KSN 2017 Abstract

AKI-Basic, pathogenesis

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Despite the high prevalence and burden of acute and chronic kidney diseases, our understanding of appropriate clinical care and underlying disease pathology is far from complete. Nephrology clinical practice guidelines are littered with “weak” recommendations based on “low” or “very low” evidence. No effective therapies currently exist for AKI, and the few drugs approved for CKD do not work consistently across the CKD population. Relatively few trials occur in nephrology compared to other medical specialties, and many of the interventions tested in recent AKI and CKD trials have had negative results—often sending us back to the drawing board. The presentation will explain how improved kidney outcomes may best be achieved through complementary approaches that include precision medicine, pragmatic trials and population management. Precision medicine approaches to kidney research aim to identify unique disease subgroups and novel drug targets for each group. Pragmatic trials may cost-effectively test identified treatments in large populations and simple sub-populations. Population health management efforts may be designed to ensure the appropriate delivery of treatments to all individuals with each subpopulation. Health information technologies are critical to both pragmatic trials and population health management and can support precision medicine efforts.