

Factors Affecting Long-term Patient Survival Identified in a 10-year, 5-centre Retrospective National Study

James Medcalf, John Bankart and Julie James
on behalf of the STEPP Research Group

Participating Centres

- Leicester (Leicester General Hospital)
- Oxford (Churchill Hospital)
- Carshalton (St Helier Hospital)
- Leeds (St James' University Hospital)
- London (Guy's Hospital)

Study Design

- Inclusion criteria**
 - First renal transplant between 01 Jan 1992 and 31 Dec 2004
 - Transplanted and followed in a participating centre for at least 1 year post transplantation
- Exclusion criteria**
 - Age <18yrs at time of transplant
 - Attended transplant centre for renal transplant only (no previous care or follow-up)

Study Aims

- Retrospectively collect detailed information following renal transplantation
 - Quarterly for first year, Annually thereafter
- Collect information on:
 - Demographics
 - Biomedical data (results, drugs, blood pressure, weight)
 - Outcomes (significant events, patient and graft outcome)
- Prospectively collect information on patient reported outcomes (QoL, QoH and symptoms)

Data Collection

- Data collected retrospectively from clinical records and entered into Clinical Computing system (Proton).
- Validated data in other computer systems added to the Clinical Computer record.
- New and existing data then extracted using coded identifier for central analysis.

Patient Survival

- Outcome**
 - patient survival from date of graft
 - censored if transferred out of centre
- Main Exposures**
 - Transplant centre
 - Transplant cohort (1992-1996, 1997-2001)
 - Patient age at transplant
 - Patient sex
 - Patient ethnic group (white vs other)
 - Time on dialysis pre-transplantation
 - DM as attributed cause of ERF
 - Donor type (Live / Cadaver)

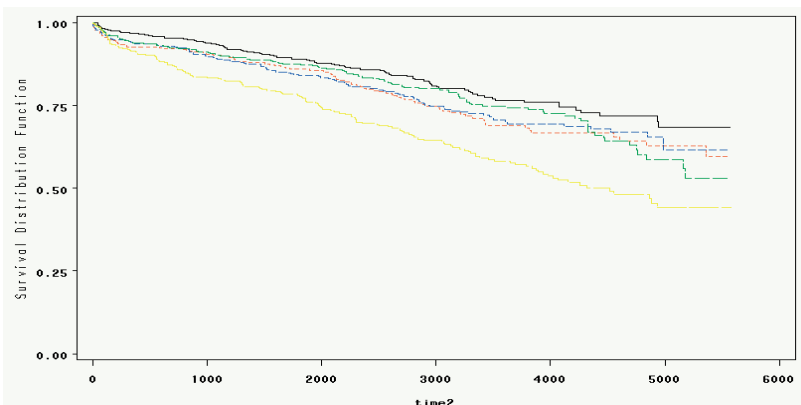
Variables

- 2134 patients transplanted 1 Jan 92 to 31 Dec 01.

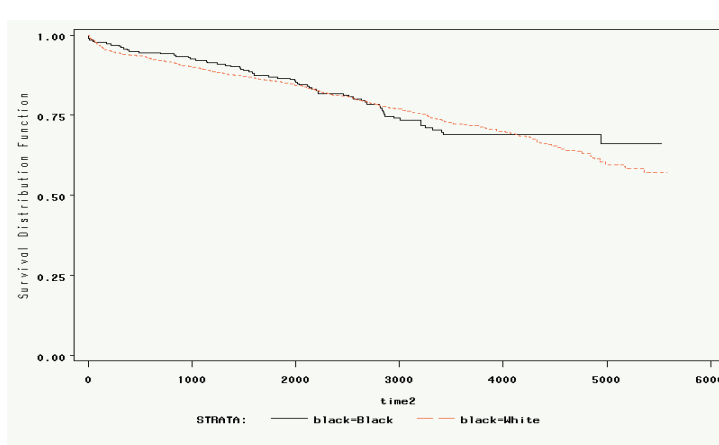
		% missing
Centre	Guy=510; StH=332; Lei=388; Oxf=492; Lee=412	0%
Year cohort	1080 (92-96):1054 (97-01)	0%
Patient age	Mean 44.9 (13.9) yrs	0%
Patient sex	1346 Male: 788 Female (37%)	0%
Patient ethnic gp	1747 White: 263 non White (13%)	6%
DM as ERF	1831=other, 196=DM (10%)	5%
Pre Tplt dialysis	1779=yes, 355=no (17%)	0%
Donor type	314 Live, 1772 Cadaveric (85%)	2%

Survival

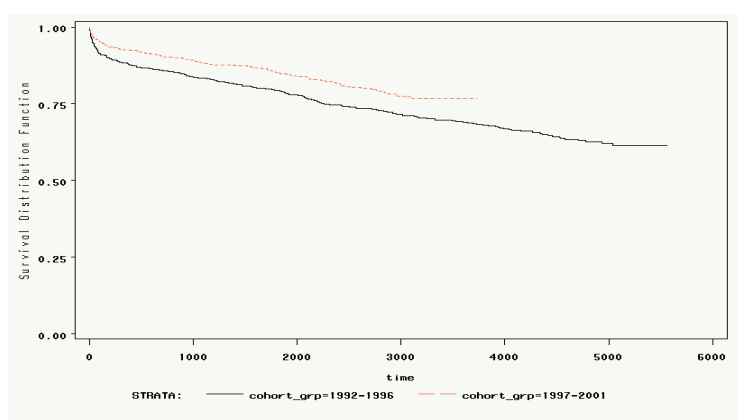
Survival by Site



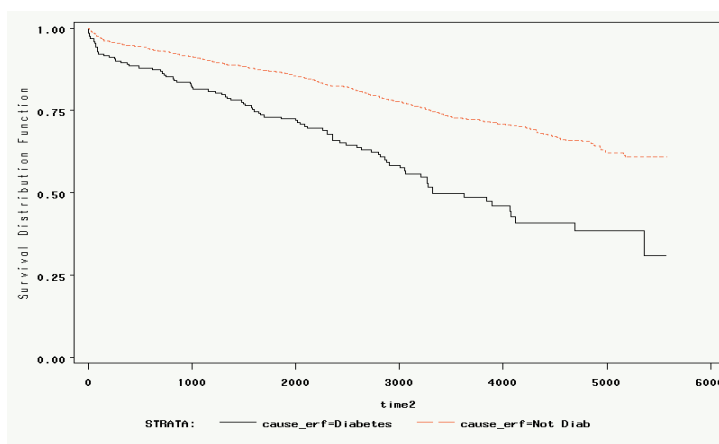
Survival by Ethnic Group



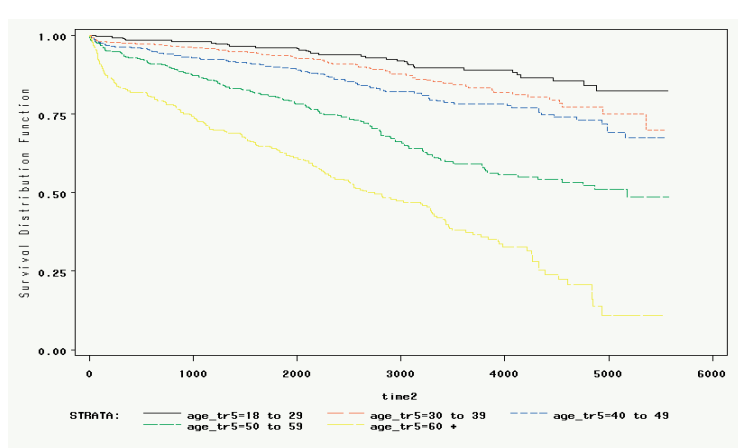
Survival by Cohort



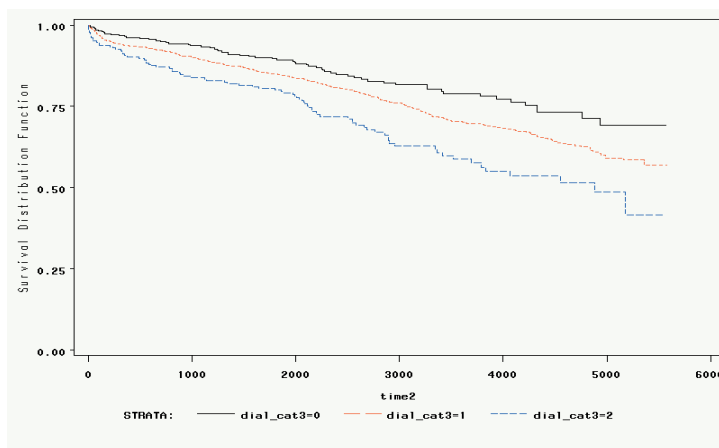
Survival by Cause of ERF



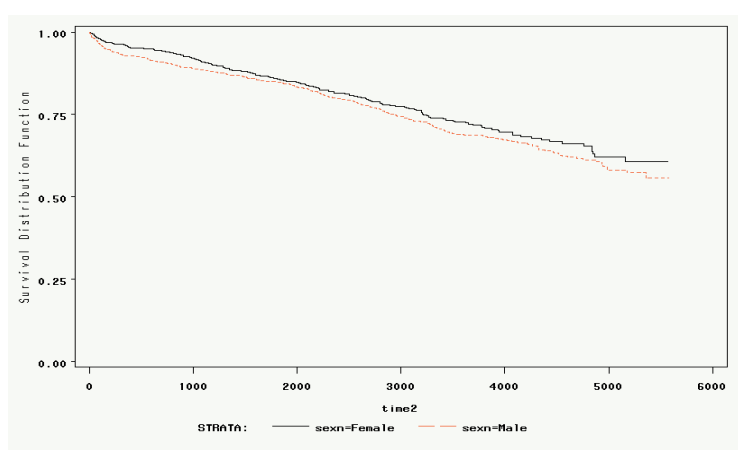
Survival by Recipient Age at Tplt



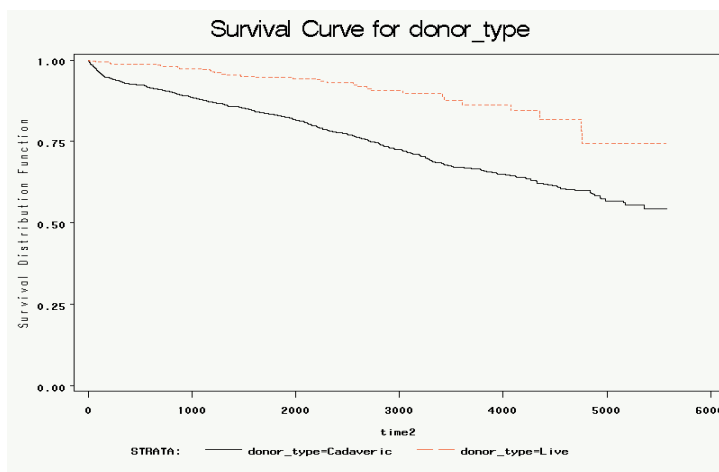
Survival by Time on Dialysis



Survival by Sex



Survival by Donor Type



Multivariable Cox PH model (n=1874) Significant predictors of Death

Variable	Hazard	Sig.	Best surv
Site		.0185	
Age at Tr		.0001	18 to 29
Cohort	1.305	.0090	Later
Cause ERF	2.523	.0001	Non-DM
Time on Dialysis	1.100	.0014	Least

Conclusions

- Higher Age at Transplant, DM as Cause of ERF, More Time on Dialysis and Earlier Cohort all significantly predict worse patient survival in a multivariable model.

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