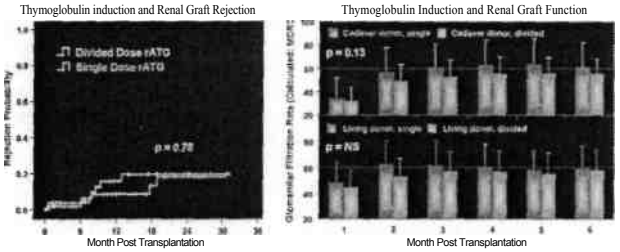
NLDs treated with S-rATG was identical to LDs(mean GFR> 60). In conclusion the two dosing regiments of rATG were equivalent in safety and efficacy with improved renal function in S-rATG treated NLDs. The implication of this for improved long-term graft survival **for** NLDs is significant.



Abstract# 1450 Poster Board #-Session: P97-III

Prolonged Lymphopenia after Anti-Thymocyte Globulin Induction Is Not Associated with Increased Graft Survival in Renal Transplant Recipients. Dionisios Vrochides,[1] Peter Metrakos,[1] Marcelo Cantarovich,[1] Jean Tchervenkov,[1] Douglas Keith,[1] Miriam Fernandez,' Steven Paraskevas.[1] *'Departments of Surgery and Medicine, Multi-Organ Transplant Program, McGill University! Health Centre, Montreal, QC, Canada.*

Introduction: Anti-thymocyte globulin (ATG) induction is associated with higher graft survival, as well as freedom from acute cellular rejection (ACR) after renal transplantation. ATG may induce prolonged (more than 30 days) lymphopenia. Purpose; To determine whether prolonged lymphopenia after ATG induction contributes to superior long term results after renal transplantation.

Methods: A total of 415 primary adult kidney transplants were performed between 1990 and 2004, with anti-thymocyte globulin for induction. Re-transplants and multi-organ recipients were excluded from the study population. Recipients with normal graft function comprised group 1 and those with slow or delayed graft function (S/DGF) comprised group 2. In both groups, recipients with an average value of < 200 lymphocytes/mm3 for the first 30 postoperative days comprised the cohorts of prolonged lymphopenia (group la and 2a), whereas the rest comprised the non-lymphodepleted cohorts (group lb and 2b). Graft survival censored for patient death, patient survival, calculated GFR, ACR and CMV infection rates were retrospectively analyzed.

Results: S/DGF was observed in 36.4% (n=151) of patients. Prolonged lymphopenia was achieved in 53.4% (n=141) and 68.8% (n=104) of recipients with normal (group la) and slow/delayed (group 2a) postoperative graft function respectively. For both the normal and the S/DGF groups, there were no differences in mean actuarial graft and patient survival for the lymphopenic and the non-lymphopenic cohorts (tables 1 and 2). There was no positive correlation of persistent lymphodepletion with the calculated GFR at 7, 30, 180 and 365 days post-transplant. Incidence of ACR was similar between the non-depleted and the depleted groups. CMV incidence was similar between the two groups.

Conclusions: Lymphocyte depletion that persists for more than one postoperative month after induction with ATG is not associated with improved long-term results. That might mean that the efficacy of ATG does not depend on decreasing the total lymphocyte count but rather on eliminating specific lymphocyte subpopulations.

Actuarial graft survival

Group 1 (normal function)			Group 2 (S/DGF)	
la (+LD)	lb (-LD)		2a (+LD)	2b(-LD)
12.9(11.9, 13.9)	12.7(11.4,14.0)	p= .769	9.5(8.1,10.8)	7.6(6.3,90) p = 828

Abstract# 1451 Poster Board #-Session: P98-III

Differential Effects of Thymoglobulin (Thymo) Depletion and Basiliximab Induction in Sensitized Patients Undergoing Renal Transplantation. Benjamin Philosophe,' Heather Hurley,[2] Kayhree Butler,[1] Eugene Schweitzer,[1] Luis Campos,[1] Matthew Cooper,[1] Rolf Barth,[1] Stephen Bartlett.' *'Surgery, University of Maryland School of Medicine, Baltimore, MD; ^Pharmacy, University of Maryland School of Medicine, Baltimore, MD.*

Thymo depletion is typically used in high risk renal transplants. Our center has recently adopted a broader use of Thymo enabling us to compare outcomes between unsensitized and highly sensitized patient groups, and to compare Thymo to basiliximab in these two different populations.

A retrospective analysis of 527 renal transplant recipients (67% CRT, 49% AA) between 2004 and 2006 was performed. 353 unsensitized (peak PRA <20), and 98 sensitized' recipients (peak PRA >40%) were analyzed. The 2 year cumulative rejection rate was higher for basiliximab compared to Thymo in the unsensitized patients (21% vs. 6% respectively. p=0.031), but similar in the sensitized patients for both agents (25% for basiliximab, 31% for Thymo, p=n.s.). In the sensitized patients, all the rejections in the basiliximab group were cellular, whereas 12 of the 21 rejections in the Thymo group were antibody mediated (6) or combined cellular and antibody mediated (6). For sensitized patients, graft survival was lower following Thymo depletion at 2 years compared to basiliximab (76% vs.100%, p-0.007), Rejection had no impact on graft survival in basiliximab treated patients. In this group, graft survival at 2 years in that rejected at least once was identical to ones that did not have any rejection (both). However, in patients treated with Thymo, rejection had a significant in graft survival regardless of sensitization. Patients without rejection had a 2 year

survival of 94%, whereas cellular rejection resulted in a 2 year graft survival (p=<0.0001). One-year graft survival for patients that experienced antibody η rejection or both antibody and cellular rejection was 63% and 25% respective Rejection occurs less frequently with Thymo depletion in unsensitized patit is no better than basiliximab in sensitized patients undergoing renal transpl; In this group, Thymo depletiofpà^'e^gtpol ^ mo^antibody mediated reject basiliximab induction, and the injections in Thymo depleted patients are more

and more likely to result in a graft loss. This may be due to a more rapid recon of T memory cells following depletion in previously sensitized patients which c well with murine data.

Abstract# 1452 Poster Board #-Session: P'

Four-Year Outcomes Comparing Thymoglobulin and Basili in Combination with Sirolimus and Reduced-Dose Cyclospor High Versus Low Risk Immune Responders. Richard J, Knight Schoenberg, Ronald H. Kerman, Hemangshu Podder, Stephan Katz, T. Van Buren, Barry D. Kahan. *Surgery, University of Texas Medical Houston, TX.*

Aim: To determine the effect of thymoglobulin versus basiliximab antibody i: therapy on renal allograft outcomes at 4 years post-transplantation for **recipien** versus low risk of acute rejection.

Methods: A retrospective single-center review of 276 deceased donor renal recipients who received either basiliximab (n=156) or thymoglobulin {i combination with sirolimus and prednisone, followed by delayed introduction o doses of cyclosporine. Recipients were stratified as either high-immune es namely African-Americans, retransplant patients or recipients with a pre-tr PRA>30%. All other recipients were considered low immune responders. Graft : acute rejection rate, and graft function were compared between groups.

Results: With a median follow-up of 21 months (range 1-81 months) thymog treated high immune responders (groupl) exhibited a 19% incidence of acute u versus 28% for basiliximab-treated low-immune responders (group 2, ρ O.O year actuarial graft survival for group 1 was 70% versus 73% group for 2 (p n serum creatinine values at 4 years were 1.7±0.6 versus 1.6±0.8 mg/dl for grou 2 respectively (p=ns). Exposures to sirolimus and CsA at 3,12,24, and 48 mon equivalent between the 2 groups.

Conclusion: A strategy combining thymoglobulin with sirolimus for high-risk h resulted in a lower risk of acute rejection and equivalent 4-year graft survivals o to a basiliximab treated low-immune risk recipient group.

Abstract# 1453 Poster Board #-Session: P

Rabbit ATG Dose: Risk Factor for Opportunistic Infection in Transplant Recipients? G. Guerra, T. R. Srinivas, J. D. Schold Gregg,[1] P. R. Patton,[1] A. I. Reed,[1] C. M. Bucci, S. Hurn V H. I· Kriesche.[1] *University of Florida, Gainesville.*

Opportunistic infections (OI) complicate renal transplantation; cum immunosuppression, especially antibody induction may contribute to port (PTx) OI. We have used rabbit antithymocyte globulin (RAT(i) induction transplant recipients (RTxR) at our institution. In late 2005 we lowered iw of Rabbit ATG (RATG) doses from 5 to 3. To date, the relationship between RATG induction and PTx OI is not well defined. We hypothesized that R associated with increased PTx OI risk. To test this hypothesis, we M*** all RTxR transplanted between 2002-06 at our center on RATG developed PTx OI (CMV, Nocardia, PCP, Systemic Mycoses. (excluding minor UTI). RTxR received RATG 1,0 mg kg day or 1.5 3-10 days (>3 days for DGF; 1.5 mg/kg dose in high risk R into 3 groups by mg/kg RATG dose (<4.65 - low dose group; > 5.82 -high dose group). We analyzed time to overall as infections at 6-months post- transplantation in multivariate and recipient age, recipient race, transplant type and HLA- Overall, 6-month infection rates were 31%, SO% and 5S% resp (p=0.008, ρ for trend = 0.002). In univariate analyses with higher RATG dose (log-rank p=0.03 ρ for trend = O.OI. by RATG dose group were 25%. 30%, and 41% for km. 0.03 for linear trend). Higher RATG dose was also significant time to any PTx infection (log-rank ρ = 0.002, ρ for trend Adjusted hazard ratios (AHR) of PTx OI «as 1.5«MJ as 2.2.0.3-3.8» in «he

Higher dose RATG induction is associated with benefit evaluations of different doses of Thymog established by prospective studies in the high level group