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INITIATION REPORT

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Cancer Genetics (Nasdaq/CGIX)

BUY **Acquisitions, New Products Fuel Emerging Leader**

Cancer Genetics is an emerging leader in DNA-based cancer diagnostics

June 27, 2017

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Investment Highlights

1) Cancer Genetics reported very positive financial results for their Q1/2017, including revenue growth of 15% year-over-year to $7.0 million, and an improvement in adjusted loss to $2.1 million from $5.3 million in the prior year period. The Company experienced revenue growth in each of its three segments, biopharma, clinical services and discovery services, fueled by new product launches in oncology diagnostics and liquid biopsy, including Focus::HERSite, Complete::IO, and Liquid::Lung-cfDNA. A multi-year commitment to cost saving and efficiency also produced positive results in the first quarter, including improved gross margins to 39.6% from 32.4% and a decrease in operating expenses to $5.6 million from $7.1 million in the prior year.

2) Recent results also bode well for the near future for CGI, as additional expected new product launches in the liquid biopsy (kidney cancer) and oncology diagnostic markets (multiple myeloma) are forecast to keep annual revenue growth for the Company in the 15%-25% range through next year. Meanwhile, cost synergies are expected to continue to reduce operating losses and cash burn over the next several quarters for CGI, bringing operating results close to break-even and reducing the need for additional financing.

3) Longer-term, CGI can expand on its past successes in acquisitions and partnerships to spur growth and enter new medical areas for example, artificial intelligence through the recent partnership with Mendel.ai. With close to $9.7 million in cash on hand and an additional $7.6 million remaining on its credit line, CGI has plenty of financial resources available for more acquisitions into new product or geographical markets. Already to date, the Company has nearly 20 development partnerships with leading hospitals and research centers, as well as a number of recent agreements with for-profit firms, both large and venture-backed, so more new agreements in the near future to fuel investor interest are certainly not a stretch of the imagination.

Current Price	**$4.00**
Price Target	**$11.00**

Estimates	F2015A	F2016A	F2017E
Revenues($000s)	**$18,040**	**$27,049**	**$32,766**
1Q March	4,370	6,068	6,966 A
2Q June	4,185	7,001	8,400 E
3Q September	4,001	6,750	8,400 E
4Q December	5,484	7,230	9,000 E
EPS (diluted)	**($1.96)**	**($1.00)**	**($0.83)**
1Q March	(0.44)	(0.39)	(0.51) A
2Q June	(0.51)	(0.28)	(0.14) E
3Q September	(0.54)	(0.23)	(0.12) E
4Q December	(0.47)	(0.15)	(0.09) E
EBITDA/Share	($1.63)	($0.80)	($0.19)
EV/EBITDA (x)	N/A	N/A	N/A

Stock Data	
52-Week Range	$1.10-$5.30
Shares Outstanding (mil.)	19.8
Market Capitalization (mil.)	$79.2
Enterprise Value (mil.)	$74.0
Debt to Capital (3/17)	18.6%
Book Value/Share (3/17)	$1.06
Price/Book	3.8 x
Average Trading Volume (3-month)	416,100
Insider Ownership	28.9%
Institutional Ownership	16.5%
Short interest (Millions)	2.1
Dividend / Yield	$0.00/0.0%

Price target and ratings changes over the past 3 yrs:
Initiated - June 27, 2017 - Buy - Price Target $11.00

Conclusion

With strong revenue growth, a commitment to cost savings which is driving improved gross margins and reduced operating losses, a solid balance sheet, a large and growing stable of development partners, and a number of new product launches expected in the near future, growth-oriented investors may find shares of CGIX very attractive. At the same time, due to the smaller size and lower profile of CGIX, these shares continue to trade at a valuation discount to industry peers in the precision medicine market, and present an attractive profile for value investors as well. Thus, we believe CGIX shares are poised to continue their recent price appreciation as positive news flow continues into the future, and thus we are initiating coverage on CGIX shares with a BUY rating and 12-18 month price target of $11.00 per share.

Company Business/History

Cancer Genetics, Inc. ("CGI") is an emerging leader in DNA-based cancer diagnostics and services some of the most prestigious medical institutions in the world. CGI's tests target cancers that are difficult to diagnose and predict treatment outcomes. These cancers include hematological, urogenital and HPV-associated cancers. The Company also offers a comprehensive range of non-proprietary oncology-focused tests and laboratory services that provide critical genomic information to healthcare professionals as well as biopharma and biotech companies. CGI has established strong research collaborations with major cancer centers such as Memorial Sloan-Kettering, The Cleveland Clinic, Mayo Clinic and the National Cancer Institute.

Cancer Genetics was founded by world-renowned cytogeneticist Dr. R.S.K. Chaganti of the Memorial Sloan Kettering Cancer Center in New York and incorporated in 1999. Today, CGI's scientific advisory board includes key thought leaders in the areas of hematological malignancies, solid tumor cancers, pharmacogenomics, and clinical trials administration. Built on a foundation of world-class scientific knowledge and IP in solid and blood-borne cancers, the company continues to develop strong research collaborations with major cancer centers and academic institutions. The Company has a strong recent history of acquisitions and development joint ventures and collaborations, as outlined below.

In 2013, CGI launched a joint-venture with Mayo Clinic - Oncospire Genomics. Working to meet areas of critical need in oncology, Oncospire Genomics seeks to improve cancer care by discovering and commercializing diagnostic tests that leverage next generation sequencing (NGS) technology.

In 2014, CGI acquired Gentris, LLC (based in Raleigh, NC) and BioServe Biotechnologies Pvt. Ltd. (based in Hyderabad, India). Gentris is a market leader in providing pharmacogenomics testing, genotyping, and biorepository services to the pharmaceutical and biotech industries. Gentris advances personalized medicine by partnering with pharmaceutical, academic, and technology leaders to effectively integrate pharmacogenomics into their drug development and clinical trial programs with the goals of delivering safer, more effective drugs to market more quickly, and improving patient care. Gentris' clinical trials services, as well as their international services and Shanghai, China operations, have been integrated into CGI's Select One clinical trials offering, allowing CGI to provide the most robust and personalized clinical trial services available to biotech and pharma customers.

Based in Hyderabad, India, BioServe India (now Cancer Genetics India) was the first company to provide DNA synthesis, DNA sequencing, and related services in India. Cancer Genetics India brings Indian scientists, pharmaceutical companies, and research institutes a 'Biomaterial to Data' model that offers a full suite of molecular services and research tools to accelerate breakthroughs in genetics, drug discovery, biomarker research, and molecular diagnostics. CG-India's customers include nearly every Indian Council of Medical

Research (ICMR) and Council for Scientific and Industrial Research (CSIR) institute and several major pharmaceutical and biotechnology companies, as well as top industry and academic researchers.

In October 2015, CGI acquired out of bankruptcy substantially all the assets and assumed certain liabilities of Response Genetics, with its principal place of business in Southern California, in a transaction valued at approximately $12.9 million, comprised of $7.5 million in cash and 788,584 shares of the Company's common stock, with the common stock being valued at $5.4 million at the time. Response Genetics was a life sciences company engaged in the research and development of clinical diagnostic tests for cancer. Response Genetics generated revenues primarily from sales of its ResponseDX diagnostic tests, which Response Genetics launched in 2008, and by providing clinical trial testing services to pharmaceutical companies.

The Company currently maintains facilities in Rutherford, New Jersey (Headquarters), Raleigh, North Carolina, Los Angeles, California, Hyderabad, India and Shanghai, China.

CGI's business is based on demand for molecular- and biomarker-based characterization of cancers from three main sectors: cancer centers and hospitals, biotechnology and pharmaceutical companies, and the research community. Clinicians and oncologists in cancer centers and hospitals seek molecular-based testing since these methods often produce higher value and more accurate cancer diagnostic information than traditional analytical methods. The Company's proprietary and disease-focused tests aim to provide actionable information that can guide patient management decisions, potentially resulting in decreased costs for care providers and patients while streamlining therapy selection. These services are also sought by biotechnology and pharmaceutical companies engaged in designing and running clinical trials for their value and efficacy in oncology treatments and therapeutics. CGI believes that trial participants' likelihood of experiencing either favorable or adverse responses to the trial treatment can be determined by biomarker testing, thereby increasing trial efficiency, participant safety and trial success rates. Their services are also sought by researchers and research groups seeking to identify biomarkers and panels and develop methods for diagnostic technologies and tests for disease. The Company is aggressively pursuing the strategy of trying to demonstrate increased value and efficacy with payors who are trying to contain costs and academic collaborators seeking to develop new insights and cures.

CGI's market strategy is organized to align with the three aforementioned industry segments. The Company utilizes relatively the same proprietary tests, non-proprietary test and technologies across each of these businesses to deliver results-oriented information important to cancer treatment and patient management. The chart below outlines the Company's three major business segments and revenues for each for the years 2014, 2015 and 2016, and projected for years 2017E and 2018E:

Revenues by Category ($000s)	2014	2015	2016	2017E	2018E
Biopharma services	$5,606	$11,564	$15,321	$18,000	$22,000
Clinical services	4,432	5,651	10,651	13,200	16,500
Discovery services	161	825	1,077	1,566	2,500
Total revenues	$10,199	$18,040	$27,049	$32,766	$41,000

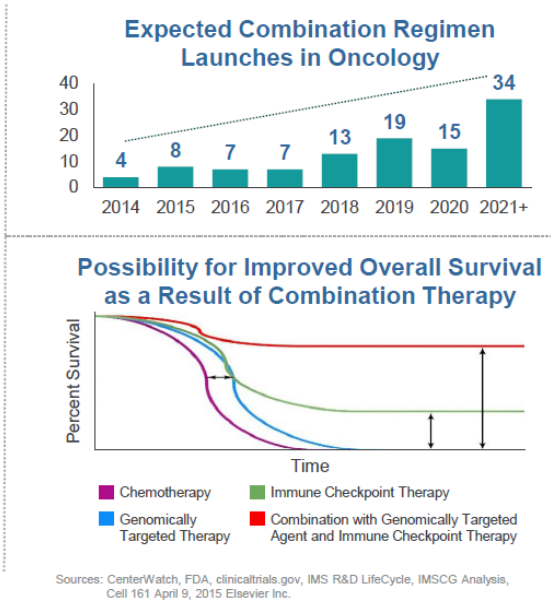
Biopharma Services

Biopharma services include laboratory and testing services performed for biotechnology and pharmaceutical companies engaged in clinical trials. Biopharma services focus on providing pharmaceutical companies with oncology specific and non-oncology genetic testing services for phase I-IV trials along with critical support of ancillary services. These services include: biorepository, clinical trial logistics, clinical trial design, bioinformatics analysis, customized assay development, DNA and RNA extraction and purification, genotyping, gene expression and biomarker analyses. CGI also seeks to apply expertise in LDTs to assist in

developing and commercializing drug-specific companion diagnostics. Industry research has shown many promising drugs have produced disappointing results in clinical trials. For example, a study by Princess Margaret Hospital in Toronto estimated that 85% of the phase III trials testing new therapies for solid tumors studied over a five-year period failed to meet their primary endpoint. Given such a high failure rate of oncology drugs, combined with constrained budgets for biotech and pharmaceutical companies, there is a significant need for drug developers to utilize molecular diagnostics to decrease these failure rates. For specific molecular-targeted therapeutics, the identification of appropriate biomarkers indicative of disease type or prognosis may help to optimize clinical trial patient selection and increase trial success rates by helping clinicians identify patients that are most likely to benefit from a therapy based on their individual genomic profile.

CGI's Select One service offering was created specifically to help the biopharmaceutical community with clinical trials and companion diagnostic development in areas of the Company's core expertise. CGI believes that oncology drugs have the potential to be among the most personalized of therapeutics, and yet oncology clinical trials continue to have some of the poorest approval rates. In an effort to improve the outcome of these trials and more rapidly advanced targeted therapeutics, the biotechnology and pharmaceutical community is increasingly looking to companies that have both proprietary disease insights and comprehensive testing services as they move toward biomarker-based therapeutics.

The United States National Institutes of Health reported over 95,000 clinical trials were being conducted in the United States as of March 2017, and over 15,000 of these trials were actively recruiting participants for studies with oncology pharmaceuticals or biologics. Molecular- and biomarker-based testing services have been altering the clinical trials landscape by providing biotech and pharmaceutical companies with information about trial subjects' genetic profiles that may be able to inform researchers whether or not a subject will benefit from the trial drug or will experience adverse effects. Streamlined subject selection and stratification, and tailored therapies selected to maximally benefit each group of subjects may increase the number of trials that result in approved therapies and make conducting clinical trials more efficient and less costly for biotech and pharmaceutical companies. In 2016, 22 new drugs were approved by the FDA, and over a quarter of these drugs were oncology-focused, highlighting the potential value of incorporating genomic information into oncology clinical trial design. The chart to the left outlines the prospects and importance of expected launches of combination therapeutics in oncology over the next five years, for example.



Source: CGI

In addition to the tests and services provided to biotech and pharmaceutical companies, CGI is developing NGS panels focused on pharmacogenomics and oncology that will inform researchers of trial subjects' drug sensitivities. The Company provides the following services to biotech and pharmaceutical companies and researchers conducting clinical trials:

Genotyping and Pharmacogenomics Testing Services

- Over 400 genotyping assays including drug metabolizing enzymes, transporters and receptors;
- Over 19 validated gene expression assays;
- Testing for the FDA's Pharmacogenomic (PGx) Biomarkers in Drug Labels recommended panel; and
- Loss of heterozygosity and copy number detection assays.

CGI also utilizes its laboratories to provide clinical trial services to biotech and pharmaceutical companies and clinical research organizations to improve the efficiency and economic viability of clinical trials. Clinical trials services leverage knowledge of clinical oncology and molecular diagnostics and the Company's laboratories' fully integrated capabilities. The Select One program integrates clinical information into the drug discovery process in order to provide customized solutions for patient stratification and treatment. By utilizing biomarkers, CGI intends to optimize the clinical trial patient selection. This may result in an improved success rate of the clinical trial and may eventually help biotech and pharmaceutical companies to select patients that are most likely to benefit from a therapy based on their genetic profile. The Company believes that it operates one of only a few laboratories with the capability to combine somatic and germline mutational analyses in clinical trials.

Select One clinical trial services are aimed at developing customizable tests and techniques utilizing proprietary tests and laboratory services to provide enhanced genetic signature analysis and more comprehensive understanding of complex diseases at earlier stages. The Company leverages its knowledge of clinical oncology and molecular diagnostics and provides access to its genomic database and assay development capabilities for the development and validation of companion diagnostics. This potentially enables companies to reduce the costs associated with development by determining earlier in the development process if they should proceed with additional clinical studies. CGI has been chosen by 9 of the top 10 biotech and pharmaceutical companies including Gilead Sciences (GILD, Not Rated), GlaxoSmithKline (GSK, Not Rated), and H3 Bio (a division of Eisai) to provide clinical trial services and molecular profiling for patient selection and monitoring. Additionally, through its services, the Company gains further insight into disease progression and the latest drug development that can be incorporated into its proprietary tests and services.

CGI also provides genetic testing for drug metabolism to aid biotech and pharmaceutical companies to identify subjects' likely responses to treatment, allowing these companies to conduct more efficient and safer clinical trials. The Company believes pharmacogenomics drug metabolism testing helps deliver the promise of personalized medicine by enabling researchers to tailor therapies in development to differences in patients' genomic profiles.

Clinical Services

CGI provides proprietary tests and services, along with a comprehensive range of non-proprietary oncology-focused tests and laboratory services, to oncologists and pathologists at hospitals, cancer centers, and physician offices. The Company's proprietary tests target cancers that are difficult to prognose and predict treatment outcomes through currently available mainstream techniques. CGI utilizes an expansive range of non-proprietary tests and technologies to provide a comprehensive profile for each patient served. Clinical testing is available through anatomic pathology, flow cytometry, karotype, FISH, liquid biopsy and molecular diagnostics (including next generation sequencing and gene expression panels). CGI's comprehensive oncology-focused testing services for cancer are utilized in the diagnosis, prognosis and prediction of treatment outcomes (theranosis) of cancer patients and are growing rapidly as clinicians demand more precise and more comprehensive diagnostic evaluation of their patients. The Company believes its ability to rapidly translate research insights about the genetics and molecular mechanisms of cancer into the clinical setting will improve patient treatment and management and that this approach can become a key component in the standard of care

for personalized cancer treatment. CGI utilizes highly skilled scientists, pathologists and hematologists in its laboratories, with 46% of individuals holding advanced degrees. These individuals assist customers in integrating and technically assessing the testing results for their patients. The Company believes that its proprietary tests provide superior diagnostic and prognostic values than other currently available tests and services.

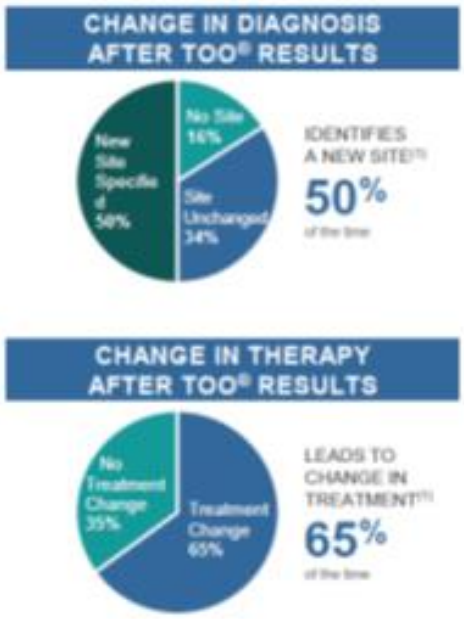
For example, prior to the introduction of CGI's Mature B-cell Neoplasm Array (MatBA), the assessment of the gain or loss on only four chromosomal regions and potentially one gene mutation was available to clinicians when testing for and stratifying a chronic lymphocytic leukemia (CLL) patient. MatBA improves on this by identifying information on a total of twenty chromosomal regions, providing more valuable diagnostic data and critical information about the risk of progression and overall prognosis of the patient. For particular cases, patient results indicating a "favorable outcome" that would have been reported to the clinician was determined by MatBA to be inaccurate, leading to a change in the prognosis and consequently decision-making by the clinician regarding the management of these patients. Applications of MatBA currently offered by the Company include:

- Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma (CLL/SLL) [CLIA & NYS Approved]
- Diffuse Large B-Cell Lymphoma (DLBCL) [CLIA & NYS Approved]
- Mantle Cell Lymphoma (MCL) [CLIA & NYS Approved]
- Follicular Lymphoma (FL) [CLIA & NYS Approved]

CGI's clinical services strategy is focused on direct sales to oncologists and pathologists at hospitals, cancer centers, and physician offices in the United States, and expanding relationships with leading distributors and medical facilities in emerging markets. As part of the market strategy for clinical services, the Company offers the branded testing programs described below:

- *Complete* Program - CGI's Complete program is a branded program offering a unique suite of common and proprietary tests that assist clinicians in determining the best treatment options to improve patient outcomes. Each Complete program integrates the latest diagnostic and prognostic biomarkers across multiple testing methodologies. Complete testing is offered for a number of hematological cancers and solid tumors, including AML, CLL, DLBCL, MDS, myeloproliferative neoplasms (MPN), colorectal, lung and breast cancers.
- *Expand DX*/Technical-Only Testing - According to the American Hospital Association, there are nearly 5,000 community hospitals in the United States. Community hospitals represent a large target market for the Company's genomic tests and services because approximately 85% of cancer patients in the United States are initially diagnosed in such hospitals, as reported to the National Cancer Database. CGI's Expand DX/Technical-Only Testing program is a partnership initiative offered to help community-based hospitals expand their clinical services. By partnering with the Company, community-based hospitals and pathology labs have cost-effective access to advanced testing technologies and specialized testing capabilities and deep experience in hematological and solid-tumor oncology diagnostics of CGI's clinical reference laboratories in New Jersey and California. Through this program, clinicians can send patient specimens to the Company's laboratories, where the technical component of the testing is performed, and then access the test results through an online portal in order to perform the professional component and provide a diagnosis. CGI believes its Expand DX/Technical-Only Testing program will enable community hospitals and pathology laboratories to optimize and expand their oncology services to better serve their cancer patients and reduce costs associated with cancer care.

- *Tissue of Origin Test* - CGI's FDA-cleared Tissue of Origin test, or TOO, is a gene expression test that is indicated when there is clinical uncertainty about a poorly differentiated or undifferentiated, or a metastatic tumor where the primary tissue of cancer development is unknown. The Tissue of Origin test is believed to be the only FDA-cleared test of its kind, and can determine the most likely tissue of origin of a patient tumor sample from the fifteen most common tumor types - including thyroid, breast, pancreas, colon, ovarian and prostate - which account for ninety percent of all incidences of solid tissue tumors, by measuring the expression levels of 2,000 individual genes. TOO is supported by extensive analytical and clinical validation data from robust, multi-center clinical studies. CGI believes that TOO can reduce the need for repeated testing, examinations, imaging and biopsy procedures (see charts to the right) by providing clinicians with the primary tissue type with greater certainty than traditional diagnostic techniques. This in turn empowers physicians to select the correct type of treatment earlier in the course of the patient's therapy.

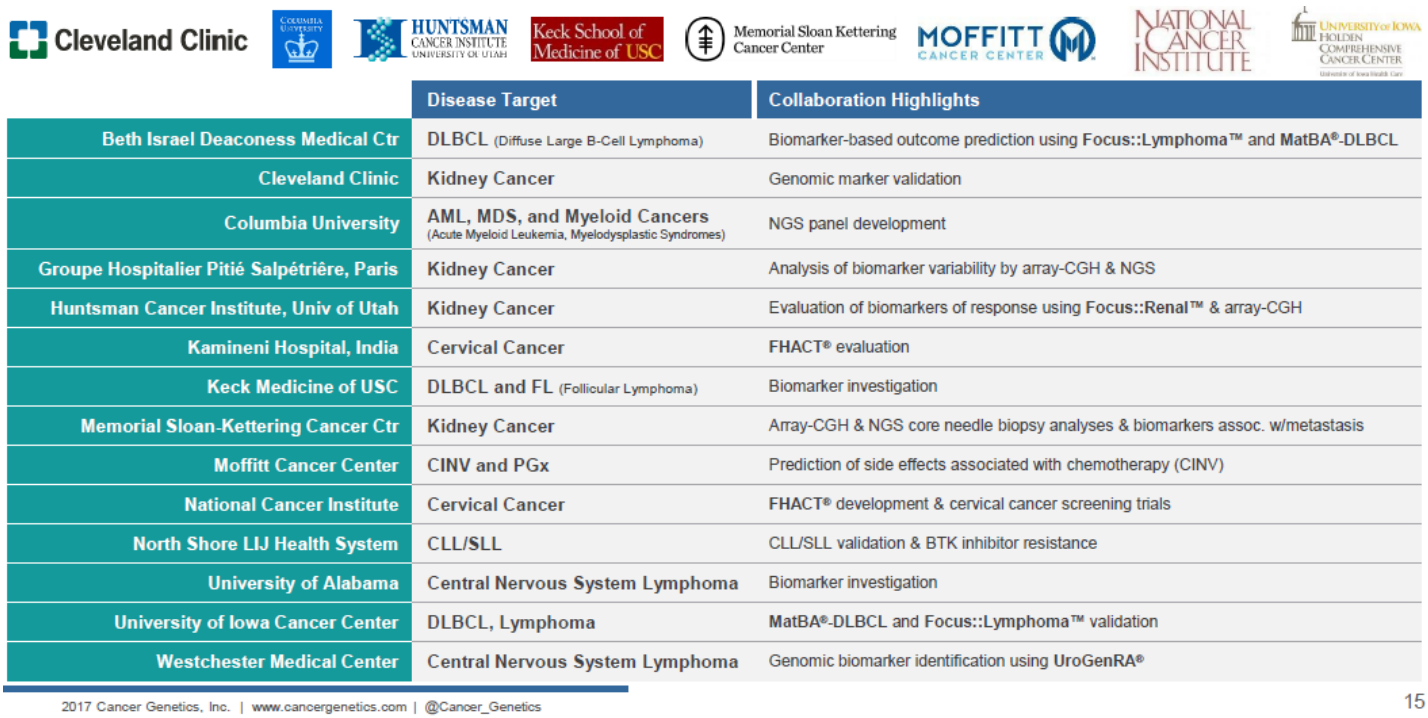


Source: CGI

- In addition, CGI has developed the *Summation Report* which provides an integrated view of a patient's test results and diagnosis in a user-friendly, visually appealing format for clinicians. CGI's pathologists and laboratory directors prepare these Summation Reports based on the clinical information and diagnosis provided by the Company's laboratory professionals. All of CGI's testing technologies are integrated into a Summation Report to allow oncologists to efficiently arrive at a definitive diagnosis and drive complete and effective decisions.

Discovery Services

CGI's discovery services provide the tools and testing methods for companies and researchers seeking to identify new molecular- and biomarker-based indicators for disease. Discovery services offered include validation of biomarkers for diseases including cancers, from which tests for diagnosis or prognosis may be established. The Company also provides consulting, guidance and preparation of samples and clinical trial design. CGI believes the ability to analyze variations in biomarkers and interpret these changes into meaningful predictors of disease or indicators of diagnosis is essential to discovering new molecular markers for cancer and targets for therapies. The table below outlines the Company's many collaborations with renowned cancer research institutions and the particular disease targeted by the program:



	Disease Target	Collaboration Highlights
Beth Israel Deaconess Medical Ctr	DLBCL (Diffuse Large B-Cell Lymphoma)	Biomarker-based outcome prediction using Focus::Lymphoma™ and MatBA®-DLBCL
Cleveland Clinic	Kidney Cancer	Genomic marker validation
Columbia University	AML, MDS, and Myeloid Cancers (Acute Myeloid Leukemia, Myelodysplastic Syndromes)	NGS panel development
Groupe Hospitalier Pitié Salpétrière, Paris	Kidney Cancer	Analysis of biomarker variability by array-CGH & NGS
Huntsman Cancer Institute, Univ of Utah	Kidney Cancer	Evaluation of biomarkers of response using Focus::Renal™ & array-CGH
Kamineni Hospital, India	Cervical Cancer	FHACT® evaluation
Keck Medicine of USC	DLBCL and FL (Follicular Lymphoma)	Biomarker investigation
Memorial Sloan-Kettering Cancer Ctr	Kidney Cancer	Array-CGH & NGS core needle biopsy analyses & biomarkers assoc. w/metastasis
Moffitt Cancer Center	CINV and PGx	Prediction of side effects associated with chemotherapy (CINV)
National Cancer Institute	Cervical Cancer	FHACT® development & cervical cancer screening trials
North Shore LIJ Health System	CLL/SLL	CLL/SLL validation & BTK inhibitor resistance
University of Alabama	Central Nervous System Lymphoma	Biomarker investigation
University of Iowa Cancer Center	DLBCL, Lymphoma	MatBA®-DLBCL and Focus::Lymphoma™ validation
Westchester Medical Center	Central Nervous System Lymphoma	Genomic biomarker identification using UroGenRA®

Source: CGI

Recent Agreements/Initiatives

In addition to the academic/research center collaborations listed in the above section, CGI has entered into a number of joint venture partnerships with both public and private institutions in a number of innovative areas. Some of the most representative of these include:

Mayo Clinic

In May 2013, CGI and Mayo Clinic agreed to form an equally-owned joint venture, Oncospire Genomics, which is now based in Rochester, Minnesota. The objectives of this venture are to try to discover and validate biomarkers in specific hematologic and urogenital disorders utilizing next-generation sequencing with a possible expansion into other solid tumors, such as esophageal, head and neck, breast and lung cancers. Additionally, the joint venture entity would engage in biomarker discovery utilizing Mayo's next-generation sequencing facility and the development of commercial products in the form of diagnostic products and services, as well as early stage therapeutic markers. Currently, the joint venture is offering an NGS (next-generation sequencing) panel for multiple myeloma for biopharma clients – the M^3P Mutational Panel – and is also in the process of developing an NGS panel for lung cancer. The joint venture holds the rights to druggable targets, if discovered.

H3 Biomedicine

In July 2016, H3 Biomedicine (H3), selected CGI to provide clinical biomarker services for H3's lead oncology drug candidate, H3B-8800: the first ever gene splicing anticancer therapeutic agent being developed for the potential treatment of select blood-based cancers. Under the agreement, CGI will provide comprehensive, biomarker-based patient profiling using technologies such as next generation sequencing (NGS) to provide biomarker-driven insight regarding target engagement and potential response. The program will study H3's lead oncology drug candidate H3B-8800 – an oral, potent and selective small molecule modulator of splicing factor 3b subunit 1 (SF3B1) - that is being developed by H3 as an anticancer therapeutic agent. The SF3B1 program represents H3's most advanced effort in its strategy to impact deregulated RNA homeostasis in cancer through RNA splicing modulation. H3 is a biopharmaceutical company specializing the in the discovery and development of precision medicine for oncology based in Cambridge, Massachusetts, and is a member of Japan's Eisai Group.

Lantern Pharma

In January 2017, CGI and Lantern Pharma, Inc. announced a strategic collaboration focused on drug rescue and repurposing which leverages genomics, biomarkers and Artificial Intelligence-driven development for multiple lead oncology compounds. The collaboration will leverage CGI's biomarker discovery, clinical trial testing, and companion diagnostic development capabilities along with Lantern's artificial intelligence and big-data driven development approach. Drug rescue and repurposing in oncology is a high-growth segment and expected to contribute to as much as 25 to 30 percent of new therapeutic approvals and significantly reduce development costs. The initial focus of the collaboration will be discovery services and further development of Lantern's lead compounds, including Tavocept (LP-300) for non-small cell lung cancer. Lantern Pharma, based in Dallas, is aiming to re-invent the cancer drug development process by tailoring promising drug programs to the right cancer patients. Lantern leverages advanced genomics and artificial intelligence (AI) to both identify and significantly reduce the cost and overall risk profile of new therapies compared to traditional drug development. Lantern currently has three clinical stage candidates in its pipeline: Tavocept, a phase 2 clinical candidate, LP-184, being prepared for biomarker based clinical trials, and Irofulven-1, which has been licensed out to a later stage pharma company focused on continuing its development.

Huntsman Cancer Center Institute, University of Utah/Pfizer

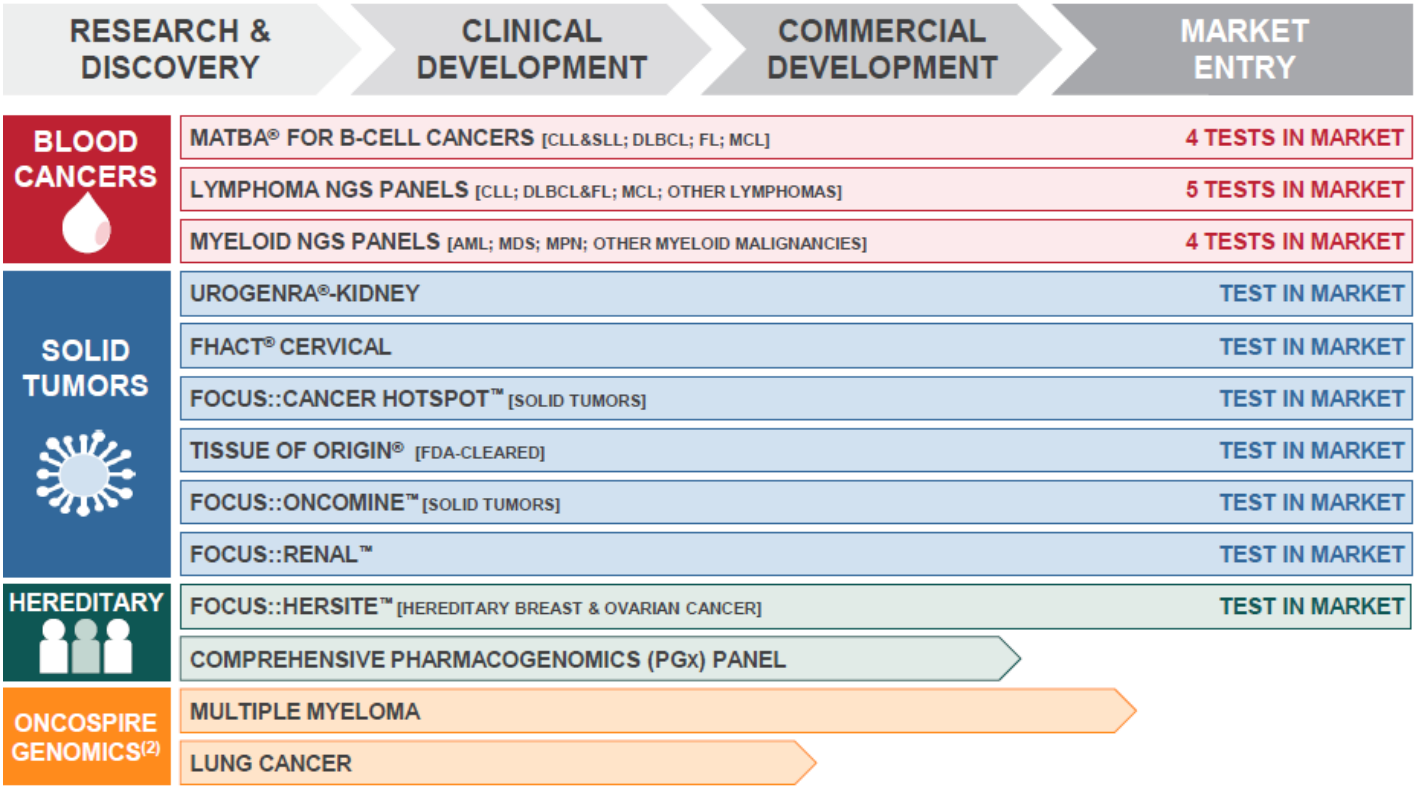
In 2015, CGI established a collaboration with the Huntsman Cancer Center Institute at the University of Utah, through its leading hospital-based urology clinic, to examine and validate genomic biomarkers of response of kidney cancer patients to frontline FDA-approved tyrosine kinase inhibitors, including Pfizer's (PFE, Not Ranked) Sunitinib (brand name Sutent), and the development of cell-free DNA assays for disease monitoring. In this collaborative study, CGI is applying both FOCUS::Renal™ and array-CGH to validate polymorphisms associated with response and determine if within this independent geographically distinct dataset of patients, novel biomarkers of response are identified or the clinical relevance of previously identified prognostic genomic biomarkers are substantiated.

Mendel.ai

In April 2017, CGI established a strategic partnership with Mendel.ai to leverage Artificial Intelligence (AI) and big data analytics to accelerate and democratize access to clinical trials for cancer. The CGI and Mendel.ai joint venture will be among the first in laboratory medicine to provide real time, constant clinical trial matching that integrates biomarker and genomic data with Electronic Health Records and clinical observations. Mendel.ai is the breakthrough artificial intelligence engine and technology powering Mendel Health. Mendel Health is a for-profit corporation headquartered in San Francisco, CA that rapidly finds optimal matches between cancer patient populations and clinical trials. Mendel uses deep learning technology to sift through unstructured data in medical literature as well as patient health records, in order to suggest evidence-based treatment options and to continuously update the results whenever a new matching trial emerges. The two companies will be actively working together to integrate Mendel.ai capabilities for clinicians, oncologists, pathologists, cancer centers and hospitals with CGI's disease-focused reports and testing results. Initial, early-access partners are set to begin using the joint system in Q2/2017 with wide roll-out slated to begin in the third and fourth quarter of this year.

Research and Development

CGI formally and informally collaborates with leading oncology centers and community-based hospitals to develop proprietary diagnostic tests, and the Company works closely with leading cancer researchers at these institutions to develop proprietary tests tailored to their needs and specifications. Additionally, many of these centers have obtained Specialized Programs of Research Excellence status, as designated by the National Cancer Institute. CGI's collaborations with these centers give access to large datasets of information that can be used to develop proprietary tests. In certain cases, CGI has formal written agreements with collaborators and in other cases there are no written agreement with collaborators or only informal written arrangements. In addition to collaborations and partnerships listed above, some of the research institutions working with CGI at the present include Cleveland Clinic, Columbia University, Beth Israel Deaconess, University of Southern California, Memorial Sloan-Kettering, Moffitt Cancer Center, North Shore/Long Island Jewish Health System, University of Alabama, Westchester Medical Center, University of Virginia and Yale University in the US, and Groupe Hospitalier Pitie Salpetriere in Paris, France and Kameini Hospital in Hyderabad, India. For the years ended December 31, 2016 and 2015, research and development expenses for CGI were $6.0 million and $5.5 million, respectively. The chart below further lists the Company's product pipeline of proprietary genomic tests and panels and status of each:



Source: CGI

Sales and Marketing

The Company's sales and marketing efforts consist of both direct and indirect efforts, with the majority of efforts focused on direct sales in both the United States and India. CGI's sales force professionals have backgrounds in hematology, pathology, and laboratory services, and many years of experience in clinical oncology sales and esoteric laboratory sales from leading biopharmaceutical, pharmaceutical or specialty reference laboratory companies. The Company currently has a team of 9 sales professionals in the United States and 3 in India, who are supported by clinical specialists who bring deep domain knowledge in the design and use of the Company's tests and services. In addition to a direct sales force, CGI has entered into agreements with the Laboratory Services group of global CRO ICON plc (ICLR/Not Rated), and BARC Global Laboratories (a part of Cerba Healthcare) to work together to offer biotech and pharmaceutical customers a comprehensive, integrated and efficient solution for laboratory testing for global oncology trials from Phase I through Phase IV. Through joint service offerings with ICON and BARC, CGI can provide biotech and pharmaceutical customers with access to combined expertise ranging from complex, oncology-focused molecular and biomarker-based testing to core central laboratory analysis, project and data management and sample logistics on a global basis.

The Company also promotes its tests and services through marketing channels commonly used by the biopharma and pharmaceutical industries, such as internet, medical meetings and broad-based publication of scientific and economic data. In addition, CGI provides easy-to-access information to customers over the internet through dedicated websites, who value easily accessible information in order to quickly review patient or study information. Also, CGI's clinical revenues are derived from a balanced mix of regional and national payers, including commercial payers (51% of 2016 annual revenues), Medicare (35%), and direct bill (14%), with more than 180 million lives in the US represented by existing agreements with national integrated networks.

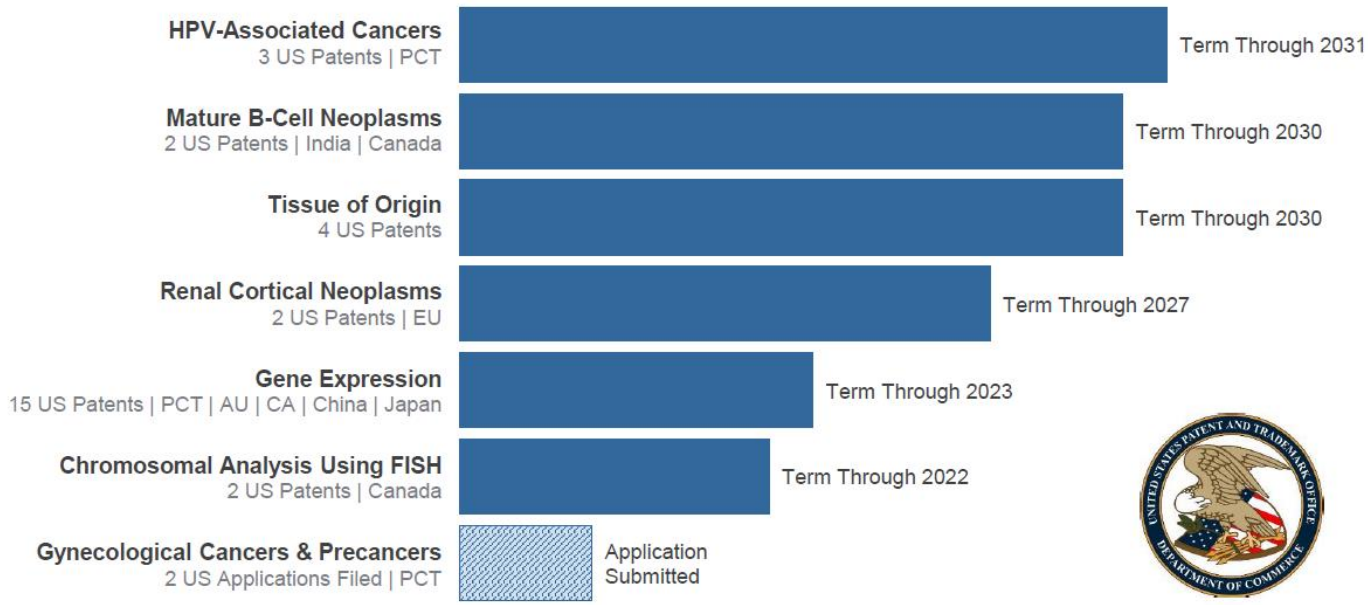
Intellectual Property

The Company develops proprietary tests that enable oncologists and pathologists at hospitals, cancer centers, and physician offices to properly diagnose and inform cancer treatment. CGI relies on a combination of patents, patent applications, trademarks, trademark applications, trade secrets, industry know-how, as well as various contractual arrangements, in order to protect the proprietary aspects of its technology.

CGI's patent portfolio consists of 49 issued US patents, several pending US applications, and 175 foreign patents. The Company's disease-focused portfolio of key patents include:

- *Hematological cancers* - including two US patents as well as patents in the EU, India and Canada directed to the MatBA microarray and associated methodologies. The term of these patents runs through 2030;
- *Solid Tumors* - including 13 US patents as well as numerous foreign patents, including patents in Australia, Canada, China and Japan. These patents relate to certain aspects of the gene expression technology used in CGI's solid tumor tests. The term of these patents runs through 2023;
- *Tissue of Origin Test* – CGI holds four US patents covering its proprietary Tissue of Origin Test. These patents are directed at systems and methods for detecting biological features in solid tumors. The term of these patents run through 2030;
- *Urogenital cancers* – CGI holds two US patents and one EU patent directed to a novel, highly sensitive and specific probe panel which detects the type of renal cortical neoplasm present in a biopsy sample. These patents cover a probe that permits diagnosis of the predominant subtypes of renal cortical neoplasms without the use of invasive methods and provides a molecular cytogenetic method for detecting and analyzing the type of renal cortical neoplasm present in a renal biopsy sample. The term of these patents runs through 2027. Relatedly, the Company also has two patent applications for methods and tools for the diagnosis of female gynecological cancers and pre-cancers and methods and tools for the diagnosis and prognosis of urogenital cancers;
- *HPV-Associated Cancers* – The Company also has three US patents and an EU patent covering methods for detecting HPV-associated cancers used in CGI's FHACT test. The term of these patents run through 2031; and
- *FISH Probes* – CGI holds two patents covering its fluorescence in situ hybridization (FISH) probes. These patents cover probes and methodologies designed to detect and analyze particular chromosomal translocations (genetic lesions) associated with a wide range of cancers using a technique known as FISH and serve as the backbone for several of the Company's other pending patent applications, which are more specifically geared towards other probes (and methodologies). The term of these patents run through 2022.

In addition to patents, CGI holds sixteen US registered trademarks, including a federal registration for "CGI" as well as three U.S. trademark applications and one foreign trademark registration for certain of its proprietary tests and services. The strategic use of distinctive trademarks has garnered increased name recognition and brand awareness for the Company's tests and services within the industry. Through its clinical laboratories, the Company provides several clinical services that utilize proprietary trade secrets. In particular, the Company maintains trade secrets with respect to specimen accessioning, sample preparation, and certain aspects of cytogenetic analysis. All of these trade secrets are kept under strict confidence, and the Company takes all reasonable steps, including the use of non-disclosure agreements and confidentiality agreements, to ensure that its confidential information is not unlawfully disseminated. CGI also conducts training sessions on the importance of maintaining and protecting trade secrets with scientific staff and laboratory directors and supervisors. A graphical depiction of select significant patents held by the Company includes:



Source: CGI

Operating and Production Facilities

In the course of its service business CGI works with electronic medical records providers to facilitate seamless communication between its clinical laboratories and the oncologist or pathologist at the test ordering site. Currently, the Company has the ability to integrate with electronic medical record systems, as it has already done with MDL, an electronic medical record provider. CGI accomplishes this integration through utilizing HL7 interfaces, which are standard in health care information technology systems, and currently employs HL7 for its integration with a revenue cycle management company, XIFIN, as well as with its electronic medical records partners such as MDL. The use of the HL7 interface allows systems written in different languages and running on different platforms to be able to talk to each other through the use of an abstracted data layer. This means that the Company does not have to spend significant extra time designing and developing common communications protocols when integrating with other electronic health records systems or billing systems providers.

When a customer obtains a specimen from a patient for oncology testing, he or she will complete a requisition form (either by hand or electronically, or via electronic medical records technology), and package the specimen for shipment to the Company's facilities. Once the specimen is received at the laboratory and all pertinent information about the specimen is entered into the clinical laboratory information system, one of CGI's laboratory professionals prepares the specimen for diagnosis. The prepared specimen is sent to one of CGI's pathologists or medical directors who is experienced in making the diagnosis requested by the referring oncologist or pathologist. After diagnosis, a pathologist uses the Company's laboratory information system to prepare a comprehensive report, which includes any relevant images associated with the specimen. CGI's clinical reporting portal, *cgireports.com*, allows a referring oncologist or pathologist to access his/her test results in real time in a secure HIPAA compliant manner. The reports are generated in industry standard PDF formats which allows for high definition color images to be reproduced clearly. This portal has been fully operational at CGI's facilities since 2011. In most cases CGI can provide both the technical analysis and professional diagnosis, although the Company can also fulfill requests from oncologists and pathologists for only one service or the other. If an oncologist or pathologist at the hospital, cancer center, reference laboratory or physician office requires only the analysis, then CGI can prepare the data and then return it to the referring oncologist or pathologist for assessment and diagnosis.

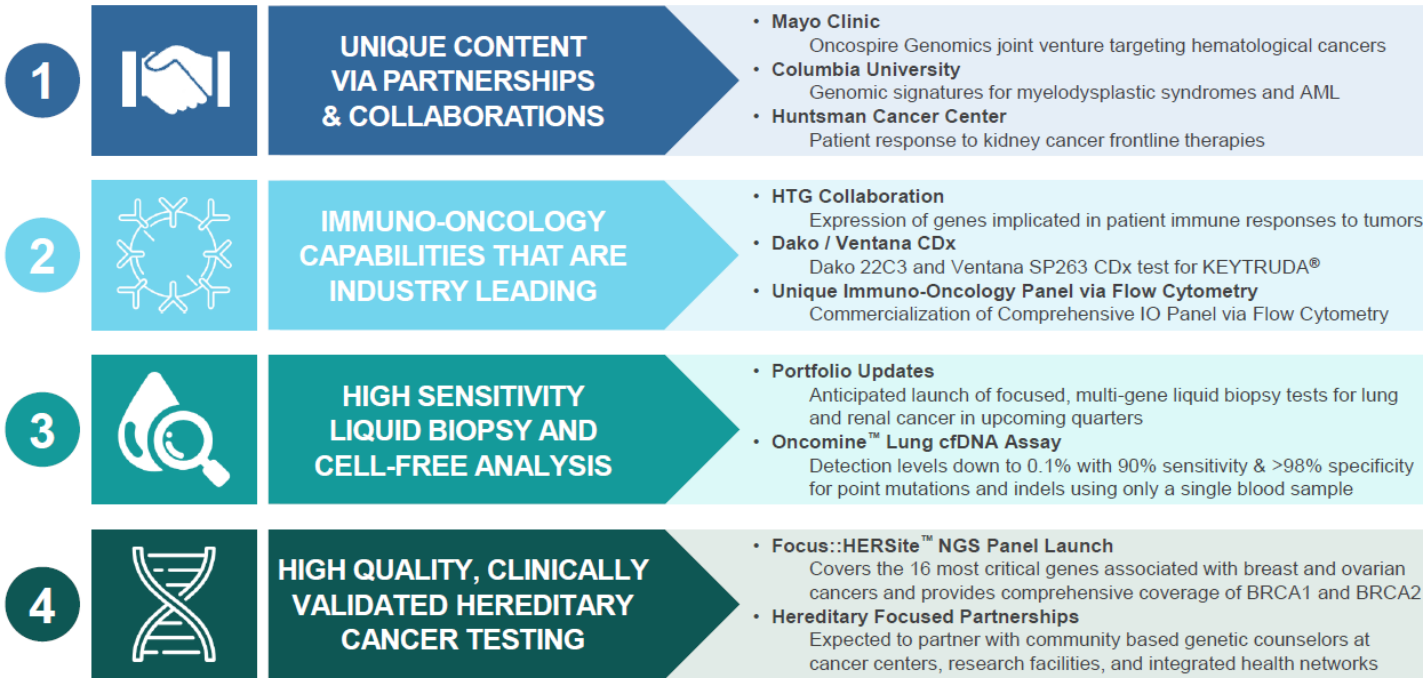
CGI has also established a comprehensive Quality Assurance and Management Program for its laboratories designed to drive accurate and timely test results and to ensure the consistent high quality of testing services. The Quality Assurance and Management Program documents the quality assurance/performance improvement plans and policies and the laboratory quality assurance and quality control procedures that are necessary to ensure that the highest quality of diagnostic testing services are offered. This program is designed to satisfy all the requirements necessary for local and state licensures applicable to this business, including requirements from the New Jersey Health Department, the California Department of Health and the New York Department of Health Clinical Laboratory Evaluation Program, and accreditation for clinical diagnostic laboratories by College of American Pathologists (CAP). CGI follows the policies and procedures for patient and employee safety, hazardous waste disposal and fire codes stated in the general laboratory procedure manual. The Company believes that all pertinent regulations of CLIA, Occupational Safety and Health Administration (OSHA), Environmental Protection Agency and FDA are satisfied by following the established guidelines and procedures of the Quality Assurance and Management Program.

Competition

With respect to clinical services, principal competition comes from existing mainstream diagnostic methods and laboratories that pathologists and oncologists use and have used for many years or decades. Historically it has been difficult to change the methods or behavior of the referring pathologists and oncologists to incorporate new molecular diagnostic testing in their practices. In addition, companies offering capital equipment and kits or reagents to local pathology laboratories represent another source of potential competition. These kits are used directly by the pathologist, which can facilitate adoption. CGI also faces competition from companies that currently offer or are developing products to profile genes, gene expression or protein biomarkers in various cancers.

Competitors in the precision medicine diagnostic market include public companies such as NeoGenomics (NEO, Not Rated) (including recently acquired Clarient), Quest Diagnostics (DGX, Not Rated), Abbott Laboratories (ABT, Not Rated), Johnson & Johnson (JNJ, Not Rated), Roche Molecular Systems, (RHHBY, Not Rated), bioTheranostics (now private), Genomic Health (GHDX, Not Rated), Myriad Genetics (MYGN, Not Rated), Foundation Medicine (FMI, Not Rated), and Invitae Corp (NVTA, Not Rated) and many private companies. CGI's expects that pharmaceutical and biotech companies will increasingly focus attention and resources on the personalized diagnostic sector as the potential and prevalence increases for molecularly targeted oncology therapies approved by FDA along with companion diagnostics. With respect to the clinical laboratory business, CGI faces competition from companies such as Genoptix Medical Laboratory (Private), NeoGenomics, Bio-Reference Laboratories, Inc. (a division of Opko, OPK, Not Rated), LabCorp (LH, Not Rated), Quest Diagnostics and Invitae Corp.

In its "Four Pillars of Innovation" presentation, the Company outlines its competitive advantages in a crowded market in this graphical depiction:



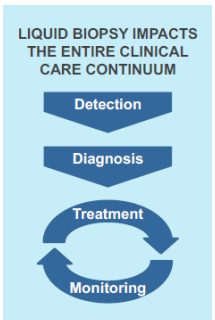
Source: CGI

Recent Results and Balance Sheet/Cash Flow

Cancer Genetics reported very positive financial results for their most recent Q1/17, including revenues of $7.0 million, an increase of 15% year-over-year. Revenue growth in the first quarter was led by an 11% increase in biopharma services, the Company's largest component of revenues, due to an increase in the number of clinical trials supported by the Company to 140 from 125 at the start of the year. Clinical services, the next largest revenue contributor, grew 20% from the prior year period to $3.0 million, due to a 19% increase in tests performed in the quarter, to 12,310. Finally, discovery services saw a 12% increase in revenues to $293,000 in Q1/17, as CGI experienced increased demand for its advanced services such as next-generation sequencing and novel bioinformatics analysis from research institutions.

Key product launches in 2017 assisting improved first quarter results included:

- An NGS-based (Next Generation Sequencing) panel for hereditary breast and ovarian cancer, FOCUS::HERSite, which was selected by a global pharmaceutical company to power a 1,000+ patient clinical study; and
- Liquid::Lung-cfDNA, a breakthrough NGS-based liquid biopsy test for lung cancer, which analyzes over 150 hot spots associated with non-small cell lung cancer. The Company also announced the signing of five new agreements and contracts with biotech and pharma customers to develop liquid biopsy tests for a broad range of solid tumors. Liquid biopsies have several advantages over older-generation tissue biopsies, including: less cost, minimally invasive procedures enabling tumor content to be sampled multiple times, reduced time to treatment, and more comprehensive capturing of the heterogeneity of the tumor. The diagram to the right depicts the positive impact of a liquid biopsy on the continuum of clinical care for a cancer patient.



On the bottom line, gross profit margin improved to 39.6% or $2.8 million for CGI in Q1/17, an improvement from 32.4% or $2.0 million in Q1/16, largely driven by improved operating efficiencies in lab operations and a reduction in supply costs. Total operating expenses also showed a positive trend downward in Q1/17 to $5.6 million, a reduction of 22% from $7.2 million in the prior year period, due to a large degree from headcount reduction, reorganization of technology and test development efforts, and benefits from shared services with CGI's team in Hyderabad, India. Net loss was $9.6 million for Q1/17, compared to $5.3 million for Q1 2016, however the net loss this year included non-cash charges of $7.5 million related to changes in fair value of derivative instruments. Adjusted net loss in Q1/17 decreased 61% to $2.1 million, down from an adjusted net loss of $5.3 million in Q1/16, due to higher sales volumes and lower expenses. Due to cash provided of almost $2.8 million during the quarter, including net proceeds from warrant exercises, $1 million in non-dilutive funding through a New Jersey state tax rebate program, and refinancing of $6.0 million in debt, cash and equivalents on hand at the end of the first quarter actually increased slightly from the start of the year, to $9.66 million from $9.50 million. At the end of the quarter, CGI had approximately $4.8 million drawn on its term note, comparable to $4.6 million in long-term and current balances at the start of the quarter.

The Company's balance sheets for the periods Q4/16 ending December 2016 and Q1/17 ending March 2017 are shown below:

Balance Sheets

($000s)

Assets:	**12/31/16**	**3/31/17**
Current Assets		
Cash and equivalents	$9,502	$9,664
Accounts receivable, net	11,748	12,675
Other current assets	2,174	2,018
Total current	23,424	24,357
Fixed assets, net	4,738	4,778
Other long-term assets		
Restricted cash	300	300
Patents and other intangible assets, net	1,503	1,451
Investment in joint venture	268	256
Goodwill	12,029	12,029
Other noncurrent assets	172	194
Total non-current	14,272	14,230
TOTAL ASSETS	$42,434	$43,365
Liabilities:		
Current liabilities		
Accounts payable and accrued expenses	$8,148	$8,099
Capital lease obligations, current	109	229
Deferred revenue	789	432
Term note, current portion	2,000	0
Total current	11,046	8,760
Term note	2,654	4,779
Capital lease obligations	374	616
Deferred renta payable	290	229
Warrant liability	2,018	7,620
Deferred revenue, long-term	428	436
Total liabilities	16,810	22,440
Stockholders' equity	25,624	20,925
TOTAL LIAB & EQ	$42,434	$43,365

Outlook/Growth Drivers

Regarding financial guidance going forward, CGI management stated in its most recent Q1/17 earnings presentation that going forward in 2017 they expect:

1) Ongoing improvements in the top line; and
2) Incremental improvements in operating expense during 2017 to continue margin expansion.

Thus, we are forecasting that quarterly revenues for CGI going forward this year will continue to grow in the 15%-20% range, led by all business units but in particular clinical and discovery services, and that gross margins will continue to improve as this year progresses, due to cost-saving measures taken by CGI in the recent past. Combined with steady operating expenses, our forecasts show that quarterly losses and operating cash burn will continue to show improvement in 2017E. For 2018E, we are estimating that revenue growth for CGI will accelerate to 25% year-over-year, due to new product introductions, and also that gross margins will improve to 48% as compared to 43% on average forecast in 2017E and 37% actual in 2016. Along with reduced operating expenses, the higher gross profit forecast for 2018E is expected to allow CGI to reach or exceed operating break-even and positive cash flow next year, with a small net loss due to interest expense and expected non-cash charges.

The Company's goals for the remainder of this year include:

- Multiple Myeloma NGS panel launch (Mayo joint venture);
- Development of a genetic counselor network;
- Expand the hereditary service offering;
- Liquid Biopsy for kidney cancer launch;
- Further Expansion in Asia; and
- Bioinformatics Center of Excellence in India launch.

Management

Panna Sharma has served as President and Chief Executive Officer and a member of the board of directors of CGI since May 2010. Mr. Sharma has over 15 years of experience in life science and healthcare finance and operations, including Managing Partner at TSG partners, iXL Enterprises, Interactive Solutions, Putnam Investment Management and Bank of America.

Jay Roberts serves as Chief Operating Officer and Executive Vice President, Finance of CGI. Prior to joining the Company, Mr. Roberts held operations and financial executive positions at InfoLogix, AdvantEdge Healthcare Solutions, Clarient, and VirMedica.

Igor Gittleman joined CGI in 2017 as Chief Accounting Officer after prior financial experience with BioReference Laboratories, Gucci Group, UBS PaineWebber and PricewaterhouseCoopers. He is a CPA.

Rita Shaknovich, MD, is Chief Medical Officer of CGI. Dr. Shaknovich previously had over ten years of experience in Hematopathology, translational research and experimental therapeutics at her laboratory at the Weill Cornell Medical College, and holds both MD and PhD degrees from the Mount Sinan School of Medicine in New York.

Other key members of the CGI management team include **Greg Ash,** Vice President, Clinical Market Development and formerly with GoPath Laboratories and Eisai Oncology; **Dr. Narasimha Marella**, Vice President of Operations, who has been with the Company since April 2010 and holds PhD in Biological Sciences and MS in Biotechnology degrees; **Rob Fannon,** Vice President of Biopharma Solutions and previously with Roche, BioServe, Stansberry and Associates, and Johns Hopkins; **Dr. Kamal Maddali,** Vice President, Biopharma Collaborations and Companion Diagnostics and formerly with Q2 Solutions, Quest Diagnostics, Quintiles and Merck Schering Plough; **Dr. Bob Elkhouly,** Director of Clinical Affairs & Site Operations, and previously with Response Genetics and the USC-Keck Medical Center; **Dr. Pal Singh-Kahlon**, Director Cytogenetics and earlier with LabCorp, Genzyme, and UCSF; and **Dr. Weiyi Chen**, Director Molecular Diagnostics and previously with Memorial Sloan-Kettering.

In addition to Panna Sharma, CGI's Board of Directors also includes **John Pappajohn**, non-executive Chairman and founder of Equity Dynamics and Pappajohn Capital Resources; **Edmund Cannon,** President of Clinical Research Center of Cape Cod; **Dr. Raju S.K. Chaganti,** currently on the faculty of Memorial Sloan-Kettering Cancer Center and a founder of the Company; **Geoffrey Harris,** a portfolio manager at c7 Advisors healthcare advisory firm; **Dr. Howard McLeod,** Director of the DeBartolo Institute at the Moffitt Cancer Center; **Dr. Franklyn Prendergast,** former director of Mayo Clinic Cancer Center; and **Dr. Michael Welsh**, an Investigator at the Howard Hughes Medical Institute. CGI's Clinical Advisory Board includes **Dr. Andrea Califano** of Columbia University; **Dr. Timothy Chan** of Memorial Sloan-Kettering; **Dr. Riccardo Dalla-Favera** of Columbia University; **Dr. Hans-Guido Wendell** of Memorial Sloan-Kettering; **Dr. Vundavalli V. Murty** of Columbia University; and **Dr. Charles Rudin** of Memorial Sloan-Kettering.

Stock Valuation/Comparables

We have compiled a nine-stock comparison group for CGI comprised of precision medicine and diagnostic companies, including Accelerate Diagnostics (AXDX, Not Rated), Luminex (LMNX, Not Rated), Danaher (including Cepheid) (DHR/Not Rated), CareDx (CDNA, Not Rated), ChemBio Diagnostics (CEMI, Not Rated), Enzo Biochem (ENZ, Not Rated), GenMark Diagnostics (GNMK, Not Rated), NeoGenomics (NEO, Not Rated) and Veracyte (VCYT, Not Rated). Since CGIX is not forecast to be profitable for 2017E we are employing our forecasts for next fiscal year, 2018E, specifically revenue forecasts, in order to place a long-term target valuation on CGIX shares. Many of the comparable companies in our group, in particular smaller firms, are also expected to show significant revenue growth next year due to new products or technologies. On average, our comparable stock group shows valuation multiples of 5.3X estimated revenues for fiscal 2018E. CGIX's valuation metrics related to price/revenues estimates for 2018E show a considerable discount to our comparable group, and thus, employing the price/revenue multiple estimated for next calendar year (2018E) of 5.3X multiplied by our estimated revenues for CGIX of $41.0 million for 2018E, we have derived a valuation and long-term price target of $11.00 for CGIX shares, thus, we are initiating shares of CGIX with a Buy rating and 12-18 month price target of $11.00 per share.

Risk Factors

In addition to normal economic and market risk factors that impact most equities and the common risks shared by Cancer Genetics with other companies in the industry, we believe an investment in CGIX involves the following risks:

- **Reliance on key management** – At present, CGIX relies on several key members of its management team who either founded the Company or have been in key executive positions for an extended period of time. Should one or more of these key executives leave the Company, CGIX could find it difficult to replace their long-standing knowledge of operations and industry expertise.
- **Reliance on partnerships –** To date, CGIX has signed a number of development partnerships and joint ventures for its diagnostic tests and information services. Thus, in the future certain factors related to product marketing and/or new product development may be determined by third parties and out of the control of Company management.
- **Limited stock liquidity** – Trading volume in CGIX stock is comparatively light and these shares have a relatively limited history of trading compared with other healthcare stocks. As such, news regarding CGIX, its target market, partners and/or competitors could lead to significant volatility in the stock price.
- **Competitive markets** – The Company and its partners compete in its target diagnostic markets with a number of companies, many of which are considerably larger than the Company. There can be no assurance that the Company and its partners will be able to successfully compete and launch new products into these competitive markets in the future.
- **FDA and regulatory risks** – CGIX and its partners are subject to regulatory review for ongoing diagnostic tests and information products, principally the US Food and Drug Administration's approval and laboratory review processes. In addition, the quality assurance and manufacture of the Company's diagnostic products are subject to ongoing oversight and regulation, and any negative correspondence from the FDA or other regulatory agencies could have an adverse effect on the ongoing operations of the Company.
- **Lack of historic profitability** - CGIX has not achieved operating profitability since its founding, and according to our forecasts may not be expected to do so in the near future. Although the Company maintains adequate cash reserves at the present time, there can be no assurance the Company will not need to raise additional working capital in the future should operating losses continue.
- **Need to defend patents and other intellectual property** – CGIX currently holds approximately 49 US and 175 International patents on its products and information services, some of which expire in the near future. The Company may be required to defend its patents in the US and overseas in the future, and there can be no assurance these defenses will be successful.

Companies mentioned in this report:

Pfizer (PFE, Not Rated)
Eisai Group (H3 Biomedicine, ESALY, Not Rated)
Lantern Pharma (Private)
Mendel.ai (Private)
ICON plc (ICLR, Not Rated)
Abbott Labs (ABT, Not Rated)
Johnson & Johnson (JNJ, Not Rated)
Roche Molecular Systems, (RHHBY, Not Rated)
bioTheranostics (Private)
Genomic Health (GHDX, Not Rated)
Myriad Genetics (MYGN, Not Rated)
Foundation Medicine (FMI, Not Rated)
Invitae Corp (NVTA, Not Rated)
Genoptix Medical Laboratory (Private)
Danaher (DHR, Not Rated)
Accelerate Diagnostics (AXDX, Not Rated)
Luminex (LMNX, Not Rated)
GenMark (GNMK, Not Rated)
NeoGenomics (NEO, Not Rated)
Enzo Biochem (ENZ, Not Rated)
Laboratory Corporation (LH, Not Rated)
Quest Diagnostics (DGX, Not Rated)
Opko Health (Bio-Reference Labs, OPK, Not Rated)
CareDx (CRDX, Not Rated)
ChemBio Diagnostics (CEMI, Not Rated)
Veracyte (VCYT, Not Rated)

Robert M. Wasserman

Cancer Genetics, Inc.
Consolidated Statements of Income
(In 000s, except per share data)

FYE November	2014	2015	1Q16 March	2Q16 June	3Q16 September	4Q16 December	2016	1Q17 March	2Q17E June	3Q17E September	4Q17E December	2017E	2018E
Revenue	$10,199	$18,040	$6,068	$7,001	$6,750	$7,230	$27,049	$6,966	$8,400	$8,400	$9,000	$32,766	$41,000
Cost of revenues	8,453	14,098	4,103	4,285	4,444	4,272	17,104	4,209	4,900	4,700	4,900	18,709	21,300
Gross profit	1,746	3,942	1,965	2,716	2,306	2,958	9,945	2,757	3,500	3,700	4,100	14,057	19,700
Operating Expenses													
Research and development	4,622	5,483	1,532	1,680	1,594	1,161	5,967	1,110	1,150	1,100	1,050	4,410	4,000
General and administrative	12,369	14,567	4,318	3,658	3,701	4,357	16,034	3,477	3,500	3,450	3,400	13,827	12,000
Sales and marketing	3,964	5,269	1,298	1,379	1,054	937	4,668	971	1,000	950	900	3,821	3,500
Total operating expenses	20,955	25,319	7,148	6,717	6,349	6,455	26,669	5,558	5,650	5,500	5,350	22,058	19,500
Income (loss) from operations	(19,209)	(21,377)	(5,183)	(4,001)	(4,043)	(3,497)	(16,724)	(2,801)	(2,150)	(1,800)	(1,250)	(8,001)	200
Other income (expense)													
Interest expense	(473)	(344)	(126)	(107)	(111)	(110)	(454)	(194)	(100)	(100)	(100)	(494)	(400)
Interest income	74	49	4	13	4	2	23	17	20	20	20	77	100
Change in fair value of acquisition note	417	35	34	67	18	1,406	1,525	(232)	(100)	(100)	(100)	(532)	(400)
Change in fair value of warrant liability	198	269	17	0	712	(577)	152	(7,294)	(300)	(300)	(300)	(8,194)	(500)
Other expense	0	0	0	0	(325)	0	(325)	(46)	(50)	(50)	(50)	(196)	(100)
Total other (expense)	216	9	(71)	(27)	298	721	921	(7,749)	(530)	(530)	(530)	(9,339)	(1,300)
Income (loss) before tax	(18,993)	(21,368)	(5,254)	(4,028)	(3,745)	(2,776)	(15,803)	(10,550)	(2,680)	(2,330)	(1,780)	(17,340)	(1,100)
Income tax (benefit)	(2,350)	(1,184)	0	0	0	0	0	(970)	0	0	0	0	0
Net income (loss)	(16,643)	(20,184)	(5,254)	(4,028)	(3,745)	(2,776)	(15,803)	(9,580)	(2,680)	(2,330)	(1,780)	(16,370)	(1,100)
Basic income per share	($1.76)	($1.96)	($0.39)	($0.28)	($0.23)	($0.15)	($1.00)	($0.51)	($0.14)	($0.12)	($0.09)	($0.83)	($0.05)
Diluted income per share	($1.76)	($1.96)	($0.39)	($0.28)	($0.23)	($0.15)	($1.00)	($0.51)	($0.14)	($0.12)	($0.09)	($0.83)	($0.05)
Basic shares outstanding	9,449	10,300	13,547	14,538	16,519	18,839	15,861	18,904	19,800	20,000	20,200	19,726	21,000
Diluted shares outstanding	9,462	10,300	13,547	14,538	16,519	18,839	15,861	18,904	19,800	20,000	20,200	19,726	21,000
Key ratios:													
Revenue growth	54.3%	76.9%	38.9%	67.3%	68.7%	31.8%	49.9%	14.8%	20.0%	25.0%	25.0%	21.1%	25.0%
Gross margins	17.1%	21.9%	32.4%	38.8%	34.2%	40.9%	36.8%	39.6%	42.0%	44.0%	46.0%	42.9%	48.0%
R&D/revenue	45.3%	30.4%	25.2%	24.0%	23.6%	16.1%	22.1%	15.9%	13.7%	13.1%	11.7%	13.5%	9.8%
G &A/revenue	121.3%	80.7%	71.2%	52.2%	54.8%	60.3%	59.3%	49.9%	41.7%	41.1%	37.8%	42.2%	29.3%
Sales/revenue	38.9%	29.2%	21.4%	19.7%	15.6%	13.0%	17.3%	13.9%	11.9%	11.3%	10.0%	11.7%	8.5%
Tax Rate	-12.4%	-5.5%	0.0%	0.0%	0.0%	0.0%	0.0%	9.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Deprec, amort & non-cash comp.	4,500	4,500	1,031	1,185	1,069	1,106	4,391	1,031	1,050	1,100	1,150	4,331	4,500
Cash Flow/share	($1.35)	($1.55)	($0.32)	($0.20)	($0.21)	($0.13)	($0.83)	($0.05)	($0.06)	($0.04)	($0.01)	($0.17)	$0.20
EBITDA/share	($1.55)	($1.63)	($0.31)	($0.19)	($0.20)	($0.13)	($0.80)	($0.10)	($0.06)	($0.04)	($0.01)	($0.19)	$0.22

Balance Sheets
($000s)

Assets:	12/31/16	3/31/17
Current Assets		
Cash and equivalents	$9,502	$9,664
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Total non-current	14,272	14,230
TOTAL ASSETS	$42,434	$43,365
Liabilities:		
Current liabilities		
Accounts payable and accrued expenses	$8,148	$8,099
Capital lease obligations, current	109	229
Deferred revenue	789	432
Term note, current portion	2,000	0
Total current	11,046	8,760
Term note	2,654	4,779
Capital lease obligations	374	616
Deferred rentapayable	290	229
Warrant liability	2,018	7,620
Deferred revenue, long-term	428	436
Total liabilities	16,810	22,440
Stockholders' equity	25,624	20,925
TOTAL LIAB & EQ	$42,434	$43,365

Quarterly Earnings Comparisons

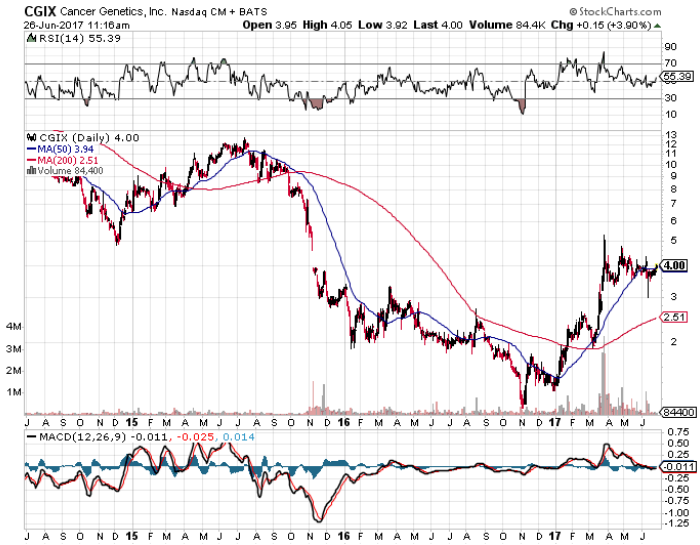
	February	May	August	November	Total
Revenues (in $Mill)					
2014					10,199
2015	4,370	4,185	4,001	5,484	18,040
2016	6,068	7,001	6,750	7,230	27,049
2017E	6,966	8,400	8,400	9,000	32,766
Earnings per Share (diluted)					
2014					(1.76)
2015	(0.44)	(0.51)	(0.54)	(0.47)	(1.96)
2016	(0.39)	($0.28)	(0.23)	(0.15)	(1.00)
2017E	(0.51)	($0.14)	(0.12)	(0.09)	(0.83)

Revenues by Category ($000s)	2014	2015	2016	2017E	2018E
Biopharma services	$5,606	$11,564	$15,321	$18,000	$22,000
Clinical services	4,432	5,651	10,651	13,200	16,500
Discovery services	161	825	1,077	1,566	2,500
Total revenues	$10,199	$18,040	$27,049	$32,766	$41,000
Other Revenue Metrics					
Biopharma projects: Total		103	125	150	200
Biopharma projects: Immuno-Oncology		3	18	40	60

Source: Dawson James Securities, Inc. estimates; Company documents

Important Disclosures:

Price Chart:



Price target and ratings changes over the past 3 years:
Initiated – Buy - June 27, 2017 – Price Target $11.00

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1) **Buy**: the analyst believes the price of the stock will appreciate and produce a total return of at least 20% over the next 12-18 months;
2) **Neutral**: the analyst believes the price of the stock is fairly valued for the next 12-18 months;
3) **Sell**: the analyst believes the price of the stock will decline by at least 20% over the next 12-18 months and should be sold.

The following chart reflects the range of current research report ratings for all companies followed by the analysts of the Firm. The chart also reflects the research report ratings relating to those companies for which the Firm has performed investment banking services.

	Company Coverage		Investment Banking	
Ratings Distribution	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	6	60%	2	33%
Market Perform (Neutral)	0	0%	0	0%
Market Underperform (Sell)	0	0%	0	0%
Ratings Suspension*	4	40%	4	100%
Total	10	100%	6	60%
*Suspensions are ratings under review for possible change due to unusual market-moving news, and/or analyst departure/change				

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