

## **SIGNIFICANCE STATEMENT**

Identifying small molecules associated with CKD progression may help elucidate the pathophysiology of the disease and reveal potential treatment targets. This study found that lower levels of serum 6-bromotryptophan were associated with CKD progression, initially in two cohorts of blacks with CKD and subsequently in a third cohort of white patients with CKD. This association was independent of established risk factors of CKD progression, including the *APOL1* high-risk genotype and baseline measures of kidney function. With additional research, including replication, these findings may point to actionable targets for preventing CKD progression.