

Accurate. Earlier. Detection.



DIANA CALDWELL, CEO & CO-FOUNDER
Amplified Sciences

*Diagnostics
Platform
Play*

*Near Term
Exit
Potential*

*Targeting
Large
Markets*

**Investment
Opportunity**

*Clinical
Evidence
Published*

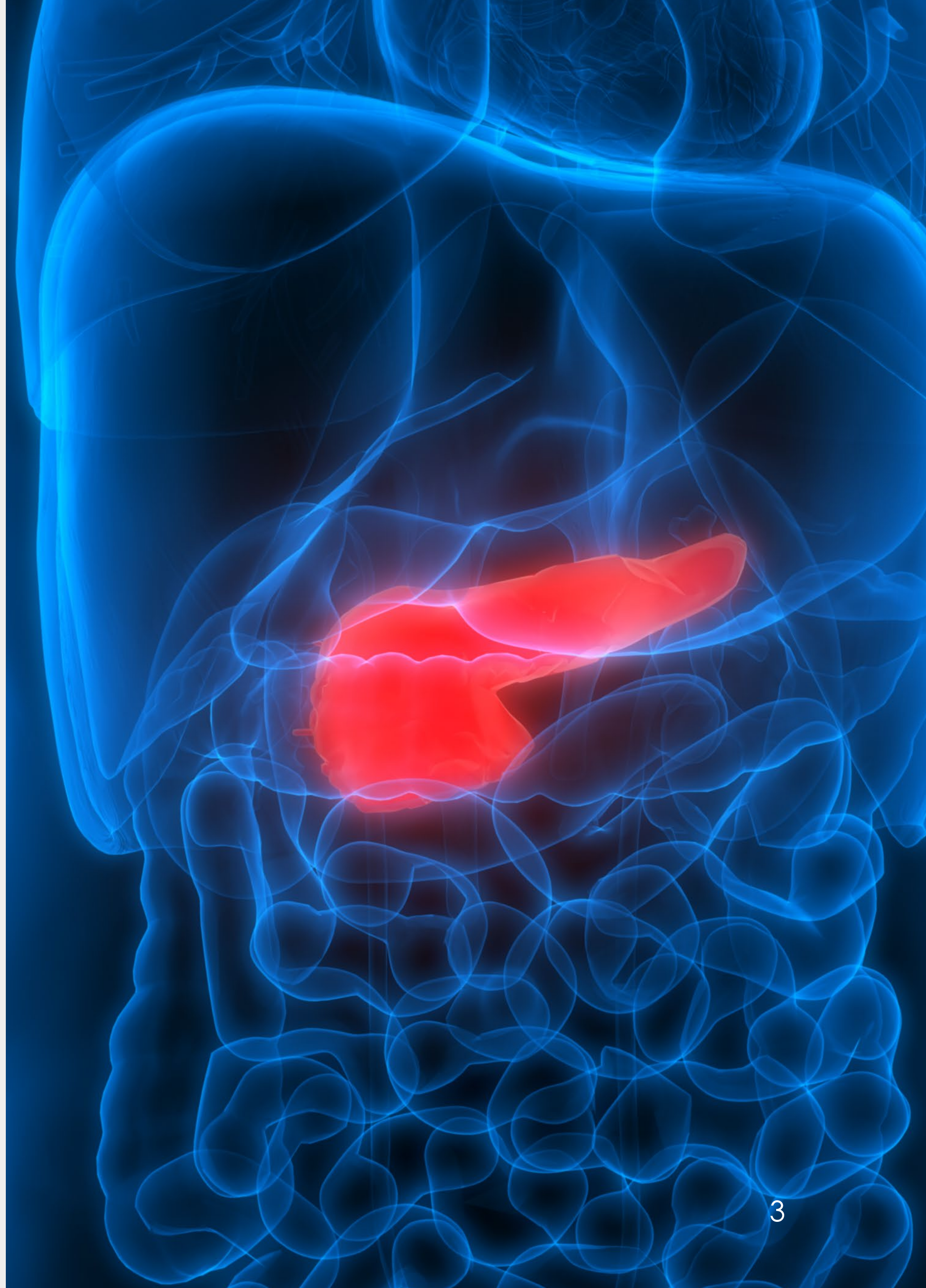
*Composition
of Matter IP*

*EOY 2023
Launch*



First problem we are solving

- Go to the doctor for stomach problems
- CAT scan shows a ***cyst on your pancreas***
- Fear
- Do we risk surgery?

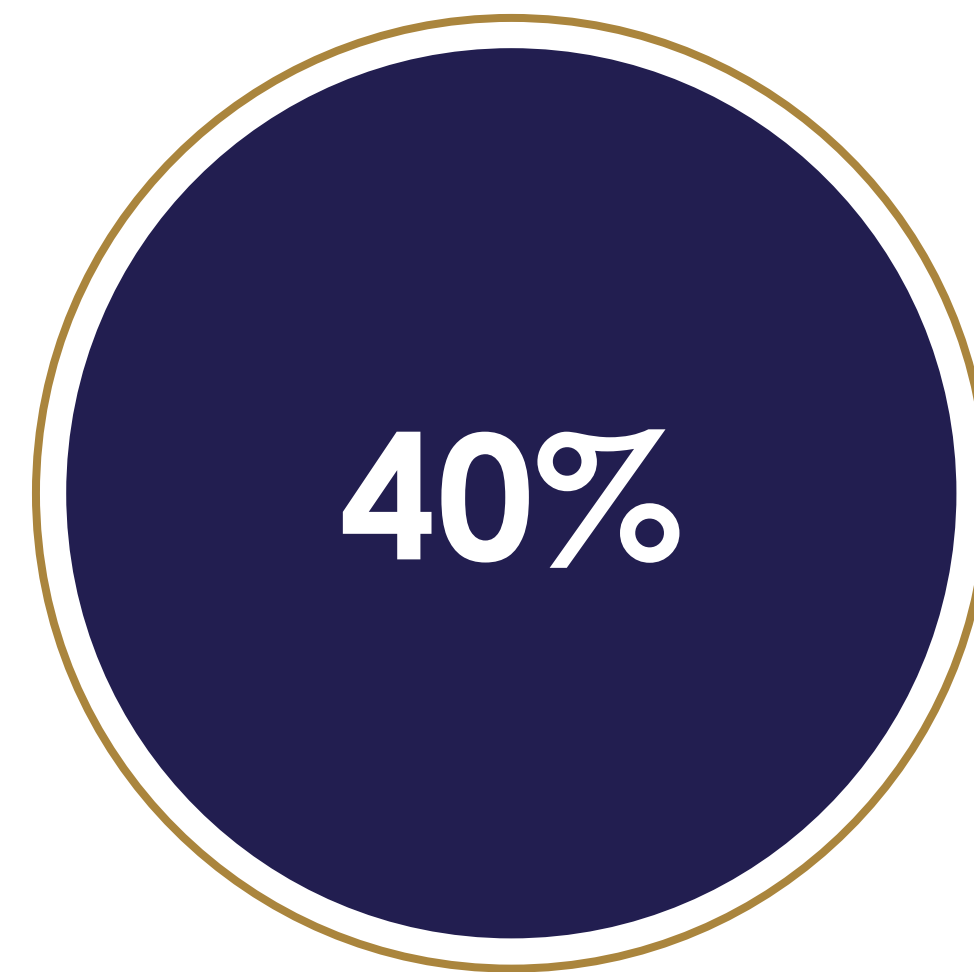


The Problem: Pancreatic Cancer and Cysts

A window to earlier detection



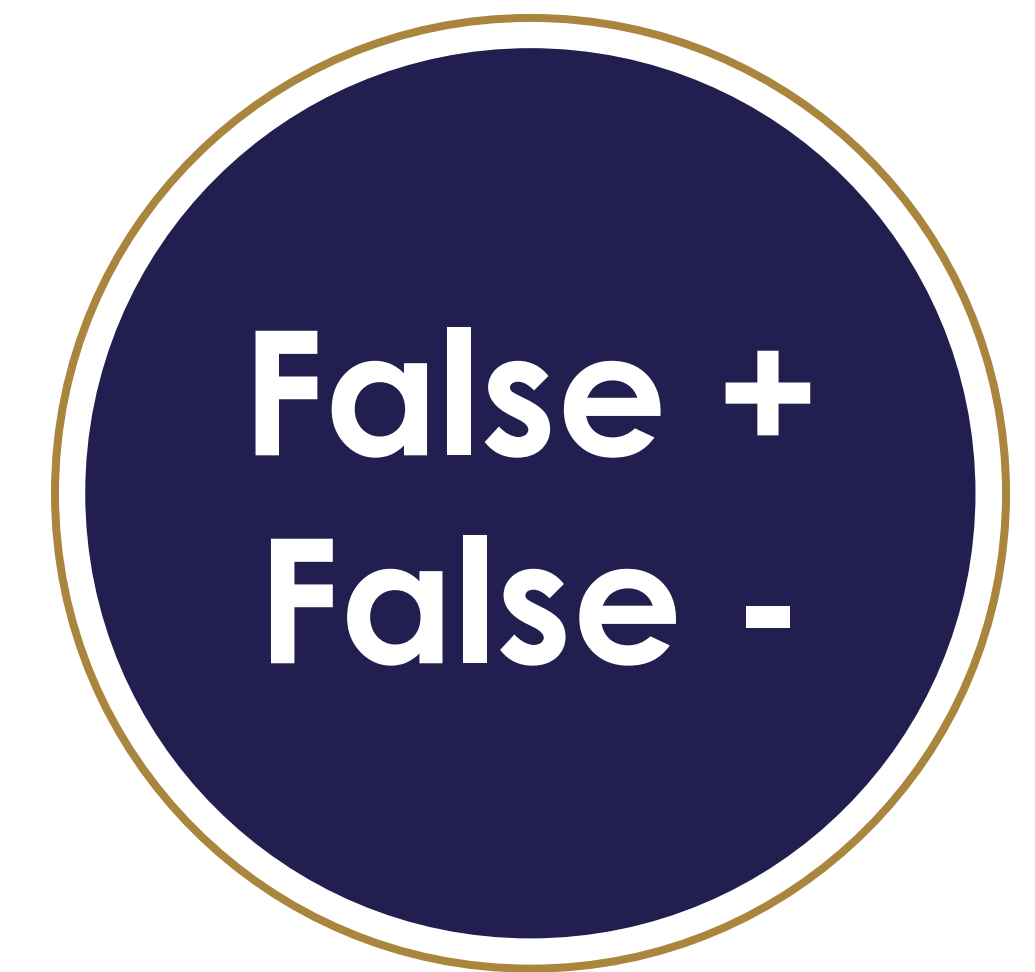
DEADLY CANCER



SURGICAL MORBIDITY



COST



INFERIOR COMPETITION

Huge unmet medical need in managing incidental cyst detection

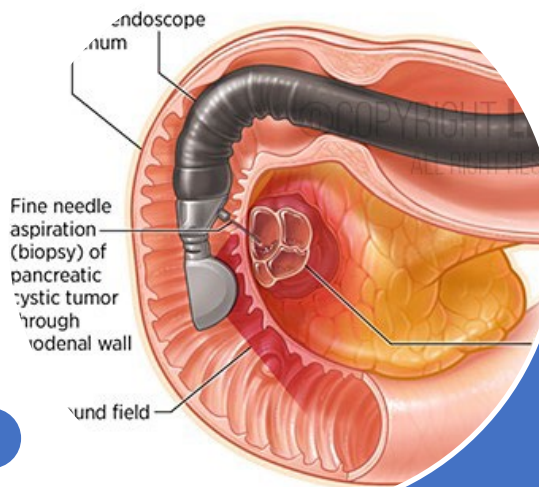
Patient Journey: Pancreatic Cancer and Cysts



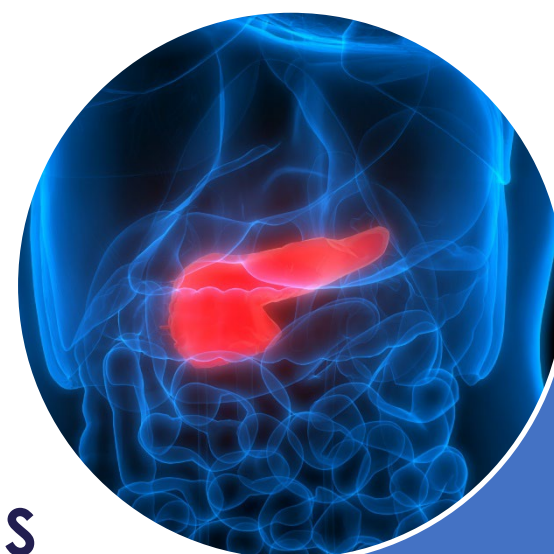
Risk stratification:
Treat potentially malignant
and spare benign



Cyst fluid analysis:
Assess cancer risk
biomarkers



**Standard of care
EUS-FNA:**
Gastro Endoscopy specialist



**Cyst discovered
incidentally:**
Primary care setting

PanCystPro™

Pancreatic Cancer Diagnostic market

\$2.9B

- Growing market*
- Total market includes imaging

\$300M

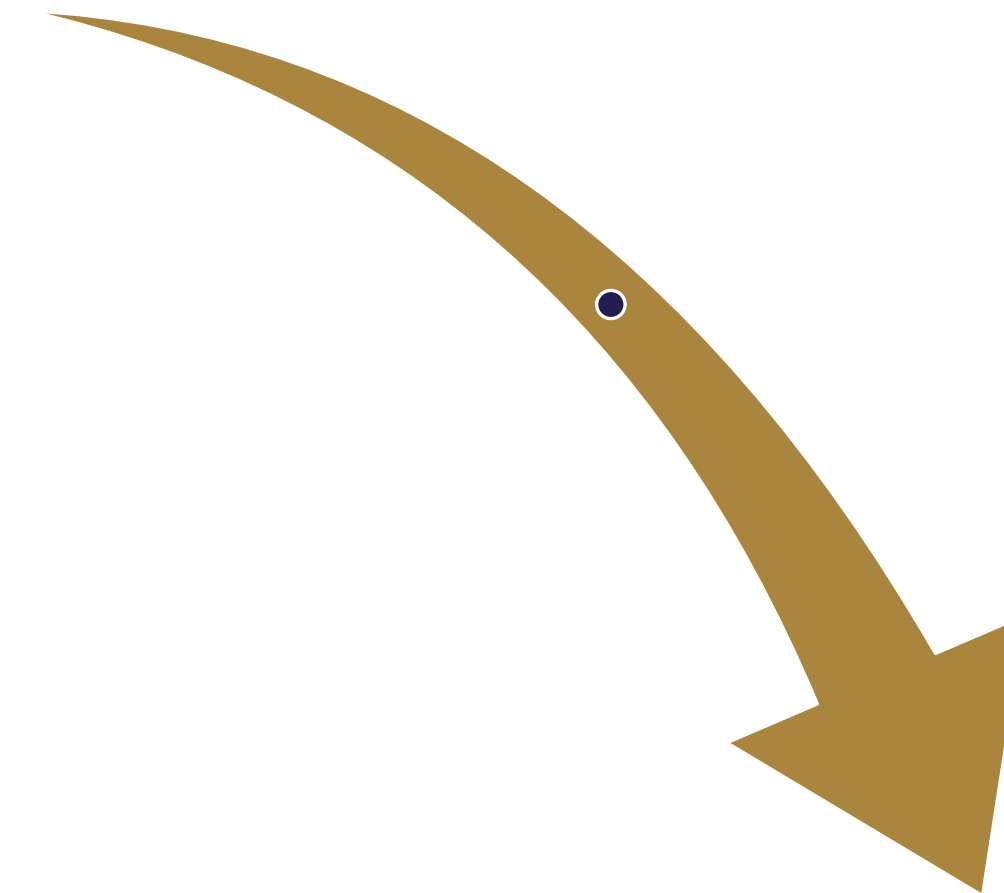
- Incidental detection
- Patients with cysts

\$80M

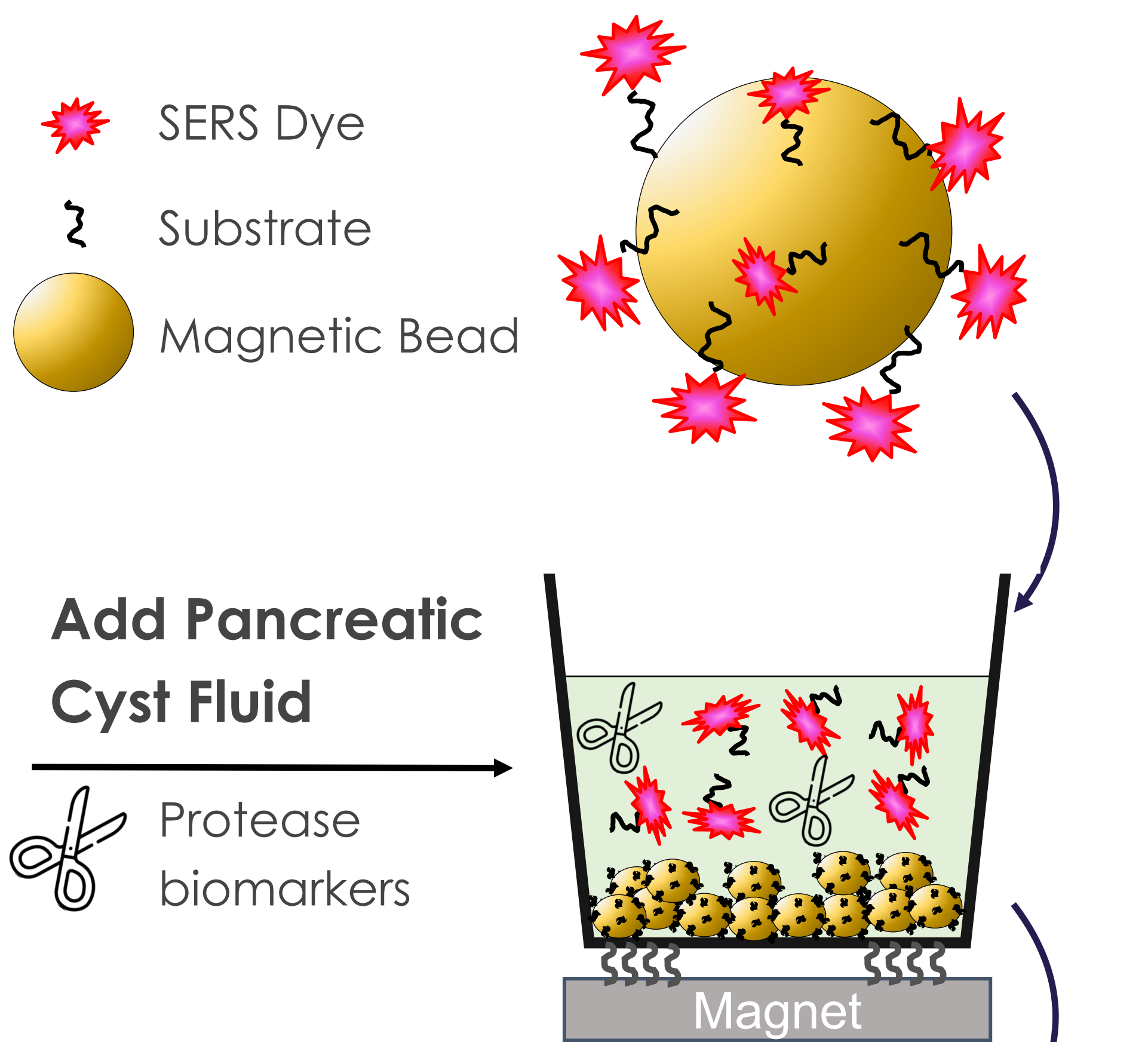
- 25% SOM
- Scalable to new assays

Total Diagnostic market

Total IVD \$88B

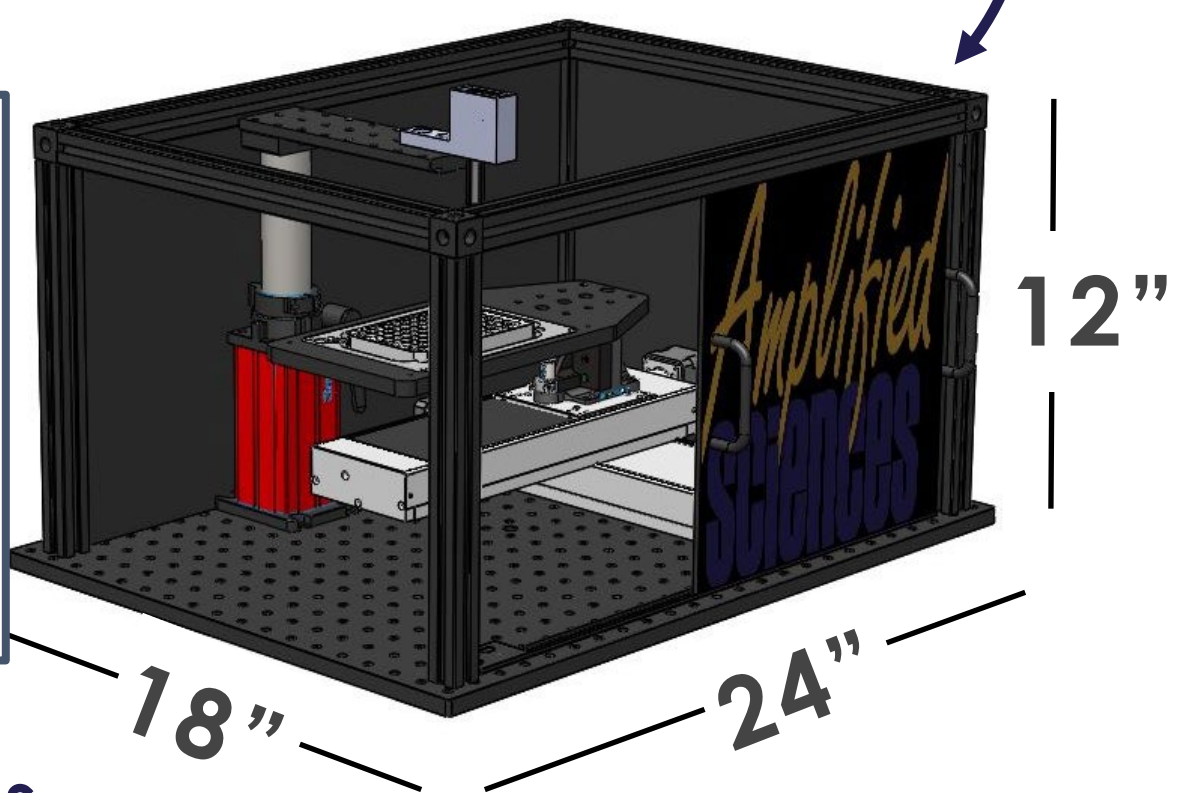
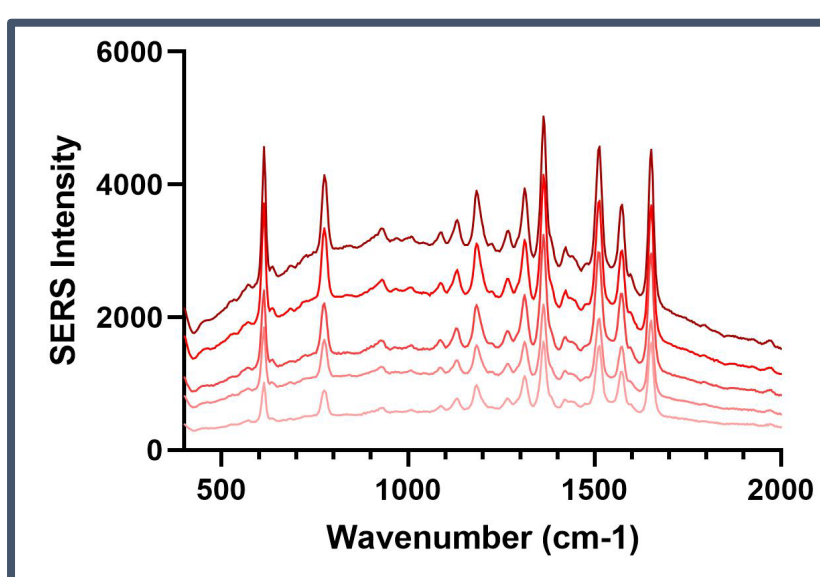


70% Healthcare decisions



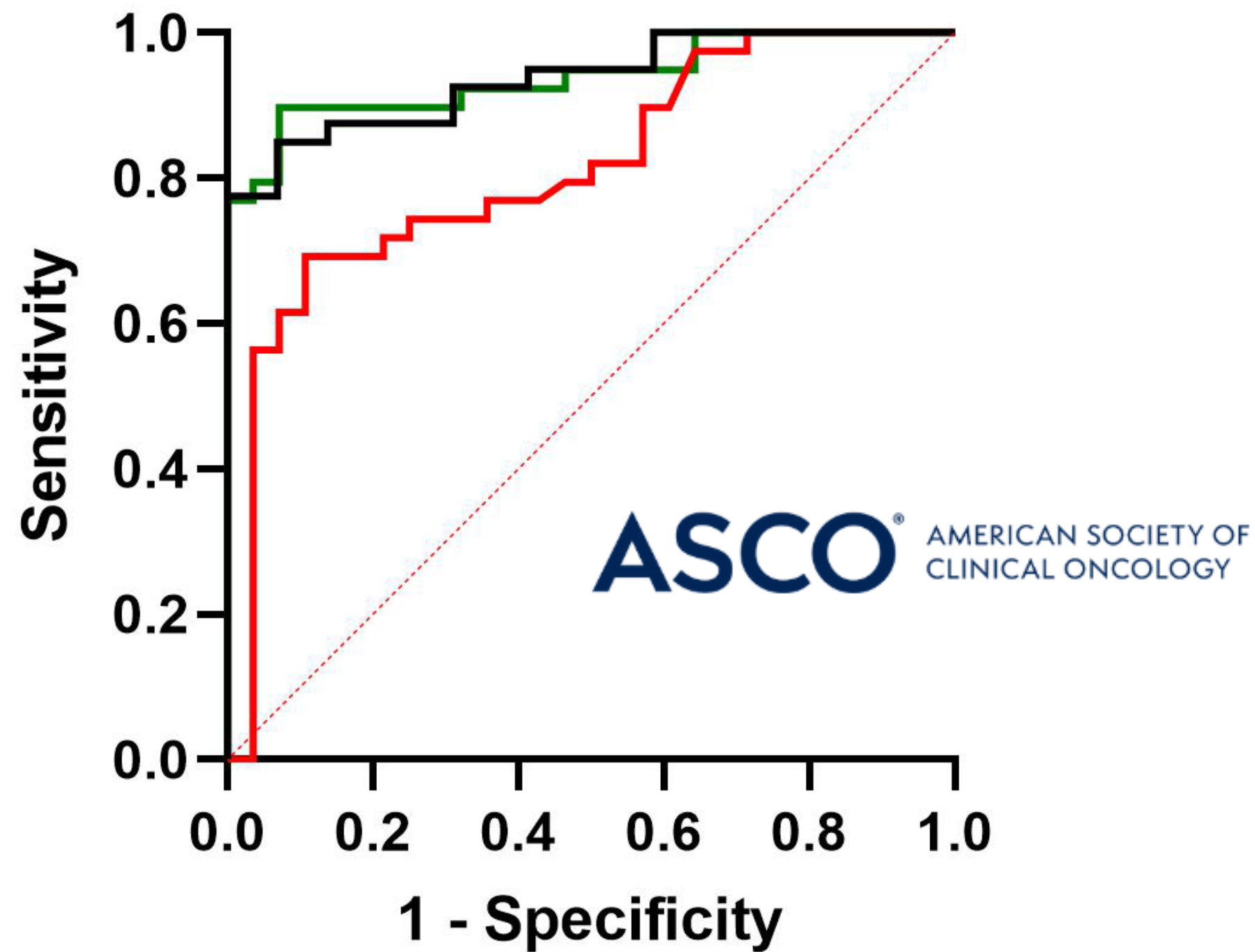
The Solution: PanCystPro™ Minimal Sample Assay for Protease Biomarker

- “Rule Out” test is first in class
- Beats competition: accuracy and overcomes sample size limitations
- Favorable existing reimbursement precedent set by competition



AMPLIFIED SCIENCES

Clinical Data



— PanCyst Pro (FL) — CEA — Combo

	Sensitivity	Specificity	AUC
PanCyst Pro (FL)	85%	93%	0.93
CEA	62%	93%	0.81
Combo	90%	93%	0.94

AMPLIFIED SCIENCES N = 69 HUMAN CYST FLUID SAMPLES, PATHOLOGICALLY CONFIRMED

SHEIK, D.A.; SURESH, V.; BYERS, K.; RAJESH, U.C.; CAIAZZA, F.; ZHU, G.; CRAIK, C.S.; KIRKWOOD, K.; DAVISSON, V.J. DISCRIMINATION OF MUCINOUS PANCREATIC CYSTS USING AN ENZYMATIC TURNOVER ASSAY TO IMPROVE CLINICAL DIAGNOSTIC ACCURACY. *J. CLIN. ONC.* 2022 40, SUPPL, 4151-4151 (POSTER ABSTRACT)

PanCystPro™

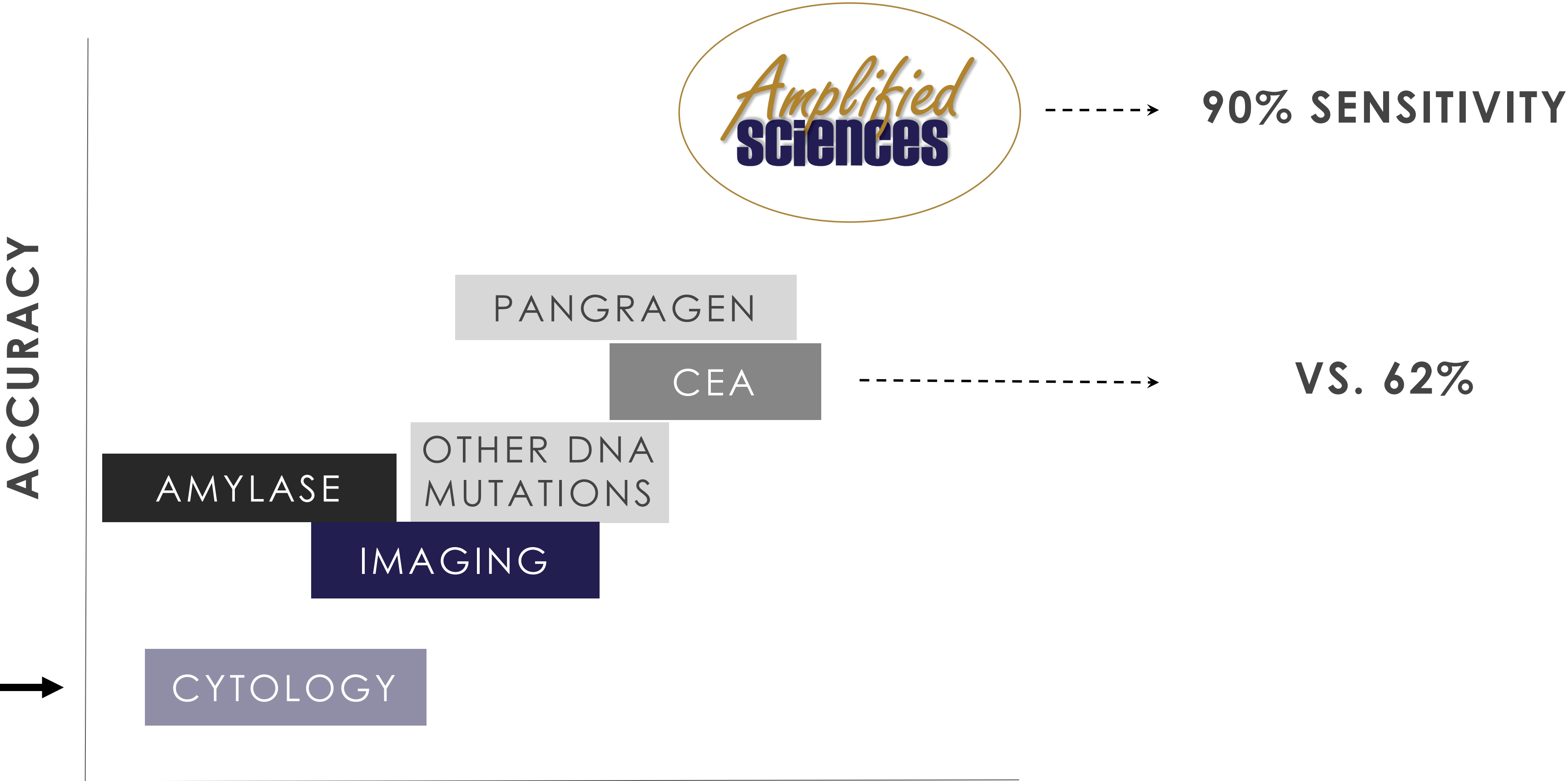
**Multi-analyte assay
Negative Predictive
Value**

95.24%

N = 154 HUMAN CYST FLUID SAMPLES, PATHOLOGICALLY CONFIRMED

INTERNAL DATA SUBMITTED IN ABSTRACT FOR ASCO GASTRO 2024 POSTER PRESENTATION

Competitive Analysis



❖ Biopsy does not work 70% of the time



EARLY DETECTION

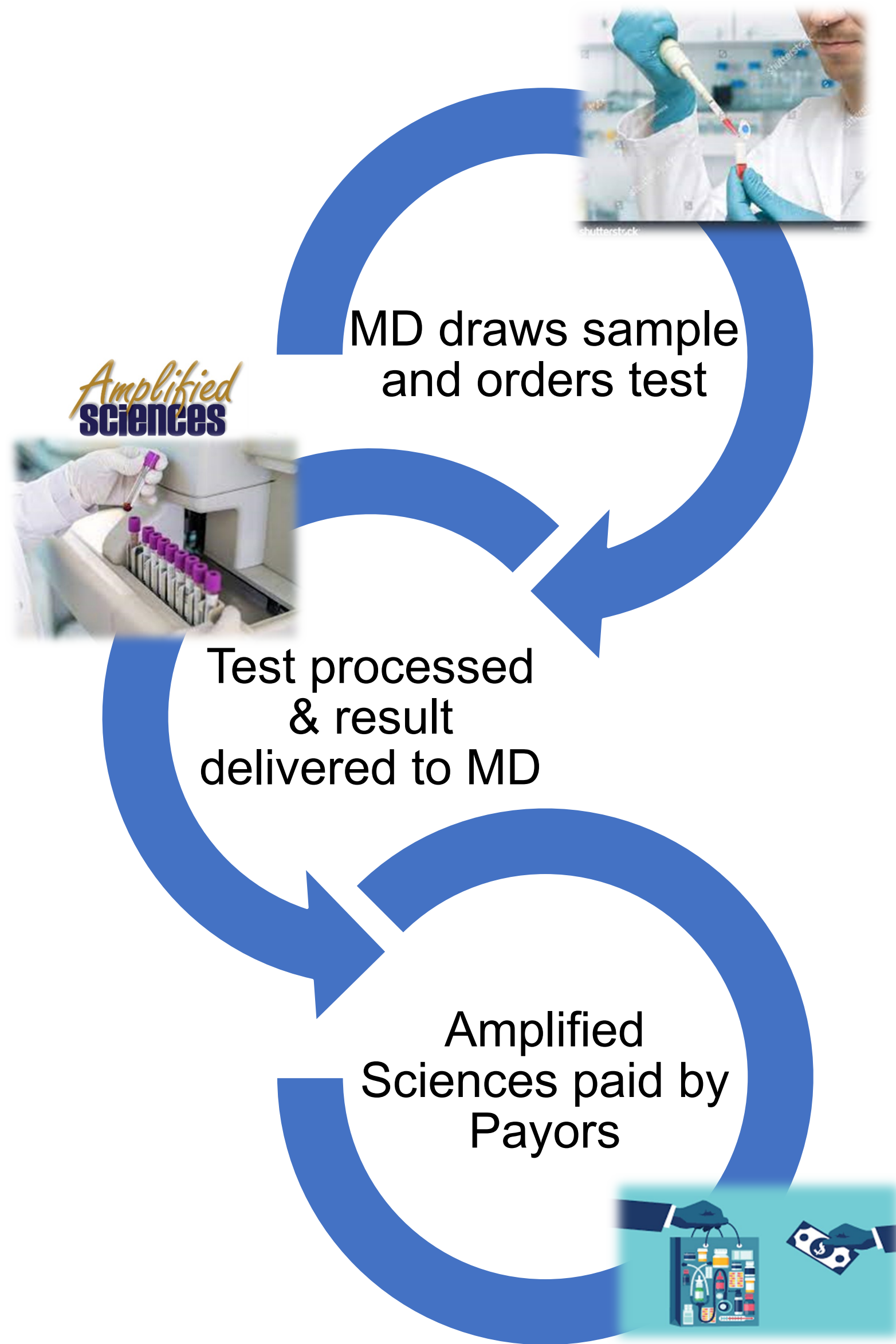
DEPENDENT ON LOW VOLUME PERFORMANCE

PanCystPro™

Value Proposition

- **Superior accuracy** vs. standard of care enables real decision making
- Doctors make **better decisions**
- Addressing huge **unmet medical need** in **earlier detection** of pancreatic cancer
- **More biological insight from lower volume** of patient sample required vs. competition
- **Saves healthcare costs**
- Foundation for suite of assays: **Platform enables multiple tests** with same patient sample

Diagnostics Business Model



- Similar models



- Revenue Model:

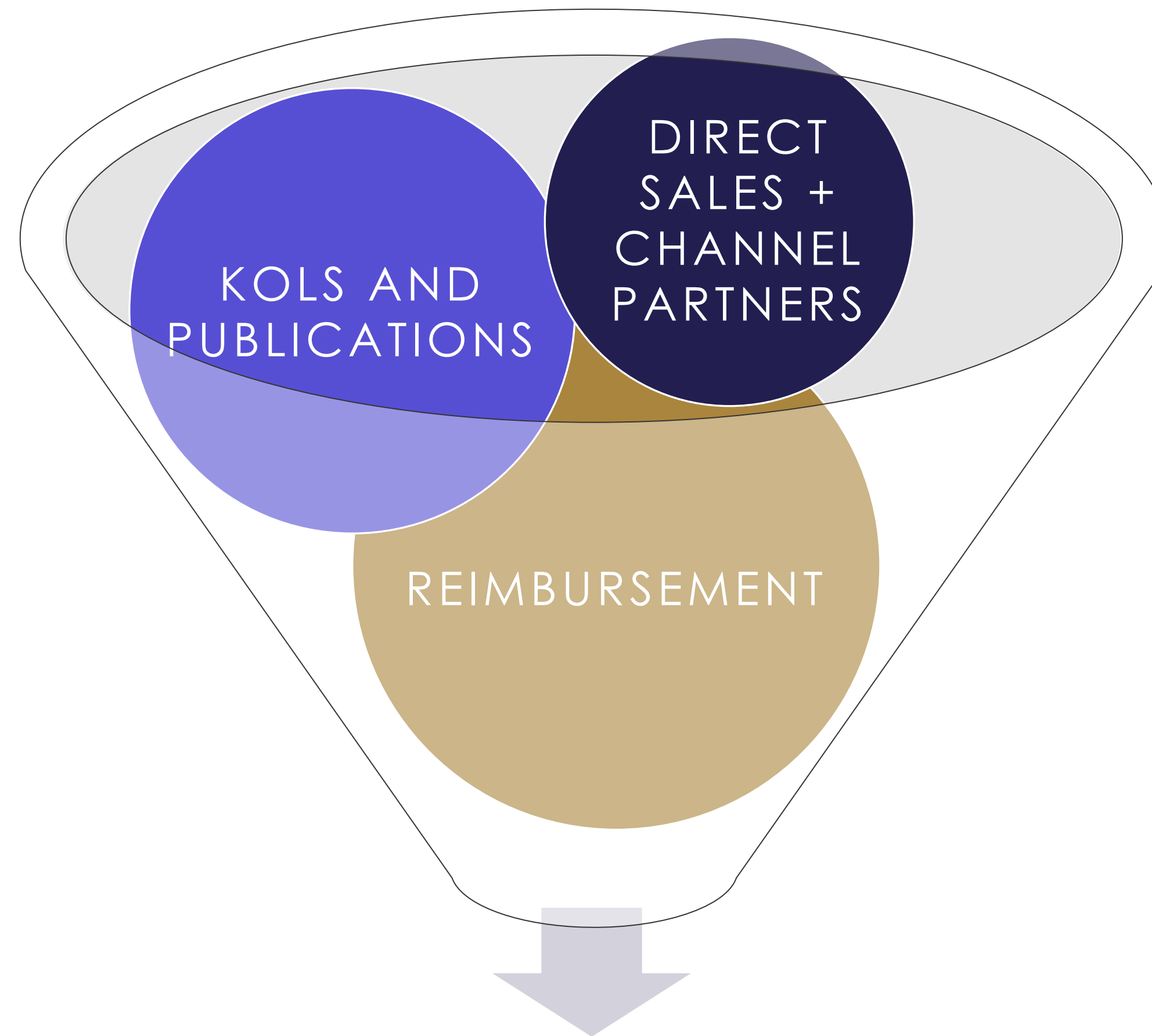
- CLIA: regulatory certificate Q 4 2023

- Lab Developed Test target price \$2,500

- Lead assay prescriber: Gastroenterologist

- Platform Play: Integrated system across disease states scales cost effectively

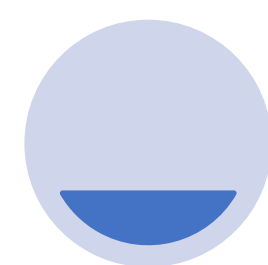
Commercialization Strategy: PanCystPro™



Launch to large
Gastroenterologist practices

Timeline

2020 - 2022

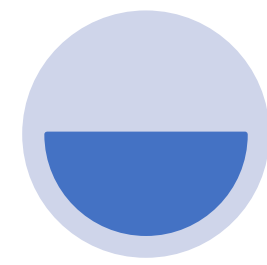


R&D Product Validation

- IRB approved clinical trials
- Clinical evidence published
- Platform development

\$1.78M Series Seed Note

2023

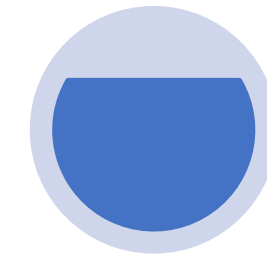


Regulatory Approval

- Analytical/Clinical Validation
- Launch Prep
- CLIA Certificate Q4

\$3M Series Seed Preferred

2024 - 2025

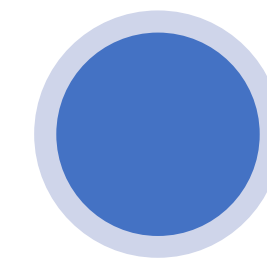


Launch

- Early access launch: PanCystPro
- Clinical utility trial
- File Medicare reimbursement dossier
- Launch 2nd pancreatic cancer assay

EARLY EXIT

2026 - 2028



Scale Pipeline

- Secure reimbursement
- Build/launch portfolio
- Commercial scale

\$8-10M Series A

Team

DIANA CALDWELL, MBA
 CEO/Co-Founder
 Board Member
 Serial entrepreneur



V. JO DAVISSON, PHD
 CSO/Inventor/Founder
 Board Member
 Biochemist
 30 years R&D
 +\$20M career grant fund
 IP licensed to Millipore



JOHN RIDGE
 Director of Commercial and
 Market Access

REBECCA LYON, PHD
 Operations Manager



DANIEL SHEIK, PHD
 Director of Research
 and Technology



Research Scientists



Advisory Board

CLINICAL

SCIENTIFIC

BUSINESS/IVD LAUNCH



KIM KIRKWOOD, MD
Pancreatic Surgeon
UCSF
School of Medicine



CHARLY CRAIK, PHD
Protease Thought Leader
UCSF
University of California San Francisco



PATTI CONNOLLY
Diagnostics COO
CAP/CLIA Inspector



VINCE WONG
Chief Commercial Officer



MO AL-HADDAD, MD
Chief of Gastroenterology



MARK CISNEROS, PHD
Serial Lifescience CEO



JOHN RIDGE
Diagnostics Market Access Executive



EXACT SCIENCES



TOM TAGUE, PHD



LINDA O'KEEFE, CPA
Former Elevate Ventures CFO

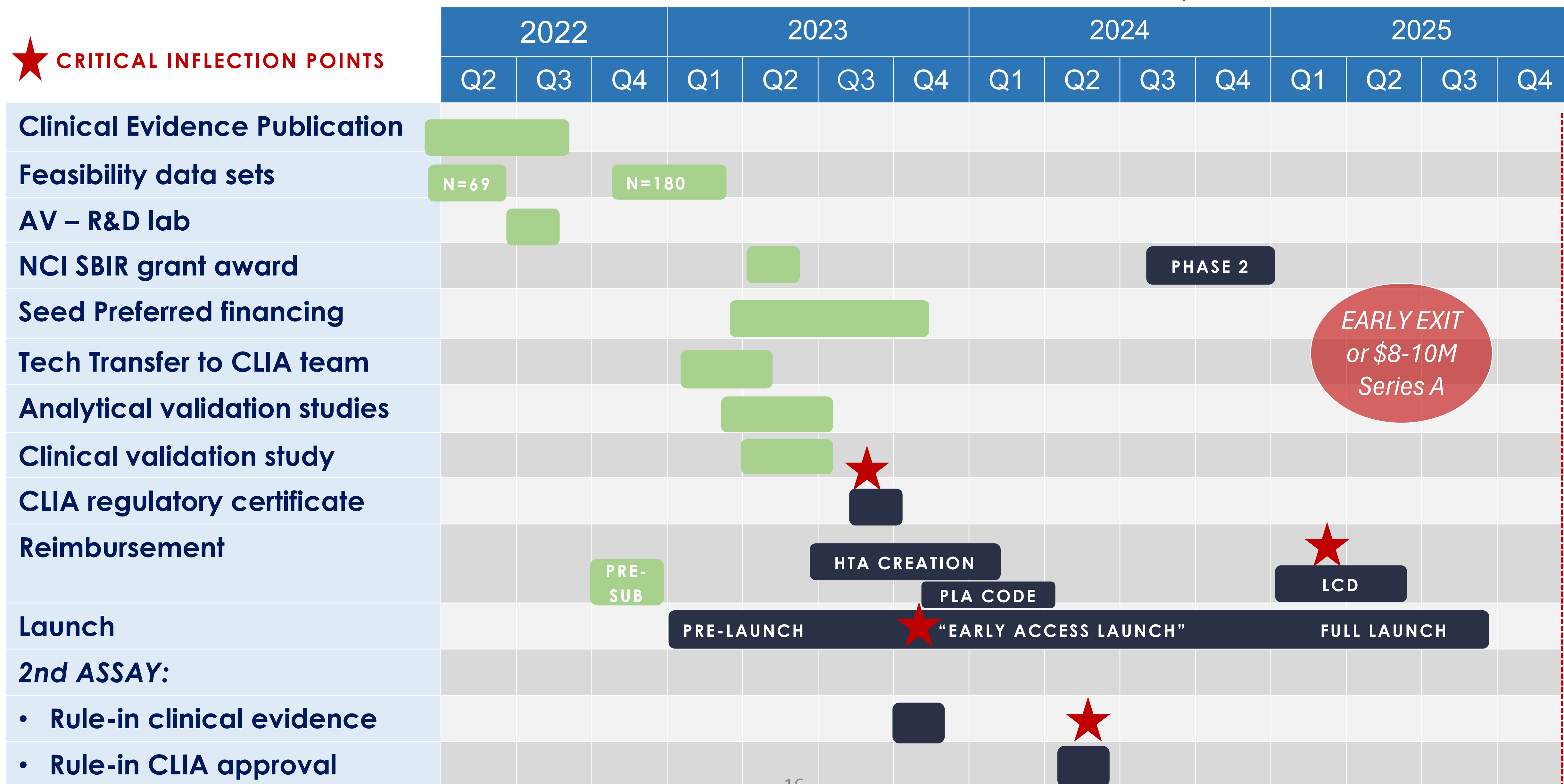


AMPLIFIED SCIENCES

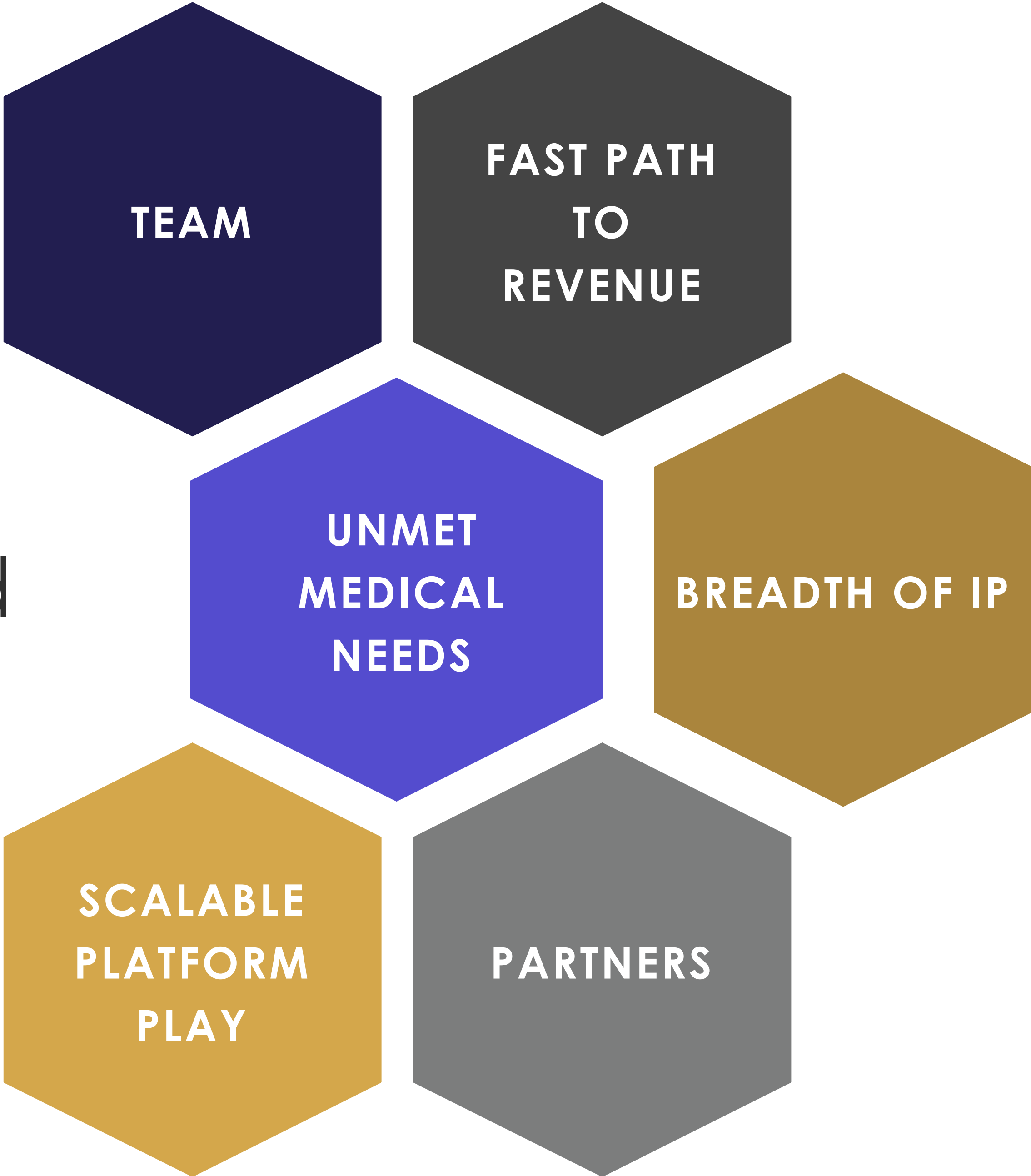
Key Milestones: commercial stage

-----\$4.05M FINANCING RUNWAY

★ CRITICAL INFLECTION POINTS



Why we will succeed



External Validation

"The Amplified Sciences product represents innovation that might allow us to better find that golden marker a little faster."

– DR. AL-HADDAD
IU SIMON CANCER CENTER

AMPLIFIED SCIENCES

Q BAY MENTOR SERIES WITH JOHN E. DOWLING

RESI REDEFINING EARLY STAGE INVESTMENTS
January 11-13, 2022
WWW.RESICONFERENCE.COM

Congratulations to the Digital RESI JPM 2022 IPC Winners!

First Place	Second Place	Third Place

NIH NATIONAL CANCER INSTITUTE

MedCity **INVEST**
JULY 21-22, 2020 • CHICAGO
National Healthcare Investing Event
PRESENTED BY MedCity & mhin
News
Register now >>

Ocean Insight
January 15, 2021
Ocean Insight Grant Program
Finalists Announced

GRANT FINALISTS ANNOUNCED

Grant Program Finalists Announced



TEXAS LIFE SCIENCE Forum

BUZZ OF BIO CONTEST VOTE FOR THE BUZZ OF BIO

ENDLESS FRONTIER LABS

PEPPERDINE | GRAZDIADIO BUSINESS SCHOOL
MOST FUNDABLE COMPANIES LIST

INDIANA UNIVERSITY

News at IU ALL CAMPUSES

BUSINESS AND INNOVATION

Life science startup targeting pancreatic cancer receives IU Philanthropic Venture Fund investment

Acquisition by large clinical CLIA lab player (LabCorp or Quest)



Strategic acquisition post CLIA commercial stage

- ▶ Exact Sciences, Interpace Diagnostics, Castle Biosciences, Lucid Diagnostics, Gemelli Biotech, Oncocyte, Olympus, & other "liquid biopsy" companies

Co-development and/or acquisition by instrument company

- (Bruker, Thermofisher, Agilent, Leica, Wasatch)

Several paths to exit


Healthy M&A Activity

\$450M



Quest Diagnostics™
HAYSTACK ONCOLOGY

\$600M



veracyte. | DECIPHER BIOSCIENCES

Combination creates comprehensive portfolio of novel genomic diagnostic tests addressing 7 of the top 10 cancers

Drives market, menu and global expansion
Accelerates growth

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\$8B



illumina®
GRAIL

\$1.8B



DiaSorin
Luminex®

\$2.1B



EXACT SCIENCES
Thrive.
Earlier Detection

\$130M

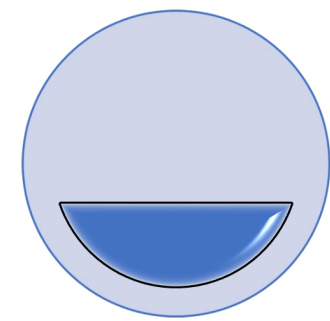


C/STLE BIOSCIENCES
ALTHEA^{Dx}

Accurate. Earlier. Detection.

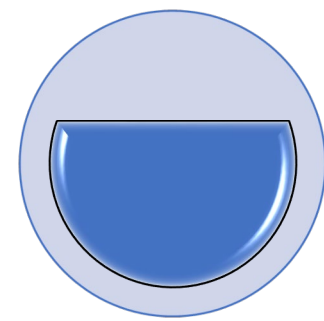
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OPEN CAPITAL RAISE



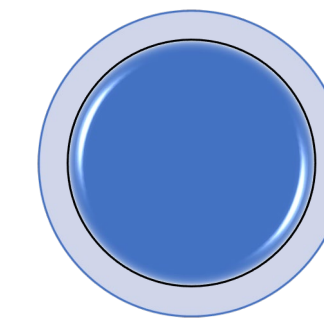
THE ASK

Series Seed
Preferred \$3M
\$6.5M pre-money
valuation
30% VCI tax credits



STATUS

\$2.24M Closed
through 10/6
Co-lead VC model
Diligence to share



USE OF FUNDS

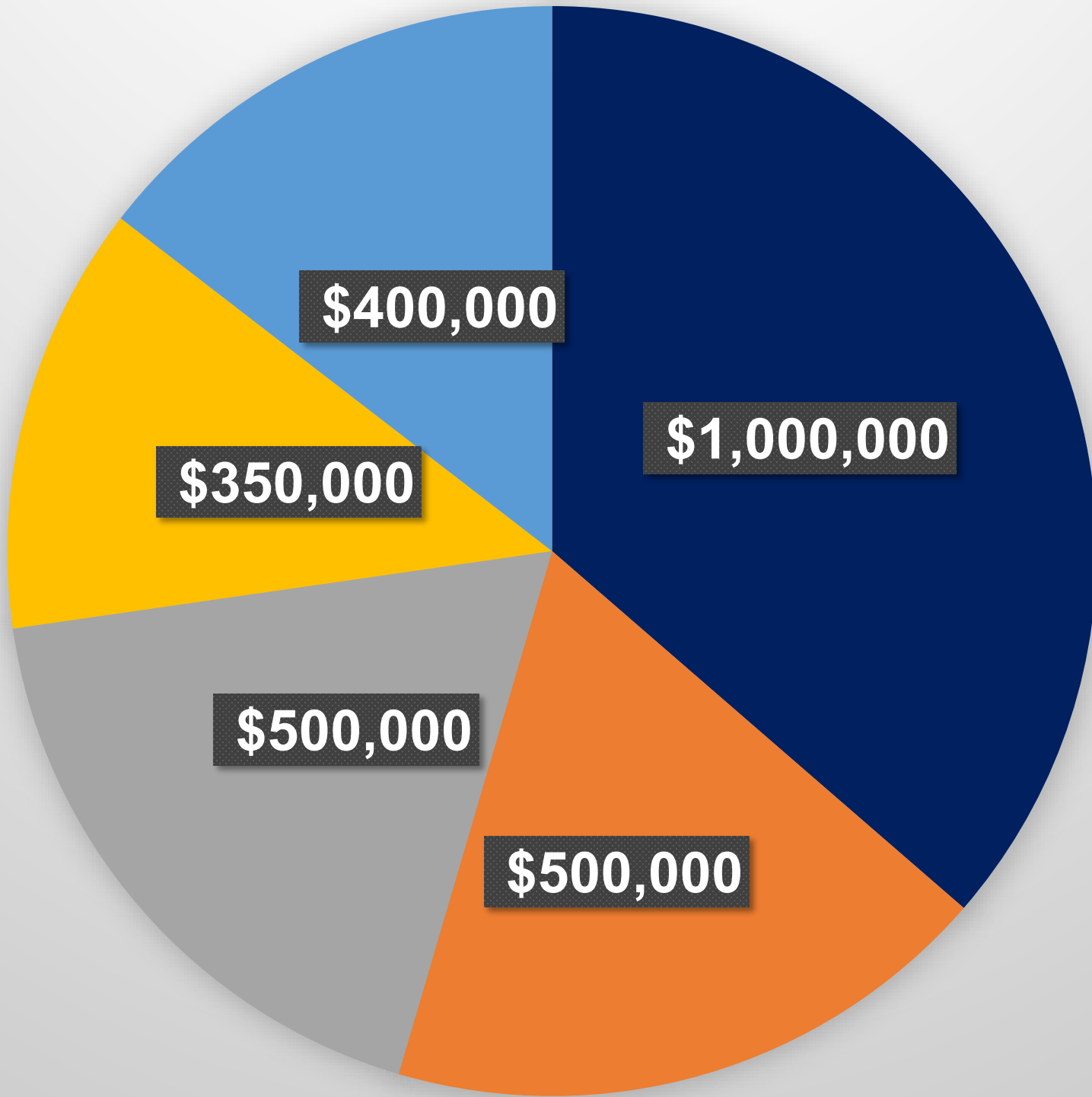
Hits regulatory
milestone
Fuels commercial
stage
Builds pipeline

OCA  **VENTURES**


elevate
ventures

Series Seed Preferred: Use of Funds

- R&D
- Sales/Mk
- Clinical trials
- Capital equipment
- CLIA Lab/Regulatory



- HITS REGULATORY MILESTONE
- FUELS COMMERCIAL STAGE
- BUILDS PIPELINE



Diana Caldwell, President & CEO

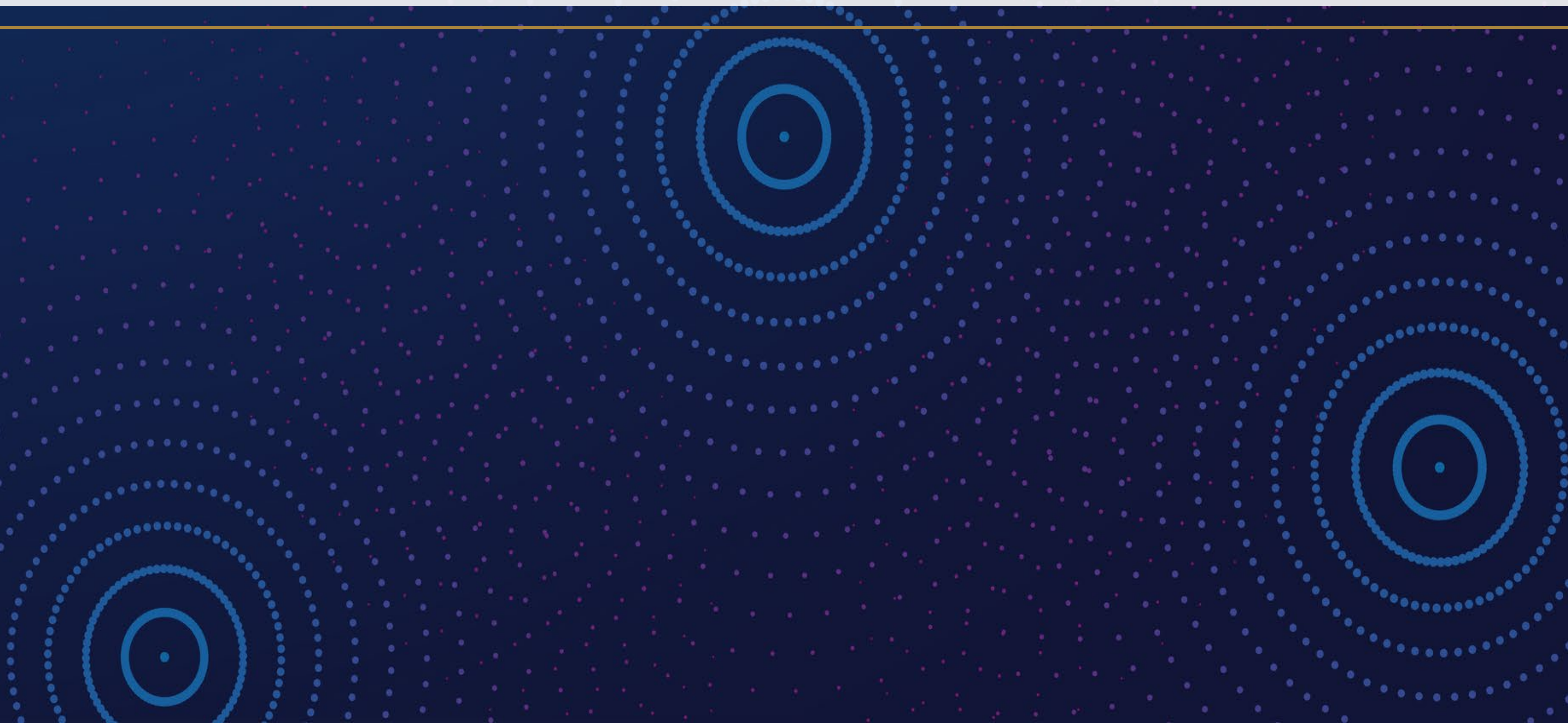
Amplified Sciences

diana.caldwell@amplifiedsci.com

317.490.0511

Backups

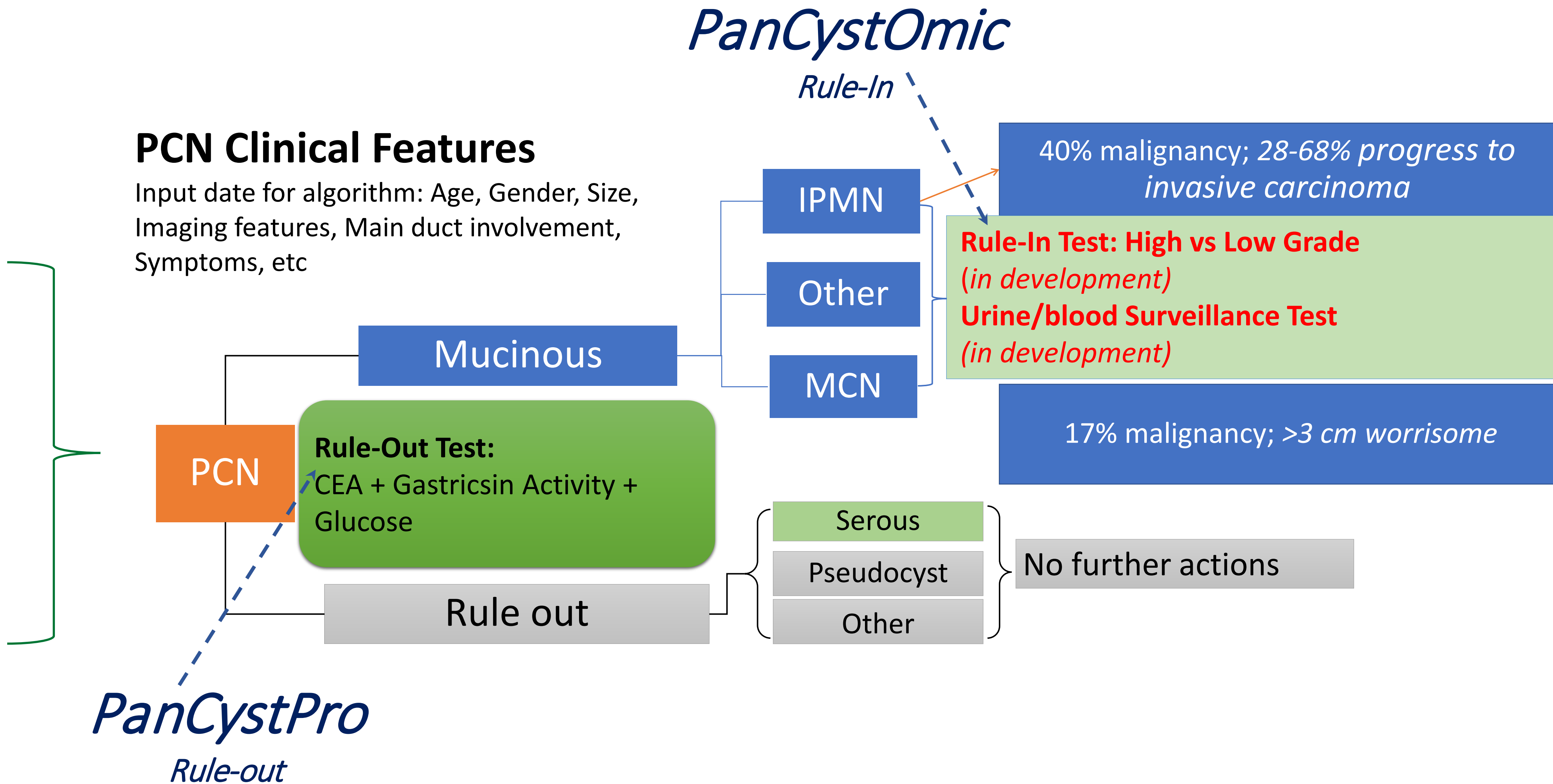
Amplified
SCIENCES



Product Portfolio to Manage Patients at Risk of Pancreatic Cancer



Pancreatic Cystic Neoplasm (PCN) patients



Technology External Validation

LEVERAGING NON-DILUTIVE FUNDING

\$450k SBIR grant

- Phase 1 NIH-NCI SBIR award effective 5/1/2023
- Includes \$50k match from Indiana

\$415k Research use only revenue

- Sub-award through Purdue
- Sub-award through CRO in Phase 2 SBIR

\$90k State of Indiana grants

- Elevate Innovation Voucher grants
- INTap

AMPLIFIED SCIENCES



Department of Health and Human Services National Institutes of Health NATIONAL CANCER INSTITUTE		Notice of Award FAIR# R43CA277913 Federal Award Date 04/21/2023
Recipient Information		Federal Award Information
1. Recipient Name AMPLIFIED SCIENCES, LLC 1281 WIN HENTSCHEL BLVD STE 2132 WEST LAFAYETTE, IN 47906		11. Award Number 1R43CA277913-01A1
2. Congressional District of Recipient 04		12. Unique Federal Award Identification Number (FAIN) R43CA277913
3. Payment System Identifier (ID) 1812008087A1		13. Statutory Authority 42 USC 241 15 USC 638 42 CFR 52
4. Employer Identification Number (EIN) 812008087		14. Federal Award Project Title Translational Assays for Inflammatory Biomarkers for the Risk Stratification of Pancreatic Cystic Lesions
5. Data Universal Numbering System (DUNS) 080310994		15. Assistance Listing Number 93.394
6. Recipient's Unique Entity Identifier RCKST9F41YA6		16. Assistance Listing Program Title Cancer Detection and Diagnosis Research
7. Project Director or Principal Investigator Daniel Sheik, PHD Dan.Sheik@amplifiedsci.com 815-979-4285		17. Award Action Type New Competing
8. Authorized Official Diana T Caldwell		18. Is the Award R&D? Yes
Summary Federal Award Financial Information		
19. Budget Period Start Date 05/01/2023 – End Date 04/30/2024		
20. Total Amount of Federal Funds Obligated by this Action \$399,885		
20 a. Direct Cost Amount \$308,450		
20 b. Indirect Cost Amount \$65,274		
21. Authorized Carryover		
22. Offset		
23. Total Amount of Federal Funds Obligated this budget period \$399,885		
24. Total Approved Cost Sharing or Matching, where applicable \$0		



elevate
ventures

About Entrepreneurs Investors Regions P

EARLY & PRE-REVENUE STAGE

Innovation Voucher Program

Helping you leverage research services provided by Indiana higher-ed institutions and authorized nonprofit research providers.

Delivering Milestones

Cash runway extended to Q3 2025 via Series Seed Preferred and non-dilutive \$

SEED ROUND:
COMMERCIAL READY ASSAY

SERIES SEED PREFERRED:
LAUNCH CLINICAL DIAGNOSTIC

PRE SEED:
POC



2023 - 2025

2020 - 2022

2017 - 2019

\$3M FINANCING
\$2.2M CLOSED 8/31/23

RAISED \$2.02M

ADDITIONAL \$750K NON-DILUTIVE*

- ✓ Purdue IP ISSUED AND SECURED
- ✓ BRUKER PARTNERSHIP
- ✓ WORKING POC
- ✓ NSF GRANT
- ✓ FULLTIME CEO

- ✓ HIRED TEAM
- ✓ IRB APPROVAL
- ✓ CLINICAL STAGE
- ✓ RESEARCH USE ONLY REVENUE
- ✓ GRANT FUNDING
- ✓ ASCO AND *DIAGNOSTICS* PUBLICATIONS
- ✓ SECURED UCSF OPTION & PROVISIONAL PATENT FILED
- ✓ ASSAY READY FOR CLIA TRANSLATION
- ✓ PLATFORM DEVELOPMENT: 2ND DYE CLASS

- REGULATORY CLIA CERTIFICATE
- COMMERCIAL TARGETED LAUNCH
- PIPELINE BUILD

Multiomic Diagnostics Platform: Universal Optical Reporter Systems

- ▶ Versatile reagents and detector platform (razor and razor blade)
- ▶ Patented chemical reporters that amplify the biomarker signal
- ▶ Multiple classes of chemical reporters enables multiplexing of biomarkers in ligand binding assays
- ▶ Selective substrate and reporter technology enable multiplexing of protease activities
- ▶ Multidimensional biomolecular analysis:
 - ▶ Stackable to measure protein, metabolite or DNA/RNA markers
 - ▶ Agnostic workflow amenable to automation
- ▶ Ultra-sensitive sensing technology at LOD 10,000x comparable technologies

