Graft survival following deceased donor kidney transplantation with rATG vs basiliximab (BAS) induction therapy in recipients at risk of delayed graft function and/or acute rejection

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Introduction: Studies show conflicting results regarding the long-term impact of induction therapies on kidney graft survival. The SRTR database was analyzed for patients transplanted 01/2000–12/2009 who met the inclusion criteria of a prior multicenter study (risk of delayed graft function and/or acute rejection; NEJM 2006; 355: 1967) and received rATG (thymoglobulin®) or BAS induction therapy.

Methods: Registry analysis identified 90,851 deceased donor kidney graft recipients; 51,561 had risk factor status entries and met the increased risk inclusion criteria used in the prior study (NEJM 2006; cold ischemia time [cit] > 24 h, additional risk factors if cit < 24 h). Graft survival was compared for patients with and without each risk factor; Patients with functioning grafts lost to follow-up were excluded. Adjusted Kaplan-Meier survival curves were generated for each risk factor, with other covariates fixed at population means. Hazard models included rATG vs BAS induction.

Results: Of 51,561 patients receiving induction therapy, 35.7% received rATG and 17.4% received BAS. The proportion of patients receiving rATG increased from 14.2% (2000) to 53.3% (2009); The proportion receiving BAS declined from 30.2% (2000) to 14.5% (2009). One-year graft survival was 90.7% vs 89.9% for rATG vs BAS, respectively (p=0.02); 5-year graft survival was 69.3% vs 66.7% for rATG vs BAS, respectively (p<0.001). Improved survival for rATG vs BAS was maintained at longer follow-up.

Conclusion: Analyses suggest improved graft survival for rATG vs BAS induction therapy in transplant patients at risk of delayed graft function/rejection.

Biography
Edward Drea completed his BSc and received his doctorate in pharmacy from the University of Iowa. Since then, he has accrued a multitude of pharmacy and pharmaceutical industry experience, including leading a number of clinical trials in oncology and transplantation medicine. He is presently Director of Medical Managed Care at Sanofi Genzyme. In his current position, he provides comprehensive medical and scientific information in connection with Sanofi products and assists in the development of medical communications and publications related to health outcomes research. He has served as a clinical manuscript reviewer for The Annals of Pharmacotherapy for 28 years.

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