

SIGNIFICANCE STATEMENT

The individual course of CKD may vary, and improved methods for identifying which patients will experience short-term eGFR loss are needed. The authors explored the utility of urinary Dickkopf-3 (DKK3), a stress-induced, renal tubular cell-derived glycoprotein that drives tubulointerstitial fibrosis, as a biomarker of short-term (over 12 months) eGFR loss in patients with CKD. They found that urinary DKK3 is independently associated with a significant decline in kidney function over 12 months, even in the absence of albuminuria. Compared with eGFR or albuminuria alone, assessment of urinary DKK3 significantly improved prediction of short-term loss of kidney function, regardless of the cause of kidney injury, and shows potential as a tool for monitoring CKD progression and assessing effects of interventions.