

Issuer Free Writing Prospectus
Filed Pursuant to Rule 433
Registration No. 333-201437
Date: January 21, 2015

Biocept
Completing the Answer™

Personalized Medicine from a Liquid Biopsy



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 us (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 which 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.

FWP Statement

This presentation highlights basic information about us and the offering to which this communication relates. Because it is a summary, it does not contain all of the information that you should consider before investing in our common stock.

We have filed a registration statement (including a prospectus, which currently is in preliminary form) with the US Securities and Exchange Commission for the offering to which this presentation relates. The registration statement has not yet become effective. Before you invest, you should read the preliminary prospectus in the registration statement (including the risk factors described therein) and other documents we have filed with the SEC for more complete information about us and the offering.

You may access these documents for free by visiting EDGAR on the SEC website at <http://www.sec.gov>

The preliminary prospectus, dated January 21, 2015, is available on the SEC Web site at http://www.sec.gov/Archives/edgar/data/1044378/000095012315000339/bioc-s1a_20140930.htm

Alternatively, we or any underwriter participating in the offering will arrange to send you the preliminary prospectus and, when available, the final prospectus and/or any supplements thereto if you contact Aegis Capital Corp., Prospectus Department, 810 Seventh Avenue, 18th Floor, New York, NY 10019, telephone: 212-813-1010, e-mail: prospectus@aegiscap.com

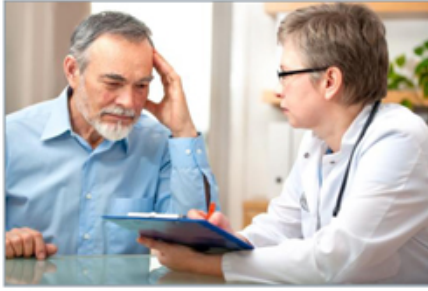
Offering Summary

Issuer	Biocept, Inc.
Exchange/Ticker	NASDAQ Capital Market / BIOC
Offering Size	Approx. \$15,000,000 of Common Stock (100% Primary)
Over-Allotment	15% (100% Primary)
Use of Proceeds	<ul style="list-style-type: none">• Sales and marketing for test offerings• Assay development and validation• Automation and scale up
Joint Book-Runners	<ul style="list-style-type: none">• Aegis Capital Corp. and Feltl and Company

Biocept's Liquid Biopsy Solution

Answering an Unmet Medical Need

Do I qualify for this drug?

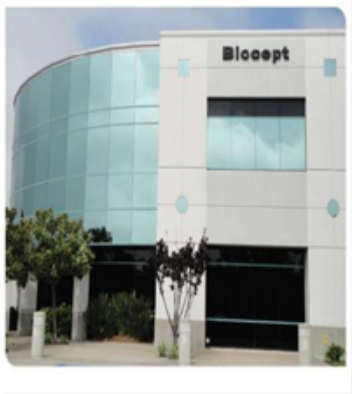


Does my treatment need to be changed?



The Right Therapy for the Right Patient at the Right Time

Business Overview



CLIA facility in
San Diego, CA



*R & D, test kits
manufactured and
samples analyzed*



Genomic test results sent to physicians

Investment Highlights

Commercial stage cancer diagnostics company with ground-breaking technology platform utilizing a simple blood test

- OncoCEE™: captures circulating tumor cells (CTCs)
- CEE-Selector™: enhanced sensitivity for genomic mutation analysis
- Commercialized tests for breast, gastric and non-small cell lung cancer
- Test pipeline focused on solid tumor biomarkers in lung, breast, colorectal, prostate and melanoma
- Established, certified and scalable CLIA lab
- Clear path to market penetration
- Established research collaborations and strategic partnerships

Biocept Executive Team

David Hale <i>Chairman</i>	<ul style="list-style-type: none"> • CEO of Hale BioPharma Ventures with over 36 years as a life sciences sector leader • Chairman (current or former) of Santarus (acquired by Salix), Conatus, Micromet (acquired by Amgen), and SkinMedica (acquired by Allergan) • CEO of Hybritech (acquired by Lilly), Gensia (acquired by Teva)
Michael Nall <i>President and CEO</i>	<ul style="list-style-type: none"> • More than 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
William Kachioff <i>SVP, Finance and CFO</i>	<ul style="list-style-type: none"> • 25 years life sciences industry experience • 15 years of experience in public company finance • Abbott Labs, Cutera, Coulter Pharmaceutical, Althea, Vivus • Diverse finance and operations management experience
Lyle Arnold, Ph.D. <i>SVP, R&D and CSO</i>	<ul style="list-style-type: none"> • 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 • 40 issued US and more than 140 issued and pending patents worldwide
Veena Singh, MD <i>SVP and Sr. Medical Director</i>	<ul style="list-style-type: none"> • Board certified molecular pathologist, UCSD, Cedars Sinai trained • Numerous publications, serves on CAP committees for oncology biomarkers • Most recently Medical Director – bioTheragnostics
Raaj Trivedi <i>VP Commercial Operations</i>	<ul style="list-style-type: none"> • More than 15 years in the biotechnology and diagnostics industry • Served as VP of Marketing and VP of Business Development at Clariant – a GE Healthcare Company • Life Technologies Commercial Leader for Oncomine Biomarker Discovery Panel

Conatus
Pharmaceuticals

SANTARUS
Inc.

CLARIENT
A GE Healthcare Company

CUTERA

Abbott
A Promise for Life

GEN-PROBE

IncyteGenomics

UC San Diego

CEDARS-SINAI

BIO THERANOSTICS
A GENENTEC COMPANY

US LABS
The New Measure

life
technologies

Biocept
Completing the Answer™

Multifaceted Growth Strategy

- Sales and Marketing Investment
 - Physician and hospital market for treatment decisions
 - Biopharma and research services
 - Collaboration and partnership agreements
- Research and Development
 - Clinical utility studies
 - Validation of test in pipeline
 - Enhanced technology
- Operational Efficiency
 - Investment in automation
 - Optimize capacity of infrastructure



2014 Accomplishments

- ✓ Appointed Veena Singh as SVP and Senior Medical Director
- ✓ Appointed Raaj Trivedi as Vice President - Commercial Operations
- ✓ Recruited a national sales team to support commercialization
- ✓ Implemented reimbursement and managed care plan
- ✓ Gained coverage for approx. 19M patients in large PPO network
- ✓ Awarded additional issued patents in Europe, China and S. Korea
- ✓ Gained and expanded collaborations with MD Anderson, Rosetta and Insight
- ✓ Launched Clinical Research Services in Circulating Tumor DNA
- ✓ Secured \$10 Million Term Loan Facility With Oxford Finance LLC
- ✓ Increased menu of testing:
 - ✓ ER in breast cancer; ALK, ROS1 and T790M/EGFR in NSCLC and HER2 in gastric cancer.

Target Market

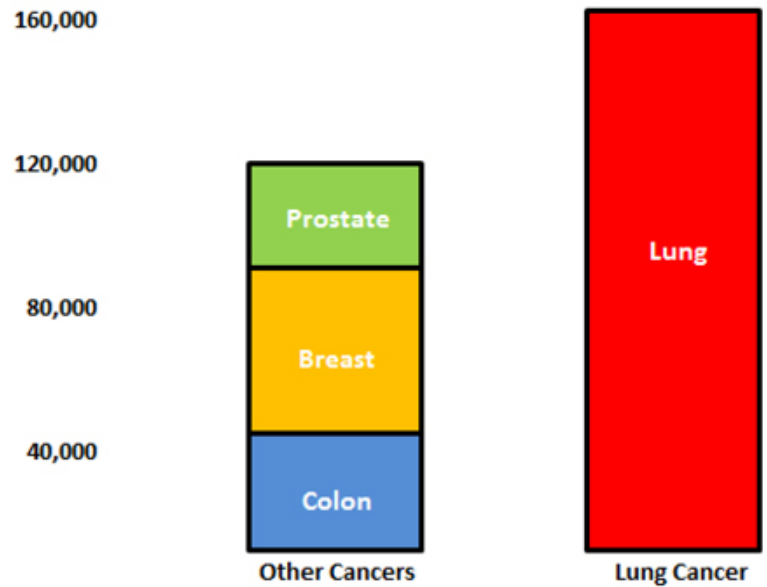
925,030

Newly
Diagnosed
Cancers

8,009,272

Living with
Cancer

Estimated Cancer Deaths by Site, 2014



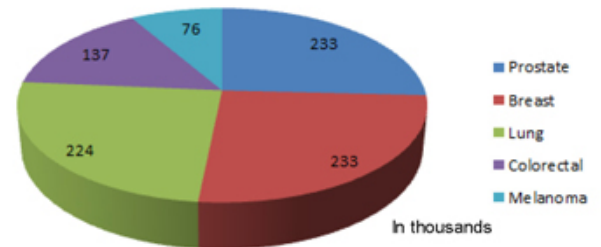
– Incidence data for 2014 and prevalence data for 2010 of breast, lung, colon, prostate, melanoma, gastric and deaths data provided by National Cancer Institute: <http://seer.cancer.gov/statfacts/>

Liquid Biopsy Opportunity

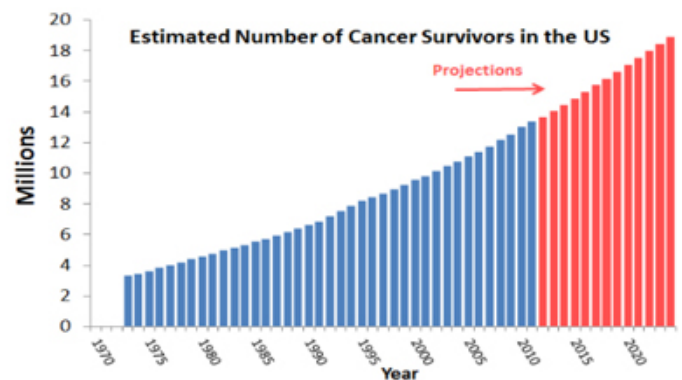
“...liquid biopsies have a multi-billion dollar market potential that could eventually exceed \$10B”

Cowen and Company Liquid Biopsy Industry Report, November, 2014

Profiling
Newly Diagnosed
Cancers



Monitoring
Patients Living with
Cancer



Limitations of Tissue Biopsy

Cancer is a heterogeneous disease

- Molecular properties differ within a tumor
- Primary tumor biopsy may not reflect current disease condition
- Therapy causes changes in tumor cells

Biopsy is invasive

- May not be feasible based on patient condition or tumor accessibility
- Impractical for periodic monitoring for progression / recurrence

Biopsy tissue is limited

- Greater demand due to molecular profiling
- Surgery is costly

Liquid Biopsy Addresses Limitations in Standard of Care

Reducing Healthcare Costs

Average cost of biopsy: \$14,634¹

Average cost when adverse events such as collapsed lung, bleeding or pneumonia occurred was 4X higher¹

Average cost of blood draw:

between \$6 and \$167 ²

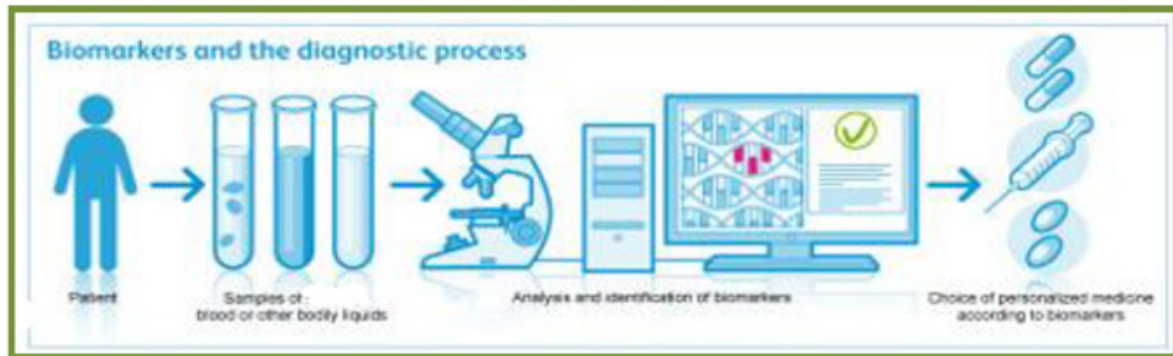
.... potentially saving our healthcare system billions



¹Lokhandwala T, Dann R, Johnson M, et al. Costs of the Diagnostic Workup for Lung Cancer - A Medicare Claims Analysis. Presented at: 2014 Chicago Multidisciplinary Symposium in Thoracic Oncology; October 30-November 1, 2014; Chicago, Illinois. Presentation Number: 103.

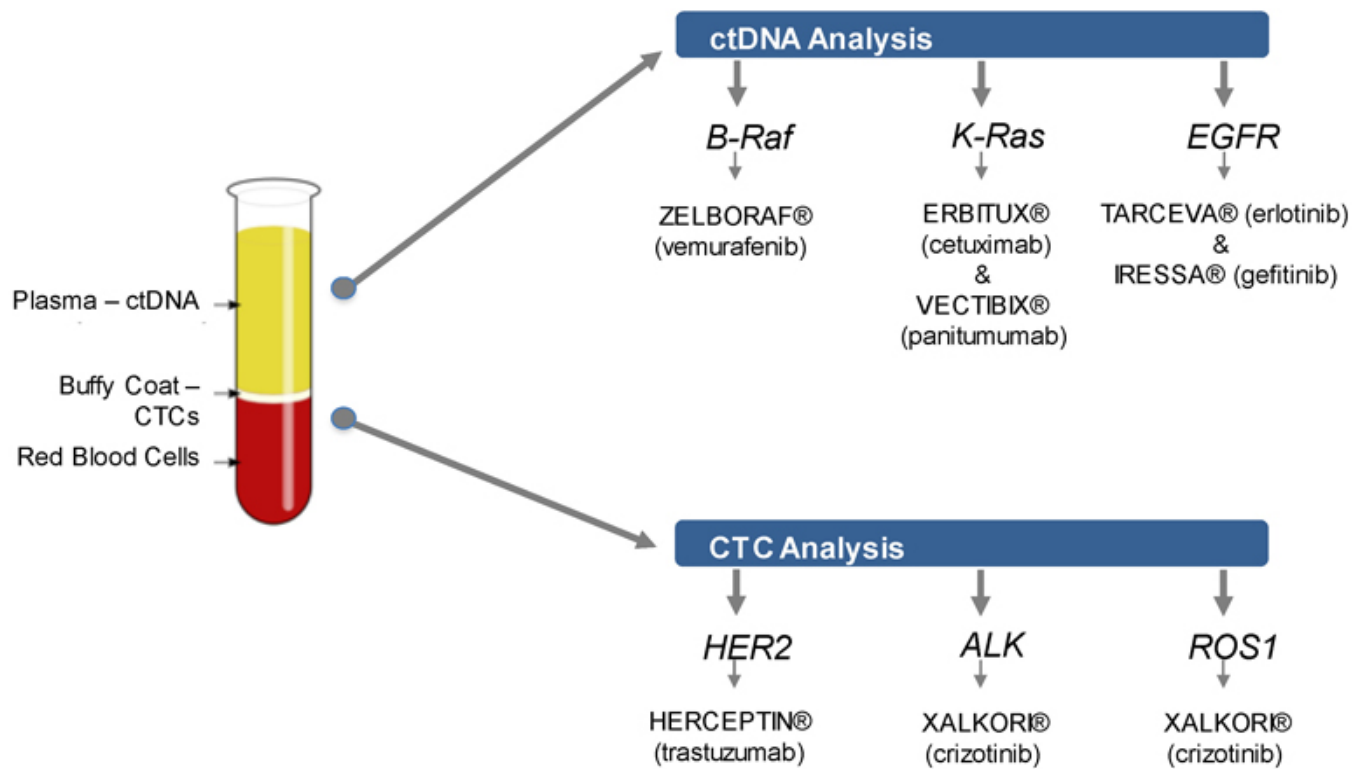
²<http://clearhealthcosts.com/blog/2012/12/how-much-does-a-blood-test-cost-it-could-be-16-or-117/>

New Molecular Paradigm



- Liquid biopsy (CTCs and ctDNA) - surrogate for tumor tissue biopsy
- Repeatable for monitoring patient response to treatment
- Provides tumor biomarker status when tissue is not available
- Reduce false negatives attributable to heterogeneity
- Detect metastasis, recurrence and biomarker conversion
- Qualify more patients for targeted therapies
- *66% of researchers say analysis of CTCs will be the standard of care by 2017**

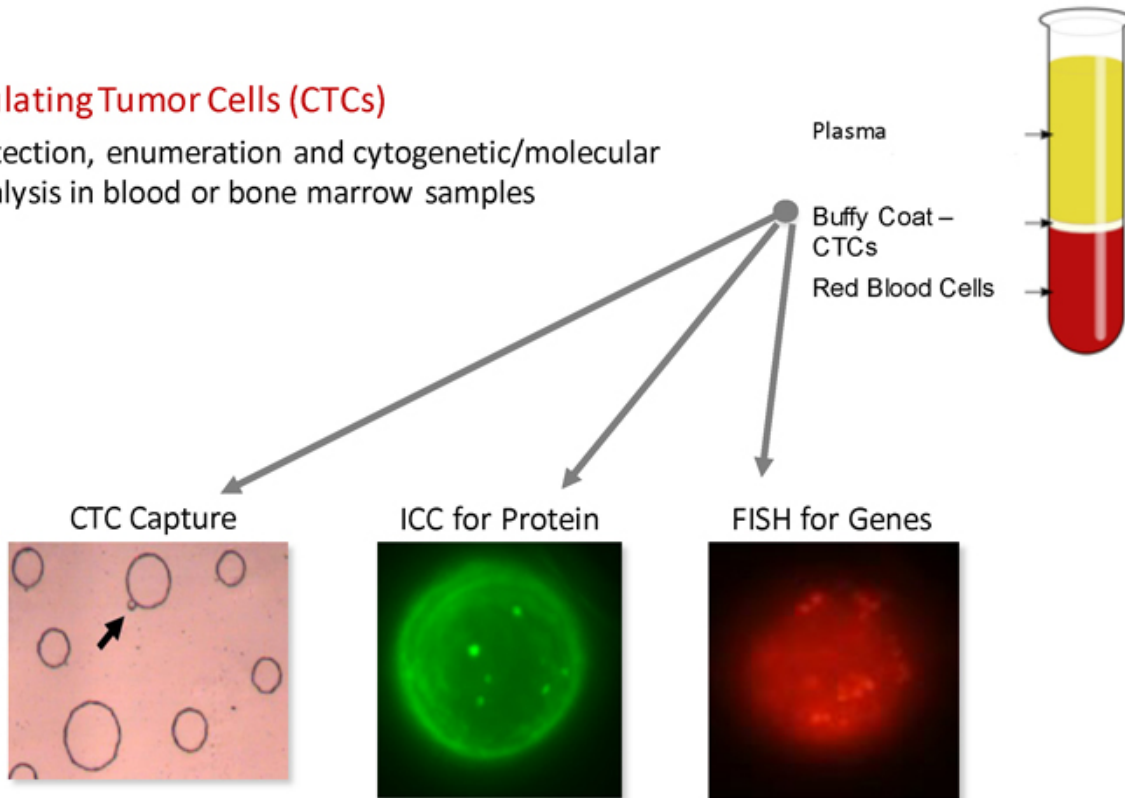
Platform Overview



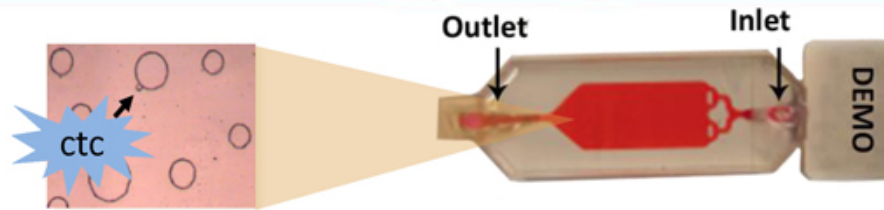
OncoCEE CTC Testing

Circulating Tumor Cells (CTCs)

- Detection, enumeration and cytogenetic/molecular analysis in blood or bone marrow samples



CEE® Microfluidic Channel



- Patented arrangement of posts optimized for ultra-sensitive rare cell capture
- Mounted on glass slide and transparent, enabling direct microscopic visualization of captured CTCs
- Multiple assays can be performed on captured CTCs
- Cells can be released for further analysis, including CEE-Selector mutation analysis, and is intended for next generation sequencing at Biocept or with industry partners

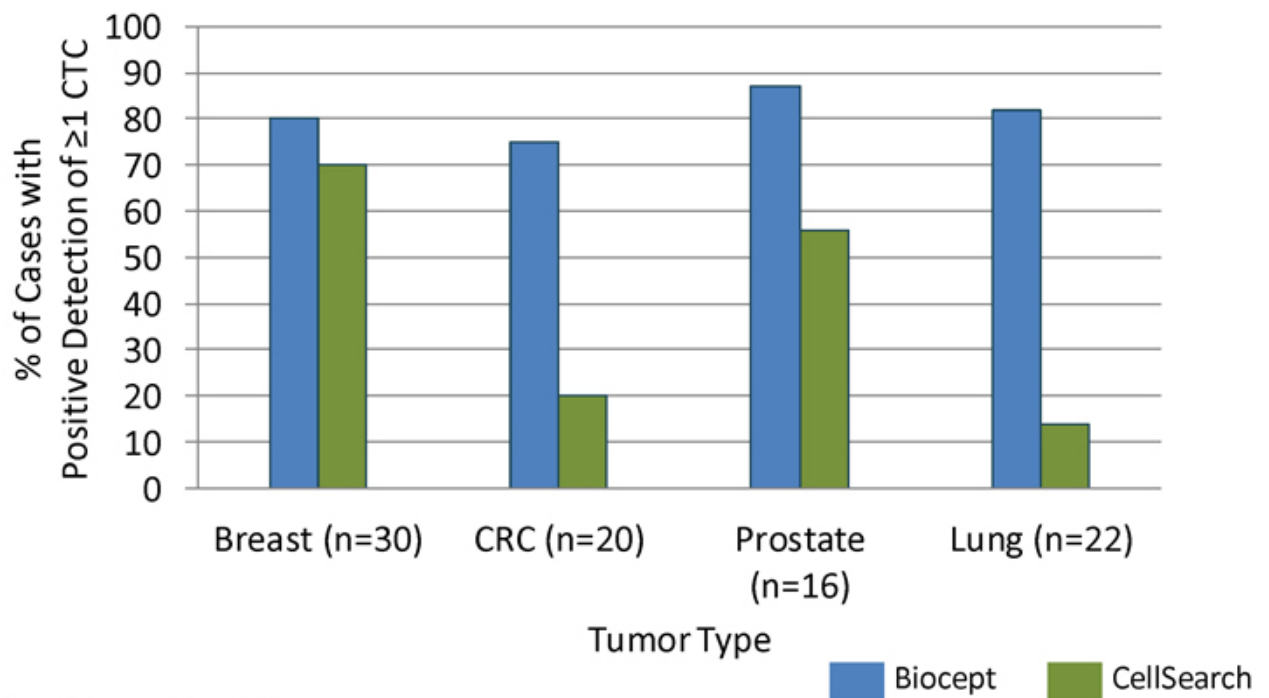
OncoCEE™

A New Standard in Oncology Diagnostics

OncoCEE™ Platform	CellSearch (J&J) Platform
<ul style="list-style-type: none">✓ Proprietary CTC antibody capture cocktail✓ Not limited to “traditional” epithelial CTCs✓ Captures more CTCs	<ul style="list-style-type: none">• Single capture antibody• Limited to “traditional” epithelial CTCs
<ul style="list-style-type: none">✓ Immediate post-capture biomarker analysis	<ul style="list-style-type: none">• No biomarker analysis offered under FDA clearance
<ul style="list-style-type: none">✓ Tests for Breast, Gastric, Lung cancers with Colon, Prostate, Melanoma planned	<ul style="list-style-type: none">• Only available for Breast, Colon, Prostate

Published CTC Enumeration Comparison*

Traditional Definition of CTCs (CK+, CD45-, DAPI+)

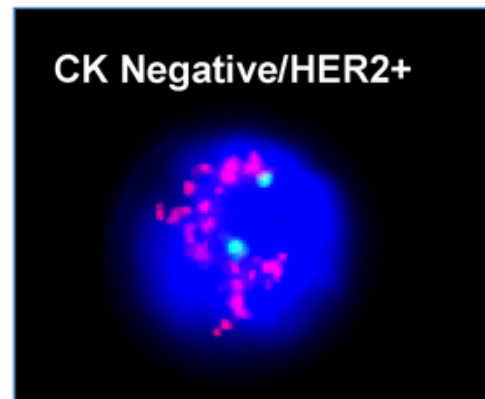


*Pecot et al, Cancer Discovery, Dec. 2011

Biocept Technology Detects More CTCs



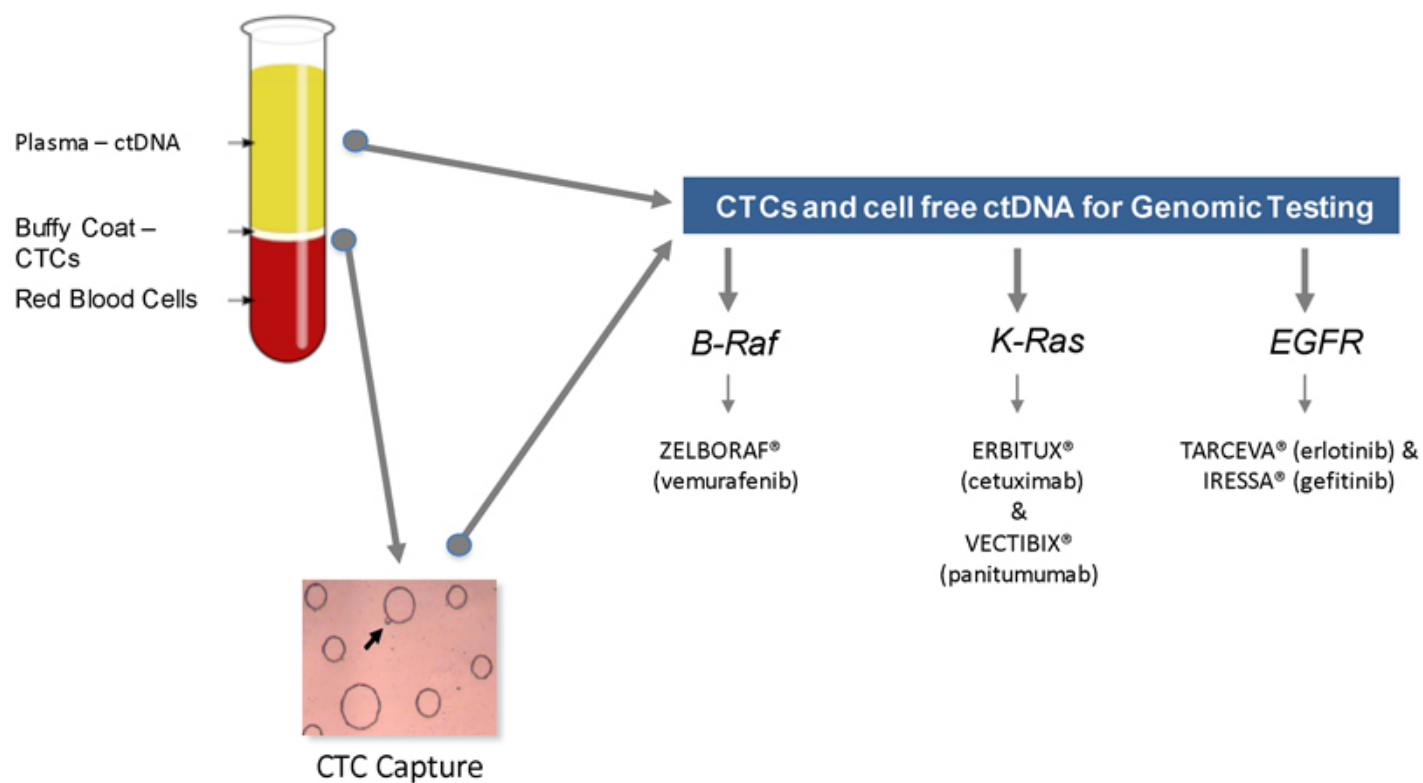
- Traditional definition of CTC
- Biocept captures more of these due to antibody cocktail and microfluidic channel design



- >50% of HER2 Positive cells are CK negative* and are considered to be a tumor cell
- CK negative cells missed by competitors
- Biocept captures these types of cells

*Mayer et al. Cancer Genetics, 2011

Ground-Breaking CEE-Selector Platform



Advantages of CEE-Selector™ Platform

*Mutation determination sensitivity 10-100x better than competing platforms**

- Allows for both CTC and cell free ctDNA analysis
- Detects 1 mutation out of >10,000 normal DNA
- Works with various nucleic acid targets (DNA and RNA)
- Compatible with sequencing and PCR instruments
- Multiplexing reduces costs and enhances reimbursement
- Potential applications in all stages of cancer

* Biocept internal data

OncoCEE™ Product Profiles

Italicized and underlined biomarkers are currently available to Biocept customers

Product	Tumor Type	OncoCEE™ CTC	CEE-Selector™
OncoCEE-BR™	Breast	<u>Enumeration of CTCs</u> , <u>HER2</u> , <u>ER</u> , PR	ER mutation
OncoCEE-GA™	Gastric	<u>Enumeration of CTCs</u> , <u>HER2</u>	Currently no clinically actionable mutations identified
OncoCEE-LU™	Lung	<u>Enumeration of CTCs</u> , <u>ALK</u> , <u>ROS1</u> , MET	<u>EGFR</u> , K-ras, B-raf mutations, ALK mutations
OncoCEE-CR™	Colon	<u>Enumeration of CTCs</u> , EGFR	K-ras, B-raf mutations
OncoCEE-PR™	Prostate	<u>Enumeration of CTCs</u> , AR, and PTEN deletion (blood or bone marrow)	Currently no clinically actionable mutations identified
OncoCEE-ME™	Melanoma	<u>Enumeration of CTCs</u>	B-raf and N-ras mutations

Established CLIA Facility



- CLIA inspected and certified
- CAP accredited for high complexity testing
- Manufacturing and lab operations in place
- Scalable for future growth
- Laboratory information system with client portal
- Adjacent clinical development and research facility
- Automation solutions in place

Targeted Commercialization Strategy

- Raise awareness of the value of CTCs and ctDNA
- Drive OncoCEE adoption
 - Market directly to oncologists and other physicians
 - Develop key opinion leader speakers
- Build relationships with patient advocacy groups
- Publish studies with major cancer centers
- Participate in medical meetings / symposia
- Deepen payor relationships and expand reimbursement coverage
- Expand strategic partnerships with pharma and biotech for personalized diagnostics

Driving Adoption for Growth

Salesforce Plan

★ current ★ 2015 ★ 2016

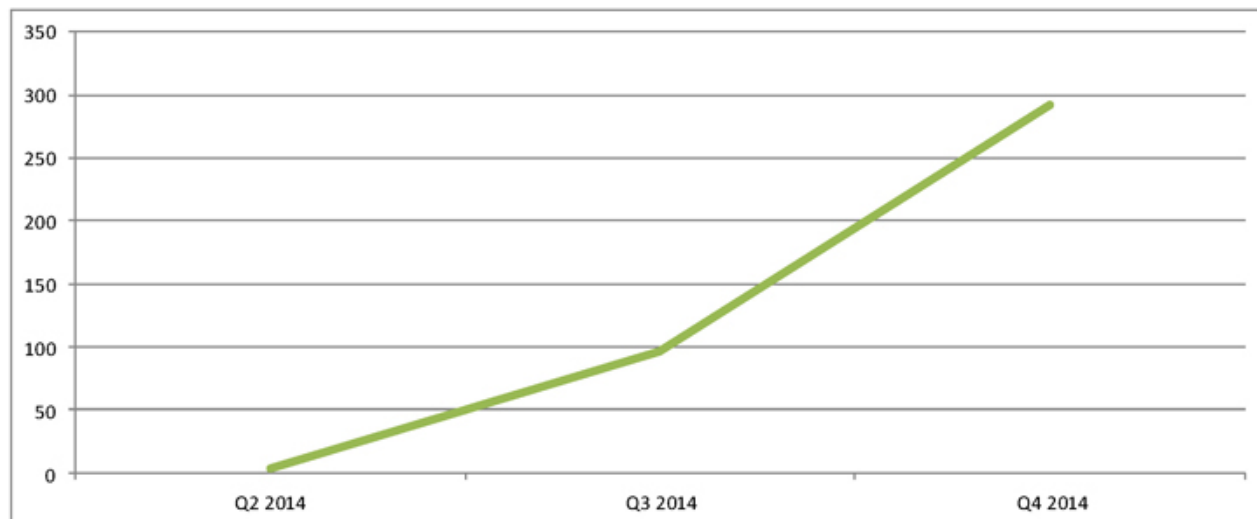


Commercial Team

- ✓ Head of sales and marketing
- ✓ Regionally based sales team
- ✓ Sales team for pharma
- ✓ Managed care expert
- ✓ Internal marketing
- ✓ Leverage partner sales forces

Increasing Adoption

Commercial Samples Per Quarter




Average reimbursement per sample YTD: \$1,062

Revenue and Reimbursement

- Utilize established CPT codes for coverage today
 - Medicare covers analysis component of testing
 - Select private payors cover CTC capture, enumeration and analysis
 - Seeking Medicare coverage for capture and enumeration
- Diversified revenue streams
 - Grow clinical trial business and other fee for service channels
 - Establish new revenue sources through partnerships
- Perform clinical utility study against tissue biopsy
 - Health economics impact
 - Goal is to show improved outcomes with reduced costs

Clinical Studies

 <p>COLUMBIA UNIVERSITY MEDICAL CENTER <i>Discover. Educate. Care. Lead.</i></p>	<p><u>Columbia</u></p> <ul style="list-style-type: none"> • Patients with ER positive metastatic and primary biopsy • Correlation of ER status – Biocept OncoCEE BR™ with metastatic and primary biopsy • Accepted for publication – pending review
 <p>DANA-FARBER CANCER INSTITUTE</p>	<p><u>Dana-Farber</u></p> <ul style="list-style-type: none"> • Metastatic Breast Cancer patients with HER2 negative primary biopsy • CTC HER2 positive patients, as detected with OncoCEE BR, placed on Herceptin • 22% of patients were Her2 positive on CTCs but negative on tissue • Sponsored by Genentech, Komen Foundation
 <p>THE UNIVERSITY OF TEXAS MD ANDERSON CANCER CENTER <i>Making Cancer History®</i></p>	<p><u>MD Anderson</u></p> <ul style="list-style-type: none"> • Published in Cancer Medicine – April 2013 • Recently diagnosed breast cancer patients • 15% of CTC and 28% of DTCs have HER2 discordance with primary tumor • Current Ovarian study – CTCs as predictive of outcomes
	<p><u>Other studies</u></p> <ul style="list-style-type: none"> • Four additional peer reviewed published studies validating technology • Additional pending studies with collaborators • Planned study in Non Small Cell Lung Cancer

Patent Portfolio

Biocept Developed Solutions

CEE-Sure™
Stability
Transport Tube
Patent pending



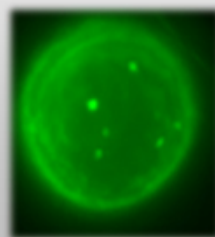
One US and associated foreign patents pending

Patented
CEE®
Microfluidic Channel



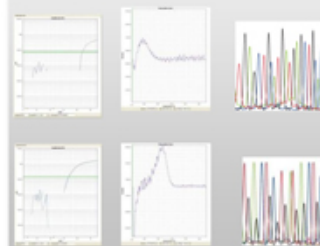
Multiple issued patents in US, EU, China and Korea

OncoCEE™
Chemistry: Antibody
Cocktail
Patent pending



Two US and associated foreign patents pending for capture; one US and associated foreign patents pending for detection

CEE-Selector™
Mutation Analysis
Patent pending



One US and associated foreign patents pending

Current Capital Structure

(as of 12/31/14 - excluding shares in this offering)

	Shares Outstanding	%
Common Stock	4,449,603	72%
Equity Awards ¹	1,157,812	19%
Warrants ²	<u>610,774</u>	<u>9%</u>
Fully Diluted Shares Outstanding	<u>6,218,189</u>	<u>100%</u>

¹ Average option exercise price of \$6.29

² Average exercise price is \$9.47/share

Leading Cancer Diagnostic Companies



Sold 56% to Roche for \$1.2B



NeoGenomics
Laboratories

Market cap \$241M*



CLARIENT

Sold to GE Healthcare \$576M



MYRIAD®

Market cap \$2.84B*



genomic
health

Market Cap \$1.043B*

GENOPTIX®
MEDICAL LABORATORY

Sold to Novartis - \$470M

* Market Cap close of market – January 16, 2014

Biocept
Completing the Answer™

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