



Q4 & Full Year 2016 Earnings Report & Company Updates

Thursday – March 23, 2017 | 09:00am Eastern | CEO: Panna Sharma



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 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.



Investor Highlights: Cancer Genetics Addresses Key Trends in Oncology from Bench to Bedside



Large, Global Market Opportunities



\$458B GLOBAL ONCOLOGY SPEND BY 2030



Global Footprint Created by Highly Strategic M&A



3 TRANSFORMATIVE ACQUISITIONS



Strong & Growing Partnerships with Leading BioPharma



CONTRACTS WITH **9 of 10** TOP BIOPHARMA
+650% INC. WITH BIOPHARMA⁽¹⁾ CUSTOMERS 2012-2016



Innovation Engine & Expertise Driven By Key Collaborations



15 ACTIVE RESEARCH COLLABORATIONS
WITH LEADING INSTITUTIONS



Unique, Proprietary Portfolio of Genomic Tests & Panels



16 COMMERCIALY LAUNCHED TESTS
28 US PATENTS



Diversified & High Growth Revenue Streams



50% REVENUE GROWTH FY 2015-2016 | **42%** 4-YEAR CAGR



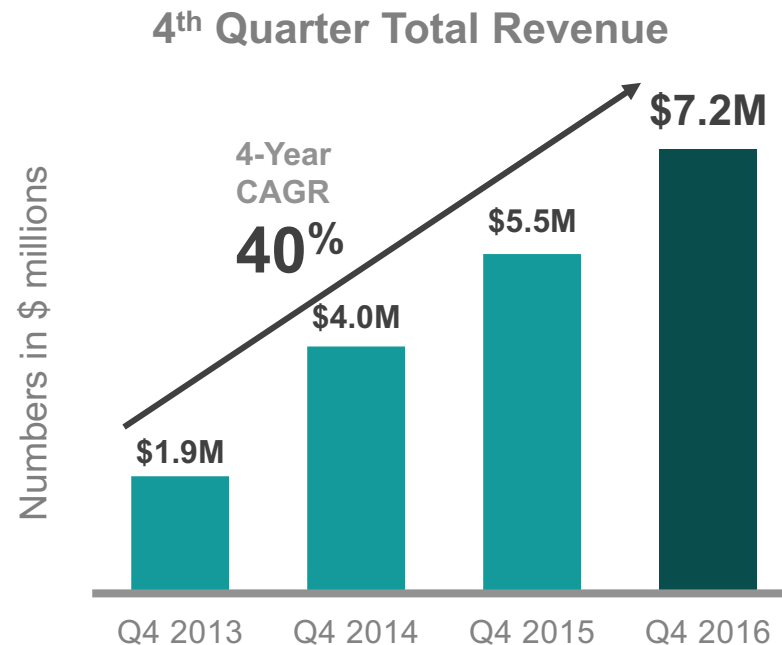
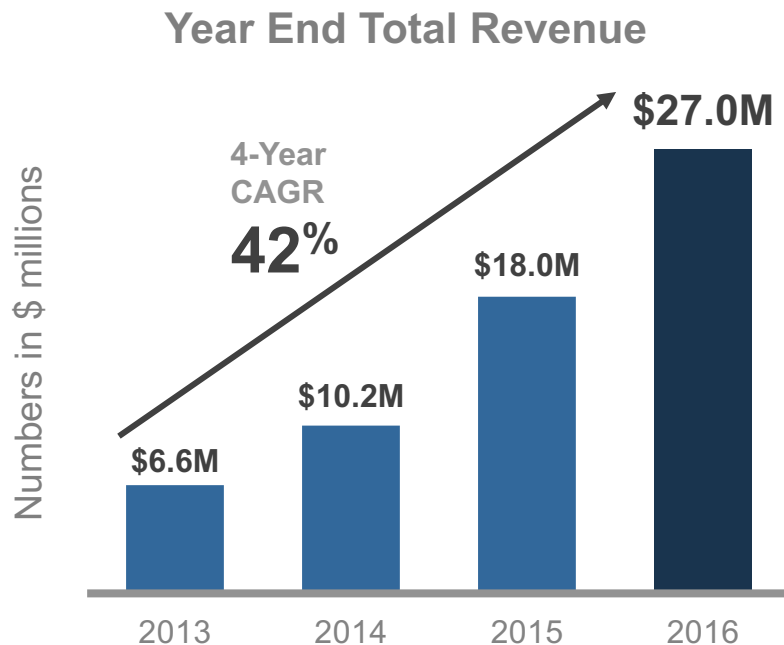
World-Class Management Team



100+ CUMULATIVE YEARS OF EXPERIENCE

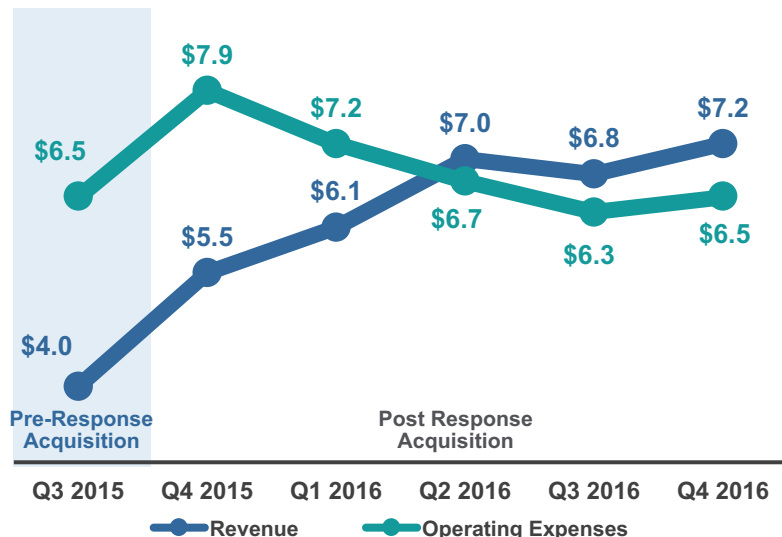
(1) In signed contracts & potential revenue

Revenue & Growth Highlights



Operational Integration and Streamlining

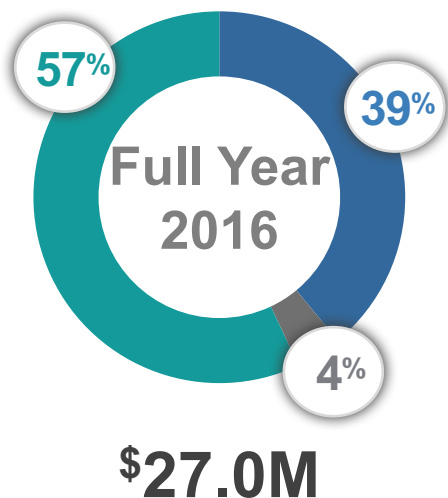
REVENUE & OPERATING EXPENSES



* Amounts in \$ millions

- Operating expenses were **reduced by \$1.5 million** from Q4 of 2015 thru Q4 of 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 Category



\$15.3M BIOPHARMA SERVICES

- CGI is now supporting over 125 clinical trials and studies focused on Solid Tumor and Blood Cancers, including nearly 36 for immuno-oncology indications

\$10.7M CLINICAL SERVICES

- 204% increase in clinical test volume over Q3 2015 due to enhanced portfolio in both immuno-oncology testing and our solid tumor center of excellence

\$1.1M DISCOVERY SERVICES

- Driven by support for molecular testing and bioinformatics for translational initiatives by academic and commercial research organizations



Full Year 2016 Financial Highlights

- FY 2016 revenues were **\$27.0 million**, a **50% increase** over FY 2015 revenues of **\$18.0 million**.
- Revenue from **Biopharma Services** grew **32%**; **Clinical Services** grew **88%**; and **Discovery Services** grew **31%** year-over-year.
- Total operating expenses were **\$26.7 million, including \$5.9 million of non-cash items**.
- Gross margin percentage **improved to 37%** (from 22%).
- Sales and Marketing expenses **decreased by 11% to \$4.7 million from \$5.3 million**.
- Net loss for the year was **\$15.8 million**, or **\$1.00** per diluted share, compared to a net loss of **\$20.2 million**, or **\$1.96** per diluted share, in 2015.
- Cash and cash equivalents was **\$9.5 million** as of December 31, 2016.
- Shareholder's equity was **\$25.6 million** as of December 31, 2016.



Q4 2016 Financial Highlights

- Q4 2016 revenues were **\$7.2 million**, a **32% increase** over Q4 2015 revenues of **\$5.5 million**.
- Revenue from **Biopharma Services grew 34%**; **Clinical Services increased by 25%**; and **Discovery Services grew 102%** year-over-year during the fourth quarter.
- Total operating expenses were **\$6.5 million, including \$1.8 million of non-cash items – a decrease of 18%** year-over-year during the fourth quarter.
- Sales and Marketing expenses **decreased by 47% from \$1.7 million to \$0.9 million**, year-over-year in the fourth quarter.
- Net loss for the quarter was **\$2.8 million, including \$1.8 million of non-cash items**, or **\$0.15** per diluted share, compared to a net loss of **\$5.7 million**, or **\$0.48** per diluted share in the fourth quarter of 2015.



Debt Refinancing

- Closed a **\$12 million debt refinancing** with **Silicon Valley Bank and Partners for Growth**, allowing the Company to **access ~\$7.6 million** in additional capital net of paying off \$4.4 million term loan with Silicon Valley Bank.
- The new \$12 million debt facilities will be used to repay the Company's existing Silicon Valley Bank term loan, and will carry an effective blended interest rate of approximately 8.2% to 9.2%.
- During the **first quarter of 2017**, the Company received an **additional ~\$1 million** in non-dilutive funding through its participation in the **New Jersey Business Tax Certificate Program**.



Q4 2016 Biopharma Highlights

- Working with **9 out of the 10 top biopharma** companies in 2016.
- Revenue from **biopharma partners and customers increased by 32%** to **\$15.3 million** in 2016 as compared to \$11.6 million during 2015.
- For the fourth quarter of 2016, **biopharma revenues increased 34%** to **\$4 million** up from \$3 million during the same period of 2015.
- Global, clinical-stage biopharma company, **BeiGene, Ltd.**, **selected CGI** to collaborate on innovative molecularly-targeted and **immuno-oncology** drugs for the treatment of cancer, working to accelerate studies of tumor microenvironment in cancer patients.
- Listed by **Merck** as a **national reference laboratory** for KEYTRUDA® companion diagnostic testing, for **PD-L1 testing** in non-small cell lung cancer.



2016 Clinical & Discovery Highlights

- **Clinical services** revenue **growth was 88%** for the full year of 2016 over 2015, from \$5.7 million to **\$10.7 million**.
- For the **fourth quarter of 2016**, clinical services revenue **increased 25%** over the same period in 2015, from \$2.4 million to **\$3 million**. This growth was driven by an **increase in test volumes** from 12,429 in 2015 to 28,658 in 2016, an increase of 131%.
- **Discovery services**, provides genomic and bioinformatic support for global discovery and pre-clinical initiatives. Discovery services contributed an additional **\$1.1 million** in revenue for the full year 2016, a **31% increase** over 2015.
- For the **fourth quarter of 2016**, discovery services **increased by 102%** over the same period of 2015, from \$157 thousand to **\$317 thousand**, driven by significant demand for discovery solutions by research institutions where **next-generation sequencing** is combined with novel bioinformatics analysis.

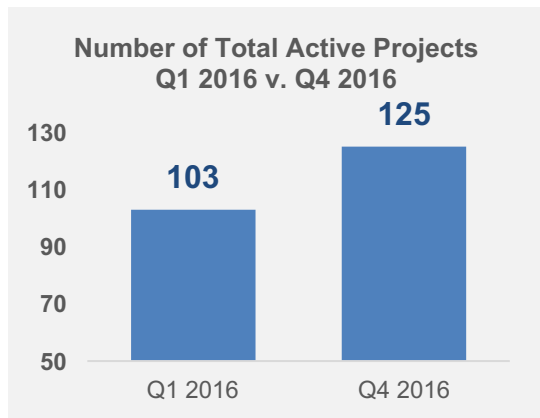


Summary Statement of Operations

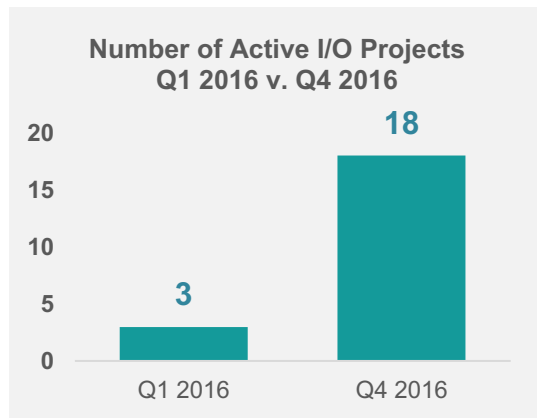
Income Statement Items (\$ in Thousands)	Q4 2016	Q4 2015	Full Year 2016	Full Year 2015
Revenue	\$7,230	\$5,484	\$27,049	\$18,040
Gross Profit	\$2,958	\$728	\$9,945	\$3,942
Gross Margin (%)	41%	13%	37%	22%
Research & Development (R&D)	\$1,161	\$1,148	\$5,967	\$5,483
Sales & Marketing (S&M)	\$937	\$1,726	\$4,668	\$5,269
General & Administrative (G&A)	\$4,357	\$5,031	\$16,034	\$14,567
Operating (Loss)	(\$3,497)	(\$7,177)	(\$16,724)	(\$21,377)
Net (Loss)	(\$2,776)	(\$5,714)	(\$15,803)	(\$20,184)
Non Cash Adjustments	\$1,836	\$1,609	\$5,918	\$4,882
Net (Loss) Excluding Non Cash Items + (non GAAP)	(\$940)	(\$4,105)	(\$9,885)	(\$15,302)

+This is non GAAP measure. Adjustments for Q4 2016 and Q4 2015 are **depreciation** (\$552 and \$665), **equity compensation** (\$479 and \$656) and **other** (\$805 and \$288) respectively. Adjustments for 12 months are **depreciation** (\$2,376 and \$1,503), **equity compensation** (\$2,016 and \$2,834) and **other** (\$1,526 and \$545) respectively.

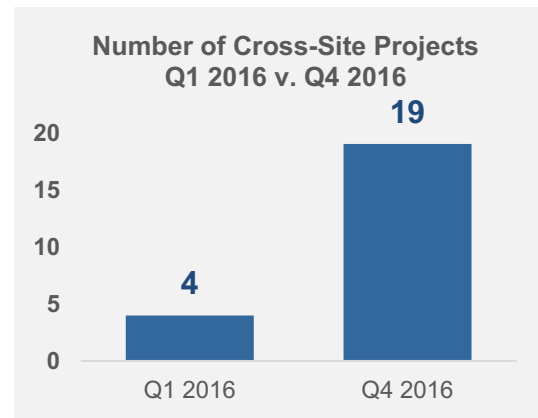
2016 Biopharma Highlights: Additional Key Metrics



Realized a **35% increase** in number of biopharma **projects managed** from 103 to 140 projects from Q1 2016 to Q4 2016.



A **5-fold increase** from 3 to 18 **immuno-oncology projects** managed from Q1 2016 to Q4 2016.



Projects using multiple **centers of excellence** at CGI have increased from 4 to 19, a **greater than 3-fold increase** from Q1 2016 to Q4 2016.



Q4 2016 Biopharma Highlights

Case Study

In Q4 2016, CGI commenced services as a **biomarker discovery, assay development**, and **clinical trial support partner** for **2 novel immuno-oncology first-in-class programs** in development by an industry-leading major biotech company.

Program 1

- 4 IHC markers, including PD-L1*
- 2 ISH markers**
- 2 Solid Tumor NGS panels
- Bioinformatics analysis

Program 2

- Over 9 IHC markers, including PD-L1
- RNA Sequencing on pre- and post-treatment biopsies
- Bioinformatics analysis

CGI Advantage

Experience and capabilities as a **biomarker engine**, utilizing a broad range of molecular test techniques across numerous **biomarkers** associated with **immune responses** to cancer.

*IHC = Immunohistochemistry

** ISH = In situ hybridization

2017 Upcoming Milestones



1st Half 2017

Launch of:

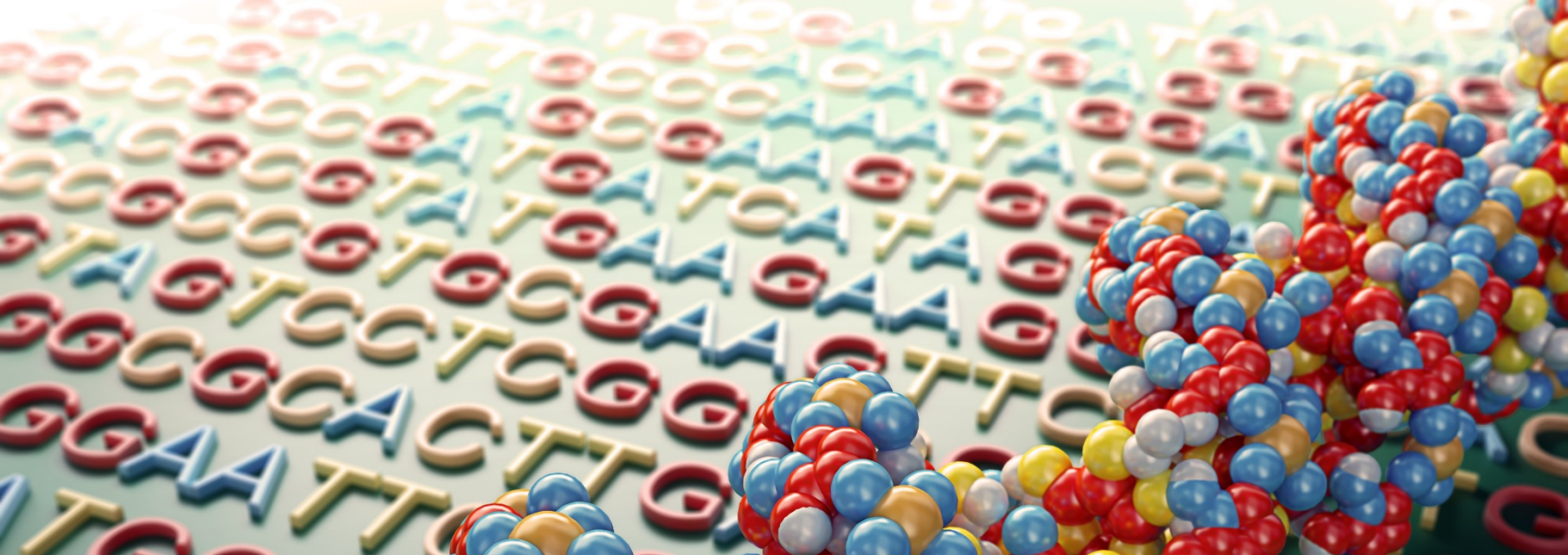
- Hereditary Cancer Testing Panels
- AI engine to improve clinical trial matching
- Development of Network of Genetic Counselors
- Multiple Myeloma NGS Panel [with Mayo Clinic]
- Immuno-Oncology NGS Panel [Biopharma Studies]



2nd Half 2017

Launch of:

- Liquid Biopsy for Lung Cancer Profiling
- Liquid Biopsy for Kidney Cancer
- Expand Hereditary Cancer Service Offering
- Further expansion in Asia
- Launch Bioinformatics Center of Excellence in India



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