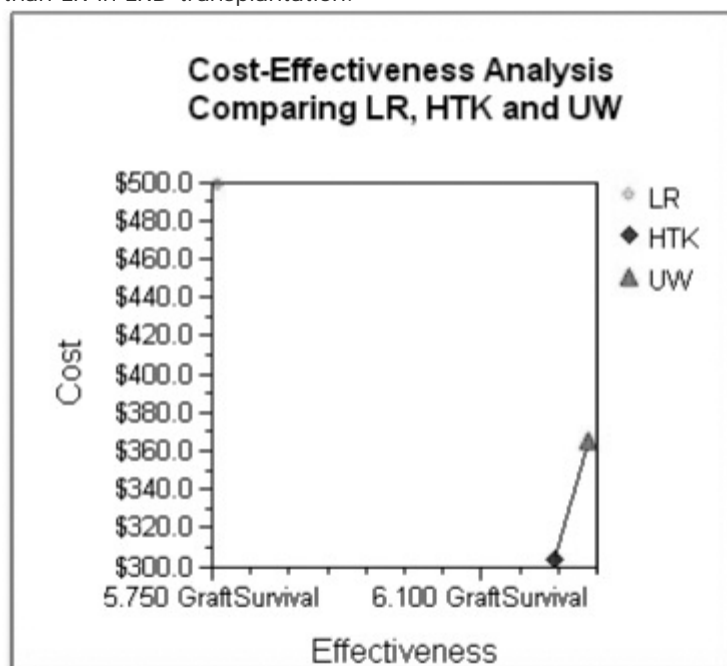


[1628] HTK and UW Are More Efficacious and Cost-Effective Than LR for the Preservation of Live Donor Kidneys.

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LR has been the flushing solution of choice for living renal donors (LRD) due to the short cold ischemia times (CIT). Recent trends have expanded the CIT for LRD transplants reigniting the question - what is the best flushing and preservation solution? METHODS: After IRB approval, we retrospectively reviewed donor and recipient factors for 177 patients receiving LRD transplants from 2004 through 2010. Our program switched from LR to HTK in 2008. To avoid observation bias, we used propensity scoring (PS) to match our study groups on the probability of developing delayed graft function (DGF), defined as the requirement for dialysis within 7 days following transplantation. PS was built based on 7 known factors for developing DGF. These were CIT, WIT, multiple renal veins, donor ages, recipient ages, HLA and size mismatches. Fifty-seven patients flushed with HTK were matched to 57 patients flushed with LR. RESULTS: The rate of DGF was 19% lower ($P < 0.01$) in the HTK group than in the LR group. Using HTK reduced the relative risk of DGF by 92%. Only 5.2 patients using HTK would prevent one case of DGF. We developed a Markov model to perform cost-effective analysis comparing LR, HTK and UW solutions using probabilities of DGF from our propensity matched groups and a review of the literature. Costs for LR, HTK, UW and in-hospital dialysis were from 2011. The model revealed that both HTK (cost \$304, effectiveness 6.2 years) and UW (cost \$363, effectiveness 6.3 years) absolutely dominated LR (cost \$502, effectiveness 5.7 years). CONCLUSIONS: Our study showed that HTK is superior to LR for preventing DGF. HTK and UW are more cost-effective than LR in LRD transplantation.



Keywords: Kidney transplantation; Donation; Preservation; Graft function

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Room: Exhibit Hall A

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