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New markers for acute kidney injury reported

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Saeed A. Jortani, Ph.D., associate clinical professor in the University of Louisville's Department of Pathology and Laboratory Medicine, headed up one of three labs in the United States involved in determining two new markers for acute kidney injury (AKI). The research group's paper, "Validation of Cell-Cycle Arrest Biomarkers for Acute Kidney Injury Using Clinical Adjudication," was posted online Feb. 25 by the *American Journal of Respiratory and Critical Care Medicine*.

AKI has been difficult to diagnose and treat early because current markers for it don't show up until several hours after it has begun. The research group, however, validated two new markers – tissue inhibitor of metalloproteinases (TIMP)-2 and insulin-like growth factor binding protein 7 (IGFBP7) – in urine that, when assessed together, give clinicians the ability to detect and begin treating AKI much earlier than the current standards.

The Jortani Clinical Trials Laboratories (JCTL) at UofL were among the independent labs that tested the results of the trial. The other two were at the University of California-San Diego and ARUP Laboratories, Salt Lake City, Utah.

The JCTL is certified under the Clinical Laboratories Improvement Amendments (CLIA) of the Centers for Medicaid & Medicare Services. As a CLIA-certified lab, the JCTL has undergone a rigorous review of its facilities and processes to ensure quality in the laboratory testing and analyses it provides.

AKI was formerly known as acute renal failure. It is an abrupt loss of kidney function, usually occurring within 48 hours or less. It can occur after serious infections, major surgery or taking certain medications. In its most serious form, it can cause the patient to require dialysis and can result in death. Groups at greatest risk for AKI are the elderly, men and African Americans.

More information: www.atsjournals.org/doi/pdf/10 … 4/rccm.201401-0077OC

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