Liquid Biopsies
Next Generation Cancer Molecular Diagnostics

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Chief Executive Officer

June 2016
Forward Looking Statements

Statements pertaining to future financial and/or operating results, future research, diagnostic tests and technology under development, clinical development of diagnostic tests, and potential opportunities for OncoCyte Corporation and the diagnostic tests it is developing, along with other statements about the future expectations, beliefs, goals, plans, or prospects expressed by management constitute forward-looking statements. Any statements that are not historical fact (including, but not limited to statements that contain words such as “will,” “may,” “believes,” “plans,” “anticipates,” “expects,” “estimates”) should also be considered to be forward-looking statements. Forward-looking statements involve risks and uncertainties, including, without limitation, risks inherent in the development, testing, marketing and/or commercialization of potential diagnostic tests, including developing or obtaining the resources and capabilities required to do so, uncertainty in the results of clinical trials, need and ability to obtain future capital, and maintenance of intellectual property rights, need to obtain approvals from federal and state regulatory agencies, and uncertainty as to reimbursements or coverage from third party payers such as Medicare, health insurance companies, and health maintenance organizations. Actual results may differ materially from the results anticipated in these forward-looking statements and as such should be evaluated together with the many uncertainties that affect the business of OncoCyte, particularly those mentioned in the Risk Factors and other cautionary statements found in OncoCyte’s latest Annual Report on Form 10-K and other Quarterly Reports and Current Reports filed by OncoCyte with the Securities and Exchange Commission. OncoCyte disclaims any intent or obligation to update these forward-looking statements and/or this presentation, including but not limited to any changes resulting from changes in fact or circumstances.

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Investment Highlights

• Positioned to capitalize on standard of care moving to liquid biopsy
• Addresses large unmet needs for early, accurate diagnosis in multiple cancers
• Initial focus on lung, one of the largest markets and a national health priority
• Current lung cancer standard of care is inaccurate, risky, and expensive
• Strong clinical data potentially positions OncoCyte to become standard of care
• Compelling value proposition for payers, physicians, and patients
• On track for first product launch
• Deep product pipeline leveraging core R&D competencies
• Experienced leadership team with background in commercialization
Molecular diagnostics are evolving toward non-invasive liquid biopsies

**IMAGING**
- Mammogram
- LDCT

**TISSUE BIOPSY**
- Veracyte
- Genomic Health

**LIQUID BIOPSY**
Some molecular diagnostics companies have substantial valuations

In some cases based on incremental improvements and/or small markets

OncoCyte is focused on the largest segment and the biggest market opportunity
OncoCyte is focused on early diagnosis – the largest market segment, but with low competition.

Lung cancer is the largest market opportunity

Most cancer deaths each year in the U.S.

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>Estimated Deaths</th>
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<tbody>
<tr>
<td>Lung</td>
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<tr>
<td>Colo-rectal</td>
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<td>Breast</td>
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<td>Pancreatic</td>
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<tr>
<td>Prostate</td>
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<td>Ovarian</td>
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<td>Kidney</td>
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<td>Thyroid</td>
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Largest % of global diagnostics revenue

- Lung Cancer
- Breast Cancer
- Colorectal Cancer
- Prostate Cancer
- Ovarian Cancer
- Pancreatic Cancer
- Kidney Cancer
- Liver Cancer
- Cancer Blood

Diagnostics include both imaging and molecular diagnostics
SEER Stat fact Sheet Estimated deaths 2015
Lung cancer is typically diagnosed at later stages, limiting survival rates. **57% of lung cancer diagnoses are made in stage IV**

**Five year survival rate**

- Prostate
- Breast
- Bladder
- Colorectal
- Lung

Sources: Cancer SEER Stat Fact Sheets
NCCN Guidelines Lung Cancer Screening 2/2014
USPSTF Screening for Lung Cancer
Lung cancer diagnosis is the highest unmet need

The most lethal cancer with one of the worst survival rates, but one of the poorest standards of care

Lung: 158,040
Colorectal: 49,700
Breast: 40,290
Ovarian: 14,180
Thyroid: 1,950
Pancreatic: 40,560

Bubbles represent number of U.S. deaths per year

Health Outcomes (5-year death rate)

Cost Savings

Probability of false positive test under current standard of care (leading to unnecessary and expensive follow-up procedures)
Lung cancer is now a major U.S. health priority

Early detection of lung cancer is now a national health priority because it has the highest death rate
  • Better diagnosis will increase the survival rate and save lives

December 2013
  • USPSTF guidelines recommend annual LDCTs for patients with 30 pack-year history
  • 7-10M Americans

February 2015
  • CMS announces Medicare coverage of LDCTs

However LDCT has a high rate of false positives
  • 25% of all LDCTs are indeterminate, requiring additional procedures
  • But **96% of indeterminate LDCTs turn out to be benign** – false alarms
  • So 96% of follow up procedures are unnecessary
Current standard of care is risky and expensive

Follow up procedures are also expensive

- Biopsies via bronchoscopies, surgery, needle biopsy
- Frequent follow up LDCTs (radiation exposure)

Lung biopsies are much riskier than other types of biopsies, and deaths could be avoided:

- 0.5 to 1% mortality (600 to 1,300 annual deaths averted)
- 4-20% major complications (5,000 to 26,000 fewer events annually)
- 2-15% collapsed lung (2,600 to 20,000 fewer events annually)

For an average patient a lung biopsy has a higher likelihood of leading to a serious complication than of confirming lung cancer

OncoCyte absolute number estimated using TAM 10M and 65% specificity
Pipeline diagnostics based on platform with commercial advantages

Diagnostic Strategy

*... potentially malignant, clinician to determine follow up procedure.
OncoCyte’s initial focus is on confirmatory diagnostic solution

Screening

- High-risk patients
- LDCT screening

No nodules

Confirmatory

- Nodules
- Follow-up LDCT scans

Clear

- Biopsy

Malignant

Benign nodule
OncoCyte’s preliminary test shows strong performance

- Prototype classifier presented at American Thoracic Society in 2015
- Sensitivity: 76%
- Specificity: 88%
- Proof of concept for confirmatory diagnostic and screening diagnostic

- Dr. Louise C. Showe bioinformatics lab
- 9+ years of developing blood-based tests for lung cancer
- Significant sample set (3,000 samples and ongoing collection)
- OncoCyte exclusive global licensing agreement
- Follow up independent cohort study (620 subjects) replicated 2015 results (February 2016)

AUC = 0.8832
Cancers: n=54
Controls: n=49
Large market opportunity for lung tests

USPSTF guidelines for 30 pack-year smokers

All indeterminate diagnoses (LDCT+)

Downstream procedures performed on indeterminate diagnoses

Overall screening market (7-10 million patients)

Confirmatory test extended use (1.8-2.5 million patients)

Confirmatory test first launch (~180k to 250k patients)

TAM numbers based on company estimates and secondary data
High clinical utility – the potential for fewer risky procedures and significant cost savings

OncoCyte’s test could result in $1.4B to $4.0B in annual U.S. cost savings

Current Standard of Care

- USPSTF Guidelines 30-pack year smokers (8-10M patients)
- Nodules Found (2-2.5M patients)
- Referred to follow-up ~230k (Use 1*) ~620K (Use 1-2**)
- Complications 34K

OncoCyte’s Test as part of Standard of Care

- USPSTF Guidelines 30 pack year smokers (8-10M patients)
- Nodules found (2-2.5M nodules patients)
- Avoided procedures ~140k (Use 1*) ~380K (Use 1-2**)
- Avoided complications 9-26k

140,000 to 380,000 fewer procedures annually 9,000 to 26,000 fewer hospitalizations annually

*Use 1 – Confirmatory test first launch, Lung RADs 3 and 4
**Use 1 and 2 – Confirmatory test first launch and expanded use, Lung RADS 2,3 and 4
Assumptions: 10M patients screened, 25% positive results, molecular diagnostic with 65% specificity (OncoCyte test may have higher or lower specificity); for Use 1 and 2 all positive screens referred to downstream procedures including repeat LDCTs, PET scans, bronchoscopies, surgical biopsies, with 15% complications and associated hospitalization costs
Compelling proposition for payers

Payers gave diagnostic high ratings for unmet needs

Pricing and TPP discussion with payers very positive

As asked of 10 Commercial, Managed Medicaid and Managed Medicare payers representing 20M covered lives

Q8: Now I would like to ask what is your perception of the overall unmet need for certain oncology screening diagnostics or procedures. On a scale of 1 to 10 where 1 is no unmet need and 10 is significant unmet need for an improved screening procedure/diagnostic
Compelling proposition for prescribers

- Interest in using the OncoCyte test is very high with a mean rating of 8.5 out of 10
- Pulmonologists expressed highest interest at 9.3, followed by interventional radiologists at 8.7
- Reasons provided for high ratings:
  - Useful for smaller nodules with high risk factors
  - Provides additional accuracy and benefit
  - Avoid biopsies
  - Non-invasive blood test
  - Provides clinical utility

Survey of 30 in-depth interviews with clinicians fielded in Sept/Oct 2015. Question asks On a scale from 1-10 where 10 is very interested, how interested would you be in utilizing Test X?
Commercialization strategy addresses all key stakeholders

**Benefits**

**Provider**
- Determinate diagnosis
- High sensitivity
- High specificity
- Reduce unnecessary procedures

**Patient**
- Earlier detection
- Improved outcomes
- Reduce anxiety over indeterminate finding

**Payer**
- Improved health outcomes
- Fewer unnecessary procedures
- Reduce overall costs

**Marketing Strategy**

- Specialty sales force
- TPP refinement via market research
- Practice guidelines
- Peer review journals
- KOL influence

- Reimbursement support out of pocket
- Increase awareness to increase LDCT uptake
- Patient friendly test report

- Pricing vs comparator
- RWE clinical utility studies
- CMS 1st coverage focus
- 5 Large health plans
OncoCyte’s deep product pipeline

- Lung confirmatory
- Breast confirmatory
- Lung screening
- Breast screening
- Bladder
- Tumor type 4

Next 12 months R&D focus

As of April 2016

Next 12 months R&D focus

May materialize as confirmatory, screening, recurrence or companion diagnostic
Breast cancer confirmatory diagnostic in early stage development

SCREENING

Screening Population → Screening Mammogram → Clear

Suspicious

Diagnostic Mammogram

CONFIRMATORY

Clear BIRADS 1/2

Suspicious BIRADS 3/4

Biopsy
Large market opportunity for iterative breast cancer diagnostic tests

Guidelines suggest annual mammogram screen

Overall screening market (38 million patients in 2014)

Guidelines suggest MRI (dense tissue, BRCA, family history)

Confirmatory test extended use (6 million patients)

Indeterminate mammograms

Confirmatory test first launch (1.6-1.9 million BIRADs 3-4)

TAM numbers based on company estimates and secondary data
Potential to partner development and/or commercialization of bladder cancer test

ROC AUC = 0.91
Sensitivity = 90%
Specificity = 83%
Classifier performance is strong in areas of greatest health outcome impact

- High grade bladder cancer is faster growing and more likely to spread than low grade
- High sensitivity/specificity in high grade hematuria and high grade recurrence
- Study based on 261 patients

Data from follow on study presented at ASCO June 2016
Large market opportunity for bladder cancer diagnostic tests

Current preliminary data suggest **multiple test uses**

- **Hematuria**
  - Screening test (3 million patients)
  - Recurrence test (500,000 patients x2)
  - Confirmatory test (500,000 patients)

- **Cancer in remission**
- **Indeterminate cytology results**

TAM numbers based on company estimates and secondary data
### Management team with commercial experience

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<tr>
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<th>Experience</th>
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<tr>
<td>William Annett</td>
<td>CEO</td>
<td>CEO BioFx Labs; CEO Corra Life Sciences; Managing Director Accenture Life Science; Led Commercial Strategy, Project Finance Genentech; Harvard MBA</td>
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<td>Karen Chapman</td>
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<td>Veracyte VP Clinical Operations, Telomere Diagnostics, VP Clinical Development Carmenta Biosciences, McKesson Oncology Network, Oncology RN</td>
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<td>Lab Director Veracyte, Illumina, Counsyl, Athena Diagnostics</td>
</tr>
<tr>
<td>Russell Skibsted</td>
<td>CFO</td>
<td>CFO BioTime; CFO Proove Biosciences; Managing Director and CFO RSL Ventures, CFO Aeolus Pharmaceuticals; CBO Hana Biosciences; Portfolio Management Partner Asset Management Company</td>
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