



BioAmp Diagnostics

“Actionable Results Before Antibiotic Prescribing”



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BioAmp Team – Together we are working to combat antibiotic resistance through diagnostic innovation



Tara deBoer, Ph.D.
Inventor of Core Tech



Angel Resendez, Ph.D.
(Head Chemist)
Deep chemistry expertise



Aubrianne Milton, B.S.
(Research Associate)
Chemistry & Biochemistry



Isha Kane, B.S.
(Lab Coordinator)
Scientific & Admin

BioAmp Advisors (Business Support):



Kelly Gardner,
Ph.D., MBA
(Successful Exit)



Kevin Krause,
MBA.
(AMR-UTIs, BD)
ACHAAGEN
AN2Therapeutics



Dr. Bradley Frazee
(ED MD, ID)



Danka-Florence
Petrovic (CLS)



Prof. Lee Riley
(UTIs & AMR)



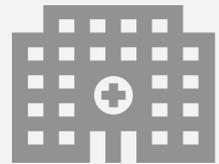
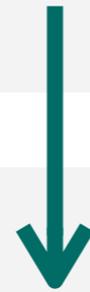
Antibiotic Resistance Impacts Many Conditions: BioAmp is first working to direct care of high-risk UTIs (cUTIs)



2 M

High-Risk UTIs (cUTIs)

Patients: Males, pyelonephritis, & immunocompromised



400,000 hospitalizations

(increased by 50% over 10 yrs)¹

+

1/2

Bloodstream Infections

originate from a UTI²



72-96 h to define appropriate treatment

Putting patients at risk of:



Treatment Failure



Disease Progression

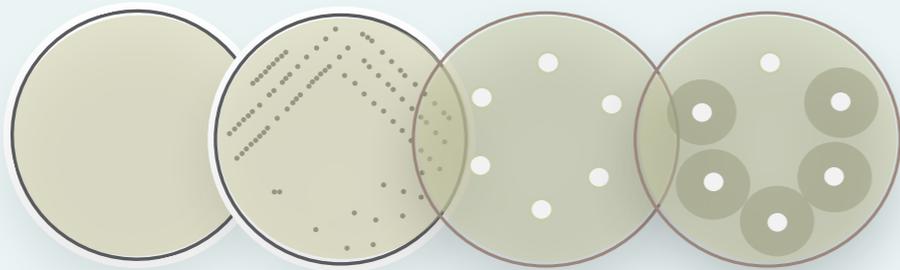


Co-Morbidity/Mortality

Diagnostic Standard is Microbiology

Slow time to results leads to poor outcomes for patients

STANDARD OF CARE:
Manual Clinical Microbiology



Time to Diagnosis: **DAYS**
72-96 h

BioAmp is TRANSFORMING
Standard of care towards automation



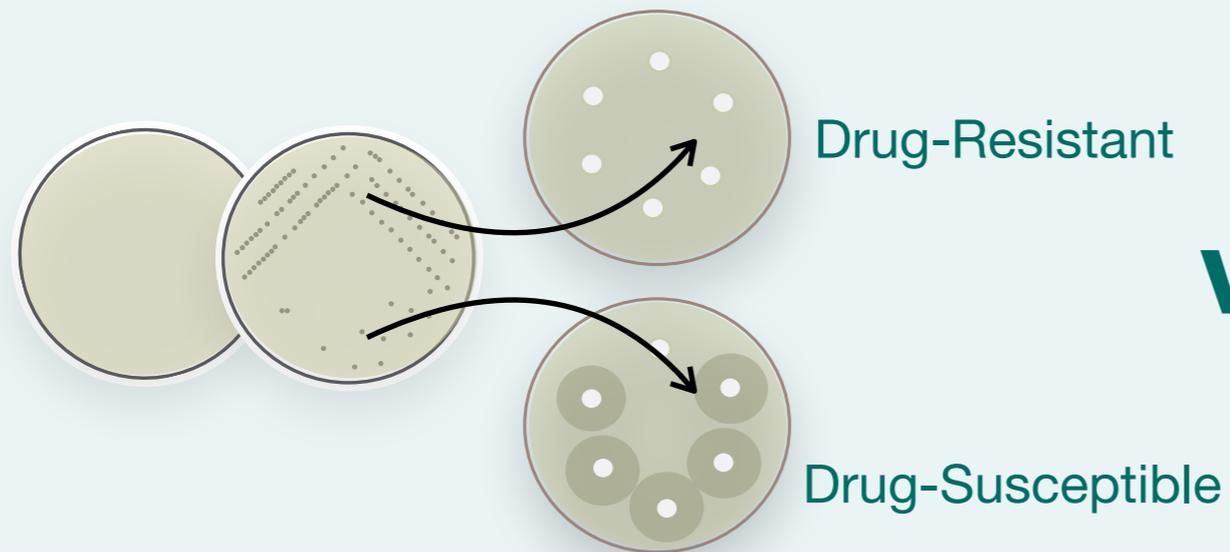
Time to Diagnosis: **MINUTES**
15 min

 BioAmp is delivering results in **MINUTES** instead of DAYS, so that patients can feel better immediately

We Apply a Non-Growth Method to Deliver Results in Minutes

- Simple color-changing signal technology

STANDARD OF CARE: Clinical Microbiology



VS

BioAmp Diagnostics



Detection method: **bacterial growth**

Detection method: **colorimetric**

Results Delivered in Minutes will Make All the Difference — Helping physicians treat patients with the right antibiotic immediately



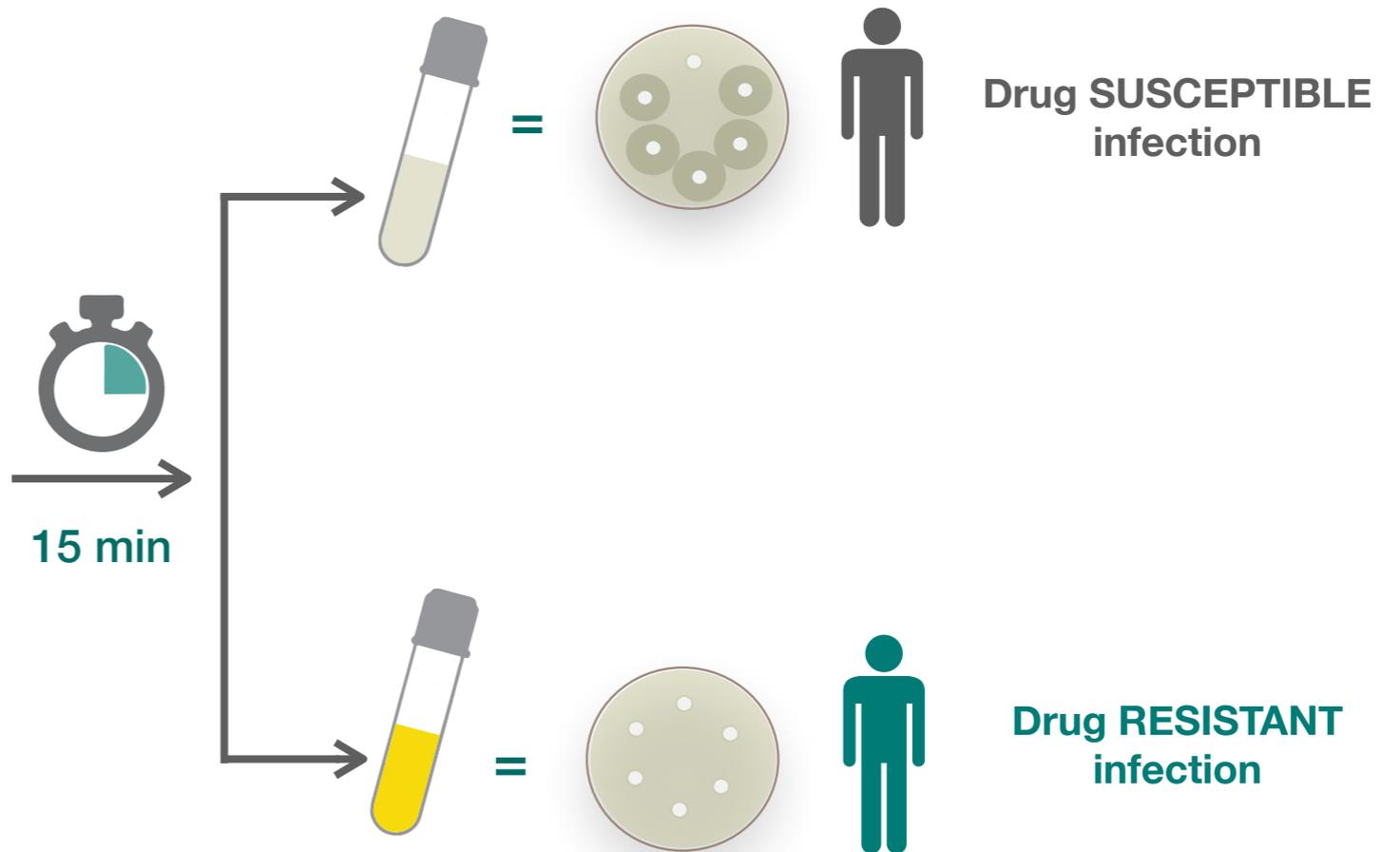
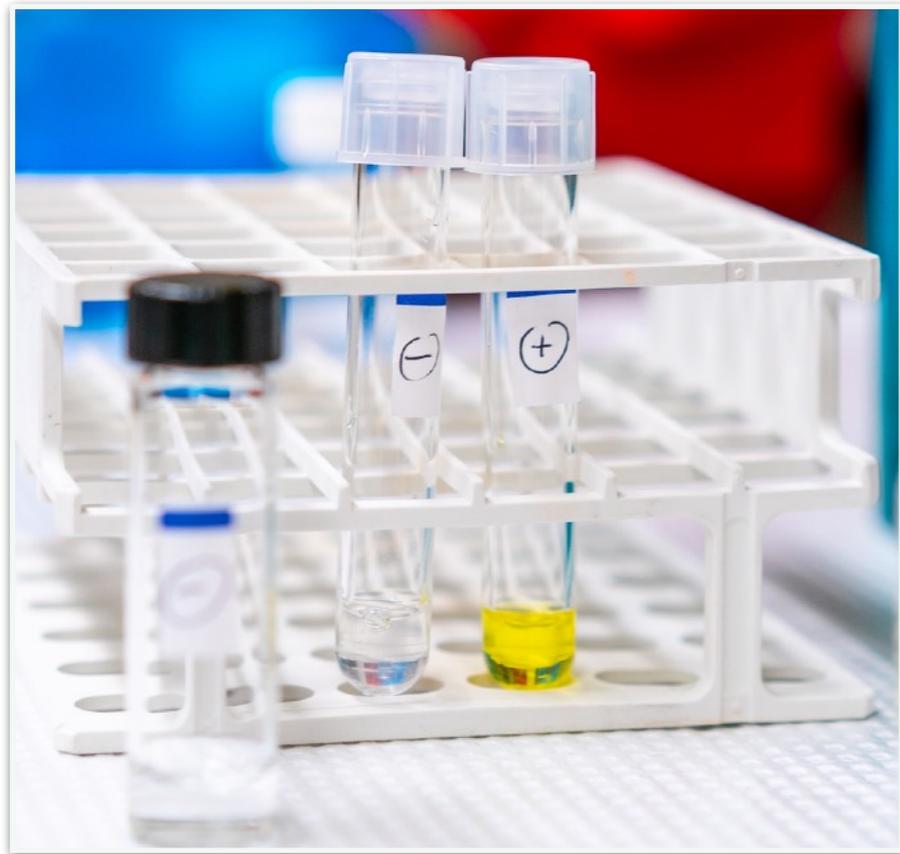
Expediting time to appropriate treatment



Decreasing mortality rates

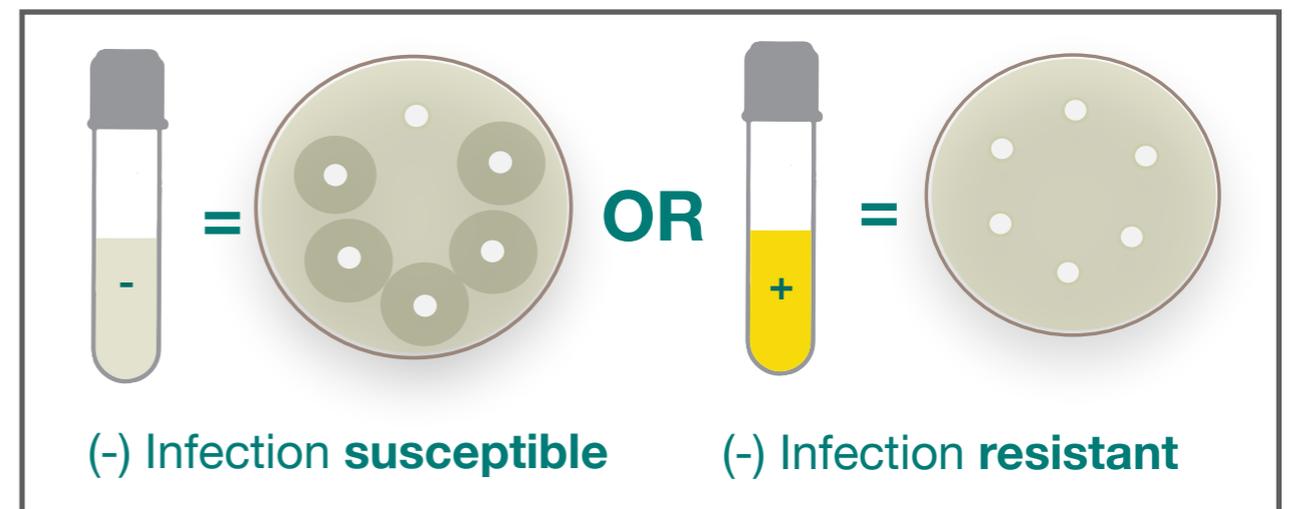
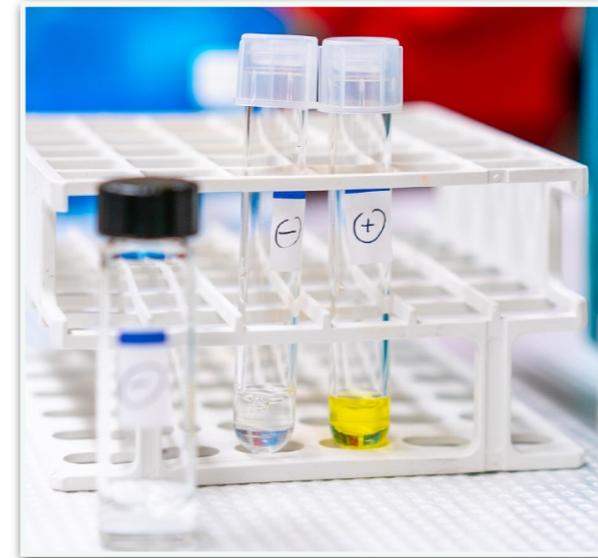
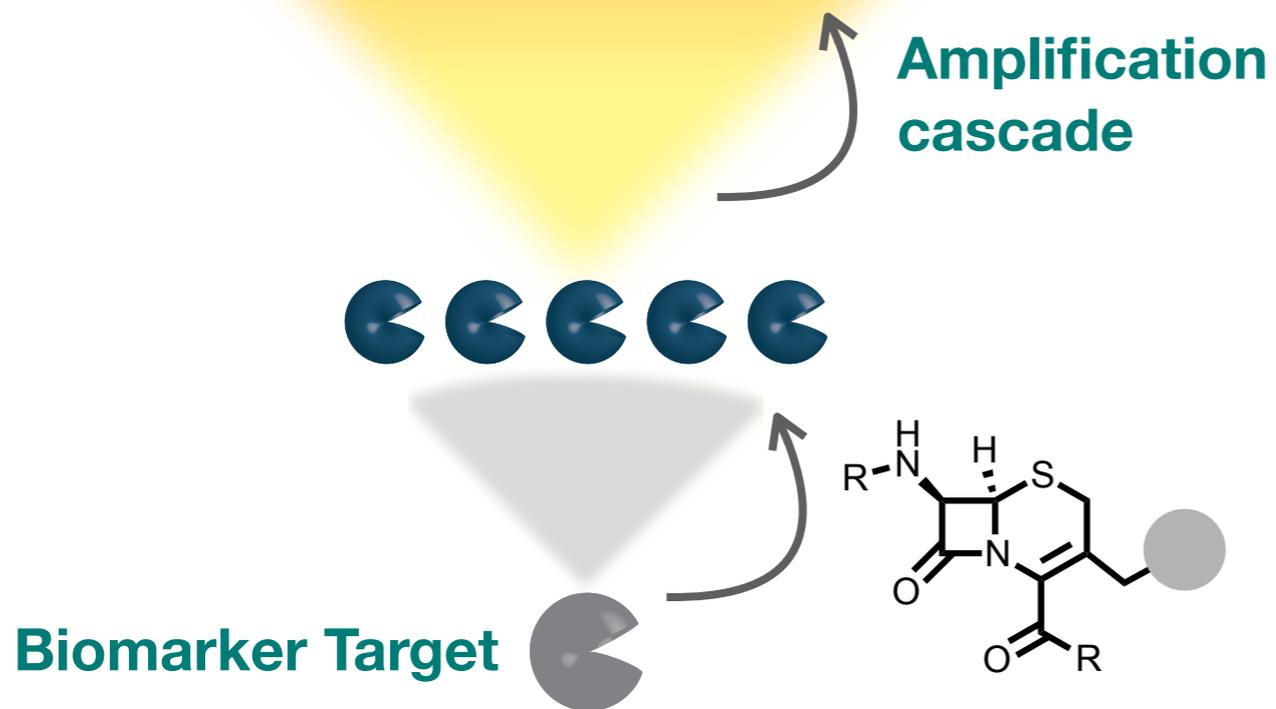


Shortening hospital LOS



BioAmp Harnesses an Amplification Strategy – DETECT (Dual-Enzyme Trigger-Enable Cascade Technology)

40,000-X
Colorimetric Signal Output



BioAmp circumvents the need for bacterial growth by **amplifying** the presence of **low-abundant** biomarkers

BioAmp Stands Apart from Competitors – Delivering results 288 X faster than the standard of care



- ✓ Simple and scalable technology
- ✓ Can be adapted to existing tools & instruments already found in clinical laboratories
- ✓ **Limit of Detection 100X** better than all competitors

Post-growth →

Minutes

+3h

+24 h

Agar
72 HOURS

BioAmpDiagnostics

288 X faster

FIRST LIGHT
DIAGNOSTICS

Roche GeneWEAVE™

GENEFLUIDICS

ACCELERATE
DIAGNOSTICS™

✓ All Require Sophisticated Instrumentation

Approach Validated by Targeting Antibiotic Resistance Biomarkers in Urine Samples – Tested 452 clinical urine samples



- ✓ **IRB-Approved Study, double blinded -**
Highland Hospital (Oakland, CA), public hospital
- ✓ **Diverse patient population:**
wide socioeconomic backgrounds
- ✓ **Comparator - clinical microbiology**
(**GOLD STANDARD**)
- ✓ **No samples excluded**

Company	Test	Sensitivity	Specificity	NPV	FDA Cleared	CE Mark
BioAmpDiagnostics	DETECT	91%	97%	99.8%		
 BACTERIO SCAN Detection. Diagnosis. Decisions.	216Dx	97.7%	72.1%	99.2%		
 GENE FLUIDICS	UTiMax	92%	97%	81%		

Overcoming Barriers of Market Entry —

We are building a secondary reagent test that fits existing hardware



Test to be run on existing automated chemistry analyzers:



Sales

Combo of direct sales to hospitals (clinical lab) & partnerships with analyzer manufactures



Test sell price

\$119 (price validation, existing equiv. test \$110/test)



Reimbursement

Existing CPT Codes (\$239 reimbursement)



Profit

To hospital (clinical lab)



Margins

Opportunity for margins > 90%



Direct Regulatory Path

510(k) Clearance

BioAmp's technology can be fitted to multiple test formats

\$ 4 B

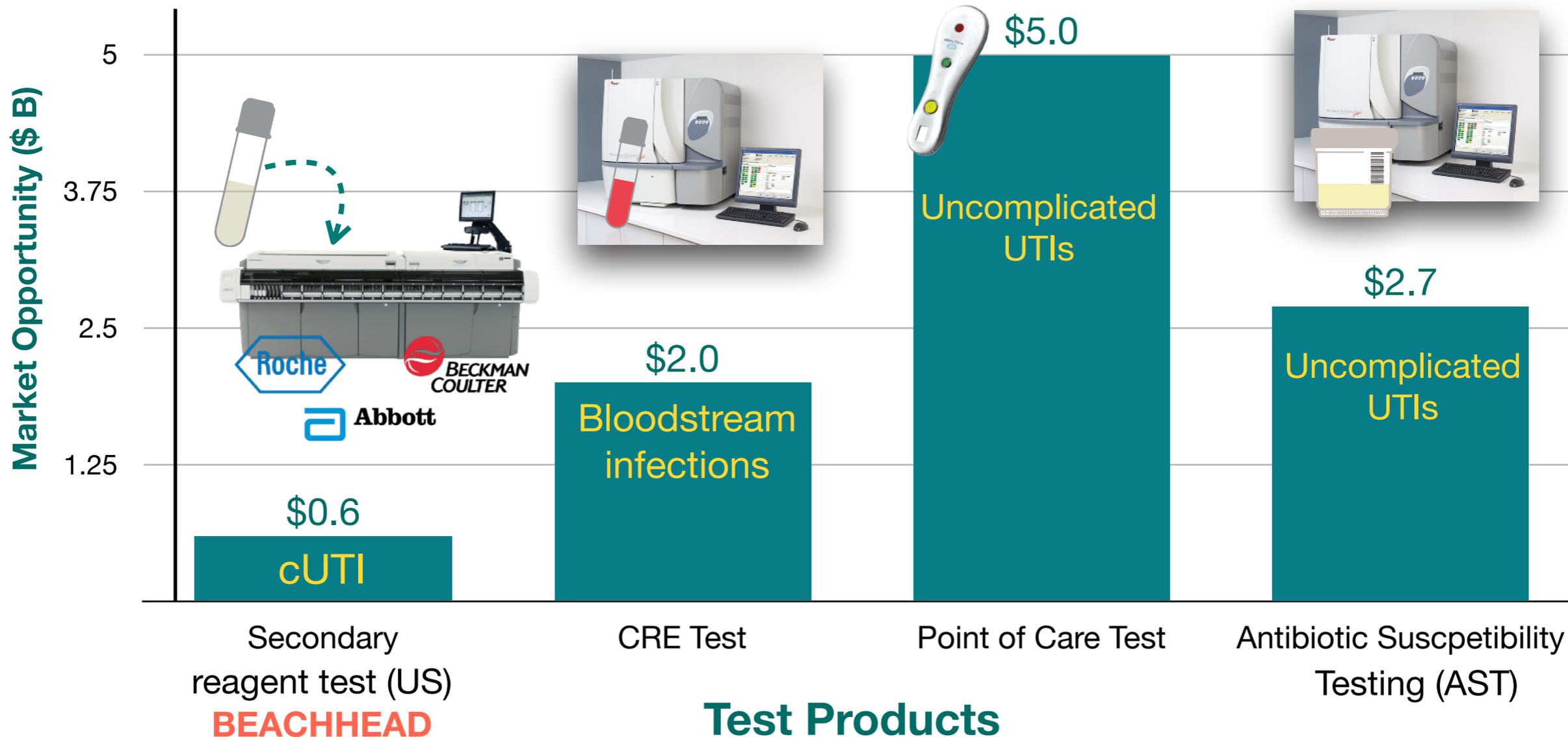
Clinical Microbiology
Market

77 %

Market shared across
20 companies

45 %

US Market
Segment



Traction & Emerging Milestones

2016 *Cal*

✓ Core tech developed & protected (PPA)

✓ Early proof of concept (n=50)  National Institute of Allergy and Infectious Diseases

Key:

Grey - Completed

Red - *In progress*

2018

✓ Feasibility Study, IRB-Approved (n=452)

HIGHLANDHOSPITAL

✓ PCT Application Filings



2020

✓ Clinical outcomes Study (n=4,107)  KAISER PERMANENTE®

✓ **Multi-Center WGS Study** (intended use statement)



ZUCKERBERG SAN FRANCISCO GENERAL Hospital and Trauma Center

UCSF Health

HIGHLANDHOSPITAL



JOHN MUIR HEALTH



UCLA Health

UCI Health

✓ **NSF Phase I Awarded**



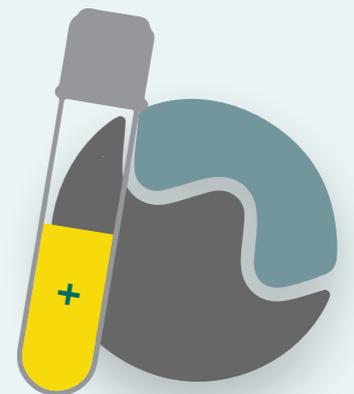
America's SEED FUND SBIR, STTR

PRE-SEED ROUND (Convertible Note, \$600K - *matching*):

✓ Translating current assay format to target product form - secondary reagent test

✓ Preparing health economic studies to address key adoption & implementation risks

✓ Preparing for FDA pre-submission



Product Launch 2023