Q2 2017 Earnings Report & Company Updates

Monday – August 14, 2017 | 05:00pm Eastern | CEO: Panna Sharma

webcast link: http://public.viavid.com/index.php?id=125895
Forward-Looking Statements

These slides may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements pertaining to future financial and/or operating results, future growth in revenues, margins, research, technology, clinical development and potential opportunities for Cancer Genetics, Inc. tests and services, 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," "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 and/or commercialization of potential products, risks of cancellation of customer contracts or discontinuance of trials, risks that anticipated benefits from acquisitions will not be realized, uncertainty in the results of clinical trials or regulatory approvals, need and ability to obtain future capital, maintenance of intellectual property rights and other risks discussed in the Cancer Genetics, Inc. Form 10-K for the year ended December 31, 2016 and the Form 10-Q for the Quarter ended March 31, 2017 along with other filings with the Securities and Exchange Commission. These forward-looking statements speak only as of the date hereof. Cancer Genetics, Inc. disclaims any obligation to update these forward-looking statements.
EVERYTHING WE DO IS FOCUSED ON 1 KEY IDEA…

…DELIVER INNOVATION & PATIENT VALUE BY PROVIDING THE MOST COMPREHENSIVE CAPABILITIES IN PRECISION MEDICINE FOR ONCOLOGY DIAGNOSTICS.
### Revenue & Growth Highlights

(numbers in $ millions)

#### 2ND QUARTER REVENUE

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$1.5M</td>
</tr>
<tr>
<td>2015</td>
<td>$4.2M</td>
</tr>
<tr>
<td>2016</td>
<td>$7.0M</td>
</tr>
<tr>
<td>2017</td>
<td>$6.6M</td>
</tr>
</tbody>
</table>

4-Year CAGR: 45%

#### 1ST HALF YEAR REVENUE

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$2.9M</td>
</tr>
<tr>
<td>2015</td>
<td>$8.6M</td>
</tr>
<tr>
<td>2016</td>
<td>$13.1M</td>
</tr>
<tr>
<td>2017</td>
<td>$13.6M</td>
</tr>
</tbody>
</table>

4-Year CAGR: 47%

#### FULL YEAR REVENUE

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$6.6M</td>
</tr>
<tr>
<td>2014</td>
<td>$10.2M</td>
</tr>
<tr>
<td>2015</td>
<td>$18.0M</td>
</tr>
<tr>
<td>2016</td>
<td>$27.0M</td>
</tr>
</tbody>
</table>

4-Year CAGR: 42%
Driving Operational Efficiency and a Clear Path to Profitability

REVENUE & OPERATING EXPENSES

Amounts in $ millions

1H OPERATING EXPENSES

(Amounts in $ millions)

<table>
<thead>
<tr>
<th></th>
<th>1H 2016</th>
<th>1H 2017</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research &amp; Development</td>
<td>$3.2</td>
<td>$2.1</td>
<td>-35%</td>
</tr>
<tr>
<td>Sales &amp; Marketing</td>
<td>$2.7</td>
<td>$2.1</td>
<td>-20%</td>
</tr>
<tr>
<td>General &amp; Administrative</td>
<td>$8.0</td>
<td>$7.0</td>
<td>-12%</td>
</tr>
<tr>
<td>TOTAL OP. EXPENSES</td>
<td>$13.9</td>
<td>$11.3</td>
<td>-19%</td>
</tr>
</tbody>
</table>

- Operating expenses were **reduced by $2.6 million** for the first 6 months ended June 30, 2017 over the 6 month period ended June 30, 2016 based on **streamlining operations** across sites, and transforming our clinical go-to-market model.

- We expect **ongoing improvements in the top line**, while incremental improvements are made in operating expenses during 2017 to continue margin expansion.
Revenues By Market Category

**Q2 2017 $6.6M**

### BIOPHARMA SERVICES
- CGI is now supporting over 170 clinical trials and studies focused on Solid Tumor and Blood Cancers, including 39 for immuno-oncology indications.

**$3.3M**

### CLINICAL SERVICES
- 20% increase in clinical revenue over Q2 2016 due to enhanced portfolio in both immuno-oncology testing and our solid tumor center of excellence.

**$3.0M**

### DISCOVERY SERVICES
- Driven by support for molecular testing and bioinformatics for translational initiatives by academic and commercial research organizations.

**$0.3M**

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Cancer Genetics, Inc. | NASDAQ: CGIX | Q2 2017 Earnings Call
Q2 2017 Financial Highlights

- Q2 2017 revenues were $6.6 million, a 6% decrease over Q2 2016 revenues of $7.0 million.

- Revenue from Biopharma Services decreased 21%; Clinical Services increased by 20%; and Discovery Services grew 10% in comparable year-over-year second quarter periods.

- Total operating expenses were $5.7 million, a reduction of 15% from $6.7 million during Q2 of 2016, and essentially flat from Q1 2017.

- Sales and Marketing expenses decreased by 14% from $1.4 million to $1.2 million, in comparable year-over-year second quarter periods.

- GAAP net loss improved by 31% to $2.8 million in Q2 2017 compared to $4.0 million in Q2 2016.
Additional Q2 2017 Biopharma Highlights

- Working with 9 out of the 10 top biopharma companies.

- Revenue from biopharma partners and customers decreased by 21% to $3.3 million in Q2 2017 as compared to $4.2 million during Q2 2016 due to delays in six clinical trial launches and slower than expected enrollments in three clinical trials.

- Closed new projects totaling over $7.1M during Q2 2017, including 13 first-time, new clients.
  - Major Top 25 Pharma: 1
  - Biotechnology: 11
  - Channel/CRO Partner: 1

- A total of 61 new projects have been initiated during Q2 2017 - including 12 immuno-oncology and 2 liquid biopsy projects.

- Increased the number of clinical trials and studies CGI is supporting to 170, including 39 in immuno-oncology and 8 in liquid biopsy.
Q2 2017 Clinical & Discovery Highlights

- For the second quarter of 2017, clinical services revenue increased 20% over the same period in 2016, from $2.5 million to $3.0 million.

- Clinical test volume grew 13% from 7,100 tests to 8,009 tests in comparable year-over-year second quarter periods.

- Discovery services contributed an additional $263 thousand in revenue for the Q2 2017, a 10% increase over Q2 2016.

- Growth in discovery services was driven by significant demand for discovery solutions by research institutions where next-generation sequencing is combined with novel bioinformatics analysis.
## Summary Statement of Operations

### Income Statement Items ($ in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Q2 2016</th>
<th>Q2 2017</th>
<th>1H 2016</th>
<th>1H 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$7,000</td>
<td>$6,604</td>
<td>$13,069</td>
<td>$13,570</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>$2,716</td>
<td>$2,570</td>
<td>$4,681</td>
<td>$5,327</td>
</tr>
<tr>
<td>Gross Margin (%)</td>
<td>39%</td>
<td>39%</td>
<td>36%</td>
<td>39%</td>
</tr>
<tr>
<td>Research &amp; Development (R&amp;D)</td>
<td>$1,680</td>
<td>$989</td>
<td>$3,212</td>
<td>$2,099</td>
</tr>
<tr>
<td>Sales &amp; Marketing (S&amp;M)</td>
<td>$1,379</td>
<td>$1,165</td>
<td>$2,677</td>
<td>$2,136</td>
</tr>
<tr>
<td>General &amp; Administrative (G&amp;A)</td>
<td>$3,658</td>
<td>$3,529</td>
<td>$7,976</td>
<td>$7,006</td>
</tr>
<tr>
<td>Operating (Loss)</td>
<td>($4,001)</td>
<td>($3,113)</td>
<td>($9,184)</td>
<td>($5,914)</td>
</tr>
<tr>
<td>Net (Loss)</td>
<td>($4,028)</td>
<td>($2,766)</td>
<td>($9,282)</td>
<td>($12,346)</td>
</tr>
<tr>
<td>Change in Fair Value of Derivative Securities</td>
<td>(67)</td>
<td>590</td>
<td>118</td>
<td>(6,936)</td>
</tr>
<tr>
<td>Adjusted Net (Loss) (non GAAP)+</td>
<td>(4,095)</td>
<td>(3,356)</td>
<td>(9,400)</td>
<td>(5,410)</td>
</tr>
</tbody>
</table>

*This is non GAAP measure.* The above table represents non-GAAP measures that management believes, given its magnitude, represents its earnings per share as unaffected by non-operating valuation adjustments to derivative instruments resulting from the Company’s change in its share price, among other related factors.
Q2 2017 Biopharma Highlights:

Strong Year over Year Progress & Significant Quarterly Progress

- 53% increase in number of biopharma projects from 111 to 170 projects
- 21% increase in number of biopharma projects from 140 to 170 projects
- 1.6-fold increase from 15 to 39 immuno-oncology projects
- 7 additional immuno-oncology projects with biopharma partners, many with combination trials
- Biopharma bookings to billing ratio of 2.2 on $7.1M of Q2 2017 bookings (highest on record at CGI)
- Record Biopharma bookings on $7.1M+ of Q2 2017 bookings which are expected to drive future revenue increases
Actively Engaged in the Expanding Liquid Biopsy Space

Launched CGI’s first breakthrough NGS-based liquid biopsy test, Liquid::Lung-cfDNA™

- Provides comprehensive coverage of 11 critical genes and 150+ hotspots related to lung cancer
- **Superior sensitivity** achieving a limit of detection down to 0.05%

**ADVANTAGES OF LIQUID BIOPSY OVER TISSUE BIOPSY**

- **Significantly less costly** — average tissue biopsy can be almost $15,000
- **Minimally invasive** to obtain enabling tumor content to be sampled multiple times
- Reduced TATs **greatly reduce time to treatment**
- More **comprehensive** capturing of the heterogeneity of the tumor
2017 Goals

- Hereditary Cancer Testing Panels
- Artificial Intelligence Engine to Improve Clinical Trial Matching
- Expand Biopharma Partnerships
- Liquid Biopsy for Lung Cancer
- Immuno-Oncology NGS Panel [Biopharma Studies]

- Multiple Myeloma NGS Panel [Mayo]
- Further Expansion in Asia-Pacific
  - Develop Genetic Counselor Network
  - Expand Hereditary Service Offering
  - Liquid Biopsy for Kidney Cancer
  - Bioinformatics Center of Excellence in India
vivoPharm Acquisition
Expanding The Oncology Value Chain & CGI’s Addressable Market

- DISCOVERY
  - Target Selection and Validation
  - Lead Finding and Optimization
  - Pre-IND Package
  - Vivo Models
  - Imaging Studies
  - Tumor – Microenvironment

- PRECLINICAL STUDIES
  - Pharmacokinetics
  - Pharmacological Profiling
  - Toxicology
  - Formulation
  - IND-Enabling Studies

- CLINICAL TRIALS
  - Phase 1, 2, 3 Trials
  - Phase 4, Post-Marketing Studies
  - Tolerability, Efficacy, Dosage
  - Drug Repurpose and Rescue
  - Patient Stratification
  - Progress Monitoring

- MARKET ENTRY
  - Validation studies
  - Regulatory Filing and Application Preparation
  - Companion Dx Development
  - Indication Expansion Studies
  - LDT Development

- PATIENT MONITORING
  - Monitor Drug Adverse Events
  - Patient Therapy Management
  - Follow-up Monitoring
  - Liquid Biopsy
  - LDT + FDA Testing
Why Australia?

- **Cost Efficiency**
  - Attractive R&D tax incentives.
  - 28% cheaper than U.S before tax incentives.
  - 60% cheaper than US after tax incentives.

- **Speed**
  - Flexible clinical trial process without compromising quality.

- **Quality**
  - Expansive network of universities, medical research institutes, clinical trial networks, biobanks and CRO’s.
  - Scientists’ research ranks highest in Asia-Pacific in terms of productivity and impact.
  - Strongest patent protection systems in the world.
  - High-quality infrastructure allows for a large number of clinical researchers with experience and expertise.

- **Unique**
  - Growing multicultural population
  - 43% of the national population was either born overseas or have a parent who was.
  - Planned immigration programs have brought around 6 million people from over 150 countries since 1945.

- **Nationally recognized as a hub for early phase clinical trials**
  - More than 1000 research projects per year
vivoPharm’s Core Capabilities in a High-Growth CRO Market Environment

vivoPharm’s capabilities and portfolio are uniquely positioned to meet the pre-clinical demands of this growing CRO market.

- Target screening, identification and validation
- Rodent and small animal pharmacology, efficacy and toxicity studies
- Clinical trial design, testing and support
- Pre-designed, tumor-derived, cell lines and cultures for 90 indications.
- “24/7” operations and support available due to global presence
- Biomarker and Bioanalytical studies

Total CRO Market Revenue Forecast 2015-2020*
Asia-Pacific (including Australia) and Rest of World (ROW)

Expanding CGI’s Geographic Footprint & Diversifying Our Customer Base

- Three Global Locations:
  - Melbourne, Vic, Australia
  - Munich, Germany
  - Hershey, PA, United States

- Over 80% of vivoPharm’s customer base is located outside of the United States

- Presently serves over 40 biotechnology and pharmaceutical companies across five continents.

- Over 50% of studies are immuno-oncology related.

vivoPharm’s Customer Distribution by Region

- Asia-Pacific (including Australia) 15%
- Europe 61%
- USA 24%
vivoPharm is an Established Leader in Discovery & Preclinical Services

- vivoPharm has over a decade of experience in human xenograft and syngeneic tumor models and proprietary oncology services.

- Offers a selection of over 90 fully-characterized human and mouse cell lines that can be used for subcutaneous or orthotopic tumor models, as well as offers metastatic and disseminated models.

- Proprietary knowledge base has culminated a large collection of reference data for a broad selection of standards of care.

- Provides a wide range of GLP-compliant bio-analytical services to meet drug discovery and development requirements.

<table>
<thead>
<tr>
<th>Indication</th>
<th>Studies Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leukemia</td>
<td>Efficacy, pharmacokinetic</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Quality certification</td>
</tr>
<tr>
<td>Cachexia</td>
<td>Efficacy</td>
</tr>
<tr>
<td>Non-small cell lung cancer</td>
<td>Efficacy and combinations</td>
</tr>
<tr>
<td>Non-small cell lung cancer</td>
<td>Efficacy and formulation</td>
</tr>
<tr>
<td>Solid tumors</td>
<td>Efficacy and combinations</td>
</tr>
<tr>
<td>Metabolic</td>
<td>GLP toxicology</td>
</tr>
<tr>
<td>Solid tumors</td>
<td>GLP toxicology</td>
</tr>
<tr>
<td>Solid tumors</td>
<td>Toxicology</td>
</tr>
</tbody>
</table>
Transaction Highlights

- The total **purchase price is $12 million**, with proceeds to be **90% CGIX stock, and 10% cash**, supported by a $16 million equity raise.

- The **vivoPharm** team is led by **Dr. Ralf Brandt** and **Dr. Glenn Smits**, who bring to CGI over **30 years of experience** in pharmacology and oncology research and development, and will be fully integrated as the flagship in CGI's Discovery Services offering.

- CGI will gain **additional international locations** in Melbourne, Australia; Munich, Germany; and Hershey, Pennsylvania, expanding the company’s global footprint and providing access to high-growth European and Asia-Pacific markets.

- Presently involved in **55 studies and trials** with highly specialized development, clinical and preclinical research.
The acquisition strengthens CGI’s “Bench-to-Bedside” capabilities and bolsters growth with a **global customer base** of biopharma partners.

The acquisition expands CGI’s **discovery and early development revenue base** with highly complementary biotechnology and pharmaceutical customers.

The acquisition is expected to be **immediately accretive** based on vivoPharm’s history of profitable, above-market growth.

The addition of vivoPharm increases CGI’s immuno-oncology and pharmacology capabilities by **adding more than 55 new projects**, over 30 of which are immuno-oncology focused.

The transaction transforms CGI’s operations and value proposition by increasing drug identification, **drug rescue and drug repurposing capabilities**.