Early detection of kidney stress and interventions to avoid acute kidney injury are recommended following surgery.

Main Points
- Two novel urinary renal biomarkers, insulin-like growth factor-binding protein 7 (IGFBP7) and tissue inhibitor of metalloproteinases-2 (TIMP-2) can identify renal stress as early as one hour after starting cardiopulmonary bypass.
- Serum biomarkers may eventually allow us to accurately identify patients with normal glomerular filtration rates at risk of postoperative AKI.
- Studies have shown that earlier intervention based on biomarkers may decrease the incidence of postoperative acute kidney injury and decrease costs.
- Interventions include avoidance of nephrotoxic agents, discontinuation of ACE inhibitors and angiotensin II receptor blockers, avoidance of hyperglycemia, and close hemodynamic monitoring.

Key References
