NEOGENOMICS INC Form POS AM April 30, 2014 Table of Contents

As filed with the U.S. Securities and Exchange Commission on April 30, 2014

Registration No. 333-166526

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 8731 74-2897368

(State or Other Jurisdiction of (Primary Standard Industrial (I.R.S. Employer Identification

No.)

Incorporation or Organization) Classification Code Number)

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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 x

Non-accelerated filer " (Do not check if a smaller reporting company) Smaller reporting company "

EXPLANATORY NOTE

The Registrant s Registration Statement on Form S-1 (File No. 333-166526) originally filed with the Securities and Exchange Commission on May 5, 2010 was declared effective on May 13, 2010 and subsequently amended by Post-Effective Amendment No. 1 which was originally filed with the Securities and Exchange Commission on March 31, 2011 and declared effective on April 13, 2011 and Post-Effective Amendment No. 2 which was originally filed with the Securities and Exchange Commission on April 27, 2012 and declared effective on May 11, 2012 and Post Effective Amendment No. 3 which was originally filed with the Securities and Exchange Commission on April 30, 2013 and declared effective on May 13, 2013 (together, 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, 2013 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 30, 2014

PROSPECTUS

NEOGENOMICS, INC.

7,295,896 Shares of Common Stock

This prospectus relates to the sale of up to 7,295,896 shares of the common stock, par value \$0.001 per share, of NeoGenomics, Inc. (unless the context otherwise requires, referred to individually as the Parent Company or, collectively with all of its subsidiaries, as the Company or NeoGenomics or we us, or our by the selling stockholders on page xx.

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 listed on the NASDAQ Capital Market under the symbol $\,$ NEO $\,$. On April 15, 2014, the last reported sale price of our common stock on the NASDAQ Capital Market was \$3.15 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 <u>Risk Factors</u> beginning on page 16 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 April 30, 2014.

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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, or, or we, or, 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 services. 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 answer diagnostic, prognostic and predictive questions in the treatment of hematological malignancies and solid tumors;
- 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. FISH helps bridge abnormality detection between the chromosomal and DNA sequence levels;
- 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 the molecular level. Molecular testing employs multiple technologies including bi-directional Sanger sequencing analysis, DNA fragment length analysis, real-time polymerase chain reaction (RT-PCR) RNA analysis and Next-Generation sequencing.

All of these testing services are widely utilized to determine 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, viewing the cells, 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 our medical staff provides 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, 2013, all of our services were provided within the United States and all of our assets were located 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

Genetic and Molecular testing.

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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 decade, 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 400 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) every year more and more genes and genomic pathways are implicated in the development and/or clinical course of cancer; (ii) 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; 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 \$5-6 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: Grow, Innovate, Diversify and Get Lean

<u>Grow</u>

Over the last ten years we have grown revenue and test volume at a compound annual growth rate of approximately 70% per year, by delivery uncompromising quality and exceptional service to our clients. All of this growth was organic growth.

We plan to continue growing organically by providing 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 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 services, and our tech-only service offering allows these larger clinician practices to also participate in the diagnostic process by performing the professional interpretation services on testing they do not perform in their own laboratory.

We will also look to grow our business through mergers or acquisitions if the right opportunity becomes available. We are focused on opportunities that would be complementary to our menu of services and would be accretive to our earnings in a short timeframe.

Innovate

We are committed to being an innovative leader in oncology testing, and thus we are also focused on innovation. Our goal is to develop new assays to help physician clients better manage their patients and to enable them to practice evidence-based medicine tailored specifically for each of their patients. During 2013, we introduced approximately 40 new molecular tests and cancer profiles to our molecular testing menu. Our clients have been very receptive to our new molecular offerings and we believe that we have the most comprehensive molecular test menu of any laboratory in the United States. We are also seeing increasing interest in our molecular menu from several Pharmaceutical firms. Molecular testing is a rapidly growing part of oncology testing, which allows us to determine specific subtypes of cancer, as well as predict responses to certain therapeutics by isolating certain genetic mutations in DNA and RNA. We also introduced a number of NeoTYPETM panels that combine multiple molecular tests into panels targeting specific types of cancer to help pathologists and oncologists determine cancer subtypes on difficult cases. We use bi-directional sequencing analysis which we believe is superior to many of the molecular tests being offered by our competitors because we are able to pick up mutations that other methods would not detect. In addition, we are finalizing plans to launch next generation sequencing capabilities for clinical use in March 2014. We believe that we are well-positioned to capitalize on this rapidly growing area.

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We are working on developing a proprietary NeoSCORETM Prostate cancer test that is performed on blood plasma and urine rather than on prostate tissue biopsies. There are two goals for this test, to diagnose the presence of cancer in patients with BPH (Benign prostatic hyperplasia) and to distinguish high-grade from low-grade cancer in patients with prostate cancer. We completed a preliminary patient study in June 2013, and the results were recently published in the Genetic Testing and Molecular Biomarkers journal. In addition, we recently completed a follow up study with additional patient samples which confirmed the published preliminary data. We are also expanding our work to include patient samples from outside the United States. While further validation work needs to be completed, we continue to be excited about the potential for this test. We are planning a limited launch of our NeoSCORE test in the second quarter of 2014 and a full launch later in the year.

Our 10 color flow cytometry service offering has been very well received as it provides approximately 60% more data than previous flow cytometry platforms and allows for better operating efficiencies. In addition, over the last year we have vastly improved our immunohistochemistry offering, brought up a new digital imaging platform and launched several new FISH tests including a very promising new test to aid in the diagnosis of Barrett s Esophagus that we are offering on a semi-exclusive basis. We expect these new tests to drive substantial growth in the future. We also expect to continue to make investments in R&D that will allow us to commercialize a number of new and innovative genetic tests as we move forward.

In January 2012, we entered into a license agreement with Health Discovery Corporation (HDC) to license certain Support Vector Machine / Recursive Feature Elimination technology (SVM-RFE). We believe SVM-RFE techniques will allow us to combine and analyze data from genomics, proteomics and digital imaging to develop practical, cost-effective and reliable new assays and other proprietary tests. Using this technology, we believe we will be able to offer a whole line of advanced tests that will help physicians better manage the treatment options for cancer patients. We have prioritized the development of better tests for the diagnosis and prediction of clinical behavior in prostate cancer, pancreatic cancer, breast cancer, leukemia/lymphoma and other solid tumors as part of the License Agreement. We intend to launch a test for prostate cancer in 2014. We are also developing a Cytogenetics Interpretation System using the SVM technology that we believe will result in substantial cost savings and open up the opportunity for sub-licensing revenue in future years.

Diversify

Our third focus as we enter 2014 is diversification. In November 2013, we announced an exclusive alliance with Covance Central Laboratories (Covance) to provide comprehensive anatomic pathology, histology and specialty laboratory testing services for clinical trials. Covance is the largest contract research organization servicing the needs of the pharmaceutical industry. Through this alliance, Covance s clients will gain access to fully integrated anatomic pathology and histology (APH) services, including immunohistochemistry (IHC), fluorescence in-situ hybridization (FISH) and molecular testing. Covance will establish a laboratory at NeoGenomics Fort Myers, Florida facility and together with NeoGenomics, will provide a full range of APH, tissue based biomarkers and other specialty testing services. The companies will then expand joint capabilities globally at Covance s central laboratory locations in Shanghai, China; Geneva, Switzerland; and Singapore. As part of the alliance, Covance will have access to NeoGenomics extensive medical and scientific networks, which includes more than 500 pathologists. NeoGenomics gains access to Covance s broad market reach, established client relationships, and extensive clinical trials experience. We believe this alliance will provide seamless global testing services supporting oncology and companion diagnostics strategies for biopharmaceutical firms around the world. We are currently expanding our facility in Fort Myers, Florida to provide the capacity to grow this partnership with Covance and to provide quality testing for global clinical trials. NeoGenomics has ongoing clinical trials with international pharmaceutical firms and working along with Covance will allow us to work on trials on a global basis.

Get Lean

We are focused on becoming more efficient and reducing our cost per test. Our best practice teams work with our information technology teams to make improvements in efficiencies to our lab processes. We are using information systems and technology to move NeoGenomics further along the path of being a fully digital lab, that uses on-line ordering, bar coding, specimen tracking, and other tools to create a streamlined, seamless, and efficient lab. We are also currently undertaking a facility upgrade to our Fort Myers, Florida lab location and we expect this upgrade to increase our efficiencies and reduce our cost per test. As a result of these efforts, our productivity as measured by the number of tests performed per laboratory employee has increased approximately 40% and our average cost of goods sold per test has decreased by 22% since 2010. This has more than offset the 19% reduction in average revenue per test during this period. As a result our gross margin has increased from 45.9% in 2010 to 47.8% in 2013.

The following graph shows our gross margin percentage for each fiscal year from 2010 to 2013, the cumulative change in average revenue per test since the year ended December 31, 2009 for those years and the cumulative change in productivity, as measured by the number of tests performed per laboratory employee, since the year ended December 31, 2009 for those years:

The following chart shows the improvements we have made annually in reducing all of our costs and increasing our Adjusted EBITDA over the last four years:

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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 turnaround time for our cytogenetics testing services, our average 3-4 day turnaround time for FISH testing services, our 5-7 day turnaround time for molecular testing and our average 1 day turnaround 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 turnaround 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 employ several other full-time M.D.s and Ph.Ds.

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. 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 NeoFISHTM, NeoFLOWTM 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 or our medical team can serve as a backup to our clients who need overflow or weekend coverage. 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.

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 better interpret technical data and render their diagnosis. 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.

Superior Testing Platforms

We use some of the most advanced testing platforms in the laboratory industry. The use of bi-directional sequencing in our molecular testing allows us to detect multiple mutations which can be missed with single point mutation analysis. Many laboratories rely on more limited kits which only look at single points on a gene. We also expect to launch next generation sequencing in 2014. Our automated FISH and Cytogenetics tools allow us to deliver the highest quality testing to our clients.

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 NeoFISHTM and NeoFLOWTM 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.

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, Central and West). These sales representatives all utilize our custom Customer Relationship Management System 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.

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 of the United States 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, high quality, test results. We intend to continue to develop and open new laboratories and/or expand our current facilities as market situations dictate and business opportunities arise.

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.

We are working with the technology we licensed from HDC to develop new proprietary cancer tests, streamline our workflow, and reduce our costs.

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Sales and Marketing

We continue to grow our testing volumes and revenue due to our investment in sales and marketing. As of March 31, 2014, NeoGenomics—sales and marketing team totaled 50 individuals, including 21 Territory Business Managers (sales representatives), 3 Business Development Specialists, 1 Product Specialist, 1 Managed Care Specialist, 3 Regional Business Unit Directors (regional managers), 10 marketing and management professionals and 11 customer care specialists.

Our revenue, requisition and test metrics for the years ended December 31, 2013, 2012 and 2011 were as follows:

	FY	2013	FY	2012	FY	2011
Client Requisitions Received (Cases)		88,431		73,773		49,235
Number of Tests Performed	1	37,317]	114,606		76,288
Average Number of Tests/Requisition		1.55		1.55		1.55
Total Testing Revenue	\$ 66,4	67,000	\$ 59,8	367,000	\$43,4	184,000
Average Revenue/Requisition	\$	752	\$	812	\$	883
Average Revenue/Test	\$	484	\$	522	\$	570

Our approximate 11% year-over-year revenue growth during 2013 was a result of a broad based increase in the number of new clients and increases related to additional practices for one large client with approximately 50 locations. Testing volumes grew approximately 20% in 2013 while average revenue per test declined approximately 7% primarily as a result of the expiration of the TC Grandfather clause. As a result of this regulatory change, effective July 1, 2012, we were no longer able to bill Medicare directly for the technical component of certain hospital in-patient and out-patient laboratory tests and now must bill our hospital clients directly for such services, and are often reimbursed at a lower rate than what we were previously receiving from Medicare. Average revenue per test and per requisition was also modestly impacted by an increasing proportion of lower average revenue molecular and immunohistochemistry tests in our test mix. Our approximate 38% year-over-year revenue growth during 2012 was a result of a broad based increase in the number of new clients, including one new client with approximately 50 locations, and the further penetration of existing clients in 2012. Our average revenue/test decrease of approximately 8% in 2012 was primarily attributable to the expiration of the TC Grandfather clause as described above.

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 new large players have entered the market. 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, hospital laboratories and in-house physician 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 tests including proprietary ones, 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.

Suppliers

The Company orders its laboratory and research supplies from large national laboratory supply companies such as Abbott Laboratories, Fisher Scientific, Life Technologies, Metasystems, 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. If there was a disruption in the supply of these FISH 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 some of these probes.

Dependence on Major Clients and Geographies

We currently market our services to pathologists, oncologists, urologists, other clinicians, hospitals and other clinical laboratories. During 2013, we maintained our relationship with a large oncology practice with multiple office locations. The revenues from this customer represented as percentage of our total revenue is as follows:

	FY 2013	FY 2012	FY 2011
Largest customer as a % of Total Revenue	15.8%	14.9%	11.3%

This client has provided us with a notice of termination of our contract with them effective May 14, 2014. This client has informed us that it plans to internalize a large portion of the tests we currently process for them.

All other clients were less than 5% of total revenue individually.

Our revenue derived from the state of Florida represented as percentage of our total revenue is as follows:

	FY 2013	FY 2012	FY 2011
State of Florida as a % of Total Revenue	30.6%	33.6%	32.9%

Payer Mix

The following table reflects our estimate of the breakdown of net revenue by type of payer for the fiscal years ended December 31, 2013, 2012, and 2011:

	2013	2012	2011
Medicare and other government	25%	36%	43%
Commercial Insurance	25%	29%	29%
Client	43%	33%	26%

Patient and year-end accrual	7%	2%	2%
Total	100%	100%	100%

The trend of decreasing Medicare and other government revenue shown above primarily relates to the expiration of the TC Grandfather clause on July 1, 2012. This resulted in the requirement that NeoGenomics bill clients (Hospitals) for the technical component of inpatient and outpatient testing.

Trademarks

The NeoGenomics name and logo has been trademarked with the United States Patent and Trademark Office. We have also trademarked or have applications pending for the brand names NeoFISH, NeoFlow, NeoSITE, NeoArray, NeoType, MelanoSITE, NeoSCORE and NeoLINK. We have also trademarked the marketing slogans, When time matters and results count and Time matters, results count.

Insurance

We maintain professional liability insurance. We believe that our present insurance is sufficient to cover currently estimated exposures, but we cannot assure that we will not incur liabilities in excess of the policy limits. In addition, although we believe that we will be able to continue to obtain adequate insurance coverage, we cannot assure that we will be able to do so at acceptable cost.

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 sale of up to 7,295,896 shares of our common stock, par value \$0.001 per share by the selling stockholders as described below:

The investors set forth in the section herein entitled Selling Stockholders who intend to sell up to 856,316 shares of common stock from the exercise of warrants previously issued by the Company to such investors in August 2007 pursuant to a private equity transaction (the 2007 Private Placement), all of which were exercised in August 2009, and certain other shares issued to such investors in September 2008 in connection with penalties incurred under the registration rights agreement executed in conjunction with the 2007 Private Placement. The investors received registration rights with respect to the warrant and penalty shares and therefore, such shares are being registered hereunder;

Certain members of the Company s board of directors as set forth in the section herein entitled Selling Stockholders who intend to sell up to 213,244 shares of common stock acquired during 2012 by the exercise of warrants. Such warrants were issued by the Company to such directors on June 6, 2007. The shares are being registered hereunder;

Aspen Select Healthcare, LP (<u>Aspen</u>) intends to sell up to 2,007,991 shares of common stock previously issued and sold by the Company to Aspen on April 15, 2003 and up to 3,050,000 shares of common stock acquired by Aspen pursuant to a warrant exercise in January 2011. Such warrants were issued by the Company to Aspen in January and March 2006 in connection with various financings. Aspen received registration rights with respect to the private placement shares and the shares underlying the warrants and therefore, such shares are being registered hereunder;

Mary S. Dent and the Mary S. Dent Gifting Trust, intend to sell up to 333,312 and 600,000 shares of common stock, respectively, previously issued and sold by the Company to Dr. Michael Dent, our founder and member of the Board of Directors, as founder shares. Such shares were subsequently transferred to Mary Dent and Mary S. Dent Gifting Trust in February 2007. Dr. Dent received registration rights with respect to these shares and therefore, such shares are being registered hereunder;

Aspen Capital Advisors, LLC intends to sell up to 26,251 shares of common stock acquired as a result of the exercise of a warrant granted to it for consulting services related to our June 2007 private placement. Aspen Capital Advisors received registration rights with respect to the shares underlying this warrant and therefore, such shares are being registered hereunder;

Dr. Michael Dent and Steven Jones intend to sell up to 72,992 and 27,298 shares of common stock, respectively, which were acquired pursuant to the exercise of warrants in January 2011. Dr. Dent and Mr. Jones received registration rights with respect to the shares underlying these warrants and therefore, such shares are being registered hereunder;

Aspen Opportunity Fund intends to sell up to 83,333 shares of common stock acquired in February 2014 upon the exercise of a warrant granted to it as part of a lease facility in February 2009. Aspen Opportunity Fund received registration rights with respect to the shares underlying this warrant and therefore, such shares are being registered hereunder; and

George O Leary intends to sell up to 10,571 shares of common stock acquired in a cashless net exercise of a warrant issued to Mr. O Leary in March 2007 for consulting services performed for the benefit of NeoGenomics. The shares are being registered hereunder.

Hawk Associates, Inc. intends to sell up to 14,588 shares of common stock acquired pursuant to a warrant exercise in February 2011. The shares are being registered hereunder.

Please refer to Selling Stockholders beginning on page 28.

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.

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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 listed on the NASDAQ Capital Market (the <u>NASDAQ</u>) under the symbol NEO . On April 15, 2014, the last reported sale price of our common stock on the NASDAQ was \$3.15 per share.

Common Stock Offered 7,295,896 shares by selling stockholders

Offering Price Market price

Common Stock Currently Outstanding 49,676,041 shares as of April 15, 2014.

Use of ProceedsWe will not receive any proceeds of the shares offered

by the selling stockholders. See Use of Proceeds .

Risk FactorsThe securities offered hereby involve a high degree of

risk. See Risk Factors .

NASDAQ Symbol NEO

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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, 2013 as filed with the SEC.

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

	For	For the years ended		
]	December 31,		
	2013	2012	2011	
NET REVENUE	\$ 66,467	\$ 59,867	\$43,484	
COST OF REVENUE	34,730	33,031	24,056	
GROSS MARGIN	31,737	26,836	19,428	
OPERATING EXPENSES				
General and administrative	17,397	15,843	12,331	
Research and development	2,440	2,281	543	
Sales and marketing	8,726	7,501	6,963	
Total selling, general and administrative expenses	28,563	25,625	19,837	
INCOME (LOSS) FROM OPERATIONS	3,174	1,211	(409)	
OTHER INCOME (EXPENSE) NET	(989)	(1,146)	(768)	
NET INCOME (LOSS) BEFORE TAXES	2,185	65	(1,177)	
INCOME TAXES	152			
NET INCOME (LOSS)	\$ 2,033	\$ 65	\$ (1,177)	