

SIGNIFICANCE STATEMENT

APOL1 high-risk genotype is associated with kidney disease in blacks. We examined the association between *APOL1* high-risk genotype in black donors and their postdonation kidney function. Renal function was also compared between donors and nondonor controls matched for *APOL1* status to determine whether live kidney donation alters the association. *APOL1* high-risk genotype in donors was associated with lower predonation and postdonation renal function. Two donors reached ESRD, and both carried high-risk *APOL1* genotypes. Overall, outcomes did not differ between donors and matched nondonors stratified by *APOL1* status. *APOL1* high-risk genotype may be associated with worse renal outcomes in kidney donors, but our data requires replication in a larger study before recommending routine *APOL1* genetic testing.