(23%) recipients ≥60yo included. 12, 156 (60%) of these patients received SCD kidneys on dialysis, other 850 (4%) recipients received ECD kidneys preemptively. Survival of the patients ≥60yo after ECD preemptive renal transplantation did not differ statistically from survival after SCD kidney transplantation on dialysis (p<0. 05) (Fig. 1), whereas in younger recipients, their survival after preemptive ECD transplantation was significantly worse than with SCD transplants (p <0. 05) (Fig. 2). Graft survival was found to be significantly shorter in preemptive ECD recipients when compared to SDC organ transplantation, in both young and old patients (p<0. 05).

Figure 1. Figure 2.

Conclusions: ECD preemptive renal transplantation offers the same life expectancy as SDC transplantation in patients ≥60yo on dialysis but not in younger ones. Such preemptive procedures allow patients to avoid the morbidity and additional mortality associated with waiting on dialysis for a suitable graft. ECD kidneys should be used preemptively in older donors therefore extending the repertoire of renal replacement therapies as well as organ pool in those patients without compromising their survival.

482 ESTIMATED GFR AFTER TREATMENT OF ACUTE REJECTION: A SURROGATE MARKER FOR LONG-TERM GRAFT SURVIVAL AFTER KIDNEY TRANSPLANTATION

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Purpose: To determine the usefulness of the estimated GFR (eGFR) after treatment of acute rejection (AR) as a surrogate of long-term graft survival after kidney transplantation (KTx).

Methods: We analyzed 603 pts (49±13 yrs-old), recipients of KTx between 05/1997 and 03/2007. Eighty pts with a first biopsy-proven AR were divided into 2 groups (Gr.), based on the post-AR eGFR (MDRD equation). Gr. 1 included pts whose eGFR returned to within 10% of pre-AR values within 3 months post-AR treatment. Gr. 2 included pts whose eGFR did not improve to within 10% of pre-AR values. In a separate analysis, pts were divided according to the baseline CNI.

Results: Pt survival at 1, 5 and 10 yrs was 96%, 90% and 82% in non-rejectors, and 98%, 91% and 76% in rejectors. Pt survival at 1, 5 and 10 yrs was 100%, 90% and 80% in rejectors Gr. 1 and 97%, 93%, 65% in rejectors Gr. 2. Graft survival at 1, 5 and 10 yrs was 92%, 85%, 73% in non-rejectors and 91%, 73% and 51% in rejectors (P<0. 001). Graft survival at 1, 5 and 10 yrs was 94%, 81% and 66% in rejectors Gr. 1 and 84%, 58% and 19% in rejectors Gr. 2 (P=0. 04). A multivariate time-dependent graft survival analysis showed that AR status (HR 4. 00, 95% CI [2. 23-7. 2], P<0. 001), age at treatment of AR (HR 1. 03, 95% CI [1. 01-1. 05], P=0. 001), and Tac vs. CsA (HR 2. 54, 95% CI [0. 92-2. 85], P=0. 094) had an important effect on graft survival.

Table 1. Age-adjusted hazard ratio (HR) for patient and graft survival

	Patient Survival		Graft Failure	
	HR [95%CI]	P-value	HR [95%CI]	P-value
Rejectors vs. Non-rejectors	1. 74 [0. 84-3. 61]	0. 14	4. 33 [2. 64-7. 10]	<0. 001
Rejectors Gr. 1 vs. Non- rejectors	1. 99 [0. 78-5. 10]	0. 15	2. 11 [0. 90-4. 97]	0. 09
Rejectors Gr. 1 vs. Gr. 2	0. 77 [0. 20-3. 02]	0. 77	0. 42 [0. 18-0. 96]	0. 04
Rejectors CsA vs. Tac	N/A	N/A	1. 57 [0. 63-3. 89]	0. 33

Conclusion: Pt survival was not influenced by AR status. An episode of AR portends a poor prognosis for long-term kidney graft survival. There was no significant difference in graft survival after AR in pts on Tac vs. CsA. In pts whose eGFR post-treatment of AR returned to within 10% of baseline, there was no significant difference in graft survival compared to pts that did not experience AR. The eGFR post-treatment of AR may be a useful surrogate marker of long-term kidney graft survival.

483 ATRICONTINENTAL ANALYSES OF KIDNEY TRANSPLANT OUTCOMES FROM THREE NATIONAL REGISTRIES.

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Introduction: Standardized comparisons of kidney transplant outcomes in different parts of the world have been challenging to undertake and very infrequently performed. In this collaborative study, three large registries undertook separate identical unadjusted analyses of short and long term kidney transplant outcomes as a first step toward harmonization of analytic methods across registries and to determine whether differences in major outcomes after kidney transplantation were observed.

Methods: Separate cohort analyses of the outcomes of all first single organ kidney transplants performed from 1988-2005 in the United States (US), United Kingdom (UK) and Australia/New Zealand (ANZ) were performed by the US Scientific Registry of Transplant Recipients, UK Transplant, and the Australia and New Zealand Dialysis and Transplant Registry, respectively. Unadjusted (Kaplan-Meier) patient and graft survival rates were calculated. Patient survival analyses included all deaths (including those after loss of graft function). Comparisons of unadjusted Kaplan-Meier point estimates from the three separate models were made using normal approximation methods to compare group survival proportions at one, five, 10, and 15 years post-transplant.

Results: There were 184553, 25095, and 9231 kidney transplants performed in the US, UK, and ANZ, respectively, from 1988-2005. The proportions of living donor transplants were 36%, 14%, and 30%, respectively. Male recipients predominated (60-62%) in all three registries. Recipient age distribution was comparable (6-7% pediatric and 5-8% >65 years). A much higher proportion of recipients received transplants for diabetic nephropathy in the US cohort (22%) compared to the UK (5%; 10% among cases where primary diagnosis was reported) and ANZ (10%). There was a higher proportion of 0 HLA mismatched transplants in the US (12%) vs. the UK (9%) and ANZ (6%), but also a higher proportion of 4-6 HLA mismatched transplants (45% vs. 18% and 29%, respectively). Unadjusted deceased donor (DD) and living donor (LD) graft and patient survival rates were significantly lower in the US compared to the UK and to ANZ at five, 10, and 15 years post-transplant (all P<0. 0001) (Figure). Deceased donor graft survival rates in ANZ were significantly higher than in the UK at five, 10, and 15 years (P<0. 0005). Deceased donor patient survival rates in ANZ were modestly but significantly higher than in the UK at 10 and 15 years (P<0. 05). Patient survival rates after living donor transplants in ANZ were also modestly but significantly higher than in the UK at five and 10 years (P<0. 05) but not at 15 years. Within the more recent 10-year cohorts (1996-2005), deceased donor graft survival rates at five years among recipients with diabetic nephropathy were significantly lower in the US compared to the UK and ANZ (61. 5 vs. 67. 8 and 70. 1; P<0. 0003 for both comparisons), and not significantly different in the UK vs. ANZ (P=0. 42).

Conclusions: Preliminary analyses of data from three national transplant registries have highlighted important differences in kidney transplant graft and patient outcomes between the US, UK, and Australia/New Zealand. The next step in this important collaboration is to undertake risk-adjusted analyses in order to explore the role of case mix differences.