasis vs tBPAR	Uneventful vs Cholestasis	tBPAR vs Uneventful
0	<i>n.s.</i>	-	-	-
1	<i>n.s.</i>	-	-	-
3	<i>n.s.</i>	-	-	-
7	<i>n.s.</i>	-	-	-
14	<i>n.s.</i>	-	-	-
28	<i>n.s.</i>	-	-	-
42	<i>n.s.</i>	-	-	-

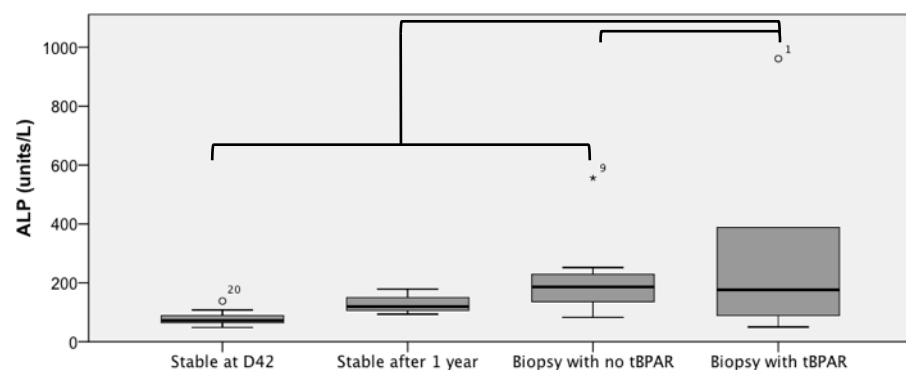
**Figure S3:** Boxplot of dscfDNA, ALT, ALP, GGT, bilirubin of recipients with tBPAR (n=6), those without tBPAR (n=10), those who were clinically stable at least 1 year after LT (n=4), and those who were clinically stable at day 42 (n=14 from the longitudinal cohort).



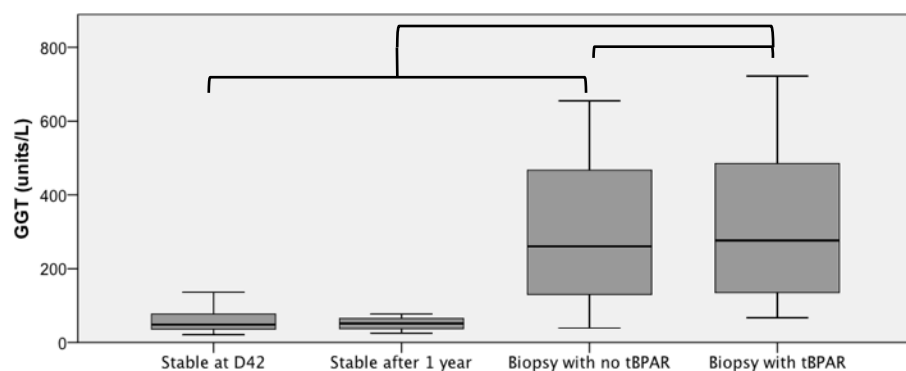
dscfDNA	p-value
tBPAR vs no tBPAR	0.002
tBPAR vs those without tBPAR or those who were stable	0.000



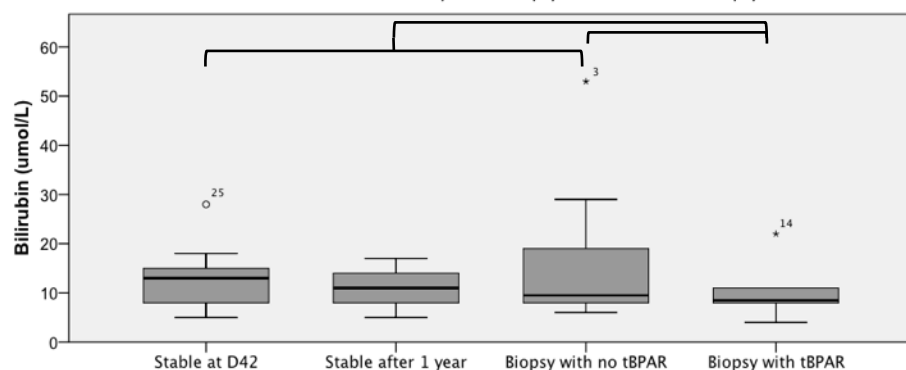
ALT	p-value
tBPAR vs no tBPAR	<i>n.s.</i>
tBPAR vs those without tBPAR or those who were stable	0.007



ALP	p-value
tBPAR vs no tBPAR	<i>n.s.</i>
tBPAR vs those without tBPAR or those who were stable	<i>n.s.</i>

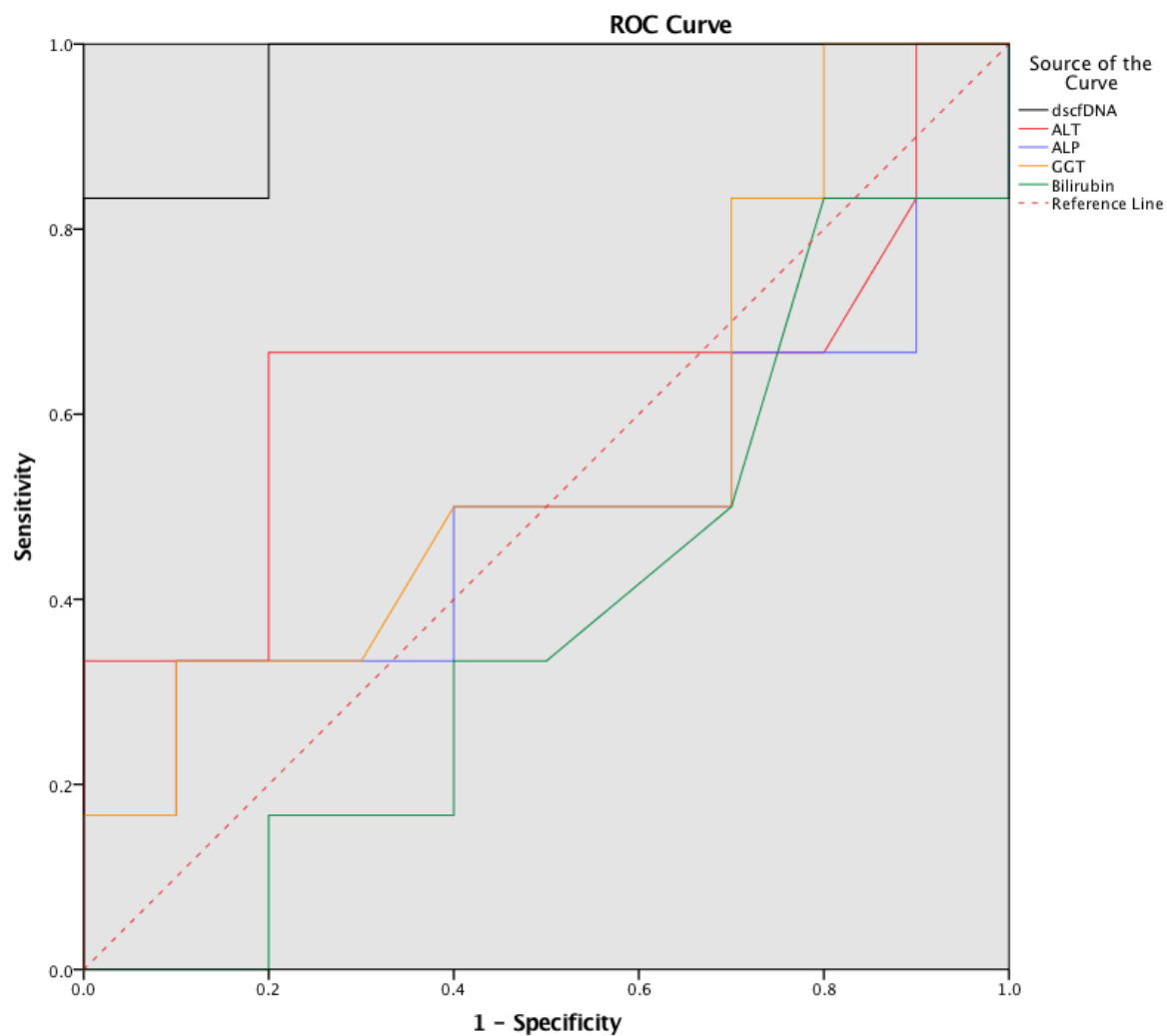


GGT	p-value
tBPAR vs no tBPAR	<i>n.s.</i>
tBPAR vs those without tBPAR or those who were stable	0.022



bilirubin	p-value
tBPAR vs no tBPAR	<i>n.s.</i>
tBPAR vs those without tBPAR or those who were stable	<i>n.s.</i>

**Figure S4:** ROC analysis of dscfDNA, ALT, ALP, GGT, bilirubin to discriminate recipients with tBPAR (n=6) from those without tBPAR (n=10).



**Figure S5:** ROC analysis of dscfDNA, ALT, ALP, GGT, bilirubin to discriminate the recipients with tBPAR (n=6) from those without tBPAR or those who were clinically stable (n=28).

