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ASSOCIATION OF PRE-TRANSPLANT SERUM CREATININE AS A POTENTIAL MUSCLE MASS SURROGATE AND 5-YEAR PATIENT AND GRAFT SURVIVAL IN 10,090 HEMODIALYSIS PATIENTS

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Background: Larger lean body & muscle mass may be associated with greater survival in hemodialysis (HD) patients (pts) but its association with post-transplant outcomes is not known. We hypothesized that a higher pre-dialysis serum creatinine, a surrogate of muscle mass, in the months prior to transplant is associated with better post-transplant outcomes. **Methods:** After merging the “Scientific Registry of Transplant Recipients” database with DaVita national database of HD pts over 5 yrs (7/01-6/06), we identified 10,090 renal transplant recipients (RTR), in whom time to death or graft failure was calculated. **Results:** Pts were 49±13 yrs old and included 49% women, 45% diabetics & 27% Blacks. The 3-mo averaged creatinine prior to transplant was 10.6±3/2 mg/dL. Cox models adjusted for case-mix &

“malnutrition-inflammation-cachexia syndrome” (MICS) showed a linear and incremental association with the composite pt & graft survival (see Figure).

Conclusions: If average pre-

dialysis serum creatinine is a surrogate of muscle mass in HD pts, larger muscle mass appears associated with better post-transplant outcomes. Trials to examine intervention to improve sarcopenia are indicated in transplant wait-listed pts.

