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Research reveals two genetic loci linked to acute kidney injury

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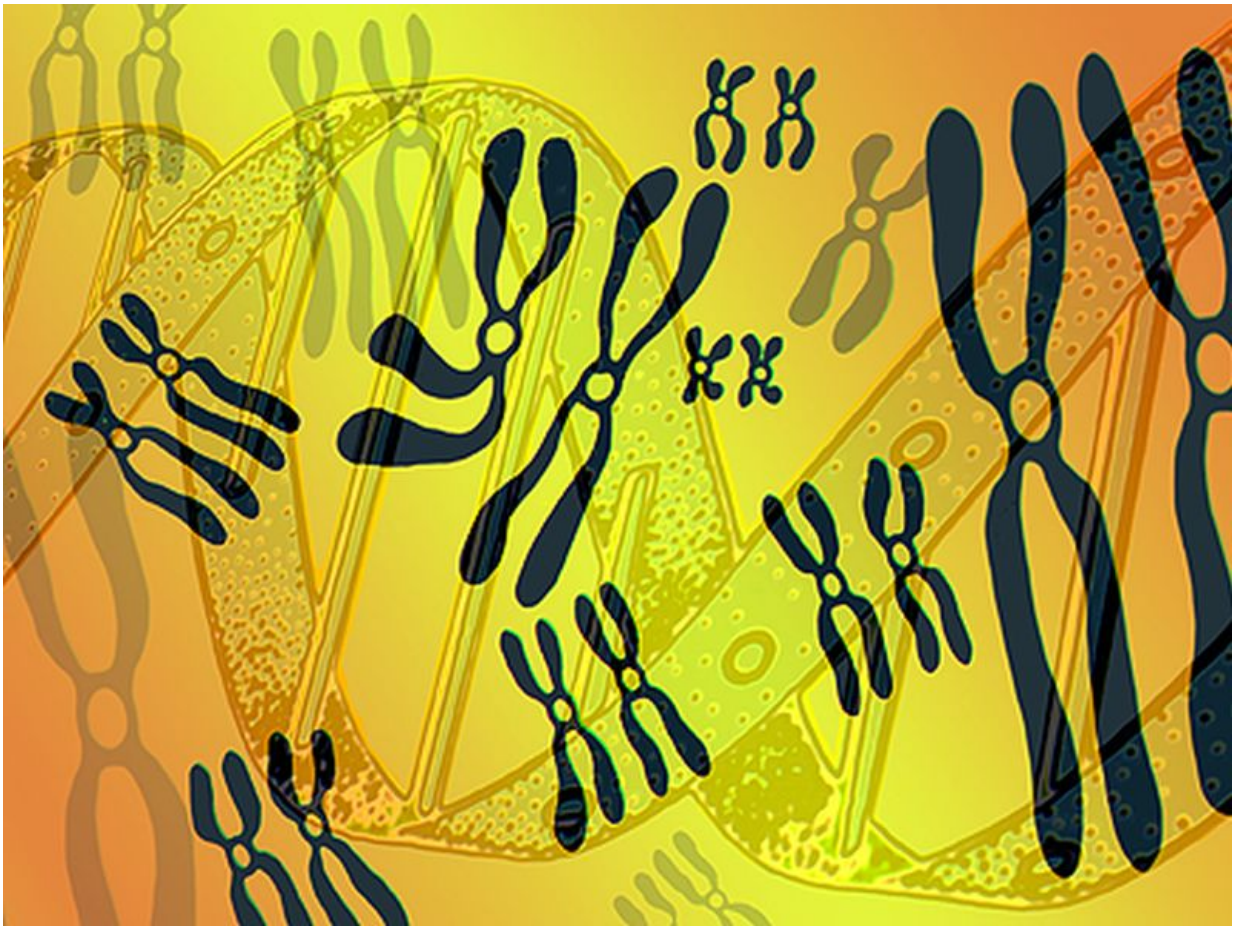

(HealthDay)—Four single-nucleotide polymorphisms at two loci that are

associated with acute kidney injury have been identified, according to a study published online Aug. 30 in the *American Journal of Respiratory and Critical Care Medicine*.

Bixiao Zhao, M.D., from the Yale University School of Medicine in New Haven, Connecticut, and colleagues conducted an exploratory genome-wide association study to identify single-nucleotide polymorphisms associated with genetic susceptibility to in-hospital acute kidney injury. A total of 609,508 single-nucleotide polymorphisms were genotyped in 760 acute kidney injury cases and 669 controls. The polymorphisms that showed the strongest association with acute kidney injury were assessed in a replication patient population with 206 cases and 1,406 controls.

On meta-analysis of discovery and replication populations, the researchers identified an association between acute kidney injury and four single-nucleotide polymorphisms at two independent loci. Two were on chromosome 4 near *APOL1*-regulator *IRF2* (rs62341639 and rs62341657), and two were on chromosome 22 near acute kidney injury-related gene *TBX1* (rs9617814 and rs10854554).

"Our findings reveal two genetic loci that are associated with acute kidney injury," the authors write. "Additional studies should be conducted to functionally evaluate these loci and to identify other common genetic variants contributing to acute kidney injury."

More information: Full Text (subscription or payment may be required)

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