

Supplementary Material

1 Supplementary Figures and Tables

Supplemental Table 1. Demographic of patients with early BL in subgroups of SCD, ECD and living donors.

| | SCD (n=109) | ECD (n=109) | LD (n=51) | P value* ECD vs SCD vs LD | P value# ECD vs SCD |
|----------------------------|-----------------------|-----------------------|---------------------|---------------------------------|------------------------------|
| Donor age, years | 40 [4,75] | 61 [4,79] | 51 [30,76] | <0.001 | <0.001 |
| Recipient age, years | 50 [20,80] | 55 [28,75] | 42 [19,67] | <0.001 | 0.029 |
| Peak PRA | 4 [0,89] | 4 [0,100] | 0 [0,46] | <0.001 | 0.596 |
| HLA mismatch | 4 [0,6] | 3 [0,6] | 3 [0,6] | 0.313 | 0.127 |
| Cold ischemia, hours | 15.4 [0,25] | 16.9[0,27] | 0.8 [0,24] | <0.001 | 0.020 |
| Dialysis vintage, months | 23.4 [0,110] | 22[1,128.4] | 3.5 [0,144] | <0.001 | 0.945 |
| DGF, n (%) | 35 (31.8%) | 40 (36.7%) | 3 (5.9%) | <0.001 | 0.479 |
| Recipient sex, male, n (%) | 76 (69.7%) | 83 (76.1%) | 42 (82.4%) | 0.209 | 0.361 |
| Retransplantation, n (%) | 14 (12.7%) | 11 (10.1%) | 0 | 0.027 | 0.164 |
| Donor sex, male, n (%) | 56 (45.2%) | 58 (46.8%) | 10 (8.1%) | <0.001 | 0.893 |

*Differences among groups were calculated by Kruskal-Wallis test.

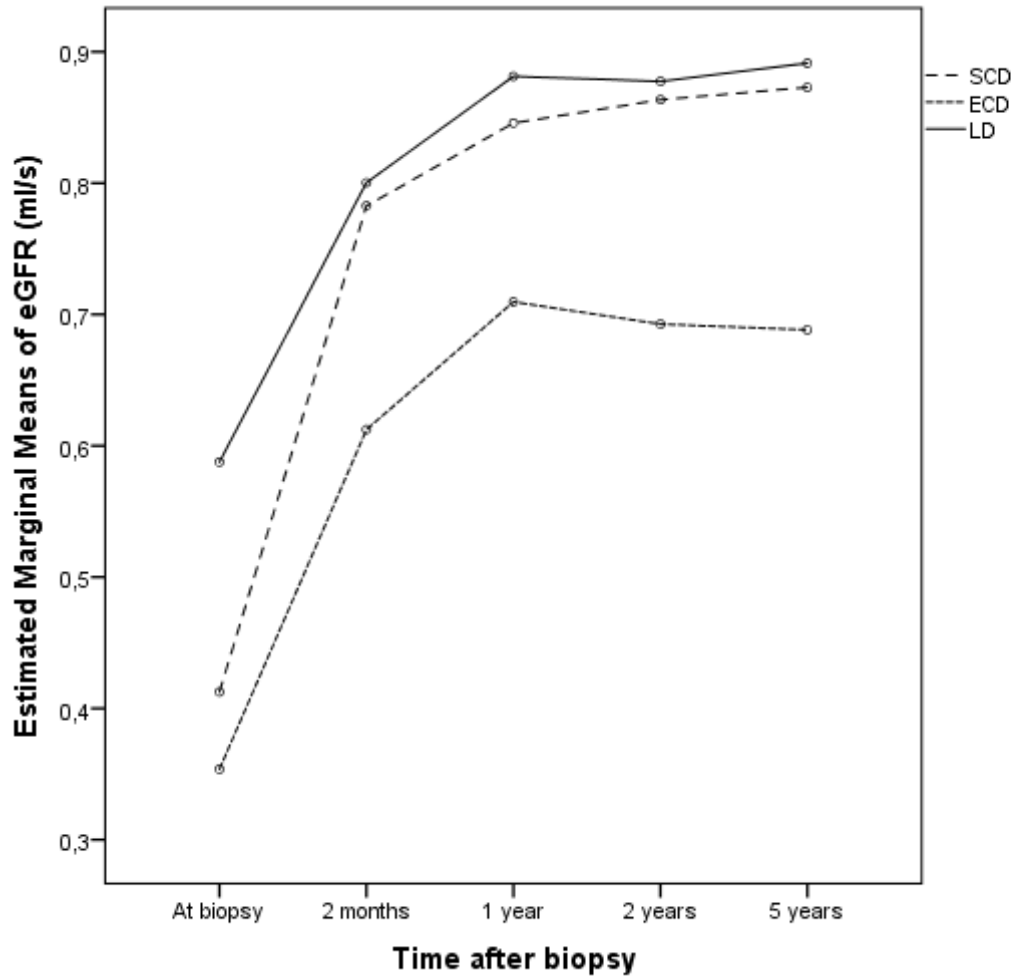
Differences among groups were calculated by Mann/Whitney test.

Supplemental Table 2. Histological findings of biopsies with early BL in subgroups of SCD, ECD and LD analyzed by microarray.

| Banff score | SCD (n=4) | ECD (n=9) | LD (n=8) | P value (ANOVA) |
|-------------------------------------|-----------|-----------|-----------|-----------------|
| Glomerulitis (g) | 0±0 | 0.22±0.44 | 0.13±0.35 | 0.620 |
| Chronic glomerulopathy (cg) | 0±0 | 0±0 | 0±0 | 1 |
| Interstitial inflammation (i) | 0.5±0.58 | 0.67±0.5 | 0.63±0.74 | 0.904 |
| Tubulitis (t) | 1.0±0 | 1.23±0.67 | 1.5±0.93 | 0.515 |
| Total inflammation (ti) | 0.75±0.5 | 0.67±0.8 | 0.5±0.76 | 0.767 |
| Tubular atrophy (ct/TA) | 0.5±0.58 | 0.89±0.6 | 0.75±0.46 | 0.528 |
| Interstitial fibrosis (ci/IF) | 0.25±0.5 | 0.56±0.73 | 0.63±0.52 | 0.607 |
| Vascular intimal fibrosis (cv) | 0.75±0.5 | 1.61±0.93 | 0.63±0.52 | 0.028 |
| Arteriolar hyalinosis (ah) | 1.25±1.2 | 1.31±1.11 | 0.88±0.99 | 0.699 |
| Arteriolar hyaline thickening (aah) | 0.5±1 | 0.44±1 | 0.25±0.7 | 0.870 |
| Peritubular capillaritis (ptc) | 0±0 | 0.22±0.67 | 0±0 | 0.537 |

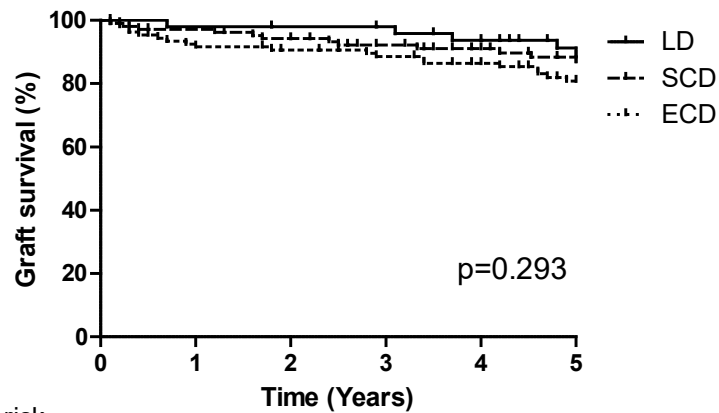
1.1 Supplementary Figures

Supplemental Figure 1. Kidney graft function during 3 years follow-up after indication biopsy stratified by donor category. SCD vs LD, $p=0.48$. SCD vs ECD, $p<0.001$, LD vs ECD, $p<0.001$. Differences in kidney graft function among SCD, ECD and LD were calculated by GLM repeated model.



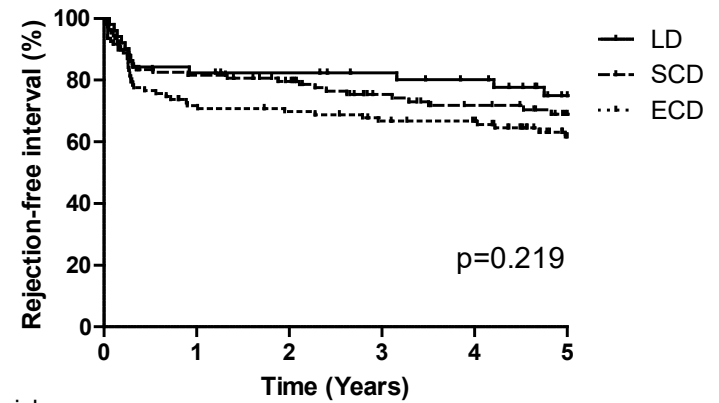
Supplemental Figure 2. Five-year graft survival (A.) and Rejection-free interval (B.) of patients with early borderline changes according to donor category.

A.



| Subjects at risk | 0 | 1 | 2 | 3 | 4 | 5 |
|------------------|-----|-----|----|----|----|----|
| LD | 51 | 51 | 50 | 48 | 43 | 37 |
| SCD | 109 | 102 | 97 | 82 | 71 | 63 |
| ECD | 109 | 98 | 95 | 87 | 80 | 68 |

B.



| Subjects at risk | 0 | 1 | 2 | 3 | 4 | 5 |
|------------------|-----|----|----|----|----|----|
| LD | 51 | 43 | 41 | 38 | 35 | 24 |
| SCD | 109 | 88 | 80 | 65 | 56 | 46 |
| ECD | 109 | 74 | 71 | 66 | 63 | 40 |

