

INVESTOR BRIEFING

MARCH 25, 2019

ARTIFICIAL INTELLIGENCE FOR KIDNEY DISEASE



Agenda

Welcome – Julian Baines, Non-Executive Chairman, RenalytixAI

Operational and financial highlights – James McCullough, Chief Executive Officer, RenalytixAI

The big problem in kidney disease and our solution – Steven Coca, M.D. Member of the RenalytixAI Scientific Advisory Board

The impact of AI in kidney diagnostic medicine

- Dr. Steve Coca -Associate Professor, Medicine, Nephrology; Associate Chair for Clinical and Translational Research, Icahn School of Medicine at Mount Sinai
- Dr. Fergus Flemming – Chief Technology Officer, RenalytixAI
- Dr. Erik Lium - Executive Vice President, Mount Sinai Innovation Partners, Mount Sinai Health System and Non-Executive Director, RenalytixAI
- Rahul Patel - Executive Vice President, Digital Product and Services, Persistent Systems
- Dr. John Quackenbush - Professor, Biostatistics, Harvard T.H. Chan School Of Public Health, Professor, Biostatistics and Computational Biology, Dana-Farber Cancer Institute, member of the RenalytixAI Scientific Advisory Board

Operational highlights

- *KidneyIntelX™* agreements secured for clinical validation patient sample access



- *KidneyIntelX™* investigator network



- *KidneyIntelX™* first production lot from Meso Scale Diagnostics for blood biomarkers shipped



- ~5,000 patient clinical validation study initiated with read-out expect this summer

Operational highlights continued

- Submitted request to Food and Drug Administration (“FDA”) for Breakthrough Device Designation for *KidneyIntelX™*
- Submitted request to Centers for Medicare & Medicaid Services (“CMS”) for parallel reimbursement and regulatory review
- Joint-venture agreement completed with AKESOgen, Inc for expanded testing capability



- Advancing machine learning technology platform with Persistent Systems



PERSISTENT

- Exclusive license executed with Mount Sinai for *FractalDx* portfolio of technologies in the field of kidney transplant rejection

Financial highlights

- Completed net capital financing of c. \$27m and associated AIM admission on November 6, 2018
- In-licensed IP underlying two product technologies for \$11.0m in upfront payments
- Nearly \$1.4m capital investment to date in AI technology platform and clinical assay development
- Net loss *after tax* of \$2.5m for the interim period
- Cash as of December 31, 2018 of \$13.1m

The big problem in kidney disease and our solution

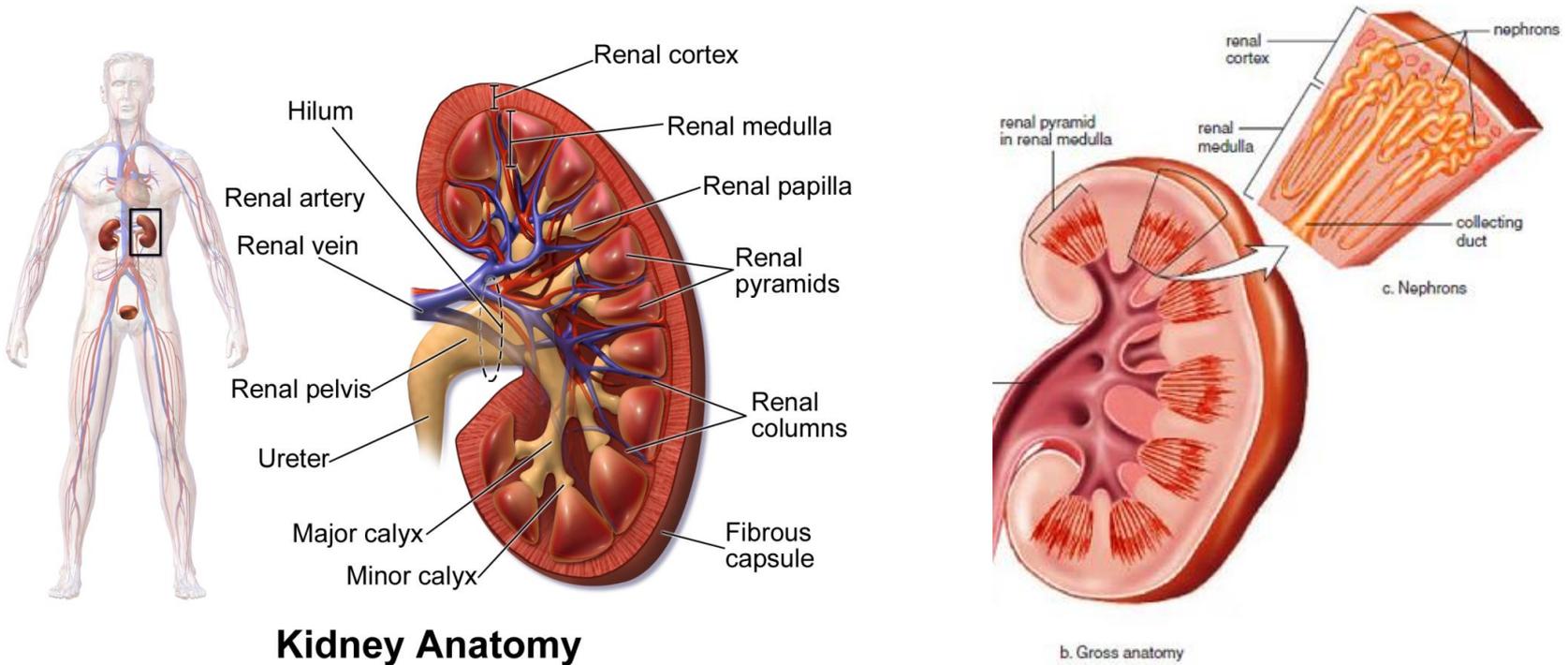
Steven Coca, M.D.

Associate Professor, Medicine, Nephrology; Associate Chair for Clinical and Translational Research, Icahn School of Medicine at Mount Sinai

Fergus Flemming

Chief Technology Officer, RenalytixAI

What are the kidneys?

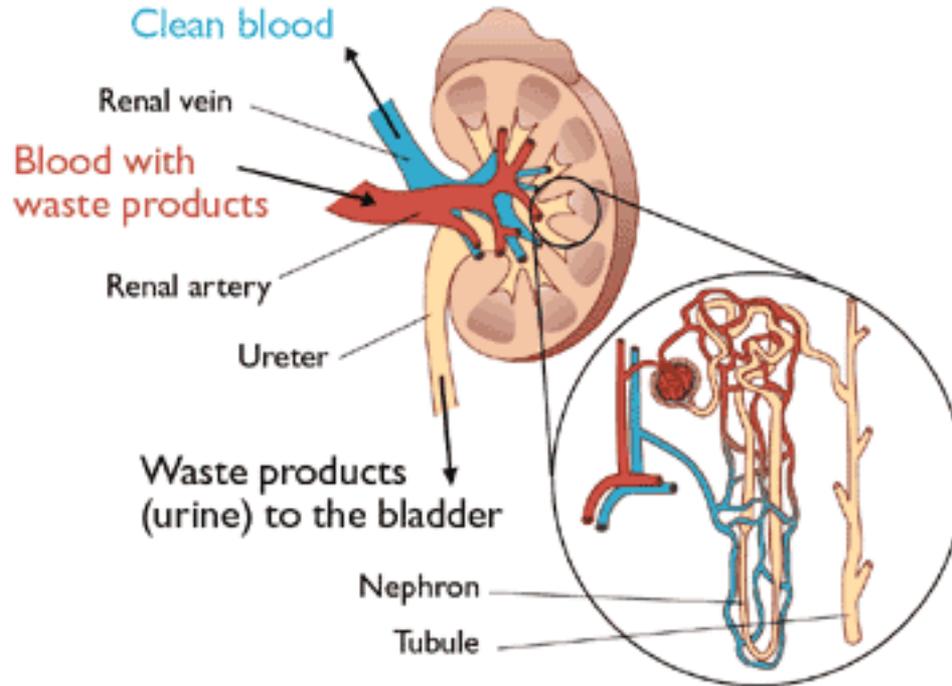


Kidney Anatomy

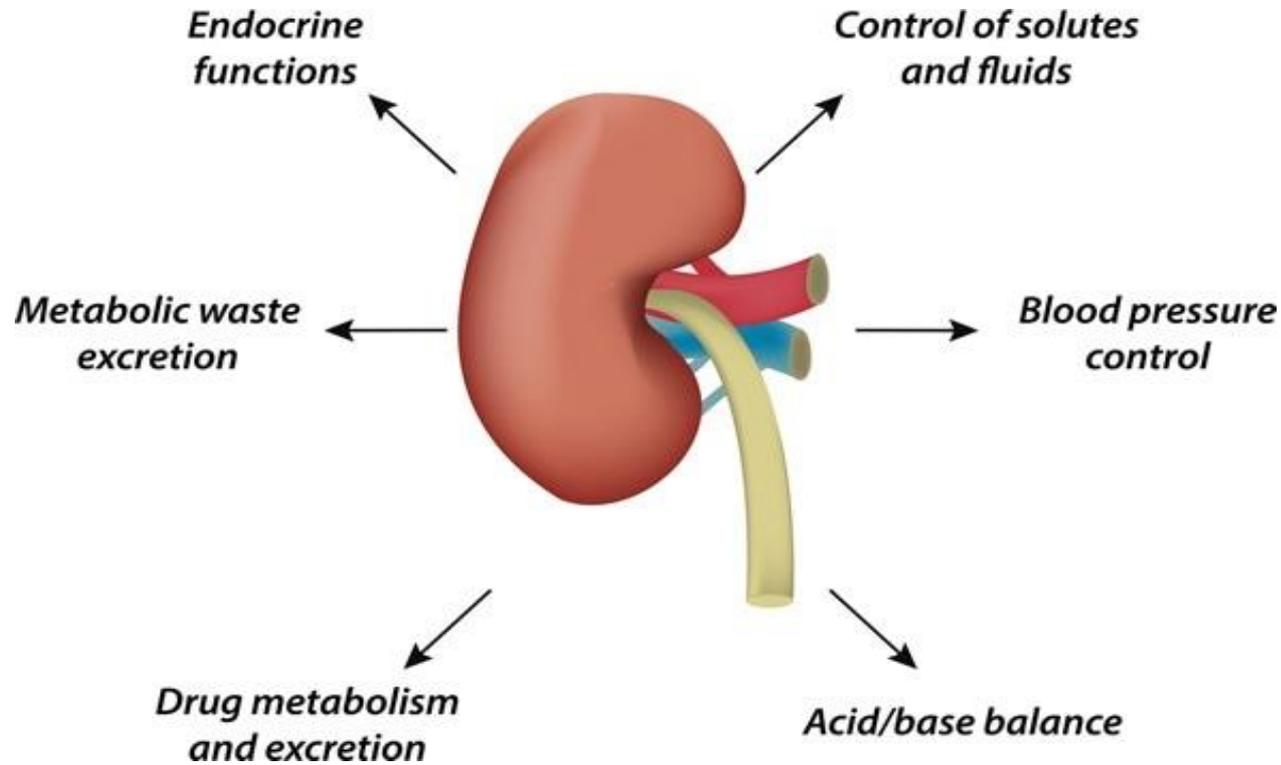
b. Gross anatomy

What do the kidneys do?

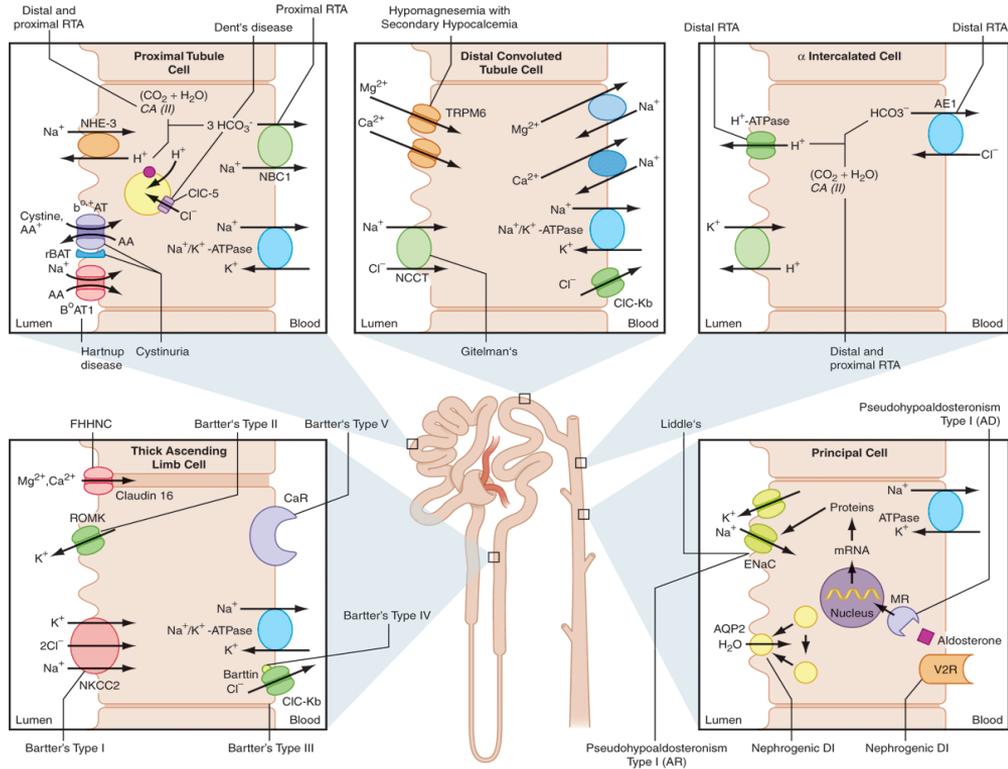
How the kidney works



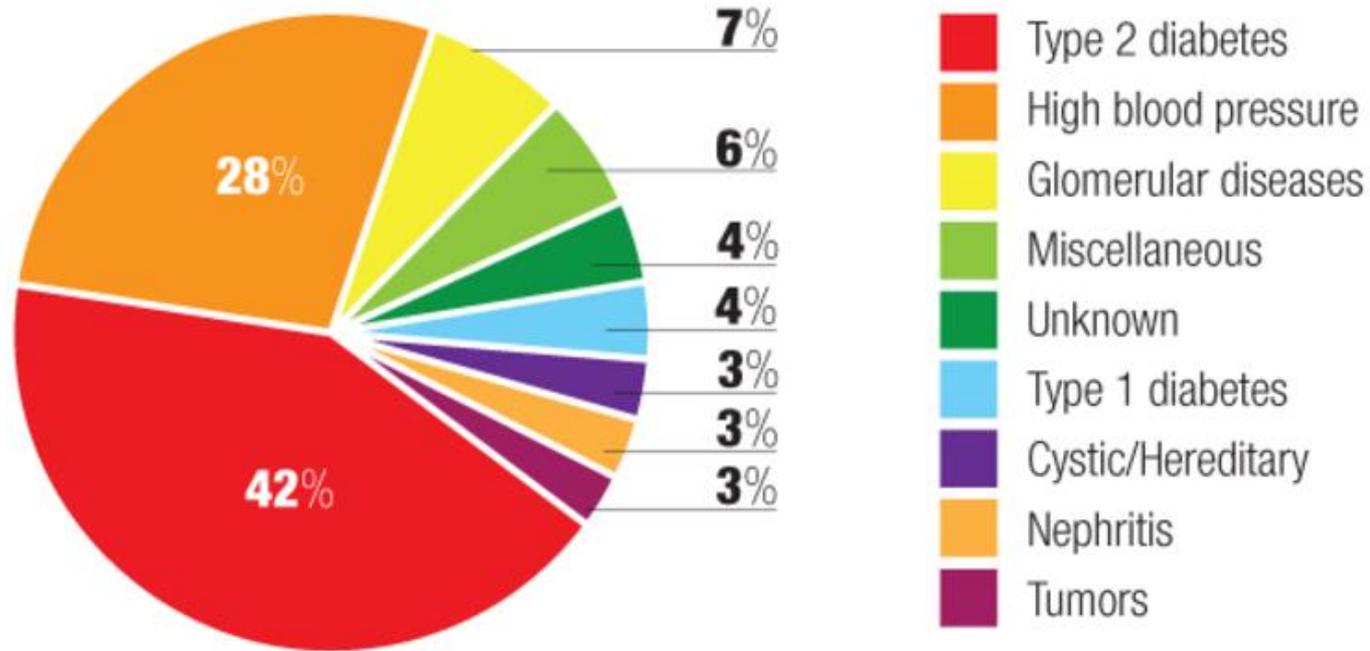
A number of major body functions start here



Functions basic to life include transport of electrolytes, amino acids, and water



Top causes of chronic kidney disease

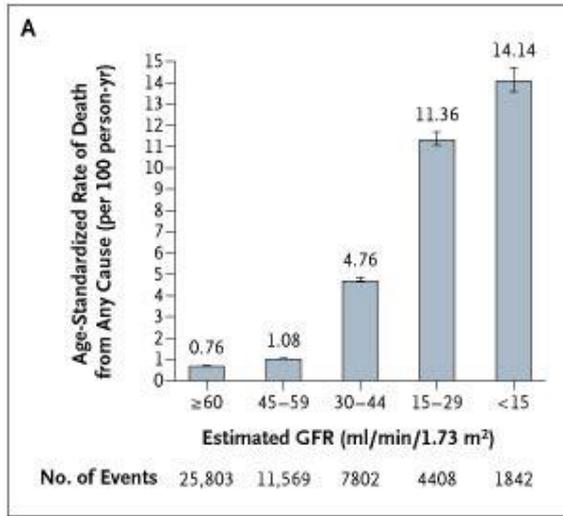


Stages of chronic kidney disease

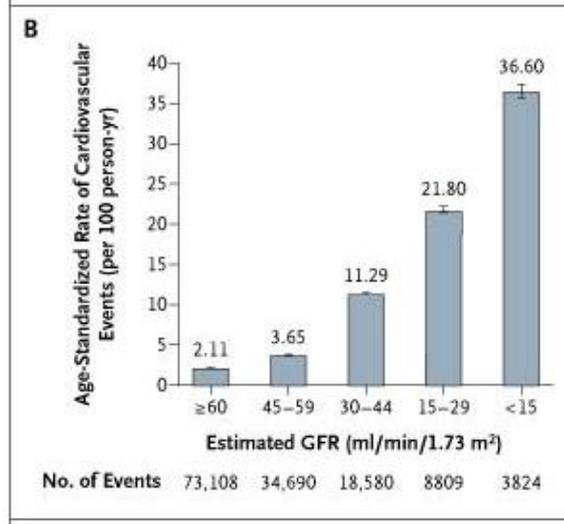


So goes kidney function so goes...

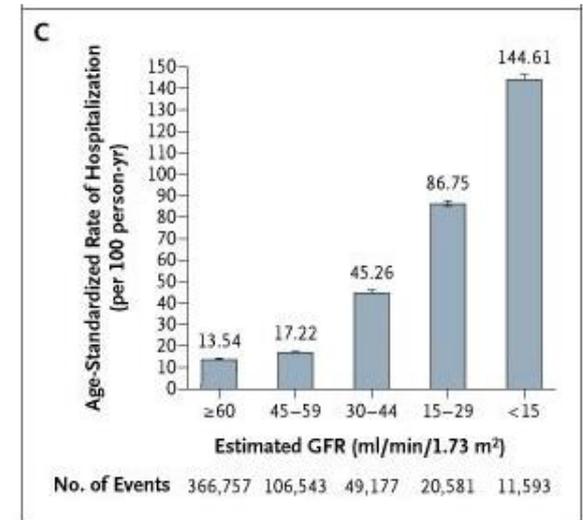
Death



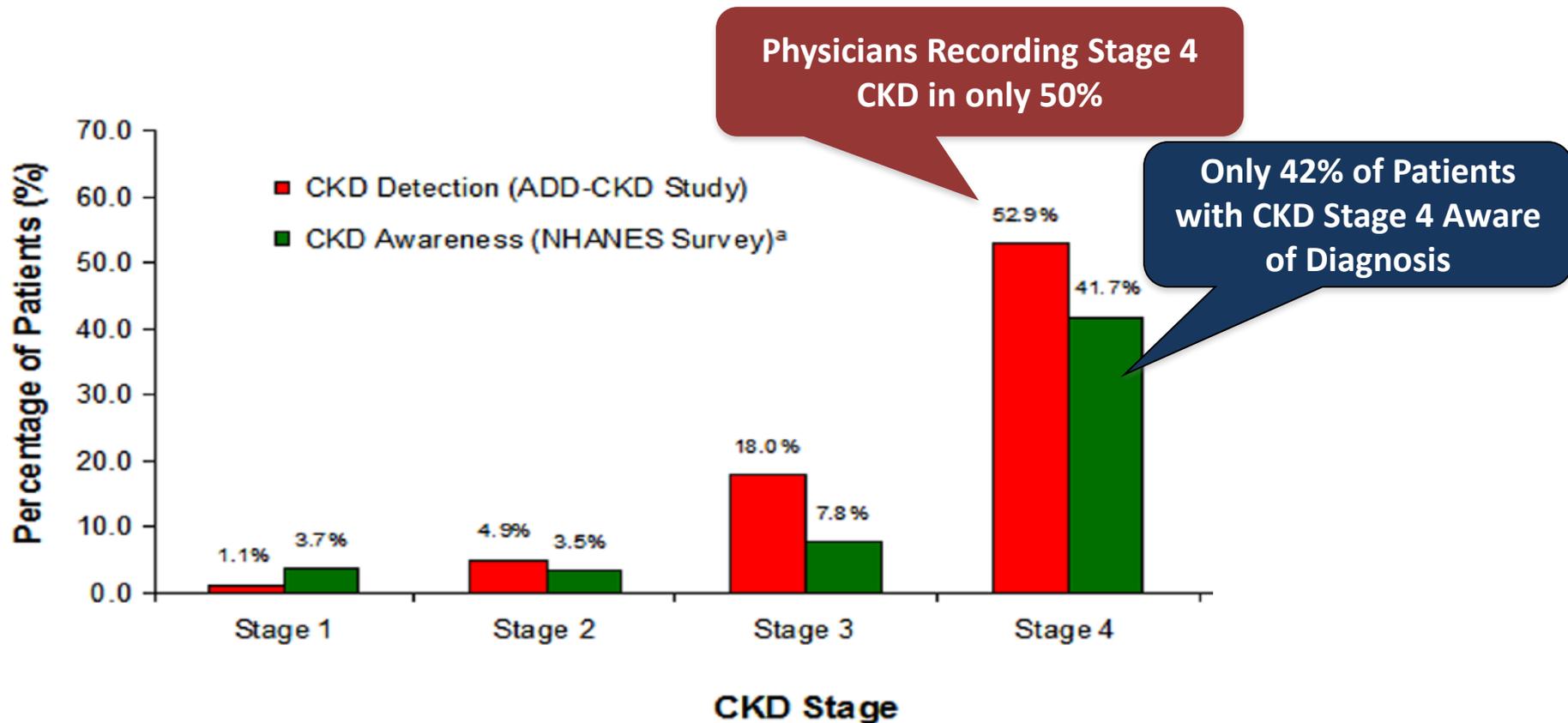
Cardiovascular Events



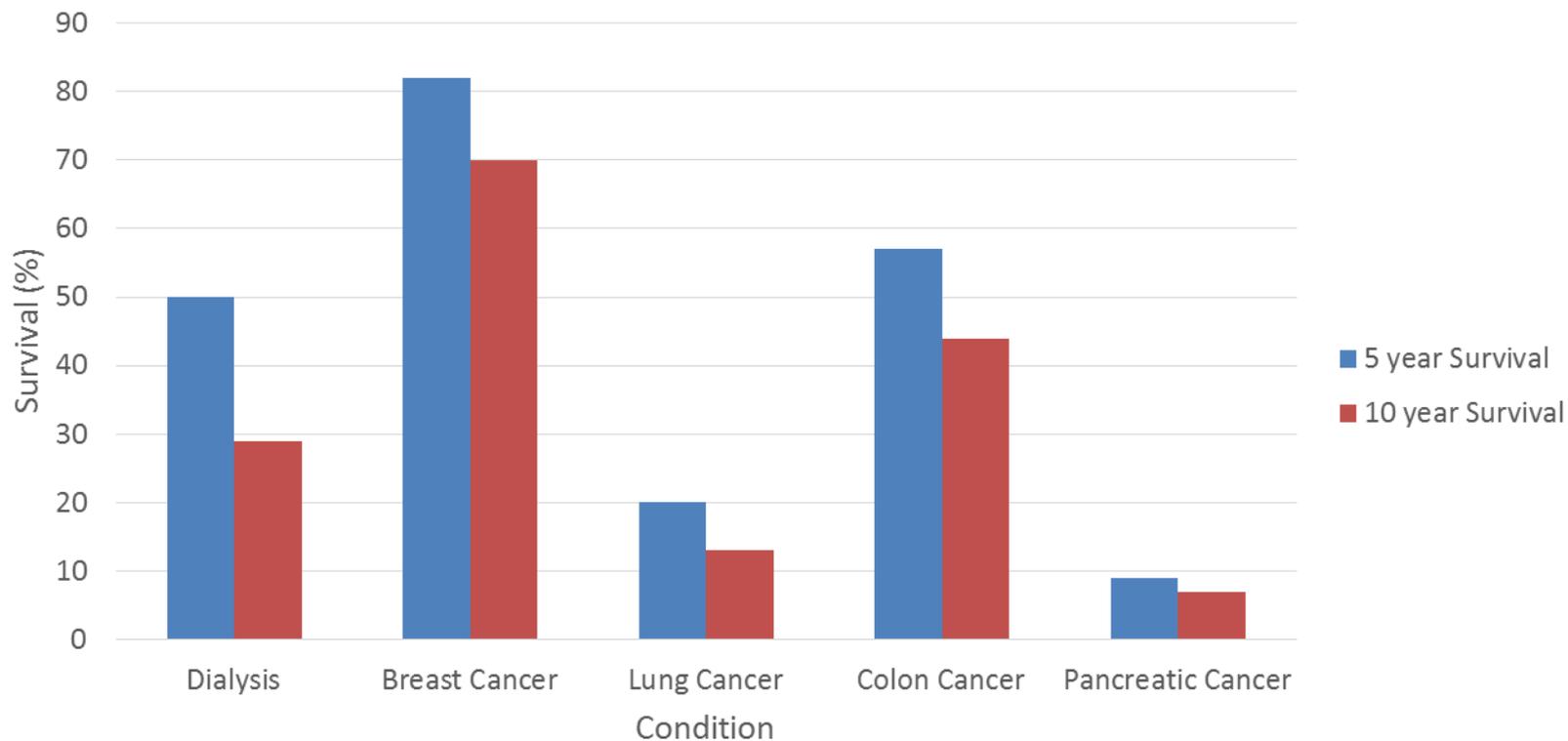
Hospitalizations



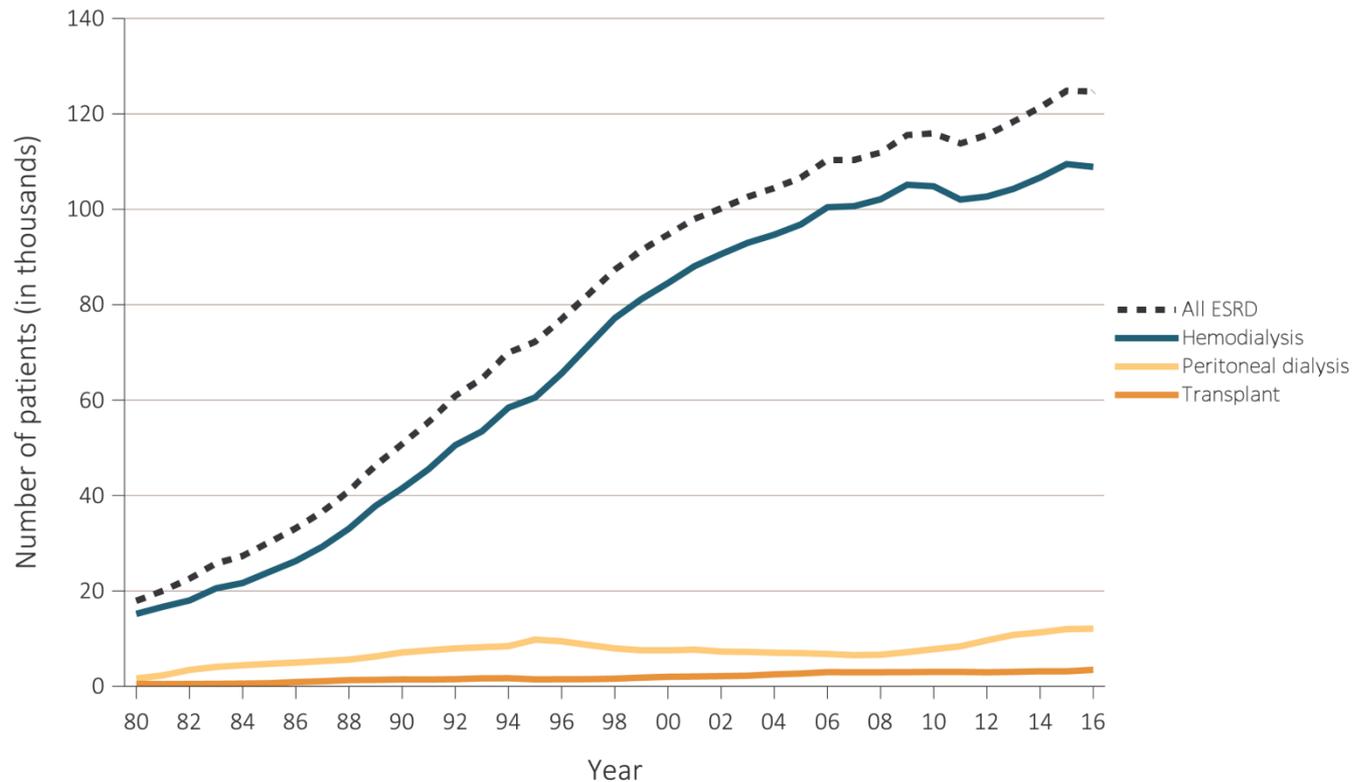
Doctors don't have the tools - patients are in the dark



Survival on dialysis is lower than several cancers

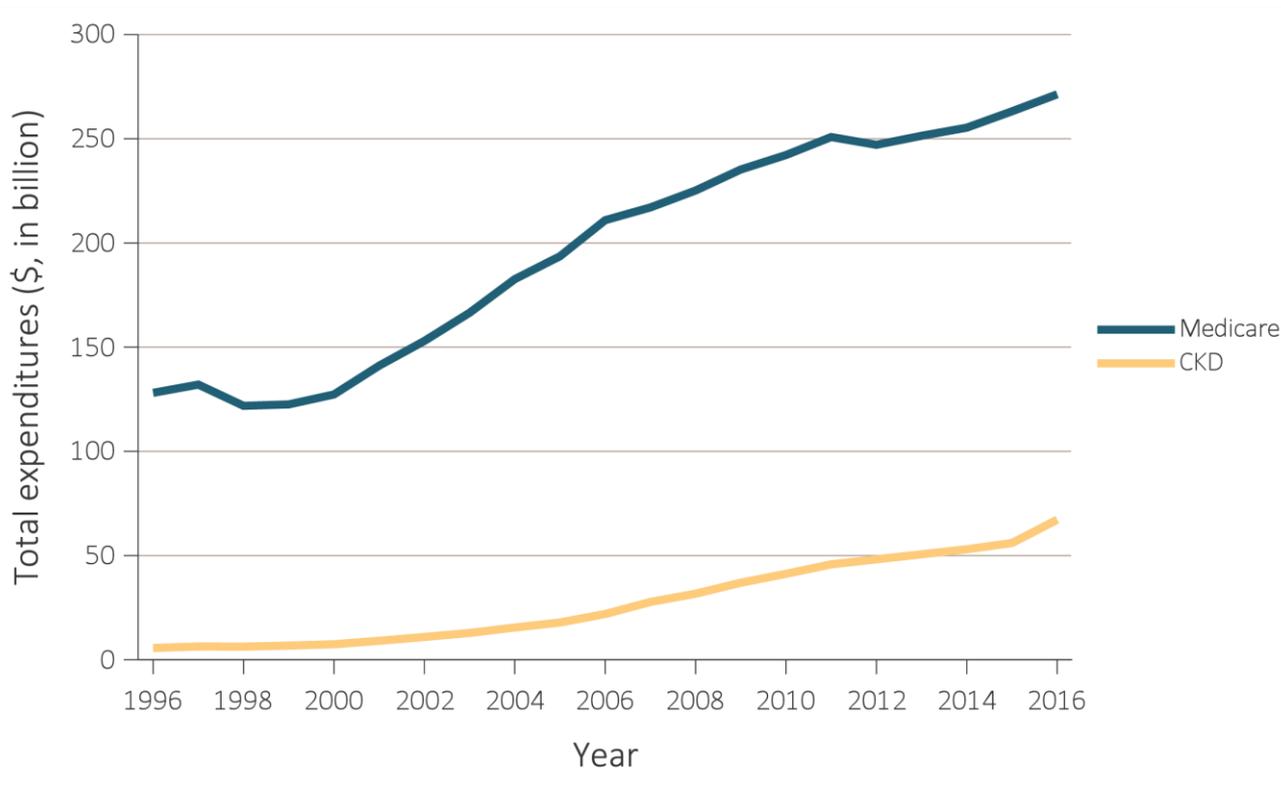


New cases of kidney failure continues to grow each year



Costs are unsustainable!

**20% of US
government
medical budget**



**We need advanced diagnostic technology
now to identify fast-progressing kidney
disease**

The Solution

KidneyIntelX™

Impacting Care, Improving Outcomes

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[More](#)



Patients

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Orders

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Generate Reports

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Educational Resources

[More](#)



Latest News from RenalytixAI

Kind Attention

This is to bring to your notice that your Provider Admin is changed from "Adam Johnson" to James Cameron with effective from 17th OCT 2018. For any further queries please reach out at superadmin@kidneyintelx.com

Super Admin | Sept 27, 2018

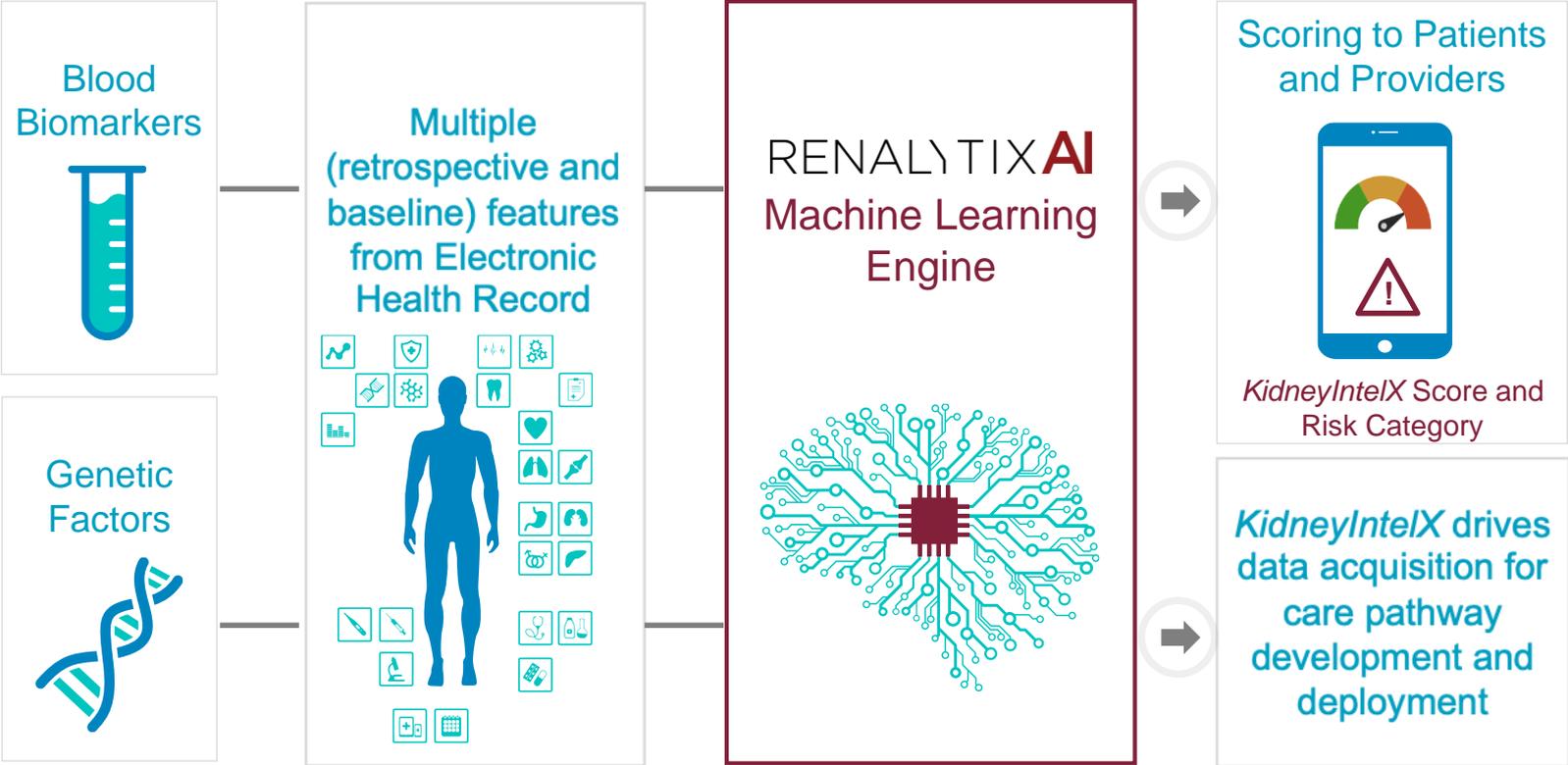
New Provider Assignment

This is to bring to your notice that you have a new Provider Mount Sinai added to your providers list managed by you. For any further queries please reach out at superadmin@kidneyintelx.com

Super Admin | Sept 27, 2018

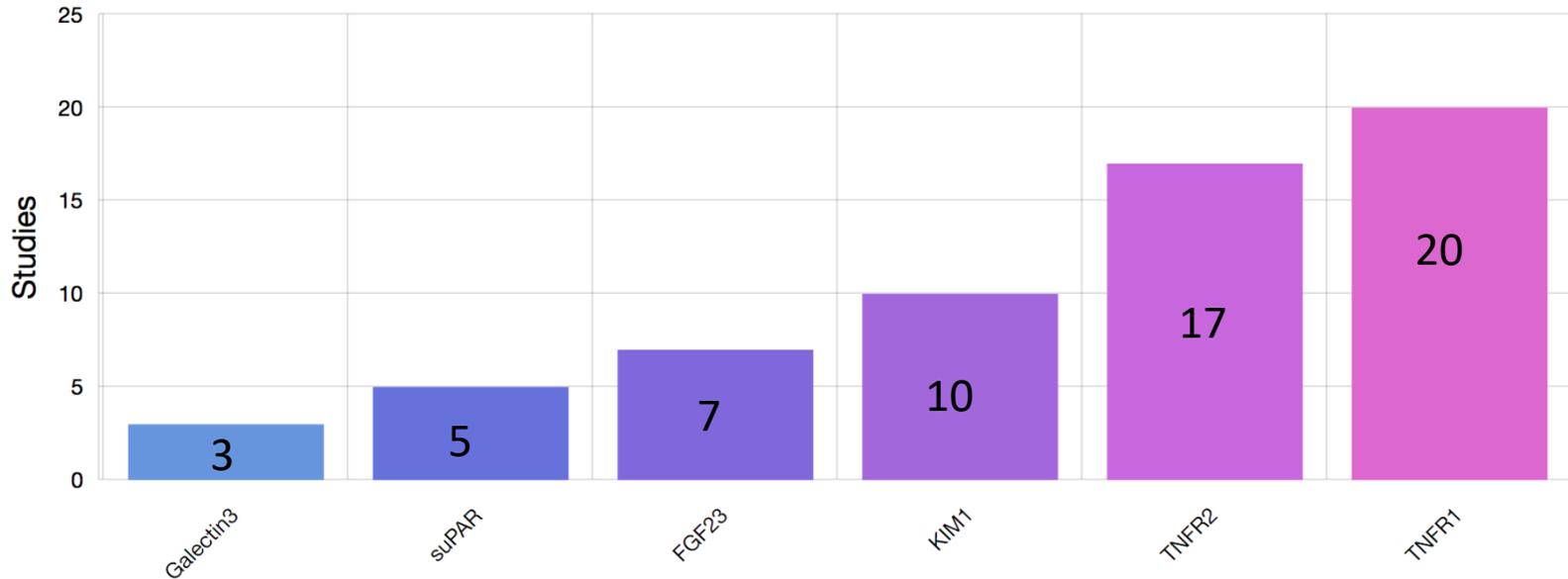
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KidneyIntelX combines disparate data sources for better prediction

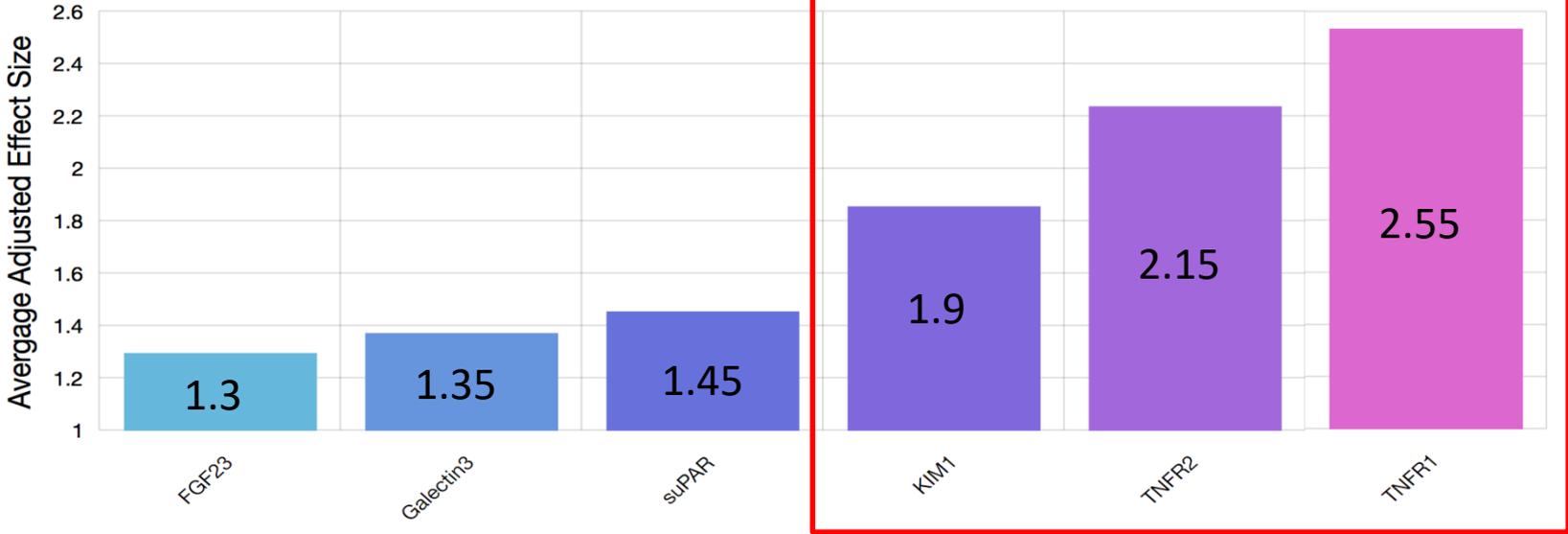


KidneyIntelX blood biomarkers sTNFR1, sTNFR2 and KIM-1 are the strongest with the most published evidence

#Published Studies for Each Plasma Biomarker

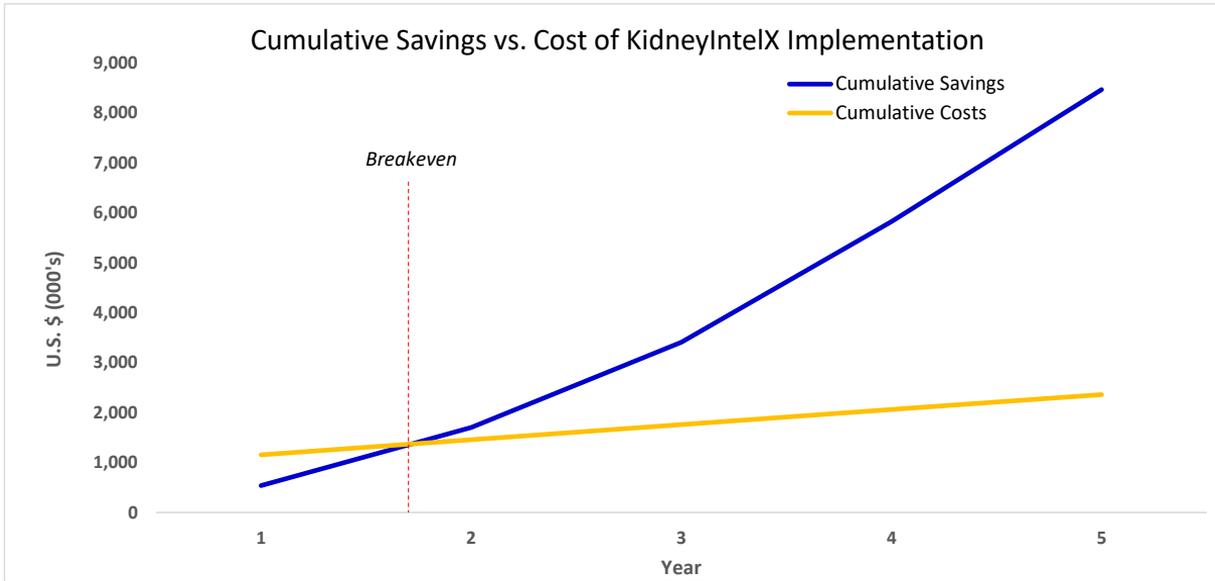


KidneyIntelX blood biomarkers pooled adjusted hazard ratio for chronic kidney disease outcomes



Increased diagnostic performance can translate into major cost savings

> \$4.0M in savings per 1,000 patients tested



Key Model Assumptions

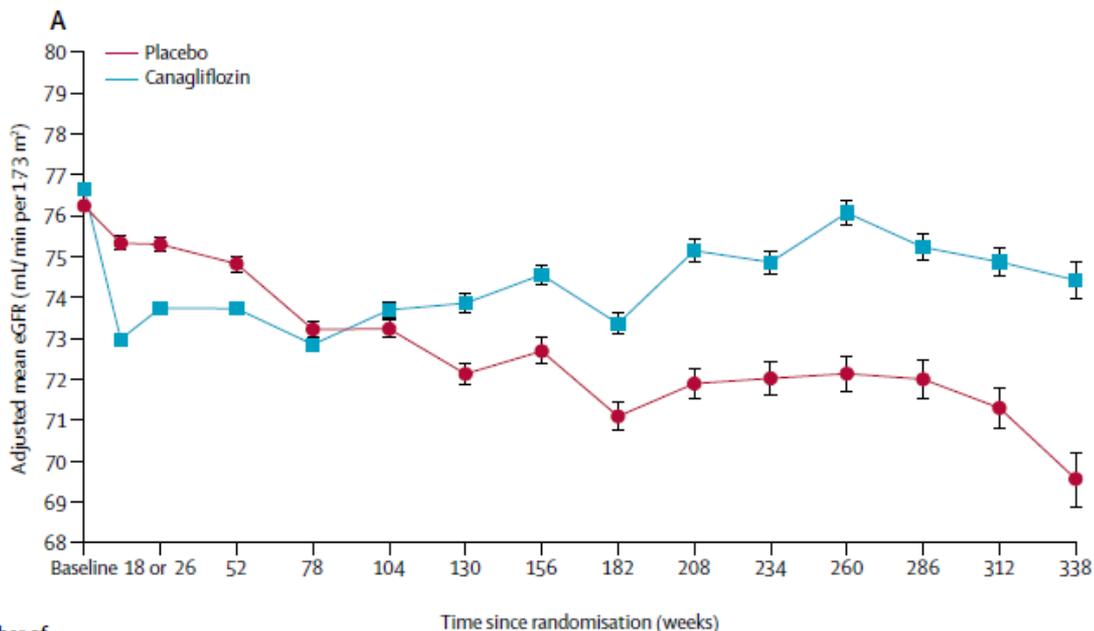
- 1,000 patients tested
- \$760 cost per KidneyIntelX test plus \$100 implementation cost
- KidneyIntelX tested population: 46.5% CKD stage 3, 53.5% stages 1-2 (UA 2,3)
- % of pre-CKD stage 3 patients with albuminuria (UA 2 & 3) = 28%
- Savings measured over first five years only @ 10% discount rate
- Preventative measures (cost of \$1-3K/yr. depending on CKD stage per patient) applied to top 20% of high risk patients
- Care cost per patient ranges from \$11K (no advanced CKD) to \$87K (ESRD pre-dialysis). Dialysis cost of \$88K; transplant \$262K

**Advanced Diagnostics + Novel Drug
Development = Personalized Medicine**

We've done it in cancer

Now its time for the kidney

The age of personalized drug therapy for kidney is here (SGLT2 Inhibitors)



Number of participants

Placebo	4276	4038	3867	3538	3212	1740	1030	881	899	785	809	726	694	243
Canagliflozin	5711	5395	5212	4867	4570	2964	2230	1961	2039	1795	1895	1695	1653	548

Discussion – the impact of AI in kidney diagnostic medicine

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