NEOGENOMICS INC
Form POS AM
April 27, 2012
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As filed with the U.S. Securities and Exchange Commission on April 27, 2012

Registration No. 333-155784

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

POST EFFECTIVE

AMENDMENT NO. 4

TO

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

NeoGenomics, Inc.

(Exact Name of Registrant as Specified in its Charter)

Nevada (State or Other Jurisdiction of Incorporation or Organization)		74-2897368 (I.R.S. Employer Identification No.)
		Douglas M. VanOort
12701 Commonwealth Drive, Suite 9 Fort Myers, Florida 33913		12701 Commonwealth Drive, Suite 9 Fort Myers, Florida 33913
(239) 768-0600 (Address and Telephone Number of Principal Executive Office)	8731 (Primary Standard Industrial Classification Code Number)	(239) 768-0600 (Name, Address and Telephone Number of Agent for Service)

With copies to:

Clayton E. Parker, Esq.

Mark E. Fleisher, Esq.

K&L Gates, LLP

200 S. Biscayne Boulevard, Suite 3900

Miami, Florida 33131

Telephone: (305) 539-3300

Facsimile: (305) 358-7095

Approximate date of commencement of proposed sale to the public: **As soon as practicable after this registration statement becomes effective**.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer , accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer ¨	Accelerated filer ¨
Non-accelerated filer ¨ (Do not check if a smaller reporting company)	Smaller reporting company x

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EXPLANATORY NOTE

The Registrant s Registration Statement on Form S-1 (File No. 333-155784) originally filed with the Securities and Exchange Commission on November 28, 2008 was declared effective on February 5, 2009 and subsequently amended by Post-Effective Amendment No. 3 which was originally filed with the Securities and Exchange Commission on March 31, 2011 and declared effective on April 13, 2011, Post-Effective Amendment No. 2 which was originally filed with the Securities and Exchange Commission on May 7, 2010 and declared effective on May 19, 2010 and Post-Effective Amendment No. 1 which was originally filed with the Securities and Exchange Commission on April 28, 2009 and declared effective on May 8, 2009 (collectively, the Original Registration Statement). The Registrant is filing this Post-Effective Amendment No. 4 to the Original Registration Statement in order to update the Original Registration Statement to include, among other things, the Registrant s audited consolidated financial statements for the fiscal year ended December 31, 2011 and other updated information about the Registrant and the offering.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED APRIL 27, 2012.

PROSPECTUS

NEOGENOMICS, INC.

3,013,254 Shares of Common Stock

This prospectus relates to the sale of up to 3,013,254 shares of the common stock, par value $0.001 per share, of NeoGenomics, Inc., a Nevada corporation, by the selling stockholders named in this prospectus in the section Selling Stockholders . Unless the context otherwise requires, in this prospectus we refer to NeoGenomics, Inc., a Nevada corporation, individually as the Parent Company and collectively with all of its subsidiaries as Company, we, us, our and NeoGenomics .

The Company is not selling any shares of common stock in this offering and therefore will not receive any proceeds from this offering. All costs associated with this registration will be borne by the Company. The prices at which the selling stockholders may sell the shares will be determined by the prevailing market price for the shares or in negotiated transactions.

Our common stock is quoted on the Over-The-Counter Bulletin Board and on the OTCQB under the symbol NGNM . On April 20, 2012, the last reported sale price of our common stock on the Over-The-Counter Bulletin Board was $1.65 per share.

Brokers or dealers effecting transactions in these shares should confirm that the shares are registered under the applicable state law or that an exemption from registration is available.

These securities are speculative and involve a high degree of risk. Please refer to Risk Factors beginning on page 12 for a discussion of these risks.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

No underwriters or persons have been engaged to facilitate the sale of shares of our common stock in this offering. None of the proceeds from the sale of stock by the selling stockholders will be placed in escrow, trust or any similar account.

The date of this prospectus is , 2012.

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PROSPECTUS SUMMARY

The following is only a summary of the information, financial statements and the notes thereto included in this prospectus. You should read the entire prospectus carefully, including Risk Factors and our consolidated financial statements and the notes thereto before making any investment decision. Unless the context otherwise requires, NeoGenomics, Inc. is referred to herein individually as the Parent Company or, collectively with all of its subsidiaries, as the Company , NeoGenomics , or we , us , or our .

Overview

We operate a network of cancer-focused testing laboratories whose mission is to improve patient care through exceptional genetic and molecular testing services. Our vision is to become America s premier cancer testing laboratory by delivering uncompromising quality, exceptional service and innovative products and solutions. The Company has laboratory locations in Ft. Myers and Tampa, Florida; Irvine, California; and Nashville, Tennessee, and currently offers the following types of testing services:

a) Cytogenetics testing - the study of normal and abnormal chromosomes and their relationship to disease. Cytogenetic studies are often utilized to assist in refining treatment options for hematopoietic cancers such as leukemia and lymphoma;

b) Fluorescence In-Situ Hybridization (FISH) testing - a branch of cancer genetics that focuses on detecting and locating the presence or absence of specific DNA sequences and genes on chromosomes;

c) Flow cytometry testing - a rapid way to measure the characteristics of cell populations. Cells from peripheral blood, bone marrow aspirate, lymph nodes, and other areas are labeled with selective fluorescent antibodies and quantified according to their surface antigens. These fluorescent antibodies bind to specific cell surface antigens and are used to identify malignant cell populations. Flow cytometry is typically performed in conjunction with morphology testing which looks at smears on glass slides for abnormal cell populations;

d) Immunohistochemistry (IHC) testing - the process of identifying cell proteins in a tissue section utilizing the principle of antibodies binding specifically to antigens. Specific surface cytoplasmic or nuclear markers are characteristic of cellular events such as proliferation or cell death (apoptosis). IHC is also widely used to understand the distribution and localization of differentially expressed proteins; and

e) Molecular testing - a rapidly emerging cancer diagnostic tool focusing on the analysis of DNA and RNA, as well as the structure and function of genes at a molecular level. Molecular testing employs multiple technologies including point mutation analysis, sequencing analysis, DNA fragment length analysis, and real-time polymerase chain reaction (RT-PCR) RNA analysis.

All of these testing services are widely utilized to inform the diagnosis and prognosis of various types and subtypes of cancer and to help predict a patient s potential response to specific therapies. NeoGenomics offers testing services on both a tech-only basis, where NeoGenomics performs the technical component of the testing (specimen set-up, staining, imaging, sorting and categorization of cells, chromosomes, genes or DNA) and the client physician performs the related professional interpretation component (analyzing the laboratory data, developing the diagnosis or prognosis as well as preparing and writing the final report), as well as on a full service or global basis where NeoGenomics performs both the technical component and the professional interpretation component.

Operating Segment

We have one reportable operating segment that delivers testing services to hospitals, pathologists, oncologists, other clinicians and researchers. Also, at December 31, 2011, all of our services were provided within the United States and all of our assets were in the United States.

Market Opportunity

The medical testing laboratory market can be broken down into three primary segments:

Clinical Pathology testing,

Anatomic Pathology testing, and

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Genetic and Molecular testing.

Clinical Pathology testing covers high volume, highly automated, lower complexity tests on easily procured specimens such as blood and urine. Clinical lab tests often involve testing of a less urgent nature, for example, cholesterol testing and testing associated with routine physical exams.

Anatomic Pathology testing involves evaluation of tissue, as in surgical pathology, or cells as in cytopathology. The most widely performed Anatomic Pathology procedures include the preparation and interpretation of pap smears, skin biopsies, and tissue biopsies.

Genetic and molecular testing typically involves analyzing chromosomes, genes, proteins and/or DNA/RNA sequences for abnormalities. Genetic and molecular testing requires highly specialized equipment and credentialed individuals (typically M.D. or Ph.D. level) to certify results and typically yields the highest reimbursement levels of the three market segments.

The field of cancer genetics is evolving rapidly and new tests are being developed at an accelerated pace. Based on medical and scientific discoveries over the last 10 years, cancer testing falls into one of three categories: diagnostic testing, prognostic testing and predictive testing. Of the three, the fastest growing area is predictive testing, which is utilized by clinicians to predict a patient s response to the various treatment options in order to deliver personalized medicine that is optimized to that patient s particular circumstances.

We estimate that the United States market for genetic and molecular testing is divided among approximately 360 laboratories. Approximately two thirds of these laboratories are attached to academic institutions and primarily provide clinical services to their affiliated university hospitals and associated physicians. We believe that the remaining one third of the market is quite fragmented and that less than 20 laboratories market their services nationally. We estimate that the top 20 laboratories account for approximately 50% of market revenues for genetic and molecular testing.

We believe that the key factors influencing the rapid market growth for cancer testing include: (i) cancer is primarily a disease of the elderly - one in four senior citizens is likely to develop some form of cancer during the rest of their lifetime once they turn sixty, and now that the baby boomer generation has started to reach this age range, the incidence rates of cancer are rising; (ii) every year more and more genes and genomic pathways are implicated in the development and/or clinical course of cancer; and (iii) increasingly, new drugs are being targeted to certain cancer subtypes and pathways which require companion diagnostic testing. Laboratory tests are needed to identify the type and subtype of cancer and the proper treatment regimen for each individual patient in order to deliver personalized medicine to the patient. These factors have driven explosive growth in the development of new genetic and molecular tests. We estimate a $10-12 billion total market opportunity for cancer testing in the United States, about $3-5 billion of which is derived from genetic and molecular testing with the remaining portion derived from more traditional anatomic pathology testing services that are complementary to and often ordered with the genetic and molecular testing services we offer.

Our Focus

Our primary focus is to provide high complexity, cancer-related laboratory testing services to hospitals, community-based pathology practices, and clinicians throughout the United States. We currently perform analyses for hematopoietic cancers such as leukemia and lymphoma (blood and lymphoid tumors) and solid tumor cancers such as breast, lung, colon, and bladder cancer. For hematopoietic cancers, we typically analyze bone marrow aspirate and peripheral blood specimens. For solid tumor cancers, we typically analyze formalin fixed, paraffin embedded tissue samples or urine.

The cancer testing services we offer to community-based pathologists are designed to be a natural extension of, and complementary to, the services that they perform within their own practices. We believe our relationship as a non-competitive partner to community-based pathology practices empowers them to expand their breadth of testing and provide a menu of services that matches or exceeds the level of service found in academic centers of excellence around the country. Community-based pathology practices typically order our services on a tech-only basis, which allows them to participate in the diagnostic process by performing the professional interpretation services without having to make the investment in laboratory personnel or equipment needed to perform the technical component of the tests.

In areas where we do not provide services to community-based pathology practices, we may directly serve oncology, dermatology, urology and other clinician practices that prefer to have a direct relationship with a laboratory for cancer-related genetic and molecular testing services. We typically service these types of clients with a global service offering where we perform both the technical and professional components of the tests ordered. Increasingly, however, larger clinician practices have begun to internalize pathology testing, and our tech-only service offering allows these larger clinician practices to also participate in the diagnostic process by performing the professional interpretation services.

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Competitive Strengths

Turnaround Times

We strive to provide industry leading turnaround times for test results to our clients nationwide. By providing information to physicians in a rapid manner, they can begin treating their patients as soon as possible. We believe our average 4-5 day turn-around time for our cytogenetics testing services, our average 3-4 day turn-around time for FISH testing services, and our average 1 day turn-around time for flow cytometry testing services are industry-leading benchmarks for national laboratories. Our consistent timeliness of results is a competitive strength and a driver of additional testing requests by our referring physicians. Quick turn-around times allow for the performance of other adjunctive tests within an acceptable diagnosis window in order to augment or confirm results and more fully inform treatment options. We believe that our rapid turnaround times are a key differentiator of NeoGenomics versus other national laboratories, and our clients often cite them as a key factor in their relationship with us.

Medical Team

Our team of medical professionals and Ph.Ds. are specialists in the field of genetics and oncology. Our medical team is led by our Chief Medical Officer, Dr. Maher Albitar, a renowned hematopathologist with extensive experience in molecular and genetic testing. Prior to joining NeoGenomics, Dr. Albitar was Medical Director for Hematopathology and Oncology at the Quest Nichols Institute and Chief R&D Director for Hematopathology and Oncology for Quest Diagnostics. He also served as Section Chief for Leukemia at the University of Texas M. D. Anderson Cancer Center. In addition to Dr. Albitar, we currently employ five full-time M.D.s as our medical directors and pathologists, two Ph.Ds. as our scientific directors and cytogeneticists, and four part-time M.D.s acting as consultants and backup pathologists for case sign out purposes.

Extensive Tech-Only Service Offerings

We launched the first tech-only FISH testing services in the United States in 2006, and we currently have the most extensive menu of tech-only FISH services in the country. Indeed, we believe we are the only national laboratory offering tech-only FISH services for hematopoietic cancers in the U.S. We also offer tech-only flow cytometry and immunohistochemistry testing services. These types of testing services generally allow the professional interpretation component of a test to be billed separately from the technical component. Our NeoFISH™, NeoFLOW™ and other tech-only service offerings allow properly trained and credentialed community-based pathologists to extend their own practices by performing professional interpretations services, which allows them to better service the needs of their local clientele without the need to invest in the lab equipment and personnel required to perform the technical component of genetic and molecular testing.

Our tech-only services are designed to give pathologists the option to choose, on a case by case basis, whether they want to order just the technical information and images relating to a specific test so they can perform the professional interpretation, or order global services and receive a comprehensive test report which includes a NeoGenomics Pathologist s interpretation of the test results. Our clients appreciate the flexibility to access NeoGenomics medical staff for difficult or complex cases or when they are otherwise unavailable to perform professional interpretations. We believe this innovative approach to serving the needs of pathology client s results in longer term, more committed client relationships that are more akin to strategic partnerships. Our extensive tech-only service offerings have differentiated NeoGenomics and allowed us to compete more effectively against larger, more entrenched competitors in our niche of the industry.

Global Service Offerings

We also offer a full set of global services to meet the needs of those clients who are not credentialed and trained in interpreting genetic tests and who are looking for specialists to interpret the testing results for them. In our global service offerings, our lab performs the technical component of the tests and our M.D.s and Ph.Ds. provide the interpretation services. Our professional staff is also available for post testing consultative services. These clients rely on the expertise of our medical team to give them the answers they need in a timely manner to help inform their diagnoses and treatment decisions. Many of our tech-only clients also rely on our medical team for difficult or challenging cases by ordering our global testing services on a case by case basis. Our Genetic Pathology Solutions (GPS) report summarizes all relevant case data from our global services on one summary report. When providing global services, NeoGenomics performs both the technical and professional component of the test, which results in a higher reimbursement level.

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Client Education Programs

We believe we have one of the most extensive client education programs in the genetic and molecular testing industry. We train pathologists how to use and interpret genetic testing services so that they can then participate in our tech-only service offerings. Our educational programs include an extensive library of on-demand training modules, online courses, and custom tailored on-site training programs that are designed to prepare clients to utilize our tech-only services. Each year, we also regularly sponsor seminars and webinars on emerging topics of interest in our field. Our medical staff is involved in many aspects of our training programs.

Laboratory Information System (LIS)

We believe we have a state-of-the-art Laboratory Information System (LIS) that interconnects our locations and provides flexible reporting solutions to clients. This system allows us to standardize testing and deliver uniform test results and images throughout our network, regardless of the location that any specific portion of a test is performed within our network. This allows us to move specimens and image analysis work between locations to better balance our workload. Our LIS also allows us to offer highly specialized and customizable reporting solutions to our tech-only clients. For instance, our tech-only NeoFISH™ and NeoFLOW™ applications allow our community-based pathologist clients to tailor individual reports to their specifications and incorporate only the images they select and then issue and sign-out such reports from our system with their own logos at the top. Our customized reporting solution even allows our clients to incorporate test results performed on ancillary tests not performed at NeoGenomics into summary report templates. This feature has been well-received by clients. In May 2011, we obtained the source code to our LIS. This has given us greater control and flexibility over the customized functionality we develop and offer to clients and allows us to make improvements in a more timely manner.

National Direct Sales Force

Our direct sales force has been trained extensively in cancer genetic testing and consultative selling skills to service the needs of clients. Our sales representatives (Territory Business Managers) are organized into three regions (Northeast, Southeast and West). These sales representatives all utilize Salesforce.com to manage their territories, and we have integrated all of the important customer care functionality within our LIS into Salesforce.com so that our Territory Business Managers can stay informed of emerging issues and opportunities within their regions. As of January 31, 2012, we had twenty Territory Business Managers, one Managed Care Specialist, and three Regional Managers.

Client Care

Our Customer Care Specialists (CCS) are organized by region into territories that service not only our external clients, but also work very closely with and support our sales team. A client receives personalized assistance when dealing with their dedicated CCS because each CCS understands their clients specific needs. When problems or questions do arise, the CCS is responsible for providing answers to the client. CCS s handle everything from arranging specimen pickup to managing questions that arise during the test process to delivering test results in order to deliver exceptional services to our clients.

Geographic Locations

Many high complexity laboratories within the cancer testing niche have frequently operated a core facility on either the West Coast or the East Coast to service the needs of their customers around the country. We believe our clients and prospects desire to do business with a laboratory with national breadth and a local presence. We have four facilities, two large laboratory locations in Fort Myers, Florida and Irvine, California and two smaller laboratory locations in Nashville, Tennessee and Tampa, Florida. Our objective is to operate one lab with four locations in order to deliver standardized test results. We intend to continue to develop and open new laboratories or expand our current facilities as market situations dictate and business opportunities arise.

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Scientific Pipeline

In the past few years our field has experienced a rapid increase in tests that are tied to specific genomic pathways . These predictive tests are typically individualized for a small sub-set of patients with a specific subtype of cancer. The therapeutic target in the genomic pathways is typically a small molecule found at the level of the cell surface, within the cytoplasm and/or within the nucleus. These genomic pathways, known as the Hallmarks of Cancer , contain a target-rich environment for small-molecule anti-therapies . These anti-therapies target specific mutations in the major cancer pathways such as the Proliferation Pathway, the Apoptotic Pathway, the Angiogenic Pathway, the Metastasis Pathway, and the Signaling Pathways and Anti-Signaling Pathways.

As an example, recently the FDA approved a small molecule anti-therapy drug (Xalkori) that targets a mutation in the ALK gene for a small sub-set of patients with Non-Small Cell Lung Cancer (NSCLC). Approximately 50-61% of patients with an ALK gene rearrangement will respond to this therapy. To identify patients eligible for this specific small-molecule therapy, an FDA-approved FISH test that NeoGenomics and certain other laboratories offer, must be performed. This ALK FISH test is considered a companion diagnostic test and it is critical that this test be performed and the patient found to have an ALK mutation before therapy can be administered. Tests such as the ALK FISH test allow our clients to direct individualized treatments to each cancer patient in a timely manner. We are increasingly focused on attempting to develop new predictive tests such as this in our new product development pipeline.

Strategic Licensing Agreement with Health Discovery Corp

In January 2012, we entered into a Master License Agreement (the License Agreement) with Health Discovery Corporation (HDC), pursuant to which we were granted an exclusive worldwide license to utilize HDC s extensive intellectual property portfolio to develop and commercialize laboratory developed tests (LDTs) and other products relating to hematopoietic and solid tumor cancers. HDC owns intellectual property and know-how, including some 84 issued and pending patents related to support vector machine (SVM), recursive feature elimination (SVM-RFE), fractal genomic modeling (FGM) and other pattern recognition technology as well as certain patents relating to digital image analysis, biomarker discovery, and gene and protein-based diagnostic, prognostic, and predictive testing.

Under the terms of the License Agreement, we may, subject to certain limitations, use, develop, make, have made, modify, sell, and commercially exploit products and services in the fields of laboratory testing, molecular diagnostics, clinical pathology, anatomic pathology and digital image analysis relating to the development, marketing, production or sale of any LDTs or other products used for diagnosing, ruling out, predicting a response to treatment, and/or monitoring treatment of any hematopoietic and solid tumor cancers excluding cancers affecting the retina and breast cancer (collectively, the Field).

The License Agreement allows us to develop and sell any gene, gene-product or protein-based LDTs based on HDC s technology in the Field and provides for sublicensing rights and the assignment of the License Agreement, in whole or in part, in our discretion. The License Agreement further provides us with access to certain HDC personnel and consulting resources in the fields of mathematics and in genetic and molecular test development. The licensed technology also includes, among other things, certain tests, algorithms and computer software which have already been developed by HDC. Initially, we intend to focus on developing prostate, pancreatic, and colon cancer LDTs. In addition, we plan to develop interpretation software that will help to automate the analysis of cytogenetics and flow cytometry tests.

Strategic Supply Agreement with Abbott Molecular

In July 2009, we entered into a Strategic Supply Agreement with Abbott Molecular, Inc., a wholly-owned subsidiary of Abbott Laboratories. Under the terms of this agreement, NeoGenomics has the rights to develop and launch three laboratory developed tests based on intellectual property developed and/or licensed by Abbott. We launched the first of these tests in February 2010, a FISH test for the diagnosis of melanoma (called Melanosite™), and we are currently working on other potential new FISH assays under the agreement. In conjunction with the Strategic Supply Agreement, Abbott Laboratories, Inc., the parent company of Abbott Molecular, purchased 3.5 million shares of our common stock, which represented an approximately 8.0% stake in NeoGenomics outstanding common stock at December 31, 2011.

Sales and Marketing

We continue to grow our testing volumes and revenue due to our investment in sales and marketing. As of January 31, 2012, NeoGenomics sales and marketing team totaled 41 individuals, including 20 Territory Business Managers (sales representatives), one Managed Care Specialist, three Regional Business Unit Directors (regional managers), six marketing and management professionals and 11 customer care specialists.

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Our revenue, requisition and test metrics for the year ended December 31, 2011 and 2010 are as follows:

	FY 2011	FY 2010	% Change
Client Requisitions Received (Cases)	49,235	38,443	28.1%
Number of Tests Performed	76,288	57,332	33.1%
Average Number of Tests/Requisition	1.55	1.49	4.0%
Total Testing Revenue	$ 43,484,000	$ 34,371,000	26.5%
Average Revenue/Requisition	$ 883	$ 894	(1.2)%
Average Revenue/Test	$ 570	$ 600	(4.9)%

We experienced 26.5% year-over-year revenue growth to $43.5 million in 2011 from $34.4 million in 2010 as a result of a broad based increase in the number of new clients, including one new client with over 30 locations, and the further penetration of existing clients in 2011. Our average revenue/test decreased approximately 5% to approximately $570 in 2011 from $600 in 2010 as a result of: a) an approximately 50% decrease in the average reimbursement for bladder cancer FISH testing as a result of Medicare and several insurance carriers reducing reimbursement beginning in January 2011, b) a 1.75% decrease in reimbursement for all Medicare tests covered under the clinical lab fee schedule which affected all our Cytogenetics and Molecular tests and c) the Medicare servicing agent in the Southeast reduced the maximum allowable number of markers reimbursable for flow cytometry testing in late 2010 and the California Medicare servicing agent followed suit in June 2011.

Within the subspecialty field of hematopathology, our scientific expertise and service offerings allow us to be able to perform multiple tests on each specimen received if ordered by our physician clients. Many physicians believe that a comprehensive approach to the diagnosis and prognosis of blood and lymph node disease to be the standard of care throughout the country. As the average number of tests per requisition changes, the average revenue per requisition changes accordingly.

Seasonality

The majority of our testing volume is dependent on patients being treated by hematology/oncology professionals and other healthcare providers. The volume of our testing services generally declines modestly during the summer vacation season, year-end holiday periods and other major holidays, particularly when those holidays fall during the middle of the week. In addition, the volume of our testing tends to decline due to adverse weather conditions, such as excessively hot or cold spells, heavy snow, hurricanes or tornados in certain regions, consequently reducing revenues and cash flows in any affected period. Therefore, comparison of the results of successive periods may not accurately reflect trends for future periods.

Competition

The genetic and molecular testing niche of the laboratory testing industry is highly competitive and, given the opportunities in this industry, we expect it to become even more competitive. There has been a high pace of consolidation in the industry in recent years and several large players have entered the market. In late 2010 and early 2011, two of our closest competitors were acquired. General Electric Healthcare Services purchased Clarient, Inc. and Novartis, A.G. purchased Genoptix, Inc. Competitive factors in genetic and molecular testing generally include the reputation of the laboratory, range of services offered, pricing, convenience of sample collection and pick-up, quality of analysis and reporting, medical staff, timeliness of delivery of completed reports (i.e. turnaround times) and post-reporting follow-up for clients.

Our competitors in the United States are numerous and include major national medical testing laboratories, in-house physician laboratories and hospital laboratories. Many of these competitors have greater financial resources and production capabilities. These companies may succeed in developing service offerings that are more effective than any that we have or may develop, and may also prove to be more successful than we are in marketing such services. In addition, technological advances or different approaches developed by one or more of our competitors may render our service offerings obsolete, less effective or uneconomical.

We intend to continue to gain market share by offering industry-leading turnaround times, a broad service menu, high-quality test reports, new proprietary tests, enhanced post-test consultation services, and the personal attention from our direct sales force. In addition, we believe our flexible reporting solutions, which enable clients to report out customized results in a secure, real-time environment, will allow us to continue to gain market share.

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Suppliers

The Company orders its laboratory and research supplies from large national laboratory supply companies such as Abbott Laboratories, Fisher Scientific, Invitrogen, Cardinal Health, Ventana and Beckman Coulter. Other than as discussed below, we do not believe any disruption from any one of these suppliers would have a material effect on our business. The Company orders the majority of its FISH probes from Abbott Laboratories. As a result of Abbott s dominance of this marketplace and the absence of any meaningful competitive alternatives, if there was a disruption in the supply of these probes, and we did not have inventory available, it could have a material effect on our business. This risk cannot be completely offset due to the fact that Abbott has patent protection which limits other vendors from supplying many of these probes.

Dependence on Major Clients

We currently market our services to pathologists, oncologists, urologists, other clinicians, hospitals and other clinical laboratories. During 2011, we performed 76,288 individual tests. For the years ended December 31, 2011 and 2010, one new client with multiple locations accounted for 11.3% and 1.2% respectively, of total revenue. All others were less than 5% of total revenue individually.

Payer Mix

In 2011, approximately 43% of our revenue was derived from Medicare and other Government payers, 29% from commercial insurance companies, 26% from clients such as hospitals and other reference laboratories, 1% from all others including patients, and the remainder in general year-end accruals. In 2010, approximately 46% of our revenue was derived from Medicare and other Government payers, 30% from commercial insurance companies, 23% from clients such as hospitals and other reference laboratories, and 1% from all others including patients and general year-end accruals.

Trademarks

The NeoGenomics name and logo has been trademarked with the United States Patent and Trademark Office. We have also trademarked the brand names NeoFISH, NeoFlow, MelanoSITE, and DermFISH.

About Us

Our principal executive offices are located at 12701 Commonwealth Drive, Suite 5, Fort Myers, Florida 33913. Our telephone number is (239) 768-0600. Our website can be accessed at www.neogenomics.com.

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THE OFFERING

This prospectus relates to the offer and sale of up to 3,013,254 shares of our common stock by the selling stockholders described below.

Aspen Select Healthcare, LP (Aspen), which intends to sell up to 2,130,364 shares of common stock previously issued and sold by the Company to Aspen on April 15, 2003 (the 2003 Aspen Placement). Aspen received registration rights with respect to these shares and therefore, such shares are being registered hereunder.

Mary S. Dent, the spouse of Dr. Michael Dent, who is our founder, who intends to sell up to 553,488 shares of common stock previously issued and sold by the Company to Dr. Dent as founder shares. Such shares were subsequently transferred to Mary Dent in February 2007. Dr. Dent received registration rights with respect to these shares and therefore, such shares are being registered hereunder.

Those shareholders other than Aspen and Mary Dent who are set forth in the section herein entitled Selling Stockholders who intend to sell up to an aggregate of 329,402 shares of common stock which they received in a distribution from Aspen in September 2007. All of such shares were originally purchased by Aspen in the 2003 Aspen Placement. Aspen received registration rights with respect to these shares and has assigned such rights to these selling stockholders and therefore, such shares are being registered hereunder.

Please refer to Selling Stockholders beginning on page 25.

The Company is not selling any shares of common stock in this offering and therefore will not receive any proceeds from this offering. All costs associated with this registration will be borne by the Company. The prices at which the selling stockholders may sell the shares will be determined by the prevailing market price for the shares or in negotiated transactions.

Our common stock is quoted on the Over-The-Counter Bulletin Board (the QTCBB) and the OTCQB under the symbol NGNM . On April 20, 2012, the last reported sale price of our common stock on the Over-The-Counter Bulletin Board was $1.65 per share.

Common Stock Offered	3,013,254 shares by selling stockholders
Offering Price	Market price
Common Stock Currently Outstanding	44,851,013 shares as of March 31, 2012
Use of Proceeds	We will not receive any proceeds of the shares offered by the selling stockholders. See Use of Proceeds .
Risk Factors	The securities offered hereby involve a high degree of risk. See Risk Factors beginning on page 12 for a discussion of these risks.
OTCBB and OTCQB Symbol	NGNM

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SUMMARY CONSOLIDATED FINANCIAL INFORMATION

The Summary Consolidated Financial Information set forth below was excerpted from the Company s Annual Report on Form 10-K for the year ended December 31, 2011 as filed with the SEC.

Statement of Operations Data (in thousands except per share data)

	For the year ended December 31,	
	2011	**2010**
NET REVENUE	$ 43,484	$ 34,371
COST OF REVENUE	24,056	18,588
GROSS MARGIN	19,428	15,783
OPERATING EXPENSES		
General and administrative	12,874	11,267
Sales and marketing	6,963	7,479
Total selling, general and administrative expenses	19,837	18,746
LOSS FROM OPERATIONS	(409)	(2,963)
OTHER INCOME/(EXPENSE):		
Other income		370
Interest expense	(768)	(710)
Other income / (expense) net	(768)	(340)
NET LOSS	$ (1,177)	$ (3,303)
NET LOSS PER SHARE		
Basic and diluted	$ (0.03)	$ (0.09)
WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING		
Basic and diluted	42,758,252	37,328,940

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Balance Sheet Data (in thousands except share data)

	As of	
	December 31, 2011	December 31, 2010
Assets:		
Cash and cash equivalents	$ 2,628	$ 1,097
Restricted cash	500	500
Accounts receivable (net of allowance for doubtful accounts of $2,150 and $1,459, respectively)	7,894	5,236
Inventories	1,202	887
Other current assets	954	1,018
Total current assets	13,178	8,738
Property and equipment (net of accumulated depreciation of $6,653 and $4,568 respectively)		