

Corporate Overview

April 2020

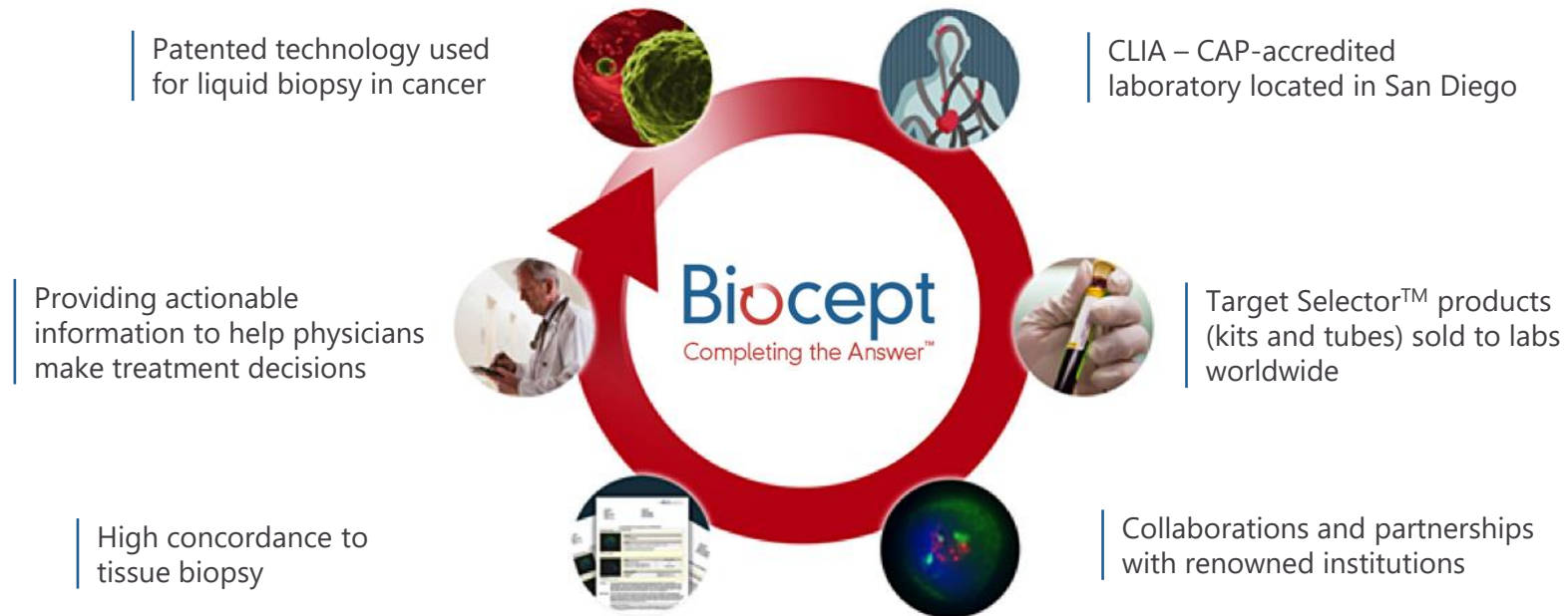
Forward-Looking Statements

This presentation contains, and any accompanying oral presentation would no doubt contain, forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, regarding Biocept, Inc. and our business. Forward-looking statements include all statements that are not historical facts and generally can be identified by terms such as anticipates, believes, could, estimates, expects, intends, may, plans, potential, predicts, projects, should, will, would, or the negative of those terms and similar expressions.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. For details about these risks, please see our SEC filings.

All forward-looking statements contained in this presentation speak only as of the date hereof, and except as required by law, we assume no obligation to update these forward-looking statements whether as a result of any new information, future events, changed circumstances or otherwise.

Corporate Profile



Investment Highlights

Liquid Biopsy Market Forecast to Reach in the Billions

- Commercial organization, improving cancer patient outcomes
- Advantages of a simple blood test vs. tissue biopsy (high sensitivity, actionable, rapid results, non-invasive, cost effective)

Test Menu Focused on Actionable Information

- Unique CTC and ctDNA testing platform
- Enables detection and monitoring of clinically validated biomarkers listed in NCCN Guidelines

Industry-Leading Test Performance

- Multiple clinical studies, publications, and presentations support Biocept's proprietary Target Selector™ platform
- Favorable reimbursement – cost-effective liquid biopsy testing, fits with health care reform goals

Opportunities for Value-Creating Strategic Partnerships

- Current partnerships with industry leading companies
- Potential for U.S. and global transactions
- Commercial and technology partnerships

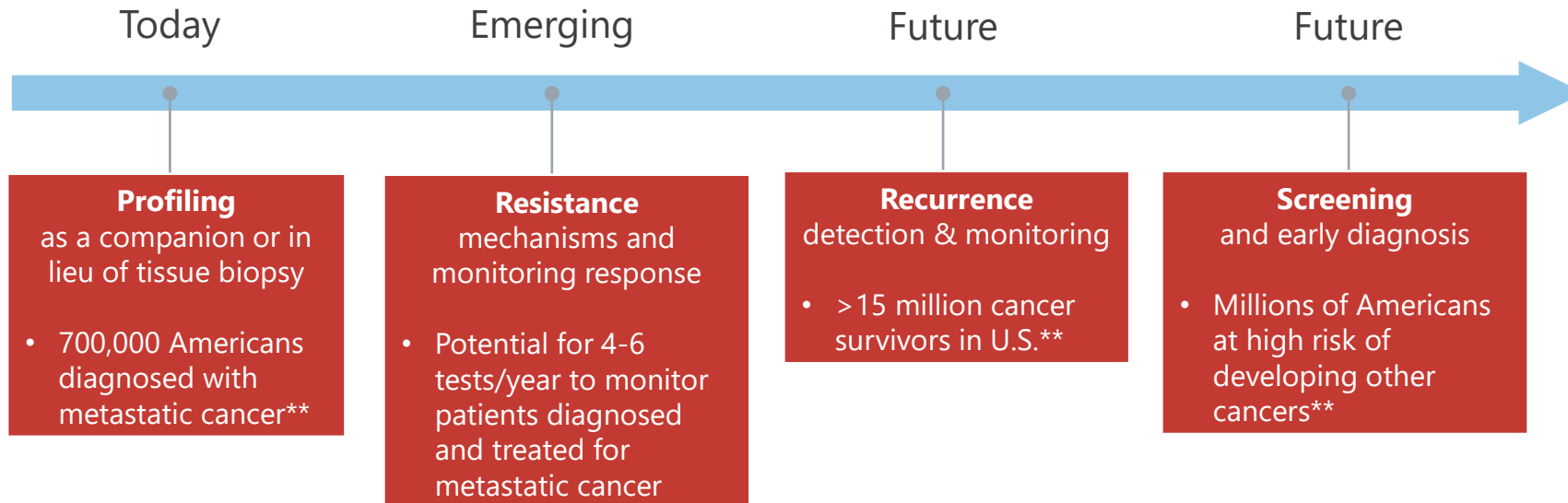
Achieved Target Selector™ Global Sales

- Actively growing Oncology Services business
- Distributed kits and blood collection tubes

Liquid Biopsy Market for Oncology



Estimated \$17 billion market by 2023*



Biocept focuses on patients with lung, breast, prostate & colorectal cancers (>45% of all metastatic cancers)**

*International Liquid Biopsy Market Report, Market Research Future, August 18, 2018

**American Cancer Society: Cancer Treatment and Survivorship 2016-2017

Investment Continues to Build in Liquid Biopsy & Cancer Diagnostics

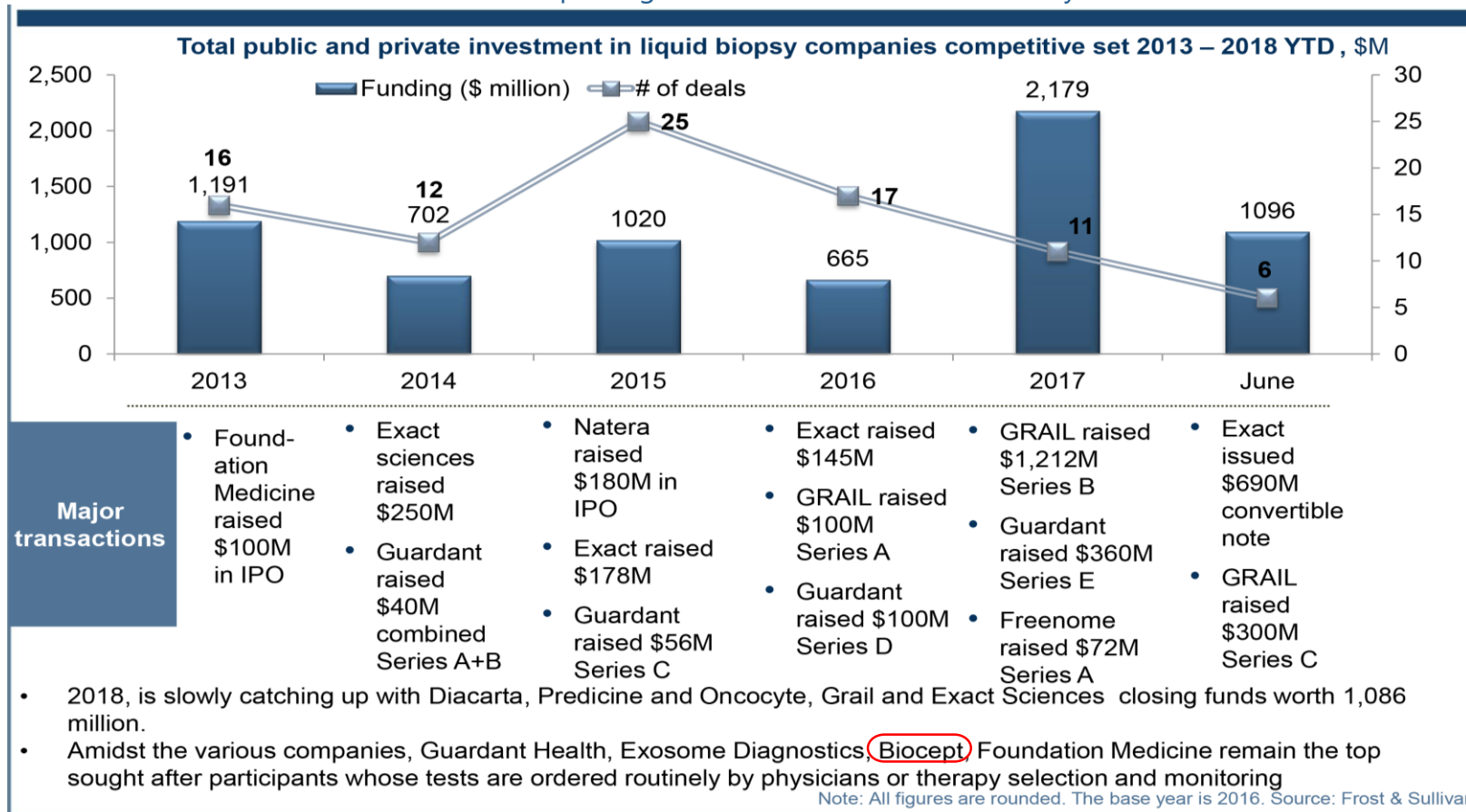
• Strong investor interest in liquid biopsy field

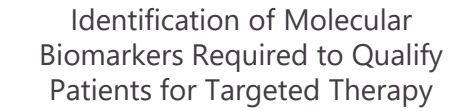
• Growing investments over time (Frost & Sullivan)

• >\$2 billion invested in 2017

Market Landscape – Investments

Investor interest based on overall capital raised has remained strong with 2018 surpassing \$1 billion in the first half of the year



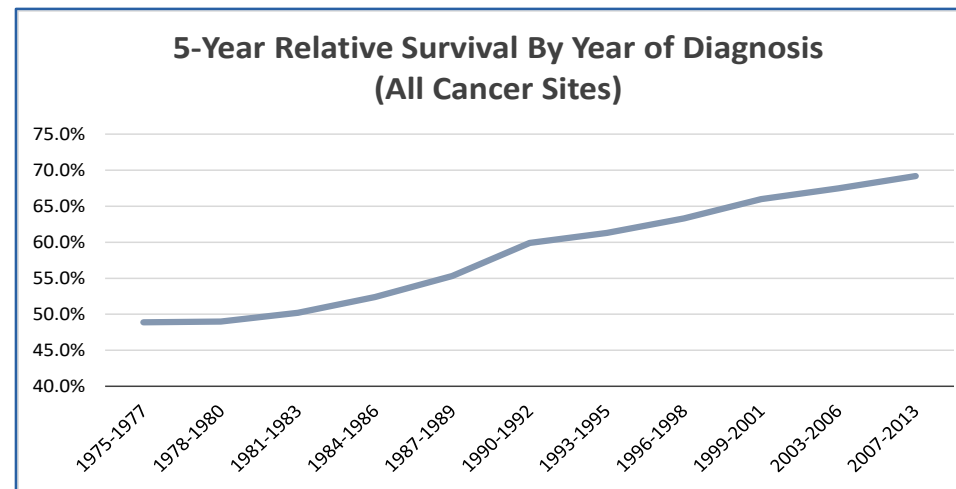


Biocept
Completing the Answer™

Precision Treatment Improved Outcomes

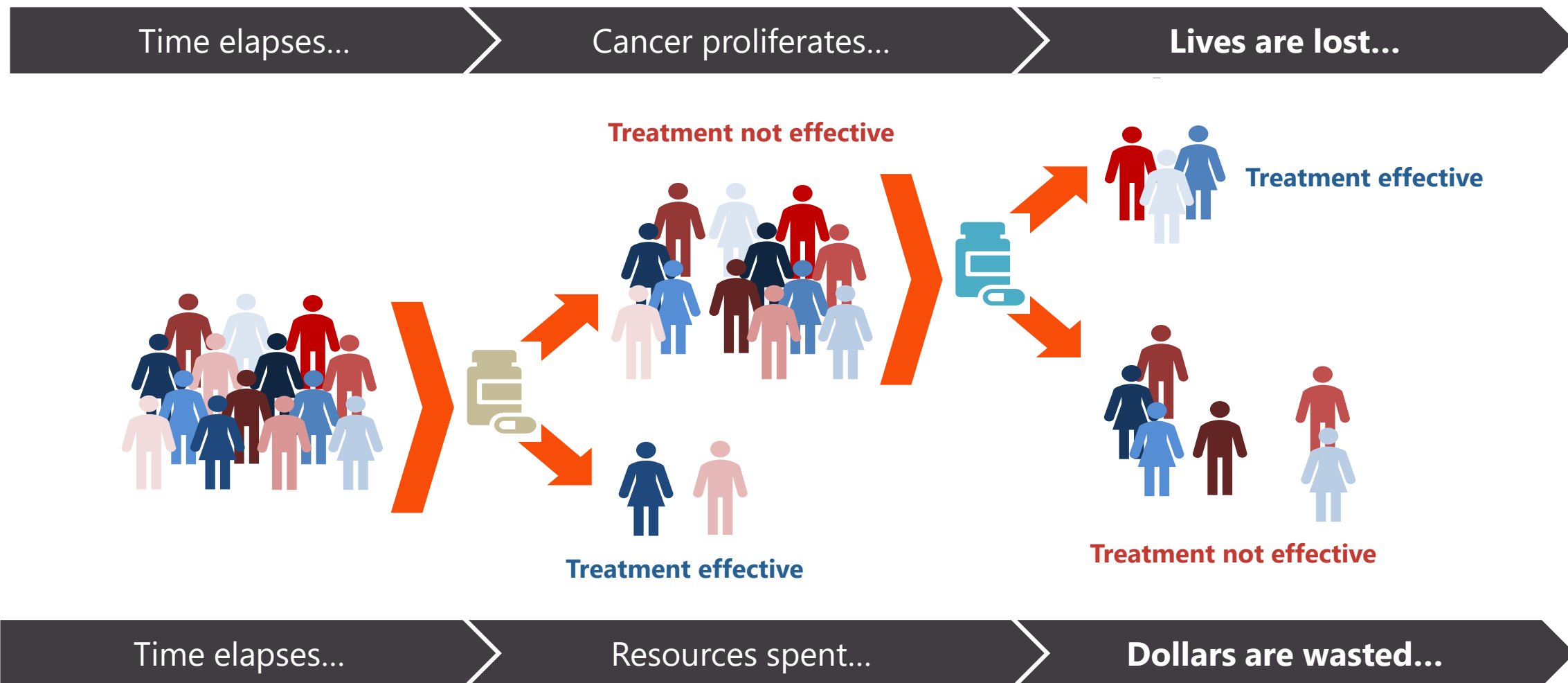


Source: SEER Cancer Statistics Review 1975-2013
cancer.gov



*NCI Cancer Statistics https://seer.cancer.gov/csr/1975_2014/browse_csr.php?sectionSEL=2&pageSEL=sect_02_table.08.html


Matching Cancer Patients to Personalized Therapy Remains Challenging



Legacy Cancer Diagnostic Tools Do Not Complete The Answer

	Advantages	Disadvantages	Cost
Traditional Surgical Biopsy	<ul style="list-style-type: none"> ▪ Required for diagnosis ▪ Considered standard of care ▪ Source of cancer (histology) ▪ Results for all known oncogenic alterations ▪ Analysis of whole cells 	<ul style="list-style-type: none"> ▪ Invasive – not appropriate for monitoring ▪ Risk of adverse events ▪ Expensive ▪ Often inadequate for complete molecular profiling ▪ Only 57% of tissue biopsies have sufficient tissue for analysis ▪ Can take as much as 30 days for results ▪ Heterogeneity of tumor can lead to false negatives ▪ Does not account for evolving cancer over time – snapshot view 	\$15,000 to \$45,000

Differentiated Product Offerings Among Liquid Biopsy Providers



Company	CTCs / Whole Cells	ctDNA / DNA Fragments	Menu - Multiple Cancer Types	Proprietary Test Kits and Collection Tube	Cerebral Spinal Fluid Specimen Option
Biocept (BIOC)	✓	✓	✓	✓	✓
Guardant Health (GH)		✓	✓		
Foundation Medicine (FMI)		✓	✓		
Epic Sciences (private)	✓		✓		
Biodesix (private)		✓			

Monitoring for Progression or Response

- Specialty Areas of Focus :
 - Urology—Prostate Cancer
 - Breast Oncology
- Clinical Application for Monitoring:
 - Recurrence
 - Disease Progression
 - Therapy Effectiveness and Resistance

High Sensitivity

- Combined results from CTCs and ctDNA from single blood sample or CSF
- Industry-leading sensitivity – delivers high concordance with tissue
- Addresses challenges of tumor heterogeneity

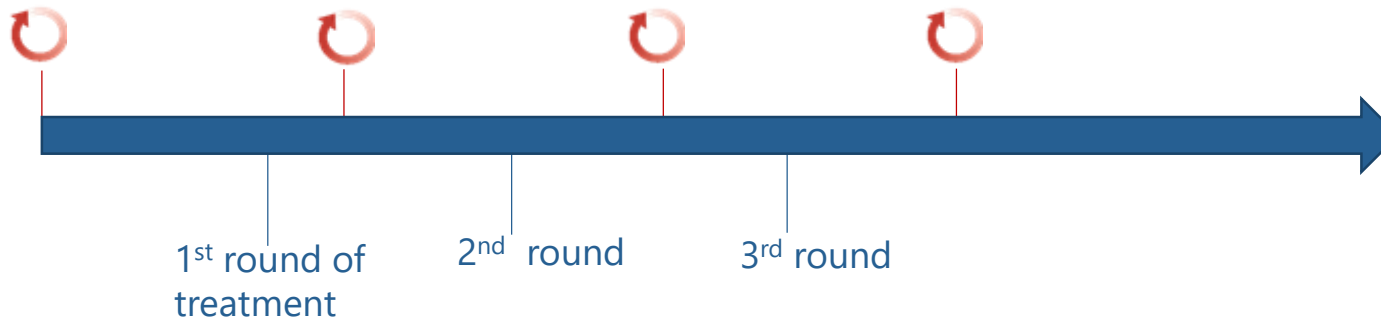
Actionable Results

- Results for all types of oncogenic alterations including SNVs, Indels, Fusions, CNVs, and Protein Expression
- Target markets – medical oncology, naturopathic medicine, urology, and pathology

Rapid, Non-Invasive,
Cost Effective

- Turnaround in 3-7 days enables targeted and immuno-therapy options
- Reimbursement advantages – pay for individual/ actionable alterations
- Non-invasive - appropriate for both profiling and monitoring
- **Cost - \$1,400 per test on average**

Order Biocept



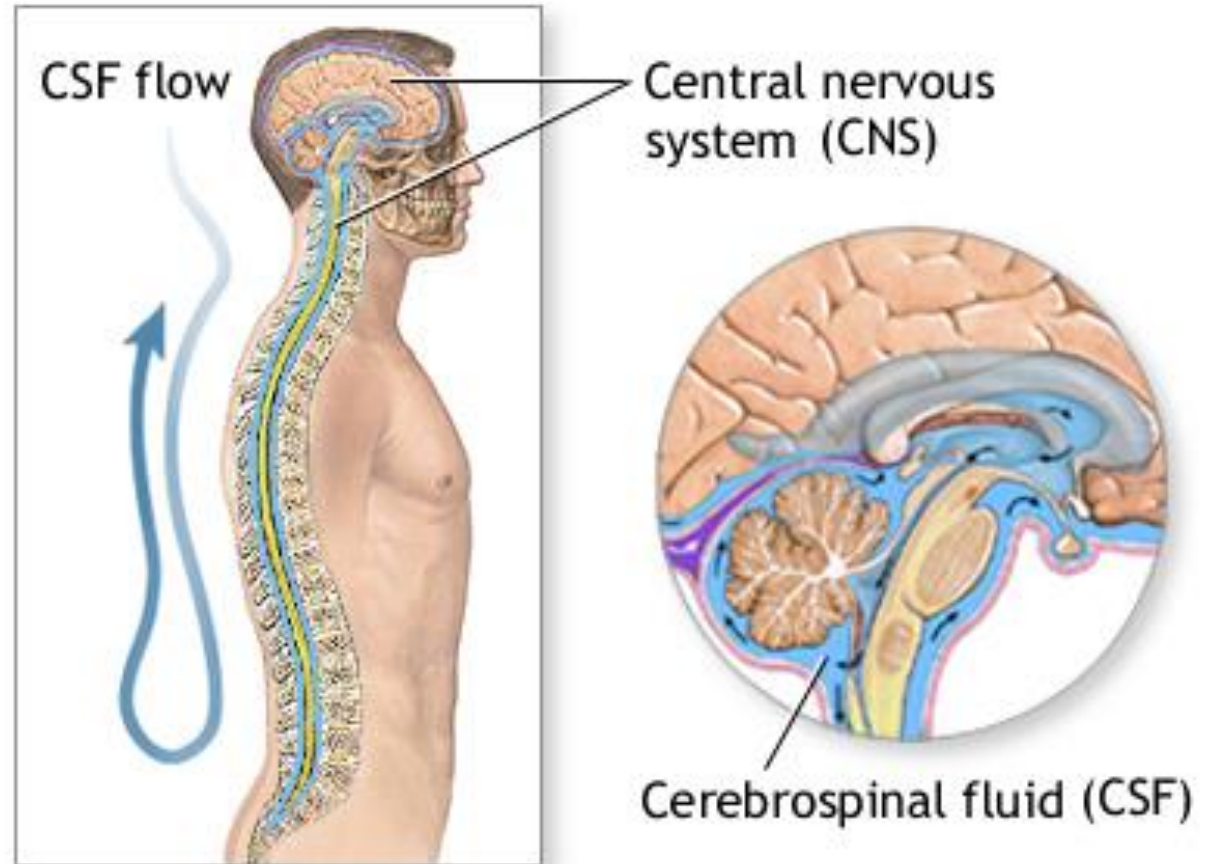
Health Plan Access Continues to Expand with Third-Party Contracts



- Managed Care agreements in place covering >200 million lives
- Dedicated managed care leadership with years of experience from GE, LabCorp and others
- Payors have positive coverage for biomarkers listed in guidelines
- Aligns with goals of healthcare reform
- Improved outcomes while reducing costs
- Utilize established CPT codes

Biocept Can Now Isolate and Analyze both CTCs and ctDNA from Cerebral Spinal Fluid (CSF)

- 23% of breast cancer patients have metastasis to the brain; 25% of lung cancer patients have metastasis to the brain
- Identifying markers from a single CSF draw prevents multiple biopsies and provides insight into potential markers for metastases following CNS symptoms from these patients
- Biomarker identification potentially helps guide therapy



Biocept Growth Drivers

Broad Technology Expertise

- CTC Analysis
- ctDNA Testing
- NGS Panels

New Customer Markets

- Urology
- Neuro-oncology (CSF)
- Integrative Oncology
- Pathology Partnerships

New Clinical Application

- Monitoring for Disease Progression and Treatment Efficacy

Monetizing Intellectual Property

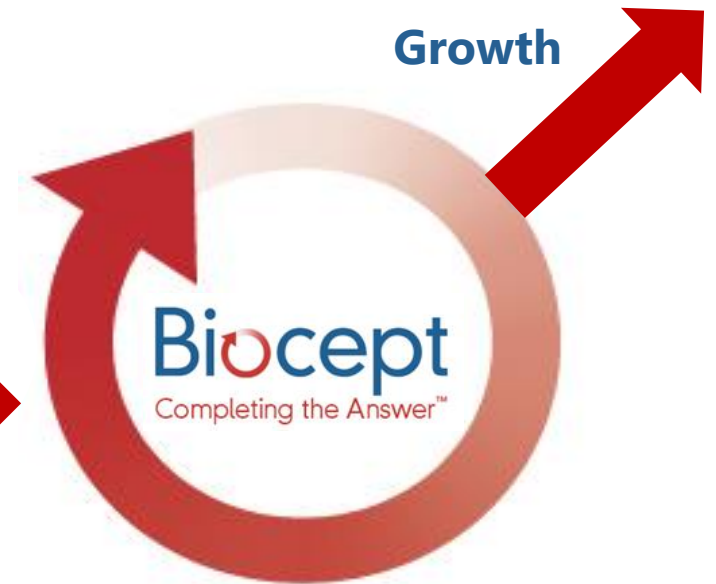
- CEE Sure Blood Collection Tubes
- Molecular Test Kits

Monetizing Database

- >20,000 Patients
- >80,000 Laboratory Tests Performed

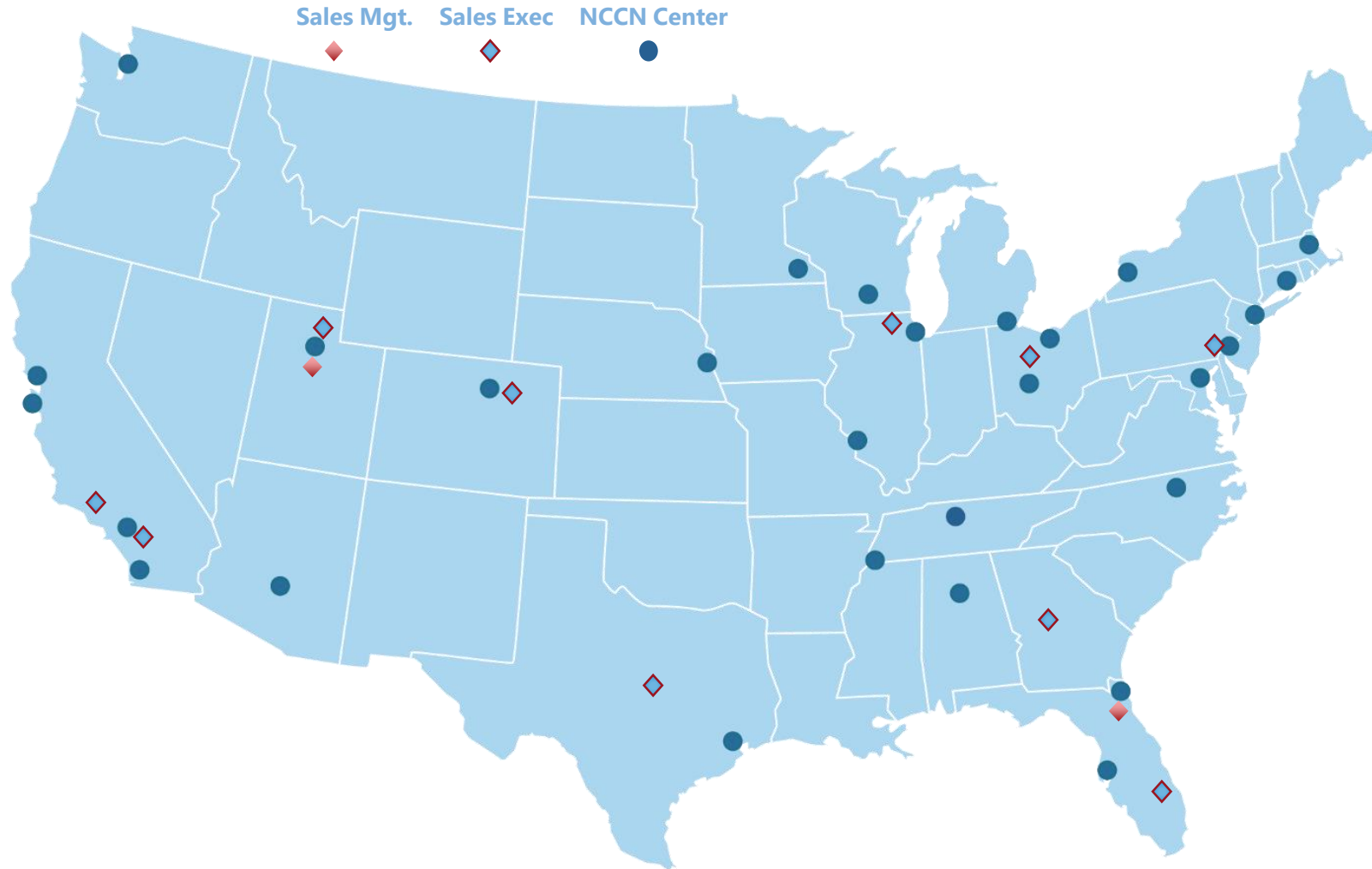
Single Cell Analysis

- Pharma
- Drug Discovery



Commercial Strategy – “Team Liquid”

Current Salesforce Coverage



Highly Experienced Commercial Team:

- Small-company Growth Focus
- Deep Market Knowledge
- Urology
- Breast Cancer Focus
- Naturopathic Medicine
- Pathology Partnerships
- Contracting and CMS coverage

Skill Sets:

- Managed Care
- Marketing
- Sales and Sales Management
- Field Product Managers

Profiling at Diagnosis and Recurrence: Real-World Lung Cancer Treatment Initiative with Allegheny Health Network

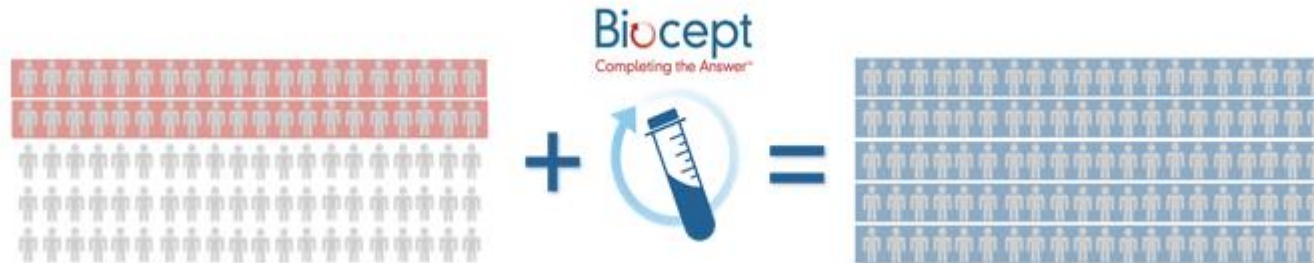


40% not tested for guideline tests

27% of patients not enough tissue



QI Project – Test all newly diagnosed and patients progressing with Tissue and Liquid



Hypothesis – 100% of patients, Increase detection of biomarkers, Improve outcomes, Reduce Costs

Highmark Health's VITAL Innovation Program testing benefits of Biocept's liquid biopsy platform for improving outcomes and lowering costs of treatment for patients with non-small cell lung cancer

Allegheny Health Network's Cancer Institute spearheading the evaluation

<https://www.highmarkhealth.org/hmk/newsroom/pr/pressreleases.shtml>



Profiling and Monitoring: EmpowerTC™-Pathology Partnership



Empower TC™
Tech-Only Liquid Biopsy

Empowering Local Pathologists
With World-Class Diagnostics

The first in the industry to offer cancer biomarker testing using both ctDNA **AND** CTCs.

Biocept offers specialized tests for approved NCCN biomarkers, including targeted therapy **AND** immunotherapy markers.

ctDNA

- BRAF
- EGFR
- KRAS
- NRAS

CTC

- ALK
- AR
- ER
- FGFR1
- HER2
- MET
- PD-L1
- PR
- RET
- ROS1
- CTC Count



Our World-Class Lab. Your Expertise.

Partner with Biocept for **Tech-Only Services** that combine our leading **CTC Testing Technology** with **Your Local Knowledge**.

ALK Gene Rearrangement by FISH: DETECTED (1 CTC/16 mL)

Case Study: Biocept's Liquid Biopsy Enables Personalized Treatment for Non-Small Cell Lung Cancer (NSCLC) Patient After Tissue Biopsy Proves Inadequate.

Customer Service 888-332-7729 • FAX 877-300-1761

Biocept, Inc.

5810 Nancy Ridge Drive, San Diego, CA 92121

www.biocept.com



© 2017 Biocept, Inc. All rights reserved. Target Selector is a trademark of Biocept, Inc. NCCN Guidelines is registered trademark of National Comprehensive Cancer Network, Inc.

MKTG-0036-02

Commercial Collaborations



- Executing on strategy to contract with major cancer treatment institutions, GPOs, and distributors
- Increasing patient access
- Accelerating adoption of liquid biopsy
- Leveraging sales and marketing resources by increasing awareness of Biocept's liquid biopsy platform within large health systems
- Roll out new tests and service offerings including molecular pathology partnering model (i.e., Empower TC™)
- Gaining value from data

Biocept IP Portfolio – 39 Patents Issued Worldwide

Family 1

MicroChannel for CTC Capture

- Patent 1 – Recovery of Rare Cells using Microchannel
- Patent 2 – Device for Cell Separation

1) Issued in US (2), China (3), Korea, France, Germany, Great Britain, Italy, Spain, Hong Kong (3), Japan, and Canada

- Pending in Australia

2) Issued in US

Expire
2025

Family 2

CTC Capture With Antibody Cocktail

- Patent 1 – Devices & Methods of Cell Capture Analysis
- Patent 2 – Method and Reagents for Signal Amplification

1) Issued in US (2), Australia, France, Germany, Great Britain, Spain, Italy, Hong Kong, Japan (3), and China

- Pending in Canada

2) Issued in US, EU, Canada, Japan, and China

- Pending in Hong Kong –Korea

Expire
2030

Family 3

Collection Tube

Patent 1 – Use of DU for Anti-Clumping of Biological Sample

1) Issued in US

Expire
2031

Family 4

Switch Blockers for ctDNA Analysis

Patent 1 – Methods for Detecting Nucleic Acid Sequence Variants

1) Issued in US, Australia, China, France, Germany, Italy, Great Britain, Belgium, Ireland, Japan and Switzerland

- Pending in Hong Kong – Korea – Brazil – Canada

Expire
2033

Extensive IP portfolio expected to allow Biocept to monetize IP through out-licensing and moving to distributed model based on developing diagnostic kits

Our Team Has a Deep & Successful History of Commercializing Innovation

Michael Nall

President & CEO

- 25+ years in healthcare sales, marketing and commercial operations
- 16 years in cancer diagnostics and genomics
- Most recently General Manager N. American Sales and Marketing for Clariant — a GE Healthcare Company



Tim Kennedy

CFO, SVP of Operations

- 30+ years of financial experience, 25+ years in the clinical diagnostics industry
- Instrumental in 2.1B restructuring of Millennium Health, a privately-held urine drug lab
- Numerous senior management positions – helped transform PLUS Diagnostics into largest independent U.S. pathology lab; merged National Health Labs and Roche Biomedical Labs to form LabCorp



Cory Dunn

SVP, Sales and Marketing

- 10+ years of experience in diagnostic sales, marketing and commercialization
- Successfully introduced and commercialized tests from GenomeDx (currently Decipher Biosciences, Plus Diagnostics and Genoptix (currently Neogenomics)
- Reimbursement and Payor expertise



Lyle Arnold, PhD

SVP, Chief Scientific Officer

- Senior R&D leadership at Gen-Probe, Incyte Genomics, Genta
- Founder/ Co-founder Oasis Biosciences, Molecular Biosystems, Aegea Biotechnologies
- Former faculty member, UCSD School of Medicine and member, UCSD Cancer Center
- 47 issued US and more than 140 issued and pending patents worldwide



Veena Singh, MD

Sr. Medical Director

- Board certified AP/CP and Molecular Pathology, UCSD, Cedars Sinai trained
- Numerous publications, serves on CAP committees
- Most recently Medical Director – bioTheranostics



Michael Terry

SVP, Corporate Development

- 25+ years commercial leadership experience in molecular diagnostics and med-tech companies
- Former GE Healthcare executive, certified in Six Sigma
- Recent experience in liquid biopsy field; EVP commercial operations at both Sequenom and Trovogene



Biocept is Guided by a Board of Visionaries & Scientific Influencers

Board of Directors

David F. Hale

Chairman

Bruce E. Gerhardt, CPA

Director, Member Audit Committee

M. Faye Wilson, CPA, MBA

Lead Independent Director, Chair Audit Committee, Member Compensation Committee, Member Nominating and Governance Committee

Ivor Royston, MD

Director, Chair – Science and Technology Committee, Member Nominating and Governance Committee

Marsha A. Chandler, PhD

Director, Chair - Nominating and Governance Committee, Member Science and Technology Committee

Bruce A. Huebner

Director, Chair – Compensation Committee, Member – Science and Technology Committee, Member – Audit Committee

Michael W. Nall

Director, President & CEO

Clinical Advisory Board

Lee Schwartzberg, MD

Chief, Division of Hematology Oncology; Professor of Medicine, University of Tennessee

David Carbone, MD

Director, James Thoracic Center, James Cancer Hospital and Solove Research Institute, Ohio State University

Michael P. Zahalsky, MD

Founder and Practicing Urologist
Z Urology, Florida

Dan Rubin, ND, FABNO

Co-Founder and Medical Director
Naturopathic Specialists
Phoenix, AZ

Edgardo Santos, MD

Medical Director, Lynn Cancer Institute,
Boca Raton, Florida

Melissa Johnson, MD

Medical Oncologist, Nashville, Tennessee

David Berz, MD, PhD

Beverly Hills Cancer Center
Chief Medical Officer – Valkyrie
Pharmaceuticals
Beverly Hills, California

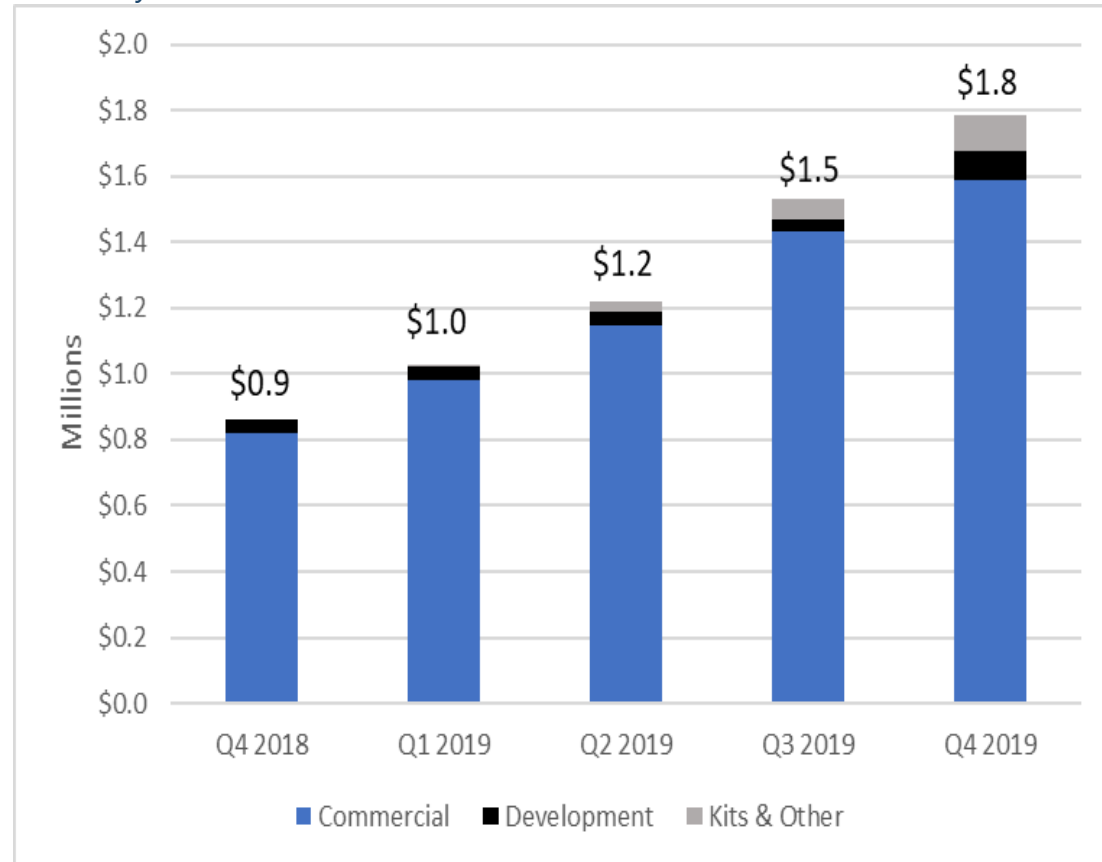
Santosh Kesari, MD, PhD

Chair, Dept. of Translational Neuro-oncology
and Neurotherapeutics, John Wayne Cancer
Institute, Santa Monica, California

Deploying Capital To Fuel Growth

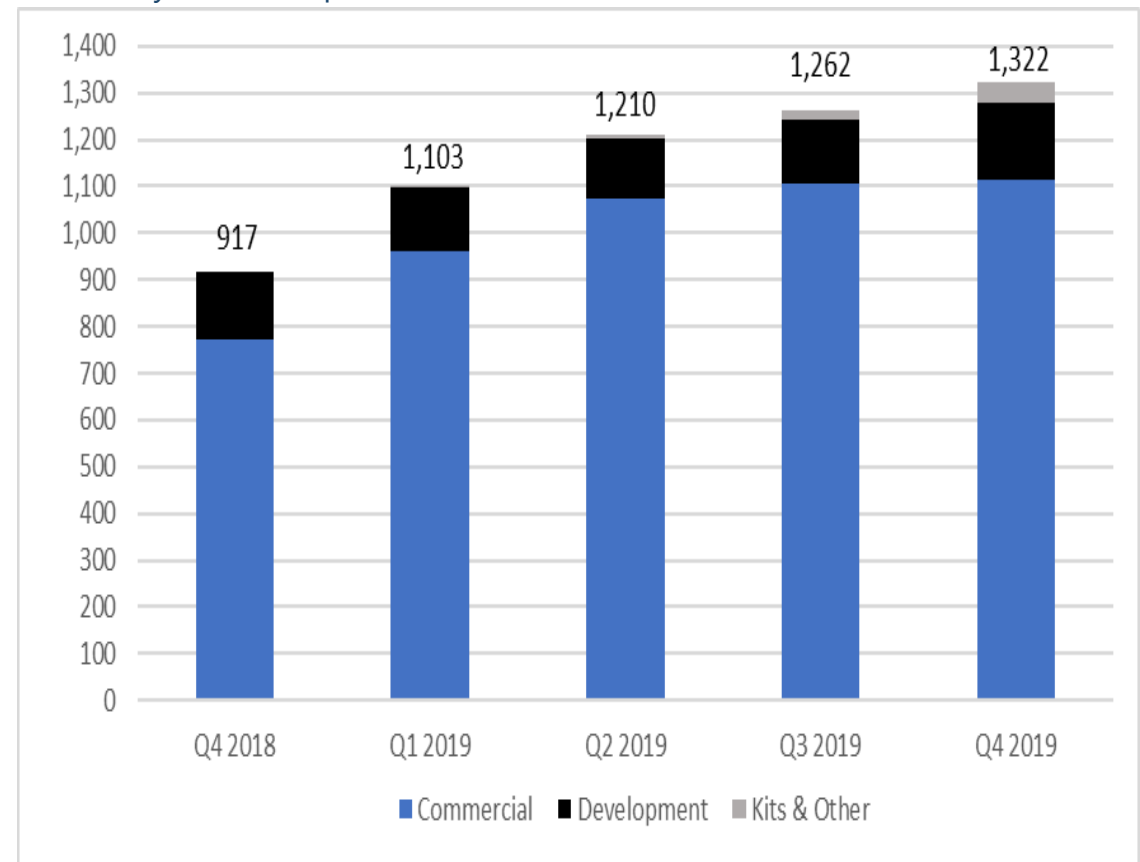
Cumulative Total Revenue of ~\$17M

Quarterly Total Revenue



Cumulative Total Sample Volume in Excess of 20,000

Quarterly Billed Samples & Kits



Corporate Priorities

- ✓ Increase market penetration into emerging liquid biopsy segment with a focus on neuro-oncology, urology, breast, and lung cancer treatment segments
- ✓ Grow sales of Target Selector™ liquid biopsy kits and CEE-Sure™ blood collection tubes
- ✓ Monetize data through artificial intelligence (AI) from over 20,000 patient samples
- ✓ Execute on launch of Target Selector™ NGS Panels under Thermo Fisher Collaboration
- ✓ Enter into additional strategic commercial and technology partnerships – Global and U.S.
- ✓ Sign new third-party health plan agreements and expand relationship with BCBS
- ✓ Publish clinical case studies
- ✓ Launch additional oncology biomarker assays

Investment Highlights

Liquid Biopsy Market Forecast to Reach in the Billions

- Commercial organization, improving cancer patient outcomes
- Advantages of a simple blood test vs. tissue biopsy (high sensitivity, actionable, rapid results, non-invasive, cost effective)

Test Menu Focused on Actionable Information

- Unique CTC and ctDNA testing platform
- Validated on blood or CSF
- Enables detection and monitoring of clinically validated biomarkers listed in NCCN Guidelines

Industry-Leading Test Performance

- Multiple clinical studies, publications, and presentations support Biocept's proprietary Target Selector™ platform
- Favorable reimbursement – cost-effective liquid biopsy testing, fits with health care reform goals

Opportunities for Value-Creating Strategic Partnerships

- Current partnerships with industry leading companies
- Potential for U.S. and global transactions
- Commercial and technology partnerships

Deploying Global Distribution Model

- Target Selector™ kits
- Blood collection tubes
- Agreement with VWR