

## TRANSPLANTATION

## APOL1 gene variants associated with renal allograft failure

Kidneys recovered from deceased African American donors with two *APOL1* nephropathy risk variants are at increased risk of renal allograft failure after transplantation, say researchers.

A single-centre study published in 2011 showed that kidneys coming from African American donors harbouring two *APOL1* nephropathy risk variants failed more quickly after transplantation than kidneys from donors with one or zero risk variants.

To validate the findings in a larger number of kidneys, Freedman *et al.* genotyped *APOL1* G1 and G2 risk alleles in DNA samples from African American deceased donors of kidneys that had been recovered and/or transplanted in Alabama and North Carolina (675 transplantations from 368 unique organ donors). They linked genotypes and allograft outcomes from subsequent transplantations performed at 55

US centres. For the 221 transplantations performed using kidneys recovered in Alabama, they found a trend towards reduced allograft survival time in patients who received two *APOL1* risk variant kidneys (hazard ratio [HR] 2.71). Among all 675 kidney transplantations, they found that *APOL1* genotype (HR 2.26) and African American recipient race (HR 1.60) were associated with allograft failure.

The authors comment that “these findings warrant consideration of rapidly genotyping deceased African American kidney donors for *APOL1* risk variants at organ recovery and incorporation of results into allocation and informed-consent processes.”

*Rebecca Kelsey*

**Original article** Freedman, B. I. *et al.* Apolipoprotein L1 gene variants in deceased organ donors are associated with renal allograft failure. *Am. J. Transplant.* doi:10.1111/ajt.13223