Planning Meeting for the Drug Development Tool for Kidney Disease (DDT-KD) Consortium

Major Objectives of Drug Development Tools for Kidney Disease Consortium

Kumar Sharma, MD
Director, Center for Renal Translational Medicine
Institute of Metabolomic Medicine

University of California, San Diego



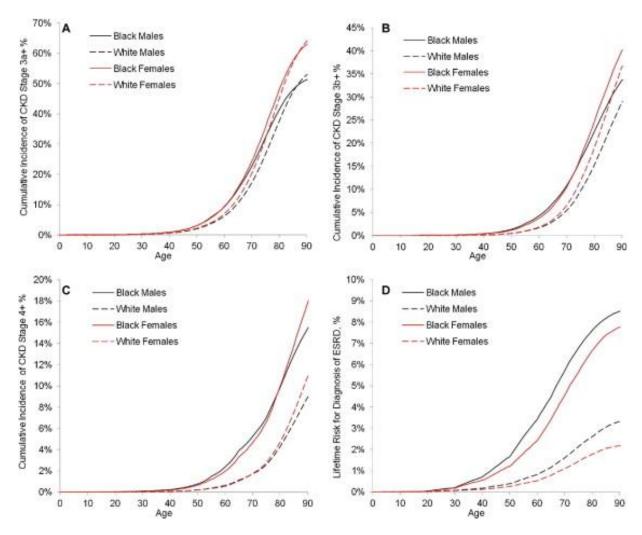
DDT-KD Consortium Objectives



- Primary Goal: Identify, prioritize and qualify novel biomarkers for AKI and CKD
- Develop drug-development tools for new therapies for acute and chronic kidney disease
- Harmonize definitions and goals
- Facilitate qualification of kidney biomarkers for nephrology community
- Learn from completed clinical trials to help us develop new approaches and designs for AKI and CKD (Adaptive trials)

Lifetime Risk of CKD >50%





Am J Kidney Dis. 2013 Aug;62:245-52





Why do we need a DDT-KD C-Path Consortium?



- AKI Biomarkers accepted by the FDA for pre-clinical testing
- Recent qualification of TKV as stratification tool for PKD
- KHI has a Data Standards in DKD Workgroup in place
- CPAST-DKD project ongoing
- CKD-Biocon recently established (2015)
- JDRF Network for DKD Biomarkers recently established (2015)
- Challenge remains-How do we coordinate the data emerging from these initiatives to improve future clinical trials and make them more insightful?



Working Principles of DDT-KD



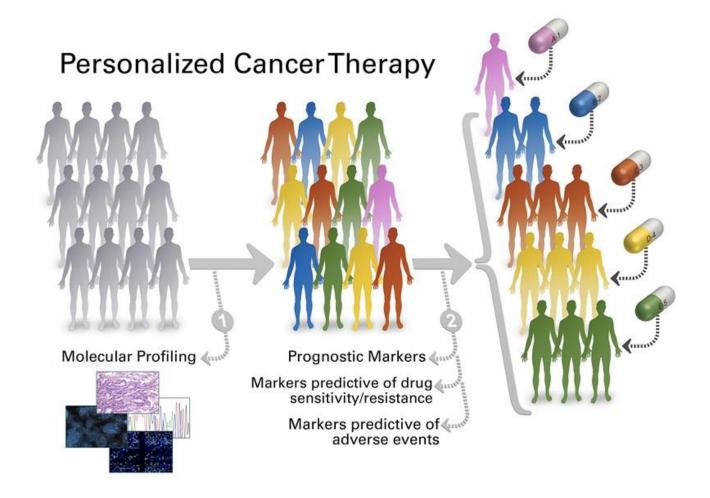
Coordinately and transparently evaluate data for biomarkers in each of the FDA accepted categories of qualification

- Prognostic
- Diagnostic
- Predictive
- Pharmacodynamic
- Surrogate



CKD has a similar prognosis as many cancers but far fewer therapies







New Generation of Insightful and Efficient Clinical Trials



- Stratify patients to only include patients who will likely progress with their CKD in a 6m-1yr, 2y, 3yr timeframe for Phase II/III trials (Prognostic)
- Identify patients who will likely benefit from a specific drug before they are given the drug (Predictive)
- Monitor treatment with biomarkers to assess degree of efficacy or toxicity while on the drug (Pharmacodynamic)
- Measure a set of biomarkers at 1-6 months to assess potential renal benefit during a Phase II-III trial (Surrogate)
- Clinical trials that will include qualified biomarkers will have a higher chance of success and will increase insight towards personalizing medicines for kidney disease

