Predicting Dialysis Independence after Acute Kidney Injury

BioMaRK: CJASN. 2011; 6:1815-1823 | Kaiser: KIR. 2019; 4:571-581

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twitter.com/i/moments/1057661851759230978

~5 years

BioMaRK: Prospective

76 patients (70%)

60 days

Dialysis Independence

Acute Kidney Injury + Dialysis (AKI-D)

Demographics and Biomarkers

2214 patients (17%)

90 days

Kaiser: Retrospective

~7 years

Predictors

- 🎂
- Charlson comorbidity index
- APACHE II score
- Cystatin C
- NGAL
- IL-18
- HGF

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- Heart failure
- Liver failure
- Diabetes
- Hemoglobin < 12
- Platelet > 150K
- eGFR ≥ 30

- Small sample size and poor discriminatory properties
  - Best renal recovery probability = ~53%
- Biomarker trend more predictive than single point-in-time values
- Urinary biomarkers not readily available

- Prediction models difficult to create with readily available tests
- Experimental urinary biomarkers required to predict dialysis independence