



# Corporate Overview

September 2020

# Forward-Looking Statements

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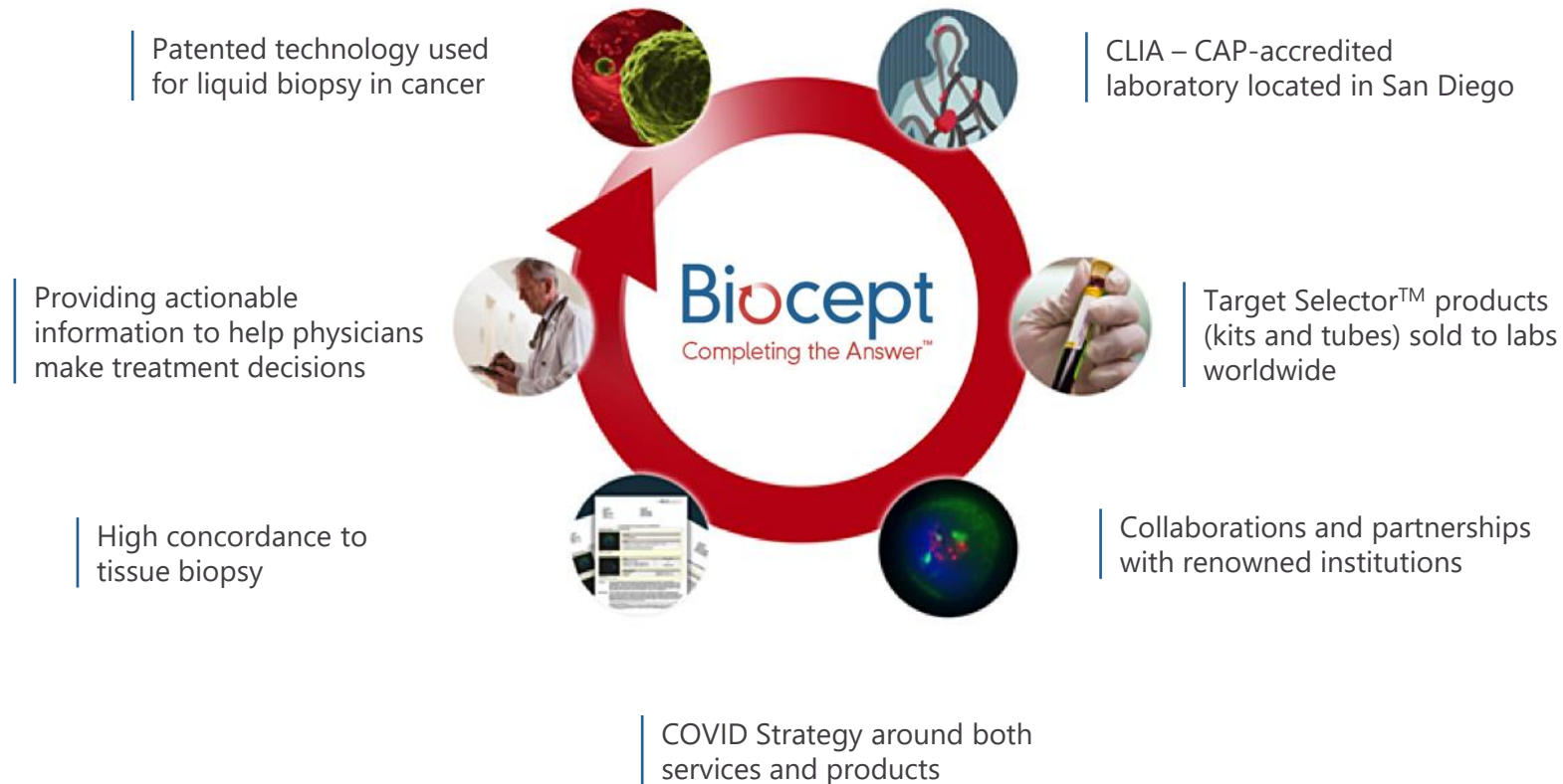
This presentation contains, and any accompanying oral presentation would no doubt contain, forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, regarding Biocept, Inc. and our business. Forward-looking statements include all statements that are not historical 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

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# Investment Highlights

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## ***Established Cancer Diagnostics Company with Patented Liquid Biopsy Testing also Providing COVID testing***

- *San Diego-based CLIA-certified, CAP-accredited, high-complexity lab*
- *Established business and strong balance sheet position company to weather pandemic*

## 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

# Biocept COVID-19 Testing

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## Accepting COVID-19 specimens for SARS-CoV-2 Testing

- RT-PCR EUA molecular diagnostic platform
- Testing performed in high-complexity, CLIA and BSL-2 safety level lab by licensed molecular lab staff trained to perform COVID-19 testing
- Testing volume ramping up weekly since launch in late June
- Average reimbursement of \$100 per specimen

## Fast Turnaround Times with Vast Majority of Results Reported in 48 Hours

## Significant Opportunity for COVID-19 Testing

- Developing agreements for COVID-19 testing (i.e., expanded agreement with MultiPlan, large skilled nursing chain)

## Ramp Capacity to Meet Demand

- Increased staffing and implemented automation to process additional tests
- Current capacity of 2,000 per day with ramp to over 10,000 based on demand

## Manufacturing PCR COVID-19 Specimen Kits for Distribution

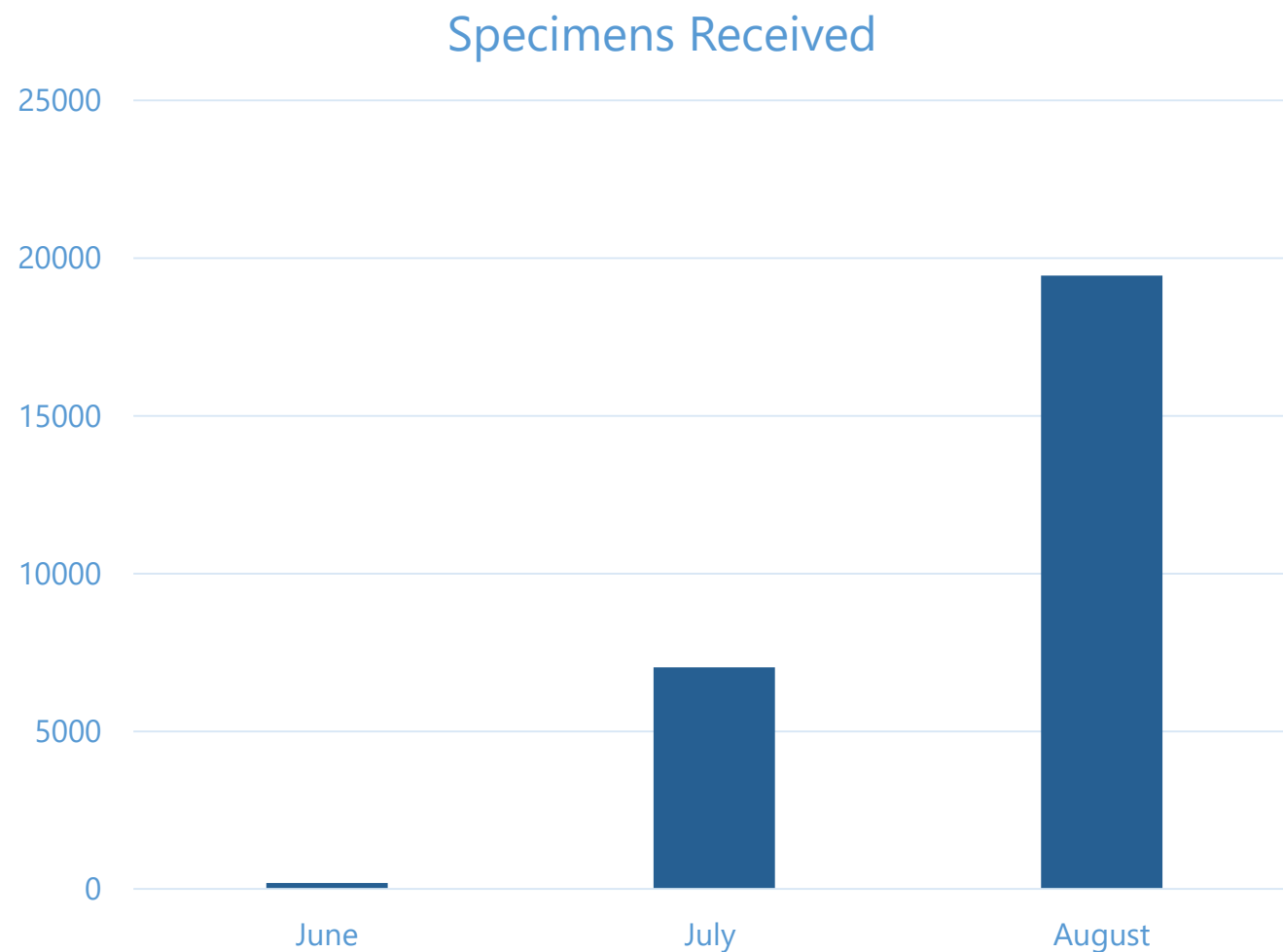
- In-house capability for kit production due to routinely manufacturing materials for oncology testing
- Proactively addressing the specimen collection kit shortage by purchasing materials and assembling in house
- Proprietary collection media being developed with expected availability by year end

## Agreement with Aegea Biotechnologies to Develop Ultra-high Sensitivity COVID-19 Assay

- Utilize patented Switch-Blocker technology
- Could provide superior specificity in detecting asymptomatic patients and identify different strains

# COVID-19 Testing Volume

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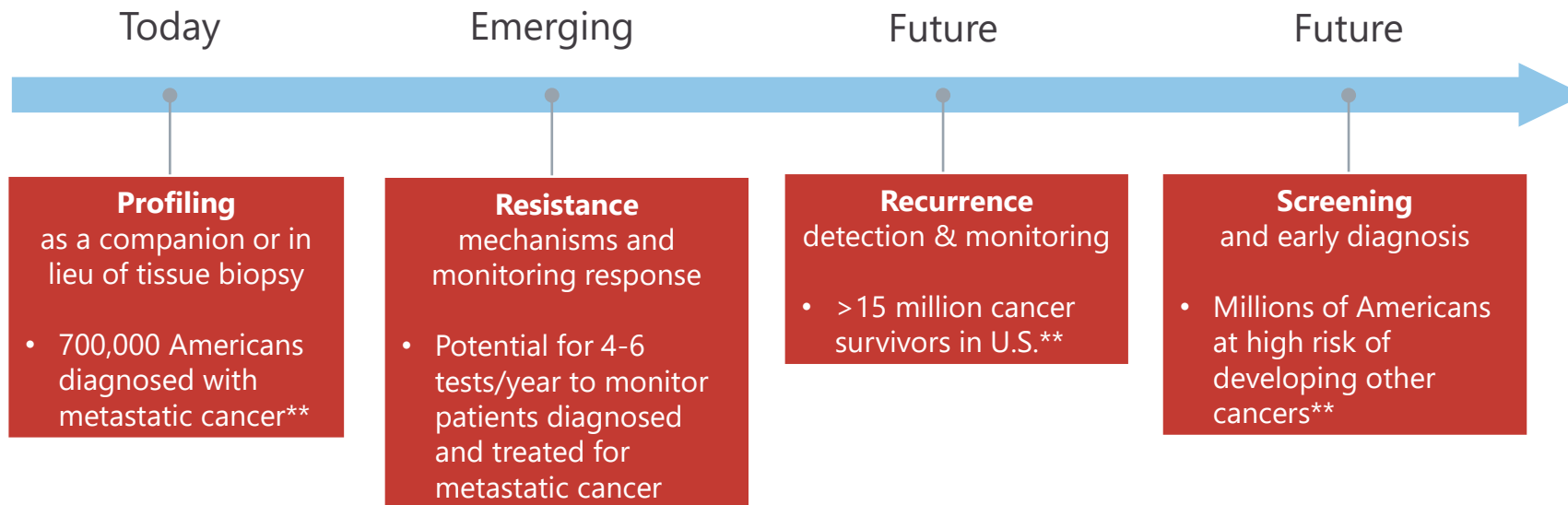


Medicare reimbursement  
~ \$100 per test

# 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

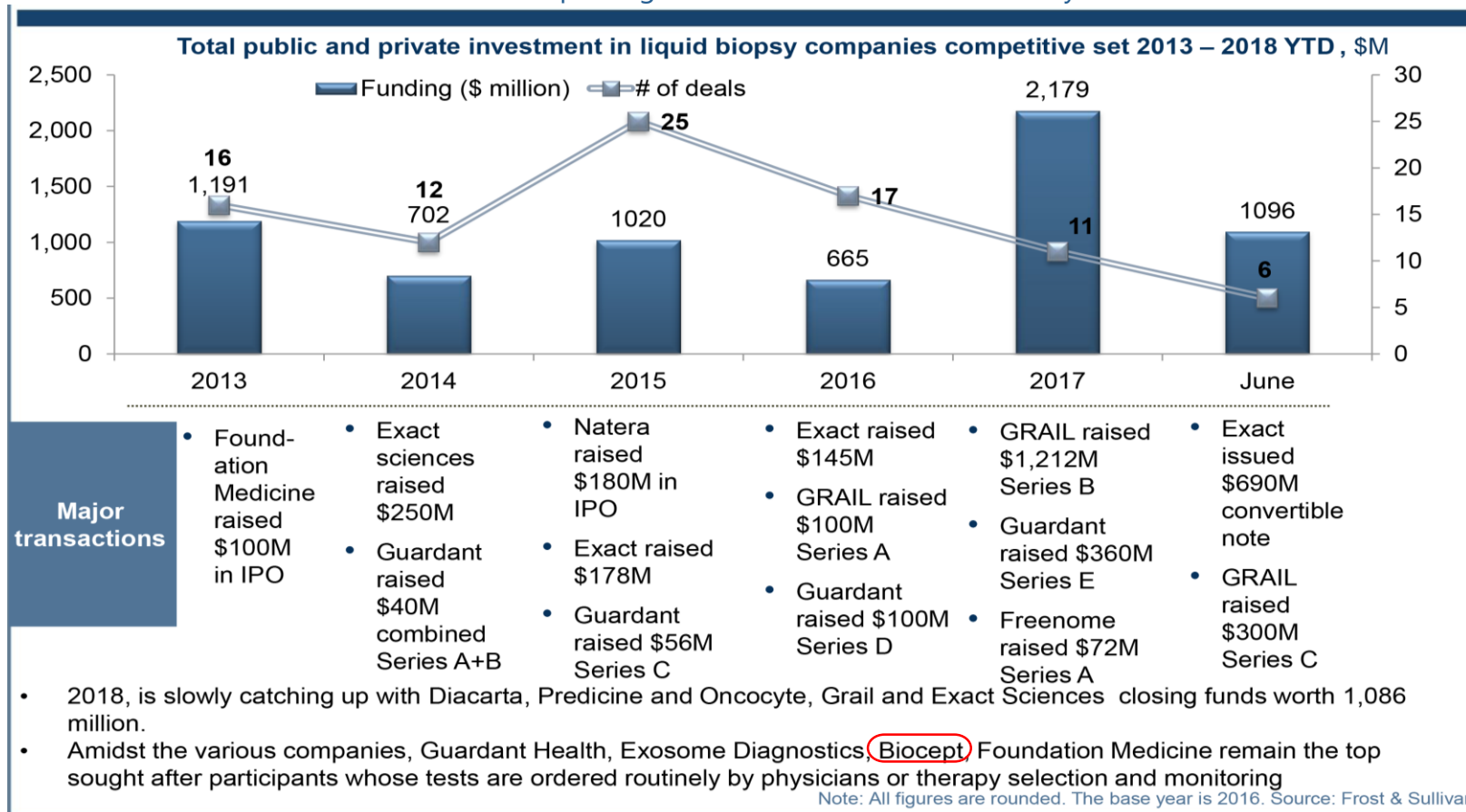
- Strong investor interest in liquid biopsy field

- Growing investments over time (Frost & Sullivan)

- >\$2 billion invested in 2017

## Market Landscape – Investments

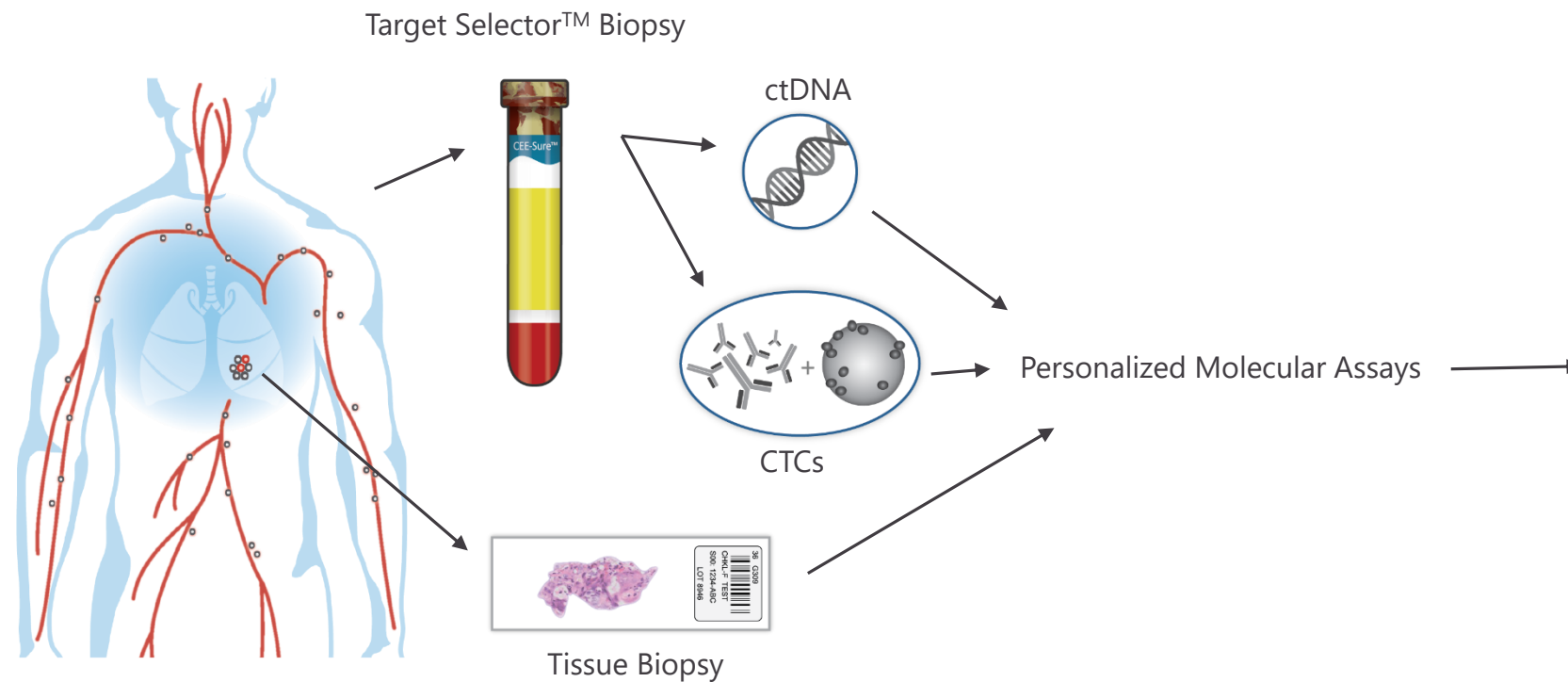
Investor interest based on overall capital raised has remained strong with 2018 surpassing \$1 billion in the first half of the year





# Precision Treatment

## Molecular Profiling Cancer Biomarkers



Identification of Molecular Biomarkers Required to Qualify Patients for Targeted Therapy

**Biocept**  
Completing the Answer™

OncoCEE-BR™ Circulating Tumor Cell (CTC) Test

18110 Nancy Ridge Drive, Suite 100, San Diego, CA 92121  
Client Service: 858-333-1729 FAX: 858-333-1701 • www.biocept.com

PATIENT INFORMATION		CLIENT INFORMATION	
Patient Name:	Patient, 10001234	Ordering Physician:	Sam Smith, MD
Patient ID#:	C100024	Order Location:	Dana-Farber Cancer Institute
Address:	400 Brookline Avenue Boston, MA 02215	Address:	400 Brookline Avenue Boston, MA 02215
Date of Birth:	12/13/1918	Account Number:	00000101
Sex:	F	Phone:	617-555-5555
		Fax:	617-555-5555

SPECIMEN INFORMATION	
Accession #:	DFW-0010
Client Account #:	1218-KX-KX
Specimen Type:	Peripheral
Waiver (Yes):	18
Collected Date:	5/7/2014 6:30 PM
Received Date/Time:	1/9/2014 9:45 AM
Reported Date/Time:	5/8/2014 12:31 PM
Test(s) Ordered:	HER2 OncoCEE-BR™

RESULTS	
Diagnosis:	History of Breast Cancer
CTCs:	Present
HER2:	Amplified (Positive)

RESULTS: Blue light image, Green light image, Red light image

**SUPPORTING DATA:**

Enumeration of Circulating Tumor Cells by OncoCEE™, 179  
HER2 Analysis of CTCs by OncoCEE™, 180 Amplified (Positive)

Parameter	Value
Number of CTCs	180
Number of CTCs, HER2 amplified	179
Number of CTCs, HER2 amplified (CTCs)	179
Number of CTCs, HER2 amplified (CTCs)	179

CTCs were detected in peripheral blood submitted to test by OncoCEE™. FISH analysis for HER2 showed evidence of HER2 amplification.

Clinical investigators believe that presence of circulating tumor cells (CTCs) is an indicator of metastasis. Metastasis is a complex multiple process that includes epithelial-mesenchymal transition (EMT), in which tumor cells are characterized by loss of cell adhesion, expression of E-cadherin, acquisition of mesenchymal markers, increased cell motility, and invasiveness. OncoCEE is recognized as an important predictive and prognostic factor in breast cancer (2). HER2 status is predictive of a patient's response to HER2 targeted agents such as (Herceptin and trastuzumab).

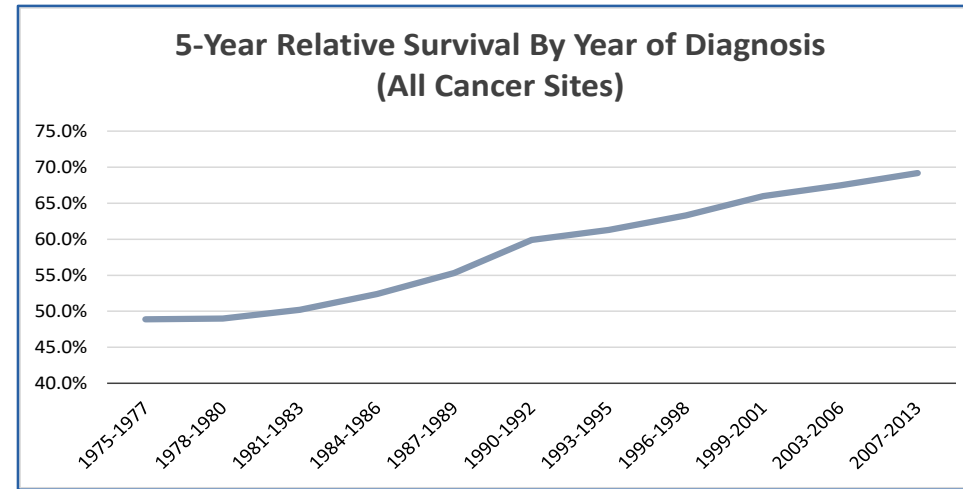
Laboratory Director: Sam Smith, MD, FACMG, PPSC (BCP)  
CLIA ID Number: 10000000000000000000000000000000

Accession #: DFW-0010  
Page 1 of 2

# Precision Treatment Improved Outcomes

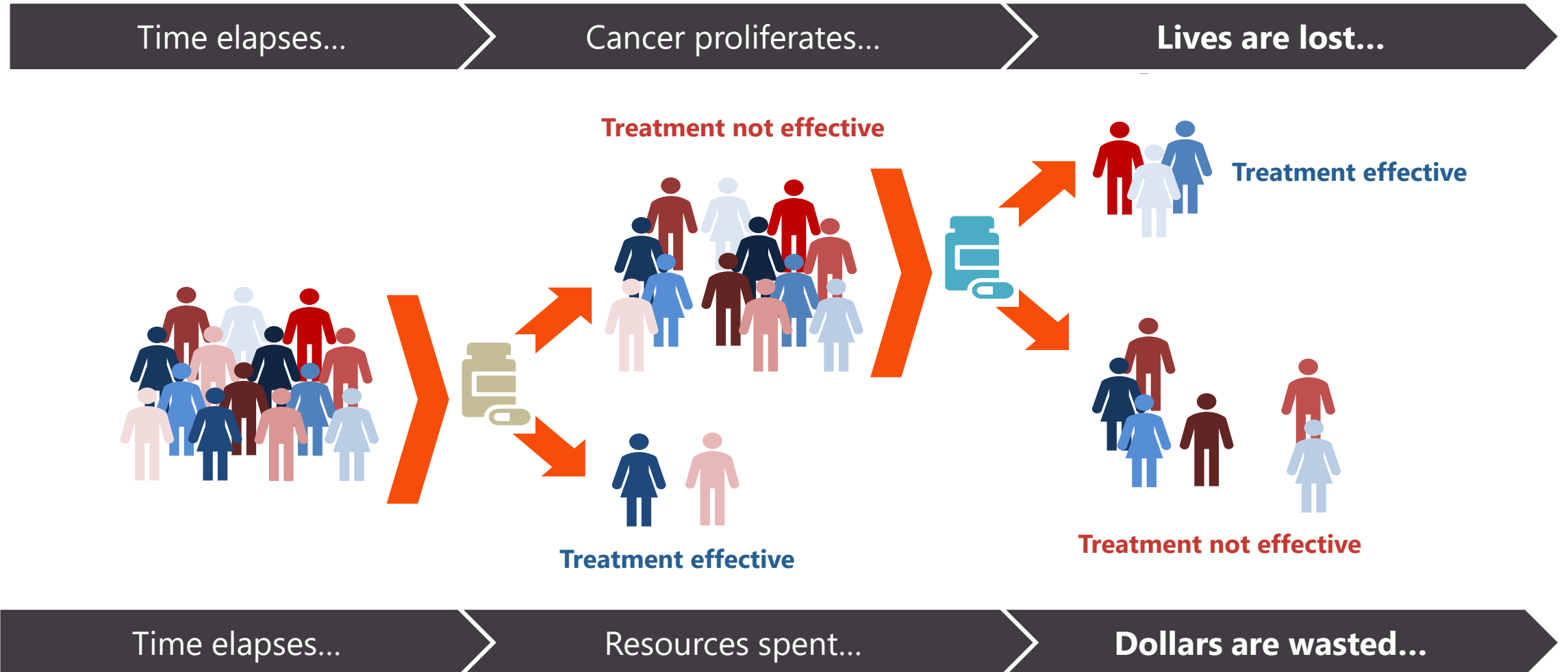


Source: SEER Cancer Statistics Review 1975-2013  
cancer.gov



\*NCI Cancer Statistics [https://seer.cancer.gov/csr/1975\\_2014/browse\\_csr.php?sectionSEL=2&pageSEL=sect\\_02\\_table.08.html](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
<b>Traditional Surgical Biopsy</b>	<ul style="list-style-type: none"> <li>▪ Required for diagnosis</li> <li>▪ Considered standard of care</li> <li>▪ Source of cancer (histology)</li> <li>▪ Results for all known oncogenic alterations</li> <li>▪ Analysis of whole cells</li> </ul>	<ul style="list-style-type: none"> <li>▪ Invasive – not appropriate for monitoring</li> <li>▪ Risk of adverse events</li> <li>▪ Expensive</li> <li>▪ Often inadequate for complete molecular profiling</li> <li>▪ Only 57% of tissue biopsies have sufficient tissue for analysis</li> <li>▪ Can take as much as 30 days for results</li> <li>▪ Heterogeneity of tumor can lead to false negatives</li> <li>▪ Does not account for evolving cancer over time – snapshot view</li> </ul>	<b>\$15,000 to \$45,000</b>

# Target Selector Assays Advantage

## ■ Specialty Areas of Focus :

- Lung Cancer
- 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
- CSF for patients with brain metastases
- Industry-leading sensitivity – delivers high concordance with tissue
- Addresses challenges of tumor heterogeneity

Actionable Results

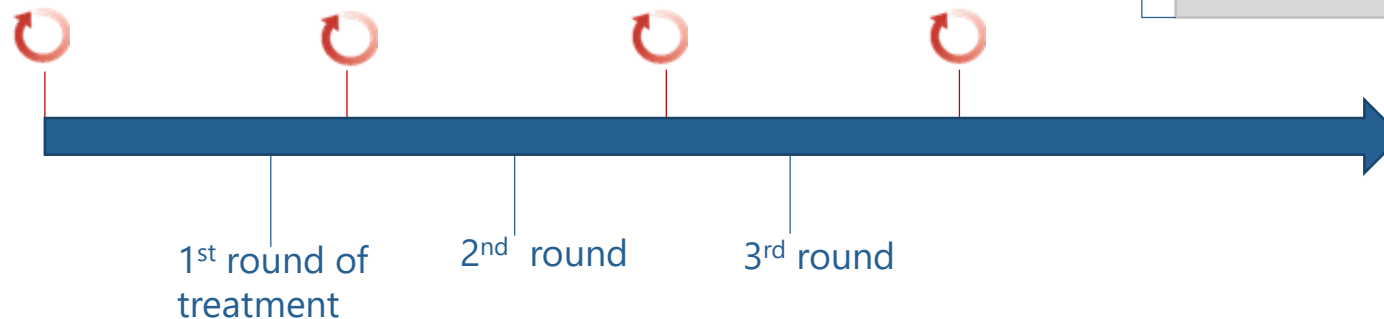
- Results for all types of oncogenic alterations leading to therapy decision making
- Target markets – medical oncology, urology, and pathology

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

**•\$1,400 per test on average – delivers more value for today's limited healthcare dollars**

When to  
Order  
Biocept



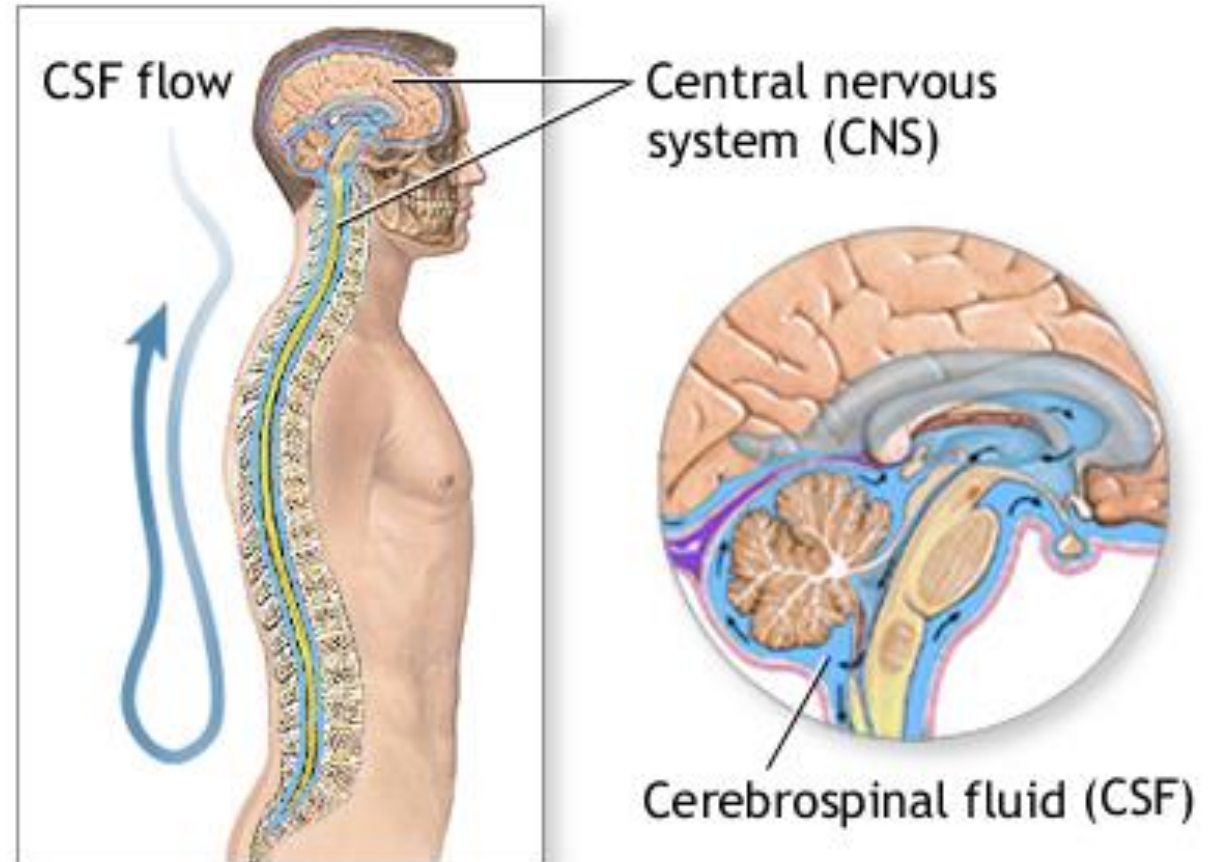
# Health Plan Access Continues to Expand with Third-Party Contracts



- 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

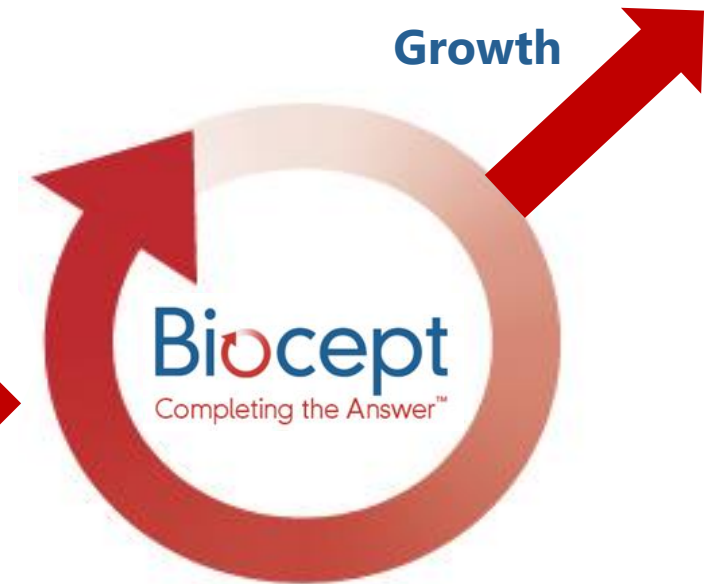
- CEE Sure Blood Collection Tubes
- Molecular Test Kits

## Monetizing Database

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

## Single Cell Analysis

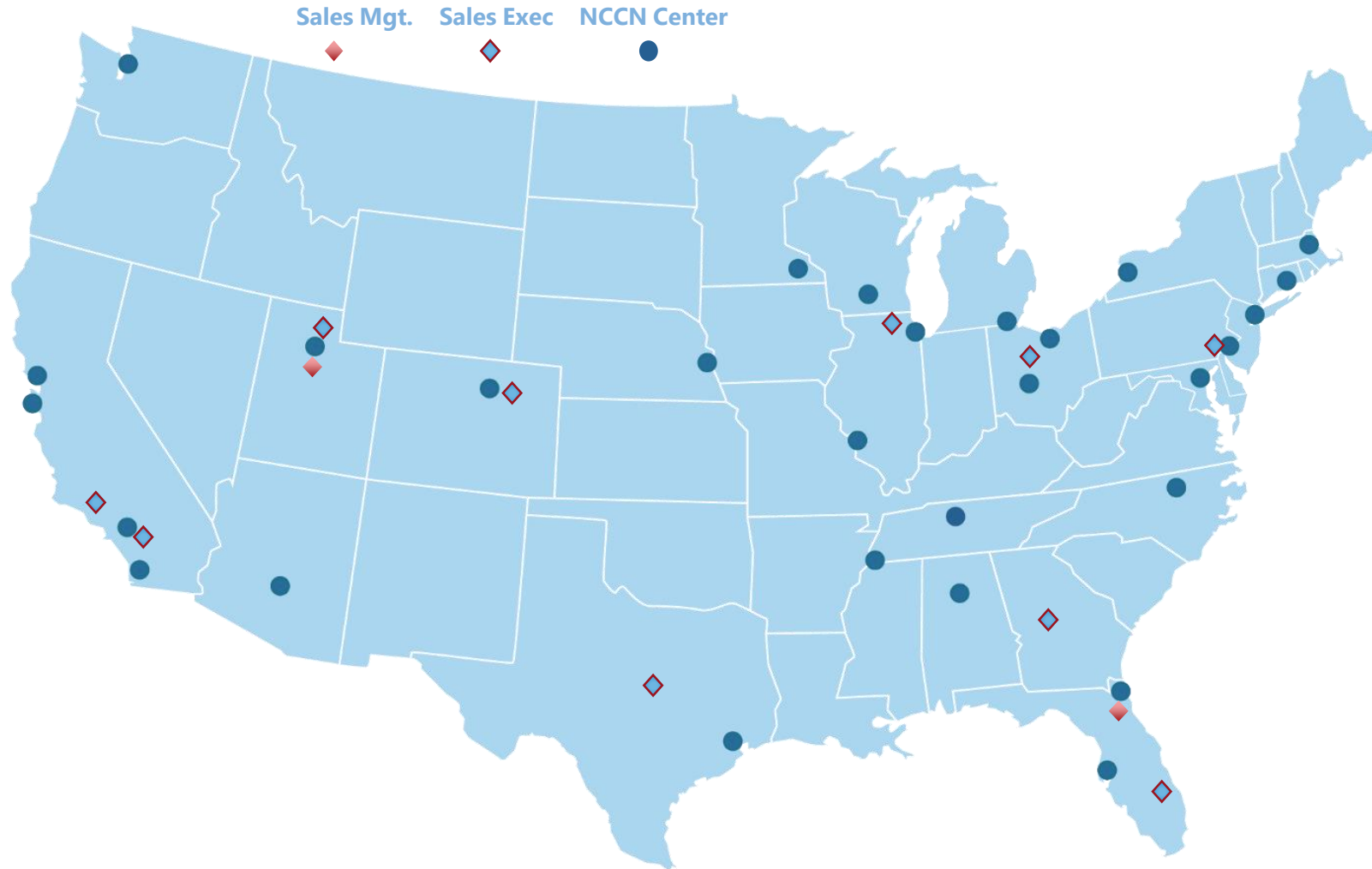
- Pharma
- Drug Discovery





# 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>



# 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 – 41 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

Primer-Switch for Nucleic Acid Analysis

Patent 2 – Methods for Rare Genetic Variant Detection and PCR Amplification Improvements

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

- Pending in Hong Kong, Korea, Canada

**2) Issued in Australia and US**

- Pending in Japan, China, Korea, Canada, Hong Kong,, Brazil, and EU

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

# Leadership Team

## Michael Nall

President & CEO

- 25+ years in healthcare sales, marketing and commercial operations
- 20 years in cancer diagnostics and genomics
- 6 years as Biocept CEO
- 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



## Michael Dugan, MD

CMO and Medical Director

- Board certified Pathologist
- Univ of AZ, Yale, UCLA
- Numerous publications, serves on CAP committees
- Leadership positions at Exact Sciences, Clinical Genomics, Quest, Genzyme and others



## Lyle Arnold, PhD

SVP, Chief Scientist

- 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



## 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 Trovagene



# 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

### Santosh Kesari, MD, PhD

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

### David Berz, MD, PhD

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

# Deploying Capital To Fuel Growth



# Corporate Priorities

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- ✓ 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
- ✓ Execute on launch of Target Selector™ NGS Panels under Thermo Fisher Collaboration
- ✓ Enter into additional strategic commercial and technology partnerships – Global and U.S.
- ✓ Complete agreement with Allegheny Regional and Highmark BCBS
- ✓ Sign new third-party health plan agreements and expand relationship with BCBS
- ✓ Publish clinical case studies
- ✓ Launch COVID-19 collection kits and complete development of COVID kit with AEGEA



# Investment Highlights

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## Industry-Leading Test Performance

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## 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