NEOGENOMICS INC
Form S-3
June 17, 2016

As filed with the Securities and Exchange Commission on June 17, 2016

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

NeoGenomics, Inc.

(Exact name of registrant as specified in its charter)

Nevada	**74-2897368**
(State or other jurisdiction of incorporation or organization)	**(IRS Employer Identification Number)**

12701 Commonwealth Drive, Suite 9

Fort Myers, Florida 33913

(239) 768-0600

(Address including zip code, and telephone number, including area code, of registrant s principal executive offices)

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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. ¨

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, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. þ

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) 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(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 registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. ¨

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. ¨

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 definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

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

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	**Amount to be registered/ proposed maximum offering price per unit/proposed maximum aggregate offering price**	**Amount of registration fee**
Common Stock, par value $0.001 per share	(1)	
Convertible Preferred Stock, par value $0.001 per share	(1)	
Warrants(2)	(1)	
Total Registration Fee:	$200,000,000(3)	$20,140.00(4)

(1) An unspecified number of securities is being registered as may from time to time be offered at unspecified prices.
(2) Includes warrants to purchase common stock, convertible preferred stock or any combination of the foregoing.
(3) Estimated solely for the purpose of calculating the registration fee. The securities registered also include such indeterminate number of shares of common stock and preferred stock as may be issued upon conversion of or

exchange for convertible preferred stock, upon exercise of warrants or pursuant to the antidilution provisions of any such securities. In addition, pursuant to Rule 416 under the Securities Act, the shares being registered hereunder include such indeterminate number of shares of common stock and convertible preferred stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions. The aggregate maximum offering price of all securities issued by the registrant pursuant to this registration statement will not exceed $200,000,000.

(4) The registration fee has been calculated in accordance with Rule 457(o) under the Securities Act of 1933, as amended. Pursuant to Rule 457(p) under the Securities Act, a portion of the registration fee for the registration of the securities to be registered pursuant to this registration statement is offset by $2,037.34 of the registration fee previously paid or deemed to be paid by the registrant under Registration Statement No. 333-186067 which was declared effective on February 12, 2013.

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 the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated June 17, 2016.

PROSPECTUS

NeoGenomics, Inc.

$200,000,000

Common Stock

Convertible Preferred Stock

Warrants

We may offer and sell up to $200,000,000 in the aggregate of the securities identified above from time to time in one or more offerings. This prospectus provides you with a general description of the securities.

Each time we offer and sell securities, we will provide a supplement to this prospectus that contains specific information about the offering and, if applicable, the amounts, prices and terms of the securities. The supplement may also add, update or change information contained in this prospectus with respect to that offering. You should carefully read this prospectus and the applicable prospectus supplement before you invest in any of our securities.

We may offer and sell the securities described in this prospectus and any prospectus supplement to or through one or more underwriters, dealers and agents, or directly to purchasers, or through a combination of these methods. If any underwriters, dealers or agents are involved in the sale of any of the securities, their names and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. See the sections of this prospectus entitled About this Prospectus and Plan of Distribution for more information. No securities may be sold without delivery of this prospectus and the applicable prospectus supplement describing the method and terms of the offering of such securities.

INVESTING IN OUR SECURITIES INVOLVES RISKS. SEE THE RISK FACTORS ON PAGE 9 OF THIS PROSPECTUS AND ANY SIMILAR SECTION CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT CONCERNING FACTORS YOU SHOULD CONSIDER BEFORE INVESTING IN OUR SECURITIES.

Our common stock is listed on the NASDAQ Capital Market under the symbol NEO. On June 16, 2016, the last reported sale price of our common stock on the NASDAQ Capital Market was $7.90 per share.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2016.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission (the SEC) using a shelf registration process. By using a shelf registration statement, we may sell securities from time to time and in one or more offerings up to a total dollar amount of $200,000,000 as described in this prospectus. Each time that we offer and sell securities, we will provide a prospectus supplement to this prospectus that contains specific information about the securities being offered and sold and the specific terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement, you should rely on the prospectus supplement. Before purchasing any securities, you should carefully read both this prospectus and the applicable prospectus supplement, together with the additional information described under the heading Incorporation by Reference.

We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We will not make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus and the applicable prospectus supplement to this prospectus is accurate as of the date on its respective cover, and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates.

For investors outside the United States: We have not done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus outside the United States.

NeoGenomics is our registered trademark. Any other trademarks, registered marks and trade names appearing in this prospectus or the documents incorporated by reference herein are the property of their respective holders. All other trademarks, trade names and service marks appearing in this prospectus or the documents incorporated by reference herein are the property of its respective holders.

THE COMPANY

This summary highlights selected information contained elsewhere, or incorporated by reference, in this prospectus. This summary does not contain all of the information that you should consider before deciding to invest in our securities. You carefully should read the entire prospectus, any accompanying prospectus supplement and any related free writing prospectus, including the risks of investing in our securities discussed under the heading Risk Factors contained herein and in any accompanying prospectus supplement and any related free writing prospectus, and under a similar heading in other documents that are incorporated by reference into this prospectus. You also should carefully read the information incorporated by reference into this prospectus, including our financial statements and the exhibits to the registration statement of which this prospectus is a part. Unless the context otherwise requires, NeoGenomics, Inc. is referred to herein, collectively with all of its subsidiaries, as the Company , NeoGenomics , or we , us , or our .

Overview

NeoGenomics operates a network of cancer-focused genetic testing laboratories in the United States. Our mission is to improve patient care through exceptional genetic and molecular testing services. Our vision is to become the World s leading cancer testing and information company by delivering uncompromising quality, exceptional service and innovative solutions.

On December 30, 2015, we acquired Clarient, Inc. (Clarient) from GE Medical Holding AB, a subsidiary of General Electric Company, for approximately $249.5 million (the Acquisition), consisting of (i) cash consideration of approximately $74.0 million, which included an approximately $6.7 million estimated working capital adjustment and adjustments for estimated cash on hand and estimated indebtedness of Clarient on the closing date, (ii) 15,000,000 shares of our common stock, and (iii) 14,666,667 shares of our series A convertible preferred stock (the Series A Preferred Stock).

We believe the Acquisition will allow us to broaden our offering of innovative cancer diagnostic tests to hospitals and physicians across the United States and to accelerate growth in the worldwide market for pharmaceutical clinical trials and research. The following discussion of our business includes the effects of the acquisition of Clarient.

As of December 31, 2015, we had laboratory locations in Ft. Myers and Tampa, Florida; Aliso Viejo, Fresno, Irvine, and West Sacramento, California; Houston, Texas and Nashville, Tennessee, and currently offer the following types of genetic and molecular testing services:

a) Cytogenetics the study of normal and abnormal chromosomes and their relationship to disease. It involves looking at the chromosome structure to identify changes from patterns seen in normal chromosomes. Cytogenetic studies are often utilized to answer diagnostic, prognostic and predictive questions in the treatment of hematological malignancies.

b) Fluorescence In-Situ Hybridization (FISH) 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. The technique uses fluorescent probes that bind to only those parts of the chromosome with which they show a high degree of sequence similarity. Fluorescence microscopy is used to visualize the fluorescent probes bound to the chromosomes. FISH can be used to help identify a number of gene alternations, such as amplification, deletions, and translocations.

c) Flow cytometry 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 analyzed as they flow in a fluid stream through a beam of light. The properties measured in these antibodies include the relative size, relative granularity or internal complexity, and relative fluorescence intensity. These fluorescent antibodies bind to specific cell surface antigens and are used to identify malignant cell populations. Flow cytometry is typically performed in diagnosing a wide variety of leukemia

and lymphoma neoplasms. Flow cytometry is also used to monitor patients through therapy to determine whether the disease burden is increasing or decreasing, otherwise known as minimal residual disease monitoring.

d) Immunohistochemistry (IHC) and Digital Imaging Refers to the process of localizing proteins in cells of a tissue section and relies on the principle of antibodies binding specifically to antigens in biological tissues. IHC is widely used in the diagnosis of abnormal cells such as those found in cancerous tumors. 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. Digital imaging allows clients to see and utilize scanned slides and perform quantitative analysis for certain stains. Scanned slides are received online in real time and can be previewed often a full day before the glass slides can be shipped back to clients.

e) Molecular testing a rapidly growing cancer testing methodology that focuses 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 DNA fragment length analysis, real-time polymerase chain reaction RNA analysis, bi-directional Sanger sequencing analysis, and Next-Generation Sequencing (NGS).

f) Pathology consultation services provided for clients in which our pathologists review surgical samples on a consultative basis. NeoGenomics is one of a few laboratories in the country with an electron microscopy lab which enables us to analyze complex renal cases.

g) BioPharma Services and Clinical Trials services supporting pharmaceutical firms in their drug development programs by supporting various clinical trials and other research initiatives. This growing portion of our business often involves working with the pharmaceutical firms (sponsors) on study design as well as performing the required testing. Our medical team often advises the investigators and works closely with the researchers as specimens are received from the enrolled sites. We have also worked on developing tests that will be used as part of a companion diagnostic to determine patients response to a particular drug. When studies are completed, our clinical trials team will report the data and often provide key analysis and insights back to the sponsors.

Our BioPharma Services and Clinical Trials group provides comprehensive testing services in support of our pharmaceutical clients oncology programs from discovery to commercialization. In biomarker discovery, our aim is to help our customers discover the right content. We help our customers develop a biomarker hypothesis by recommending an optimal platform for molecular screening and backing our discovery tools with the informatics to capture meaningful data. In other pre and non-clinical work, we can use our research and testing platforms to characterize markers of interest. Moving from discovery to development, we help our customers refine their biomarker strategy and, if applicable, develop a companion diagnostic pathway using the optimal technology for large-scale clinical trial testing.

After assay design and validation, we provide laboratory services for large scale clinical trial testing. Whether serving as the single contract research organization or partnering one, our BioPharma Services and Clinical Trials team provides significant technical expertise and works closely with our customers to support each stage of clinical trial development. Each trial we support comes with rapid turnaround time, dedicated project management and Quality Assurance oversight. We have experience in supporting the U.S. Food and Drug Administration (FDA) submissions for companion diagnostics and our pharma services activities are backed by our large clinical laboratory in Aliso Viejo, CA. Our BioPharma Services and Clinical Trials business is supported by full-time sales associates. Our goal

remains focused on helping bring more effective oncology treatments to market through providing world class laboratory services in oncology.

Multiomyx is a hyperplexed immunofluorescence assay technology that has similar staining characteristics as standard immunohistochemical stains, and has the significant advantage that up to 60 multiple proteins can be interrogated from a single FFPE section. Direct comparison of multiple biomarkers is made on the same cell, enabling routine co-expression analysis and identification of cells requiring multiple biomarkers staining. In addition to protein analysis, MultiOmyx is able to integrate genomic data utilizing FISH and NGS on the same sample to generate multiomic phenotypes. Currently, we are only offering Multiomyx services to our BioPharma and research clients.

The clinical 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, hospital pathology labs and academic centers empowers them to expand their breadth of testing and provides a menu of services that we believe matches or exceeds the level of service found in any center of excellence around the world. Community-based pathology practices and hospital pathology labs may order certain testing services on a technical component only (TC or tech-only) basis, which allows them to participate in the diagnostic process by performing the professional component (PC) interpretation services without having to hire laboratory technologists or purchase the sophisticated equipment needed to perform the technical component of the tests. We also support our pathology clients with interpretation and consultative services using our own specialized pathologists for difficult or complex cases and provide overflow interpretation services when requested by clients.

In areas where we do not provide services to community-based pathology practices and/or hospital pathology labs, 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 comprehensive service offering where we perform both the technical and professional components of the tests ordered. However, in certain instances larger clinician practices have begun to internalize pathology interpretation services, and our tech-only service offering allows these larger clinician practices to also participate in the diagnostic process by performing the PC interpretation services on TC testing performed by NeoGenomics.

2016 Focus Areas: Drive a One Company Culture, Integrate, Grow and Innovate

In the past several years, NeoGenomics has experienced rapid growth, substantially all of which has been organic. In December 2015, NeoGenomics completed its acquisition of Clarient from GE Medical. As a result, we expect to more than double in revenue in 2016, and we have focused on several initiatives to continue to build our company to be the World s leading cancer testing and information company.

Create a One Company Culture

We believe our acquisition of Clarient in 2015 presents us with a unique opportunity to create a unified corporate culture that supports our vision, values, and strategic objectives. We believe that by engaging our people, we will be able to retain them and motivate them to meet and exceed the expectations of our clients. Excellent teamwork is required as we implement best practices across our expanded testing disciplines and consolidate operations and facilities.

To create a climate of strong teamwork, we constantly communicate company values as well as developments in our business. We invest substantially in training our employees and are working to become a Best Place to Work company. We conduct surveys and take action based on feedback from employees designed to make our Company a better place for people to work. We also work to develop and implement performance-based incentive plans for every employee at the company as a tool to reinforce our desired behaviors and organizational culture. Creating a single organizational culture based on values and high performance is a critical initiative and key part of our 2016 plan.

Integrate for Success

Combining the best of NeoGenomics and Clarient s testing menus and services is one of our main objectives for 2016. There was overlap in many of our test offerings, and differences between operating processes and procedures. As a result, we are rapidly working to develop a single test menu, a single Laboratory Information System (LIS), a single billing process, a single brand, and a unified service offering.

Our medical and operating teams are working to develop and implement plans to ensure that we are offering the best tests for our clients. Our information technology teams are working to combine the best features from each LIS. Numerous laboratory functional teams are reviewing and revising processes and procedures to select the highest quality and lowest-cost testing platforms. Our sales teams have been combined to form one national team so that each account has one point of contact. In billing, we intend to combine our separate operations using common policies and procedures in each billing location, and will integrate all operations using a common billing information system. While we expect significant synergies from the combination of our two laboratories, we are also focused on retaining all our clients, and our goal is to ensure that we maintain the highest quality service throughout the integration process.

We believe successfully integrating Clarient s and NeoGenomics operations will also allow us to become more efficient and to reduce our cost per test. Our best practice teams are working with our information technology teams to make improvements in efficiencies to our lab processes, including a wide-scale adoption of on-line ordering, bar coding, specimen tracking, and other tools to create a streamlined, seamless, and efficient lab.

In addition, we are working to implement plans to consolidate our Irvine Lab facility into our Aliso Viejo Lab facility, and to further streamline the design and operation of this consolidated laboratory. Historically, improvements in our processes and procedures have had a dramatic impact on our cost structure and have allowed us to absorb reductions in average revenue per test with minimal impact to gross margin. For example, during the years ended December 31, 2015 and 2014, we reduced our average cost of goods sold per test in our legacy NeoGenomics business, which we define to exclude the Path Labs, LLC, doing business as (PathLogic), and Clarient businesses by 8.6% and 4.7%, respectively, versus the comparable periods in 2014 and 2013, and we have identified several other areas in the laboratory where we believe we can drive further automation and efficiencies.

Drive Profitable Growth

Our plans for 2016 include initiatives to continue our strong organic growth performance. We will continue to pursue market share gains by providing high complexity, cancer-related laboratory testing services to hospitals, community-based pathology practices, and clinicians throughout the United States. We currently perform comprehensive analyses for hematopoietic cancers such as leukemia and lymphoma (blood and lymphoid tumors) as well as solid tumors such as breast, lung, colon, and bladder cancers. For hematopoietic cancers, we typically analyze bone marrow aspirate and peripheral blood specimens. For solid tumors cancers, we typically analyze tissue samples or urine.

Our growth over the past several years has been significantly influenced by our sales team performance. Our highly trained sales team has been successful in competing against other laboratories because we have one of the broadest and most comprehensive test menus in our industry. Our sales team is experienced with the scientific complexity and medical necessity of our testing services, and understands the needs of our client pathologists and oncologists. Our sales representatives often become trusted advisors to our clients who rely on them and NeoGenomics, to keep up with the latest developments in the rapidly changing field of molecular genetics. We have also been successful in expanding to new geographies where we did not previously have sales representation and this has helped us bring our service offerings to new clients. We believe the strength of our sales team, comprehensive test menu, and our reputation for high quality services, positions us to further drive growth throughout 2016.

Our growth has also been aided by strong client retention. We believe our high rates of client retention are due to strong service levels, our tech-only service offerings, and a culture of customer focus in which our engaged employees seek to deliver the highest customer satisfaction possible. Our tech-only testing option allows local pathologists to participate with us in the testing process by interpreting results and performing the professional component of certain tests. Our strong service levels are reinforced by a disciplined management process with a system of detailed measures and metrics to ensure committed turnaround times and customer service. By retaining our existing customer base and

bringing in a steady stream of new customers, we have been able to organically grow our business significantly faster than the growth rate of the overall market and we plan to continue these activities in 2016.

We will also look to grow our business through mergers or acquisitions if the right opportunities become available. We are focused on strategic opportunities that would be complementary to our menu of services and would be accretive to our earnings and cash flow in the short to medium timeframe. In 2014 we acquired PathLogic, a provider of specialized anatomic pathology services to hospitals and physicians primarily in Northern California. PathLogic provides high-quality Anatomic Pathology services with significant expertise in the sub-specialties of renal pathology, dermatopathology, women s health and gastrointestinal and genitourinary pathology.

On December 30, 2015 we completed the acquisition of Clarient. Clarient specializes in advanced genetic and molecular oncology diagnostic services and will enable NeoGenomics to broaden its offering of innovative cancer diagnostic tests to hospitals and physicians across the country, and to accelerate its growth in the fast-growing worldwide market for pharmaceutical clinical trials and research. Complementary product offerings and expanded geographical reach of the combined Company are expected to provide customers with substantial benefits and create a significantly larger and more diversified provider of precision oncology diagnostics. The Clarient transaction is a good example of the type of acquisition opportunity we will consider in the future.

Continuously Innovate

We are keenly focused on innovation, and believe this has been a key factor in our growth. Over the past several years, we have developed over 125 new or improved molecular oncology tests and disease-specific panels, and believe we now have one of the most comprehensive oncology test menus of any laboratory in the world. By launching new medically significant and necessary tests at a steady rate, we are able to provide cutting-edge developments in molecular genetics for clients and their patients, and we are developing our reputation as a leader in the field of molecular oncology.

Our broad and innovative testing menu allows us to serve community-based pathologists and clinicians as well as pharmaceutical customers and nationally recognized academic centers. In addition, our comprehensive test offering allows us to be a one-stop shop for all of the oncology testing needs of our clients. Pharmaceutical firms are also attracted to our laboratory based on our knowledgeable research and development team and our ability to offer tests at the forefront of medical developments. In many cases, customers who begin using us because of our new innovative test offerings also begin to refer portions of their other testing. Therefore, innovation helps in many ways to sustain our growth.

We are committed to being an innovative leader in oncology testing. 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. For example, during the year ended December 31, 2015, we introduced approximately 70 new or enhanced molecular and FISH based tests and cancer profiles. In 2014, we launched our multimodality solid tumor Discovery Profile which analyzes 315 genes for mutation using NGS and includes 9 FISH tests to analyze translocations, amplifications and deletions that might be missed by NGS. Our multimodality testing is somewhat unique in the industry and provides the gold standard FISH testing for detecting therapy-related abnormalities, many of which are required to be confirmed by FISH prior to initiating expensive therapy.

We are also focused on opportunities to offer liquid biopsy testing. We recently launched twelve NeoLAB™ liquid biopsy tests for hematological disease using next generation sequencing and other advanced molecular technologies. These twelve new tests use cell-free circulating DNA and RNA found in blood plasma to identify molecular abnormalities in the bone marrow without the need for a bone marrow biopsy. The technology is based on the concept that hematologic cells release their DNA, RNA, and proteins into circulation as the cells are immersed in blood. The cell-free circulating DNA, RNA and proteins are referred to as exosomes, microvesicles, apoptotic bodies or simply DNA- or RNA-protein complexes. Our new tests use proprietary methods to extract these circulating nucleic acids and analyze them using next generation sequencing and other advanced methods in order to evaluate

molecular abnormalities present in hematological cancers. We estimate that more than 600,000 bone marrow biopsies are performed annually in the United States to diagnose and monitor patients with various hematologic cancers. However, bone marrow biopsies are a painful and uncomfortable procedure for patients, and can be associated with complications. These new tests are designed to help patients by reducing the need for bone marrow biopsies, and to assist clinicians in their treatment of cancer patients. Physicians can utilize the new liquid biopsy tests to: 1) screen patients to determine if a bone marrow biopsy is necessary, especially when myelodysplastic syndrome or acute leukemia is suspected; 2) monitor disease status, response to therapy and predict early relapse without having to perform repeated bone marrow biopsies at set intervals; and 3) complete testing when a bone marrow sample is inadequate or is technically difficult to obtain.

We also continue to develop new testing approaches by combining the capabilities of a variety of testing technologies. We introduced a number of NeoTYPE™ profiles that combine multiple molecular tests into multi-gene tests targeting specific types of cancer to help pathologists and oncologists determine cancer subtypes on difficult cases. Managed care payers have expressed interest in the more targeted panels as a more cost effective alternative to ordering large panels that include genes that have never been tied to a particular type of cancer. We use NGS and bi-directional Sanger sequencing analysis which we believe is superior to many of the molecular tests being offered by our competitors because we are able to detect mutations that other methods would not detect. We also add other testing modalities to NGS such as FISH, IHC and flow cytometry which allow for a more comprehensive analysis of each case.

We are working to develop a proprietary NeoLAB™ (Liquid Biopsy) Prostate cancer test that is performed on blood plasma and urine rather than on prostate tissue biopsies. There are two goals for this test: 1) to diagnose the presence of cancer in patients and 2) 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 published in March 2014 in the Genetic Testing and Molecular Biomarkers journal. In addition, in February 2014, we completed a follow up study with additional patient samples which confirmed the published preliminary data from the first trial. The results of this second study were presented at the American Society of Clinical Oncology meeting in 2014 and were published in the Journal of Cancer in February of 2016. We are also conducting a prospective validation study with over 2,500 patients enrolled thus far to further validate the efficacy of our NeoLAB Prostate Test. Recruitment for this prospective study was concluded by the end of 2015. Patients are being followed to collect outcome data and perform statistical analysis. We are planning a full commercial launch of the NeoLAB™ Prostate Test in 2016.

We also expect to continue to make investments in research and development that will allow us to commercialize a number of new and innovative genetic tests as scientific and medical technological advances are made.

Turnaround Times

We strive to provide industry leading turnaround times for test results to our clients nationwide. By providing information to our clients in a rapid manner, physicians can begin treating their patients as soon as possible. We believe our average 5-6 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 and pathology 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. Rapid 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 fast turnaround times are a key differentiator versus other national laboratories, and our clients often cite them as a key factor in their relationship with us.

Medical and Scientific Team

Our team of medical professionals and PhDs are specialists in the field of genetics, oncology and pathology. As of March 31, 2016, NeoGenomics medical and scientific team included approximately 30 full and part time Pathologists and PhDs. The team is responsible for the quality of the Company s testing, and for the development and validation of the new assays. The addition of Clarient s pathology team has added increased depth to our medical team, and has enhanced our ability to service a wider range of specialties.

Extensive Tech-Only Service Offerings

We believe, we have the most extensive menu of tech-only FISH services in the country. We also offer tech-only flow cytometry and IHC testing services. These types of testing services allow the professional interpretation component of

a test to be performed and billed separately by our physician clients. Our FISH, flow cytometry 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 a direct investment in costly 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 clients results in longer term, more committed and strategic client relationships. Our extensive tech-only service offerings have differentiated us 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 comprehensive suite of technical and interpretation 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 service of interpreting the results of those tests. Our professional staff is also available for post-test consultative services. Clients using our global service offering 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 support our clients who need help to satisfy the continued and demanding requirements of their practice. Our reporting capabilities allow for all relevant case data from our global services to be captured in one summary report. When providing global services, NeoGenomics bills for both the technical and professional component of the test, which results in a higher reimbursement level.

Superior Testing Technologies and Instrumentation

We use some of the most advanced testing technologies and instrumentation in the laboratory industry. The use of next generation sequencing in our molecular testing allows us to detect multiple mutations and our proprietary techniques allow us to achieve high sensitivity in our next generation sequencing testing. In addition, we use high sensitivity Sanger sequencing, RNA and DNA quantification, SNP/Cytogenetic arrays, Fragment Length analysis, and other molecular testing technologies. Our automated FISH and Cytogenetics tools allow us to deliver the highest quality testing to our clients and our flow cytometry laboratory uses 10-color flow cytometry analysis technology on a technical-only basis. We are one of only a few laboratories with an electron microscopy department for diagnosis in complex renal case analysis. Our MultiOmyx platform is a unique immunofluorecence array technology that allows up to sixty immunohistochemistry stains to be analyzed on a single slide. We are continually testing new laboratory equipment in order to remain at the forefront of new developments in the testing field.

Laboratory Information System

We believe we have a state-of-the-art 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 FISH and flow cytometry 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 using our system. Our customized reporting solution also allows our clients to incorporate test results performed on ancillary tests not performed at NeoGenomics into summary report templates. This FlexREPORT 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 team for our core clinical genetic testing business is organized into five regions (Northeast, Southeast, North Central, South Central and West), and we have separate sales teams for each of our BioPharma Services and PathLogic businesses. These sales representatives all utilize our custom Customer Relationship Management System (CRM) to manage their territories, and we have integrated all of the important customer care functionality within our LIS into the CRM so that our sales representatives can stay informed of emerging issues and opportunities within their regions. Our in-house customer care team is aligned with our field sales team to serve the needs of our clients by utilizing the same LIS and CRM. Our field teams can see in real-time when a client calls the laboratory, the reason for the call, the resolution, and if face-to-face interaction is needed for follow-up.

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 eight facilities and five large laboratory locations in Fort Myers, Florida, West Sacramento, California, Aliso Viejo, California, Irvine, California and Houston Texas and three smaller laboratory locations in Fresno, California, Nashville, Tennessee and Tampa, Florida. Our objective is to operate one lab with multiple 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 Advances

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 pathway 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.

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 extreme 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.

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 principal website can be accessed at www.neogenomics.com. The information on any of our websites is deemed not to be incorporated in this prospectus or to be part of this prospectus.

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RISK FACTORS

An investment in any securities offered pursuant to this prospectus and the applicable prospectus supplement involves risks. You should carefully consider the risk factors incorporated by reference to our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K we file after the date of this prospectus, and all other information contained or incorporated by reference into this prospectus, as updated by our subsequent filings under the Securities Exchange Act of 1934, as amended (the Exchange Act), and the risk factors and other information contained in the applicable prospectus supplement before acquiring any of such securities. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

FORWARD-LOOKING STATEMENTS

Information included or incorporated by reference in this prospectus contains forward-looking statements. These forward-looking statements include, but are not limited to, statements concerning our strategy, future operations, future financial position, future revenues, changing reimbursement levels from government payers and private insurers, projected costs, prospects and plans and objectives of management. The words anticipates, believes, estimates, expects, intends, may, plans, projects, will, would and similar expressions are intended to ide forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. These forward-looking statements involve known and unknown risks and uncertainties that could cause our actual results, performance or achievements to differ materially from those expressed or implied by the forward-looking statements, including, without limitation, the risks set forth under Risk Factors and in our other filings with the SEC.

Forward-looking statements include, but are not limited to, statements about:

- Our ability to implement our business strategy;
- The expected reimbursement levels from governmental payers and private insurers and proposed changes to those levels;
- The application, to our business and the services we provide, of existing laws, rules and regulations, including without limitation, Medicare laws, anti-kickback laws, Health Insurance Portability and Accountability Act of 1996 regulations, state medical privacy laws, federal and state false claims laws and corporate practice of medicine laws;
- Regulatory developments in the United States including increasing downward pressure on health care reimbursement;
- Our ability to maintain our license under the CLIA;
- FDA regulation of Laboratory Developed Tests;
- Failure to timely or accurately bill for our services;
- Our ability to expand our operations and increase our market share;
- Our ability to expand our service offerings by adding new testing capabilities;

Our ability to meet our future capital requirements;

Our ability to successfully integrate Clarient into NeoGenomics including consolidating systems and facilities;

Our ability to integrate future acquisitions and costs related to such acquisitions;

The impact of internalization of testing by customers;

Our ability to compete with other diagnostic laboratories;

Our ability to hire and retain sufficient managerial, sales, clinical and other personnel to meet our needs;

Our ability to successfully scale our business, including expanding our facilities, our backup systems and infrastructure;

Our ability to generate sufficient cash flow from our license agreement with Health Discovery Corporation to support its fair value; and

The accuracy of our estimates regarding reimbursement, expenses, future revenues and capital requirements.

These forward-looking statements represent our management s beliefs and assumptions only as of the date made. You should read this prospectus, including any documents incorporated herein by reference, completely and with the understanding that our actual future results may be materially different from what we expect.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of the securities as set forth in the applicable prospectus supplement.

Under the terms of our Series A Preferred Stock, for so long as any shares of the Series A Preferred Stock remain outstanding, in the event that we issue any other shares of capital stock, we are required to apply at least 50% of the net cash proceeds from such issuance to redeem shares of Series A Preferred Stock for cash at a redemption price per share equal to the then-effective liquidation preference of the Series A Preferred Stock, which is $7.50 per share as of the date of this prospectus, less any applicable redemption discounts. See Description of Capital Stock Preferred Stock Series A Preferred Stock.

RATIO OF COMBINED FIXED CHARGES AND PREFERENCE DIVIDENDS TO EARNINGS

If we offer preference equity securities under this prospectus, then we will, at that time, provide a ratio of combined fixed charges and preference dividends to earnings in the applicable prospectus supplement for such offering.

DESCRIPTION OF CAPITAL STOCK

The following summary description of our capital stock is based on the provisions of our articles of incorporation, as amended (Articles of Incorporation), as well as our amended and restated bylaws, as amended (Bylaws), and the applicable provisions of Chapter 78 of the Nevada Revised Statutes. This information is qualified entirely by reference to the applicable provisions of our Articles of Incorporation, Bylaws and Chapter 78 of the Nevada Revised Statutes. For information on how to obtain copies of our Articles of Incorporation and Bylaws, which are exhibits to the registration statement of which this prospectus is a part, see Where You Can Find More Information.

Our authorized capital stock consists of:

- 250,000,000 shares of common stock, $0.001 par value; and
- 50,000,000 shares of preferred stock, $0.001 par value.

Common Stock

As of March 31, 2016, we had 77,033,608 shares of common stock outstanding, held of record by approximately 514 stockholders.

Voting Rights. The holders of common stock are entitled to one vote per share for the election of directors and with respect to all other matters submitted to a vote of stockholders. Shares of our common stock do not have cumulative voting rights, which means that the holders of more than 50% of such shares voting for the election of directors can elect 100% of the directors if they choose to do so.

Dividends. The holders of common stock are entitled to share equally in dividends, if, as and when declared by our Board of Directors (the Board), out of funds legally available therefore, subject to the priorities given to any class of preferred stock which may be issued.

Liquidation. Upon liquidation, dissolution or winding-up of NeoGenomics, our assets, after the payment of debts and liabilities and any liquidation preferences of, and unpaid dividends on, any class of preferred stock then outstanding, will be distributed pro-rata to the holders of our common stock.

Other Rights and Preferences. The holders of our common stock do not have preemptive or conversion rights to subscribe for any of our securities and have no right to require us to redeem or purchase their shares.

Fully Paid and Nonassessable. The outstanding shares of our common stock are fully paid and non-assessable.

Preferred Stock

As of March 31, 2016, we had 14,666,667 shares of preferred stock outstanding, all of which were designated Series A Convertible Preferred Stock and held of record by GE Medical Holding AB (GE Medical), a subsidiary of General Electric Company. A description of our Series A Preferred Stock is below under the heading Series A Preferred Stock.

Under the terms of our Articles of Incorporation, the Board is authorized to issue preferred stock from time to time in one or more series. The Board is authorized to fix or alter the dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), the redemption price or prices, the liquidation preferences of any wholly unissued series of preferred stock, and the number of shares constituting any

such series and the designation thereof, or any of them; and to increase or decrease the number of shares of any series subsequent to the issue of shares of that series, but not below the number of shares of such series then outstanding and which we may be obligated to issue under options, warrants or other contractual commitments. In case the number of shares of any series shall be so decreased, the shares constituting such decrease shall resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series.

Any preferred stock offered pursuant to this prospectus will be convertible, and we will set forth in a prospectus supplement (including any pricing supplement or term sheet) relating to any series of preferred stock being offered the terms on which the series of preferred stock will be convertible into or exchangeable for common stock or other of our securities. The terms will include provisions as to the class, series or type of other security into which the preferred stock may be converted or exchanged, the conversion or exchange price or prices or rate or rates, any adjustments thereof, the date or dates at which the shares of the series will be convertible or exchangeable and all other terms and conditions upon which such conversion or exchange may be made.

For so long as any shares of our Series A Preferred Stock remain outstanding, without the affirmative vote or written consent of the holders of at least a majority of the then issued and outstanding shares of Series A Preferred Stock, voting together as a single class, we are not permitted to, among other things, (i) create or authorize the creation of or issue any equity security, including any security convertible into or exchangeable for any equity security, of any other class or series having rights, preferences or privileges ranking on parity with or senior to or prior to the Series A Preferred Stock or (ii) with limited exceptions, redeem, repurchase or otherwise acquire any series of preferred stock junior to our Series A Preferred Stock.

Series A Preferred Stock

The shares of Series A Preferred Stock have the following rights:

Rank. The Series A Preferred Stock is senior to all other classes and series of our capital stock, including our common stock and other series of preferred stock (collectively, Junior Stock) that we may issue in the future, including with respect to dividend and other distribution rights or rights upon a Liquidation Event (as defined below).

Voting Rights. Each holder of Series A Preferred Stock has such number of votes for each share of Series A Preferred Stock held of record by such holder on an as-converted (into common stock) basis, on each matter upon which holders of common stock have the right to vote and vote together with the holders of common stock (and any other class or series which may be similarly entitled to vote) as one class on all matters upon which holders of common stock have the right to vote, and not as a separate class or series other than as set forth below.

In addition to any other vote of our stockholders required under applicable law, if any shares of Series A Preferred Stock remain outstanding at any point in time, the affirmative vote or written consent of the holders of at least a majority of the then issued and outstanding shares of Series A Preferred Stock, voting together as a single class, will be required for us to effect any corporate action (whether taken by amendment, merger, consolidation or otherwise) to:

increase or decrease the authorized number of shares of Series A Preferred Stock;

create or authorize the creation of or issue any equity security, including any security convertible into or exchangeable for any equity security, of any other class or series having rights, preferences or privileges ranking on parity with or senior to or prior to the Series A Preferred Stock;

change the powers, designations, preferences, limitations, restrictions, voting or other rights of the Series A Preferred Stock set forth in the Certificate of Designations for the Series A Preferred Stock (the Certificate of Designations);

alter or amend any provision of our Articles of Incorporation or Bylaws in a manner adverse to the rights of the Series A Preferred Stock set forth in the Certificate of Designations;

redeem, repurchase or otherwise acquire any Junior Stock, except for repurchases of Junior Stock held by our employees, independent contractors, consultants or medical doctors upon termination of their employment or services pursuant to employment agreements, consulting agreements or settlement agreements providing for such repurchase;

issue any additional shares of Series A Preferred Stock, except as required pursuant to the terms of the Certificate of Designations;

effect an exchange, reclassification or cancellation of all or part of the Series A Preferred Stock; or

change the Series A Preferred Stock into the same or a different number of shares, with or without par value, of the same or another class.

In addition, without the affirmative vote or written consent of holders of at least a majority of the then-issued and outstanding shares of Series A Preferred Stock, voting together as a single class, we may not consummate a recapitalization, share exchange or reclassification involving the Series A Preferred Stock or a merger or consolidation with another entity, which recapitalization, share exchange, reclassification, merger or consolidation does not constitute a Liquidation Event, unless in each case after giving effect to such recapitalization, share exchange, reclassification, merger or consolidation: (a) the Series A Preferred Stock remains outstanding and the powers, preferences, privileges and voting and other rights are not amended in any respect or, in the case of any such recapitalization, share exchange, reclassification, merger or consolidation with respect to which we are not the surviving or resulting entity, the shares of Series A Preferred Stock are converted into or exchanged for preferred securities of the surviving or resulting entity or its ultimate parent; and (b) the shares of Series A Preferred Stock remaining outstanding or such preferred securities, as the case may be, have such powers, preferences, privileges and voting and other rights that are substantially the same as the powers, preferences, privileges and voting and other rights of the Series A Preferred Stock immediately prior to the consummation of such transaction.

Dividends. Commencing on December 30, 2016 and ending on the date on which the Series A Preferred Stock automatically converts as described in *Automatic Conversion* below, in the event that any shares of Series A Preferred Stock remain issued and outstanding, dividends (the PIK Dividends) on each share of Series A Preferred Stock will accrue quarterly in arrears on the last day of each March, June, September and December, and in kind in an amount of shares of Series A Preferred Stock equal to (a) the product of the PIK Dividend rate described in the table below for the period indicated, multiplied by the then effective Liquidation Preference per share of Series A Preferred Stock, divided by (b) four.

For the Period:	PIK Dividend Rate per Annum in Effect
Commencing on December 30, 2015 (the Original Issue Date) and ending on December 30, 2016	0.0%
Commencing on December 31, 2016 and ending on December 30, 2019	4.0%
Commencing on December 31, 2019 and ending on December 30, 2020	5.0%
Commencing on December 31, 2020 and ending on December 30, 2021	6.0%
Commencing on December 31, 2021 and ending on December 30, 2022	7.0%
Commencing on December 31, 2022 and ending on December 30, 2023	8.0%
Commencing on December 31, 2023 and ending on December 30, 2024	9.0%
	10.0%

	Commencing on December 31, 2024 and ending on the date of automatic conversion

The PIK Dividends will be cumulative and will accrue whether or not they have been earned or declared and whether or not there are profits, surplus or other funds of NeoGenomics legally available for the payment of PIK Dividends. On December 31 of each year, beginning on the first anniversary of the Original Issue Date and ending on the date on which the Series A Preferred Stock automatically converts as described in *Automatic Conversion* below, all PIK Dividends which have accrued on a share of Series A Preferred Stock outstanding during such calendar year (or such shorter period in the case of the initial period) will be added to the then effective Liquidation Preference of such share of Series A Preferred Stock. In the event of a redemption or conversion of the Series A Preferred Stock or a Liquidation Event on any date other than December 31 of any calendar year, the redemption amount payable upon a redemption, the Liquidation Preference and the shares of Series A Preferred Stock so convertible in connection therewith, as applicable, will be increased by PIK Dividends in an amount equal to the Liquidation Preference multiplied by the product of (a) the PIK Dividend rate in effect for such year reflected in the table above, and (b) the quotient of (x) the number of calendar days elapsed from January 1 of such year to the date of consummation of such redemption, conversion or Liquidation Event, as applicable, divided by (y) 360.

If, on account of an increase in the Liquidation Preference of a share of Series A Preferred Stock pursuant to the preceding paragraph, any holder of Series A Preferred Stock would be prohibited by any applicable law, rule or regulation from holding its Series A Preferred Stock or converting all of its Series A Preferred Stock at the then effective conversion price, without receiving the consent of any governmental authority that has not been obtained at such time, then the Liquidation Preference will not be increased, and such PIK Dividend will be paid in cash in lieu of such increase in the Liquidation Preference. If the condition set forth above ceases to exist prior to the date of an optional conversion or the date of the automatic conversion of the Series A Preferred Stock, the Liquidation Preference will be increased to such Liquidation Preference that would then be in effect as if such condition had not existed. If the outstanding 14,666,667 shares of Series A Preferred Stock are not redeemed prior to automatic conversion into shares of our common stock on the tenth anniversary of the Original Issue Date, we would be required to issue an additional 10,775,454 shares of Series A Preferred Stock as PIK Dividends.

Liquidation, Dissolution or Winding-up; Liquidation Preference. To the extent not prohibited by applicable law, upon the occurrence of any Liquidation Event, each holder of Series A Preferred Stock is entitled to receive, prior and in preference to any distribution of any of the assets or funds of NeoGenomics to the holders of shares of Junior Stock out of the assets of NeoGenomics legally available therefor, whether such assets are capital, surplus or earnings, an amount, payable in cash, equal to $7.50 plus all declared and unpaid dividends thereon, including all accrued and unpaid PIK Dividends regardless of whether there has been any payment-in-kind with respect thereto and after giving effect to the second paragraph under *Dividends*, in each case, as adjusted for any stock dividends, combinations, splits, recapitalizations and similar events with respect to such shares (the Liquidation Preference), for each share of Series A Preferred Stock held by such holder. Liquidation Event means any liquidation, dissolution or winding up of the Company, either voluntary or involuntary, and any Deemed Liquidation Event.

A Deemed Liquidation Event includes any of the following: (a) the acquisition by any person other than a holder of Series A Preferred Stock or an affiliate thereof of 50% or more of our voting securities; (b) any consolidation or merger of NeoGenomics with or into any other corporation or other entity or person, or any other corporate reorganization, in which our stockholders immediately prior to such consolidation, merger or reorganization, own less than 50% of our voting power immediately after such consolidation, merger or reorganization; and (c) any sale, lease, license, transfer or other disposition of all or substantially all of the assets, technology or intellectual property of NeoGenomics, other than non-exclusive licenses granted in the ordinary course of our business.

Automatic Conversion. Each share of Series A Preferred Stock issued and outstanding as of the tenth anniversary of the Original Issue Date will automatically convert into fully paid and non-assessable shares of common stock. The number of shares of common stock to which a holder of Series Preferred Stock will be entitled upon conversion is equal to the quotient of the then effective Liquidation Preference, divided by the then effective conversion price. The conversion price is equal to $7.50, multiplied by the conversion rate, which is initially equal to 1.0, but is subject to anti-dilution adjustments that may occur prior to the date of the automatic conversion.

Optional Conversion by Holders. At any time, from and after the third anniversary of the Original Issue Date, to the extent the VWAP of our common stock equals or exceeds $8.00 per share, as adjusted for any stock dividends, combinations, splits, recapitalizations and similar events with respect to shares of our common stock, for 30 consecutive trading days, any holder, upon written notice, will have the right to convert any or all shares of Series A Preferred Stock it owns into fully paid and non-assessable shares of common stock. The number of shares of common stock to which a holder of Series Preferred Stock will be entitled upon conversion will be equal to the quotient of the then effective Liquidation Preference, divided by the then effective conversion price, and the date upon which we receive the holder s notice of conversion will be the effective date of any optional conversion. For purposes of the foregoing, VWAP means, as of any applicable date of determination, the volume weighted average per share price of shares of our common stock on the applicable trading day on the principal national securities exchange on which our common stock is listed or admitted to trading.

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Conversion Rate and Conversion Price. The conversion price for the Series A Preferred Stock is $7.50 per share, multiplied by the then effective conversion rate. The conversion rate in effect for conversion of each share of Series A Preferred Stock into common stock is initially 1.0, subject to adjustments for stock splits, reclassifications and certain distributions and as described under *Reorganizations, Mergers and Consolidations*.

No Fractional Shares. We are not required to issue or cause to be issued fractional shares of common stock pursuant to any provision of the Certificate of Designations. If any fraction of a share of common stock would be issuable pursuant to the Certificate of Designations, the number of shares of common stock to be issued will be rounded up to the nearest whole share.

Redemption at the Option of the Company. At any time, and from time to time, we may redeem for cash all, or any portion of, the outstanding Series A Preferred Stock at a price per share equal to the then effective Liquidation Preference, provided the aggregate amount redeemed at such time is not less than (a) from the Original Issue Date until the fourth anniversary thereof, $10.0 million and (b) thereafter, $5.0 million, and in each case only in $1.0 million increments above such amounts. The amount payable by us in the event of a redemption during the period from the Original Issue Date until the fourth anniversary thereof will be discounted as set forth below under *Redemption Discounts*.

Redemption at the Option of the Holder Upon Future Capital Raise. For so long as any shares of Series A Preferred Stock remain outstanding, in the event that we issue any other class or series of equity or common stock equivalents or any unsecured debt securities for cash consideration, we are required to apply at least 50% of the net cash proceeds from any such issuance to redeem shares of Series A Preferred Stock for cash at a redemption price per share equal to the then effective Liquidation Preference. Cash proceeds received by us in connection with the exercise of options, warrants or similar securities that we issued to our employees, directors independent contractors, consultants or medical doctors as compensation will not be applied to the redemption of shares of Series A Preferred Stock. The amount payable by us in the event of a redemption during the period from the Original Issue Date until the fourth anniversary thereof will be discounted as set forth below under *Redemption Discounts*.

Redemption Discounts. Commencing on the Original Issue Date and ending on the fourth anniversary thereof, in the event that any shares of Series A Preferred Stock are redeemed, the amount payable by us for each share being redeemed will be reduced by an amount determined by multiplying the discount rate listed below for the period in which the redemption is consummated by the then effective Liquidation Preference before such discount is applied.

For the Period:	**Discount**
Commencing on December 30, 2015 and ending on December 30, 2016	9.0909%
Commencing on December 31, 2016 and ending on December 30, 2017	6.8182%
Commencing on December 31, 2017 and ending on December 30, 2018	4.5455%
Commencing on December 31, 2018 and ending on December 30, 2019	2.2727%

From and after the fourth anniversary of the Original Issue Date, no reduction will be made for any amount payable in connection with a redemption.

Reorganizations, Mergers and Consolidations. In case of any consolidation or merger of NeoGenomics with any other entity (other than a wholly owned subsidiary of NeoGenomics), or in case of any sale or transfer of all or substantially all of our assets, or in case of any share exchange pursuant to which all of the outstanding shares of

common stock are converted into other securities or property of NeoGenomics, we will, prior to or at the time of such transaction, make appropriate provision or cause appropriate provision to be made so that holders of each share of Series A Preferred Stock then outstanding will have the right thereafter to convert such shares of Series A Preferred Stock into the kind and amount of shares of stock and other securities and property receivable upon such consolidation, merger, sale, transfer or share exchange by a holder of the number of shares of common stock into which such share of Series A Preferred Stock could have been converted immediately prior to the effective date of such consolidation, merger, sale, transfer or share exchange. If in connection with any such consolidation, merger, sale, transfer or share exchange, each holder of shares of common stock is entitled to elect to receive either securities, cash or other assets upon completion of such transaction, we will provide or cause to be provided to each holder of Series A Preferred Stock the right to elect the securities, cash or other assets into which the Series A Preferred Stock held by such holder will be convertible after consummation of any such transaction on the same terms and subject to the same conditions applicable to holders of the common stock.

Prohibitions on Transfers. No sale, exchange, delivery, assignment, transfer, disposal, encumbrance, pledge or hypothecation, whether voluntary, involuntary, by operation of law, or resulting from death, disability or otherwise may be made by a holder of any shares of Series A Preferred Stock without our express written consent, except that a holder may transfer shares of Series A Preferred Stock to an affiliate of such holder upon written notice to us.

Amendments; Modifications. No provision of the Certificate of Designations may be amended, except in a written instrument signed by NeoGenomics and holders of at least a majority of the shares of Series A Preferred Stock then outstanding.

Warrants

As of March 31, 2016, warrants to purchase 650,000 shares of our common stock were outstanding. The exercise prices of these warrants range from $1.43 to $1.50 per share.

Options

As of March 31, 2016, options to purchase 4,731,171 shares of our common stock were outstanding. The exercise prices of these options range from $0.50 to $7.87 per share.

Transfer Agent

Our transfer agent is Standard Registrar & Transfer Company located at 12528 South 1840 East Draper, Utah, 84020. The transfer agent s telephone number is (801) 571-8844.

Indemnification Of Directors And Executive Officers And Limitation On Liability

Our Articles of Incorporation provide that no director or officer of the company shall be personally liable to the company or any of its stockholders for damages for breach of fiduciary duty as a director or officer of for any act or omission of any such director or officer; however such indemnification shall not eliminate or limit the liability of a director or officer for (a) acts or omissions which involve intentional misconduct, fraud or a knowing violation of law or (b) the payment of dividends in violation of Section 78.300 of the Nevada Revised Statutes. Our Bylaws provide that any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was a director, officer, employee or agent of the company (or is or was serving at the request of the company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise) shall be indemnified and held harmless by the company to the fullest extent permitted by Nevada law against expenses including attorneys fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such proceeding.

Our Bylaws also provide that we must indemnify any person who was or is a party, or is threatened to be made a party, to any threatened, pending or completed proceeding by or in the right of the company to procure a judgment in its favor by reason of the fact that such person is or was a director, officer, employee or agent of the company, or is or was serving at our request as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust or other enterprise against costs incurred by such person in connection with the defense or settlement of such action or suit. Such indemnification may not be made for any claim, issue or matter as to which such person has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals, to be liable to us or for amounts paid in settlement to us, unless and only to the extent that the court determines upon application that in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

Our Bylaws provide that we must pay the costs incurred by any person entitled to indemnification in defending a proceeding as such costs are incurred and in advance of the final disposition of a proceeding; provided however,

that we must pay such costs only upon receipt of an undertaking by or on behalf of such person to repay the amount if it is ultimately determined by a court of competent jurisdiction that such person is not entitled to be indemnified by us.

Our Bylaws provide that we may purchase and maintain insurance or make other financial arrangements on behalf of any person who is or was a director, officer, employee or agent of the company, or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise in accordance with Section 78.752 of the Nevada Revised Statutes.

Nevada Revised Statutes 78.751 and 78.7502 have provisions that provide for discretionary and mandatory indemnification of officers, directors, employees, and agents of a corporation. Under these provisions, such persons may be indemnified by a corporation against expenses, including attorney s fees, judgment, fines and amounts paid in settlement, actually and reasonably incurred by him in connection with the action, suit or proceeding, if he acted in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation and with respect to any criminal action or proceeding had no reasonable cause to believe his conduct was unlawful.

To the extent that a director, officer, employee or agent has been successful on the merits or otherwise in defense of any action, suit or proceeding, or in defense of any claim, issue or matter, the Nevada Revised Statues provide that he must be indemnified by us against expenses, including attorney s fees, actually and reasonably incurred by him in connection with the defense.

Section 78.751 of the Nevada Revised Statues also provides that any discretionary indemnification, unless ordered by a court or advanced by us, may be made only as authorized in the specific case upon a determination that indemnification of the director, officer, employee or agent is proper in the circumstances. The determination must be made:

by the stockholders;

by the Board by majority vote of a quorum consisting of directors who were not parties to that act, suit or proceeding;

if a majority vote of a quorum consisting of directors who were not parties to the act, suit or proceeding cannot be obtained, by independent legal counsel in a written opinion; or

if a quorum consisting of directors who were not parties to the act, suit or proceeding cannot be obtained, by independent legal counsel in a written opinion.

Registration Rights

We are party to a registration rights agreement with GE Medical, pursuant to which we are required to file on or before the earlier of (i) 21 months following the Original Issue Date and (ii) 6 months after we redeem all of the Series A Preferred Stock held by GE Medical, a shelf registration statement for the offer and sale of the Series A Preferred Stock and any shares of our common stock issuable upon conversion of the Series A Preferred Stock. The agreement also provides GE Medical with customary demand and piggyback registration rights with respect to such shares.

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DESCRIPTION OF WARRANTS

We may issue warrants from time to time in one or more series for the purchase of our common stock or preferred stock or any combination of those securities. Warrants may be issued independently or together with any shares of common stock or shares of preferred stock or offered by any prospectus supplement and may be attached to or separate from common stock or preferred stock. Each series of warrants may be issued under a separate warrant agreement to be entered into between us and a warrant agent, or any other bank or trust company specified in the related prospectus supplement relating to the particular issue of warrants. A warrant agent may act as our agent in connection with the warrants and would not assume any obligation or relationship of agency or trust for or with any holders of warrants or beneficial owners of warrants. The specific terms of any series of warrants will be described in the applicable prospectus supplement relating to that series of warrants along with any general provisions applicable to that series of warrants.

The following is a general description of the warrants we may issue. The applicable prospectus supplement will describe the specific terms of any issuance of warrants. The terms of any warrants we offer may differ from the terms described in this prospectus. As a result, we will describe in the prospectus supplement the specific terms of the particular series of warrants offered by that prospectus supplement. Accordingly, for a description of the terms of a particular series of warrants, you should carefully read this prospectus, the applicable prospectus supplement, and the applicable warrant agreement, which will be filed as an exhibit to the registration statement of which this prospectus forms a part.

Terms. If warrants are offered by us, the prospectus supplement will describe the terms of the warrants, including the following if applicable to the particular offering:

- the title of the warrants;
- the total number of warrants;
- the number of shares of common stock purchasable upon exercise of the warrants to purchase common stock and the price at which such shares of common stock may be purchased upon exercise;
- the designation and terms of the preferred stock with which the warrants are issued and the number of warrants issued with each share of preferred stock;
- the date on and after which the warrants and the related common stock or preferred stock will be separately transferable;
- if applicable, the date on which the right to exercise the warrants will commence and the date on which this right will expire;
- if applicable, the minimum or maximum amount of the warrants which may be exercised at any one time;

a discussion of federal income tax, accounting and other special considerations, procedures and limitations relating to the warrants; and

any other terms of the warrants including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Warrants may be exchanged for new warrants of different denominations, may be presented for registration of transfer, and may be exercised at our principal executive office, the warrant agent or any other office indicated in the prospectus supplement.

Before the exercise of their warrants, holders of warrants will not have any of the rights of holders of shares of common stock or shares of preferred stock, including the right to receive payments of dividends, if any, on the shares of common stock or preferred stock or to exercise any applicable right to vote.

Exercise of Warrants. Each warrant will entitle the holder to purchase a number of shares of common stock or shares of preferred stock at an exercise price as will in each case be set forth in, or calculable from, the prospectus supplement relating to those warrants. Warrants may be exercised at the times set forth in the prospectus supplement relating to the warrants. After the close of business on the expiration date (or any later date to which the expiration date may be extended by us), unexercised warrants will become void. Subject to any restrictions and additional requirements that may be set forth in the prospectus supplement relating thereto, warrants may be exercised by delivery to the warrant agent, or at our principal executive office or any other office indicated in the prospectus supplement, of the certificate evidencing the warrants properly completed and duly executed, and of payment as provided in the prospectus supplement of the amount required to purchase the shares of common stock or shares of preferred stock purchasable upon such exercise. The exercise price will be the price applicable on the date of payment in full, as set forth in the prospectus supplement relating to the warrants. Upon receipt of the payment, and the certificate representing the warrants to be exercised properly completed and duly executed at our principal executive office, the warrant agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, issue and deliver the shares of common stock or shares of preferred stock purchasable upon such exercise. If fewer than all of the warrants represented by that certificate are exercised, a new certificate will be issued for the remaining amount of warrants.

The description in the applicable prospectus supplement and other offering material of any warrants we offer will not necessarily be complete and will be qualified in its entirety by reference to the applicable warrant agreement, which will be filed with the SEC if we offer warrants. For more information on how you can obtain copies of the applicable warrant agreement if we offer warrants, see Where You Can Find More Information and Incorporation By Reference. We urge you to read the applicable warrant agreement and the applicable prospectus supplement in their entirety.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods or through underwriters or dealers, through agents and/or directly to one or more purchasers. The securities may be distributed from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Each time that we sell securities covered by this prospectus, we will provide a prospectus supplement or supplements that will describe the method of distribution and set forth the terms and conditions of the offering of such securities, including the offering price of the securities and the proceeds to us.

Offers to purchase the securities being offered by this prospectus may be solicited directly. Agents may also be designated to solicit offers to purchase the securities from time to time. Any agent involved in the offer or sale of our securities will be identified in a prospectus supplement.

If a dealer is utilized in the sale of the securities being offered by this prospectus, the securities will be sold to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If an underwriter is utilized in the sale of the securities being offered by this prospectus, an underwriting agreement will be executed with the underwriter at the time of sale and the name of any underwriter will be provided in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we, or the purchasers of securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for which they may act as agent. Unless otherwise indicated in a prospectus supplement, an agent will be acting on a best efforts basis and a dealer will purchase securities as a principal, and may then resell the securities at varying prices to be determined by the dealer.

Any compensation paid to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers will be provided in the applicable prospectus supplement. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof and to reimburse those persons for certain expenses.

Any common stock will be listed on the NASDAQ Capital Market, but any other securities may or may not be listed on a national securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

In compliance with the guidelines of the Financial Industry Regulatory Authority, Inc. (FINRA), the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate proceeds of the offering.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

LEGAL MATTERS

Snell & Wilmer L.L.P., Reno, Nevada, will pass upon certain legal matters relating to the issuance and sale of the securities offered hereby. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements as of December 31, 2015 and 2014, and for the years then ended incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2015 have been so incorporated in reliance on the report of Crowe Horwath LLP, independent registered public accounting firm, given on authority of said firm as experts in auditing and accounting.

The consolidated financial statements for the year ended December 31, 2013 incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2015 have been so incorporated in reliance on the report of Kingery & Crouse, P.A., independent public accounting firm, given on authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file reports and other information with the SEC as required by the Exchange Act. You can find, copy and inspect information we file at the SEC s public reference room, which is located at 100 F Street, N.E., Room 1580, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the SEC s public reference room. You can review our electronically filed reports and other information that we file with the SEC on the SEC s web site at http://www.sec.gov.

This prospectus is part of a registration statement that we filed with the SEC. The registration statement contains more information than this prospectus regarding us and the securities, including exhibits and schedules. You can obtain a copy of the registration statement from the SEC at any address listed above or from the SEC s web site.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring to those documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the following documents and all documents we file with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) pursuant to the Exchange Act on or after the date of this prospectus and prior to the termination of the offering under this prospectus or any prospectus supplement (other than, in each case, documents or information deemed to have been furnished and not filed in accordance with SEC rules):

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, filed with the SEC on March 15, 2016;
- our Amended Annual Report on Form 10-K/A for the fiscal year ended December 31, 2015, filed with the SEC on April 18, 2016;
- our Proxy Statement on Schedule 14A filed on April 29, 2016 (excluding those portions that are not incorporated by reference into our Annual Report on Form 10-K);
- our Quarterly Report on Form 10-Q for the period ended March 31, 2016, filed with the SEC on May 10, 2016;
- our Current Reports on Form 8-K filed with the SEC on February 3, 2016, February 18, 2016 and June 8, 2016; and
- the description of our common stock contained in the registration statement on Form 8-A (Registration No. 000-54384), filed with the SEC under Section 12(g) of the Exchange Act on May 2, 2011, as updated by the description of our common stock set forth in the Prospectus Supplement to our Registration Statement No. 333-186067 filed with the SEC pursuant to Rule 424(b)(5) on February 28, 2013.

Any statement contained herein or in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this prospectus to the extent that a statement

contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or replaces such statement. Any such statement so modified or superseded shall not be deemed to constitute a part of this prospectus, except as so modified or superseded.

We hereby undertake to provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request of any such person, a copy of any and all of the information that has been incorporated by reference in this prospectus, other than exhibits to such documents, unless such exhibits have been specifically incorporated by reference thereto. Requests for such copies should be directed to our Investor Relations department, at the following address:

NeoGenomics, Inc.

12701 Commonwealth Drive, Suite 9

Fort Myers, Florida 33913

(239) 768-0600

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the expenses expected to be incurred in connection with the issuance and distribution of the securities being registered. All amounts are estimated except the SEC registration fee. We will pay all expenses in connection with this offering.

SEC Registration Fee	$ 20,140
Printing and Engraving Expenses	$ (1)
Accounting Fees and Expenses	$ (1)
Legal Fees and Expenses	$ (1)
Miscellaneous	$ (1)
TOTAL	$ (1)

(1) These fees are calculated based on the securities offered and the number of issuances and accordingly cannot be estimated at this time.

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

The Company s Articles of Incorporation provide that no director or officer of the Company shall be personally liable to the Company or any of its stockholders for damages for breach of fiduciary duty as a director or officer of for any act or omission of any such director or officer; however such indemnification shall not eliminate or limit the liability of a director or officer for (a) acts or omissions which involve intentional misconduct, fraud or a knowing violation of law or (b) the payment of dividends in violation of Section 78.300 of the Nevada Revised Statutes. The Company s Amended and Restated Bylaws (the Bylaws) provide that any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was a director, officer, employee or agent of the Company (or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise) shall be indemnified and held harmless by the Company to the fullest extent permitted by Nevada law against expenses including attorneys fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such proceeding.

The Bylaws also provide that the Company must indemnify any person who was or is a party, or is threatened to be made a party, to any threatened, pending or completed proceeding by or in the right of the Company to procure a judgment in its favor by reason of the fact that such person is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust or other enterprise against costs incurred by such person in connection with the defense or settlement of such action or suit. Such indemnification may not be made for any claim, issue or matter as to which such person has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals, to be liable to the Company or for amounts paid in settlement to the Company, unless and only to the extent that the court determines upon application that in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

The Bylaws provide that the Company must pay the costs incurred by any person entitled to indemnification in defending a proceeding as such costs are incurred and in advance of the final disposition of a proceeding; provided however, that the Company must pay such costs only upon receipt of an undertaking by or on behalf of such person to repay the amount if it is ultimately determined by a court of competent jurisdiction that such person is not entitled to be indemnified by the Company.

The Bylaws provide that the Company may purchase and maintain insurance or make other financial arrangements on behalf of any person who is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise in accordance with Section 78.752 of the Nevada Revised Statutes.

Nevada Revised Statutes 78.751 and 78.7502 have provisions that provide for discretionary and mandatory indemnification of officers, directors, employees, and agents of a corporation. Under these provisions, such persons may be indemnified by a corporation against expenses, including attorney s fees, judgment, fines and amounts paid in settlement, actually and reasonably incurred by him in connection with the action, suit or proceeding, if he is not liable pursuant to Section 78.138 of the Nevada Revised Statutes or he acted in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation and with respect to any criminal action or proceeding had no reasonable cause to believe his conduct was unlawful.

To the extent that a director, officer, employee or agent has been successful on the merits or otherwise in defense of any action, suit or proceeding, or in defense of any claim, issue or matter, the Nevada Revised Statues provide that he must be indemnified by the Company against expenses, including attorney s fees, actually and reasonably incurred by him in connection with the defense.

Section 78.751 of the Nevada Revised Statues also provides that any discretionary indemnification, unless ordered by a court or advanced by the Company, may be made only as authorized in the specific case upon a determination that indemnification of the director, officer, employee or agent is proper in the circumstances. The determination must be made:

By the stockholders;

By the Company s Board of Directors by majority vote of a quorum consisting of directors who were not parties to that act, suit or proceeding;

If a majority vote of a quorum consisting of directors who were not parties to the act, suit or proceeding cannot be obtained, by independent legal counsel in a written opinion; or

If a quorum consisting of directors who were not parties to the act, suit or proceeding cannot be obtained, by independent legal counsel in a written opinion.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person connected with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

ITEM 16. EXHIBITS

(a) *Exhibits*

A list of exhibits filed with this registration statement on Form S-3 is set forth on the Exhibit Index and is incorporated herein by reference.

ITEM 17. UNDERTAKINGS

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, *however*, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a

time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant s annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan s annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Fort Myers, State of Florida, on June 17, 2016.

NEOGENOMICS, INC.

By: */s/ Douglas M. VanOort*
Name: Douglas M. VanOort
Title: Chairman and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Douglas M. VanOort and Steven C. Jones, or either of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to file and sign any and all amendments, including post-effective amendments and any registration statement for the same offering that is to be effective under Rule 462(b) of the Securities Act, to this registration statement, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitute or substitutes may lawfully do or cause to be done by virtue hereof. This power of attorney shall be governed by and construed with the laws of the State of Nevada and applicable federal securities laws.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons on behalf of the registrant in the capacities and on the dates indicated below:

Signatures	Title(s)	Date
/s/ Douglas M. VanOort Douglas M. VanOort	Chief Executive Officer and Chairman of the Board (Principal Executive Officer)	June 17, 2016
/s/ Steven C. Jones Steven C. Jones	Executive Vice President, Finance and Director	June 17, 2016
/s/ George Cardoza George Cardoza	Chief Financial Officer (Principal Financial Officer)	June 17, 2016
/s/ Edwin F. Weidig III Edwin F. Weidig III	Director of Finance (Principal Accounting Officer)	June 17, 2016
/s/ Bruce K. Crowther Bruce K. Crowther	Director	June 17, 2016

/s/ Kevin C. Johnson Kevin C. Johnson	Director	June 17, 2016
/s/ William J. Robison William J. Robison	Director	June 17, 2016

/s/ Raymond R. Hipp Raymond R. Hipp	Director	June 17, 2016
/s/ Lynn A. Tetrault Lynn A. Tetrault	Director	June 17, 2016
/s/ Alison L. Hannah Alison L. Hannah	Director	June 17, 2016
/s/ Kieran Murphy Kieran Murphy	Director	June 17, 2016

EXHIBIT INDEX

Exhibit No.	Description of Exhibit	Location
1.1*	Form of Underwriting Agreement.	
2.1	Stock Purchase Agreement, dated as of October 20, 2015, by and among NeoGenomics Laboratories, Inc., NeoGenomics, Inc. and GE Medical Holding AB	Incorporated by reference to the Company s Current Report on Form 8-K as filed with the SEC on October 26, 2015
2.2	Amendment No. 1 to Stock Purchase Agreement, dated as of December 28, 2015, by and among NeoGenomics Laboratories, Inc., NeoGenomics, Inc. and GE Medical Holding AB	Incorporated by reference to the Company s Current Report on Form 8-K as filed with the SEC on December 31, 2015
4.1	Articles of Incorporation, as amended	Incorporated by reference to Exhibit 3.1 to the Company s Registration Statement on Form SB-2, as filed with the SEC on February 10, 1999 (File No. 333-72097)
4.2	Amendment to Articles of Incorporation filed with the Nevada Secretary of State on January 3, 2002	Incorporated by reference to Exhibit 3.1.2 to the Company s Annual Report on Form 10-KSB for the year ended December 31, 2002, as filed with the SEC on May 20, 2003 (File No. 333-72097)
4.3	Amendment to Articles of Incorporation filed with the Nevada Secretary of State on April 11, 2003	Incorporated by reference to Exhibit 3.1.3 to the Company s Annual Report on Form 10-KSB for the year ended December 31, 2002, as filed with the SEC on May 20, 2003 (File No. 333-72097)
4.4	Amendment to Articles of Incorporation filed with the Nevada Secretary of State on December 28, 2015	Incorporated by reference to Exhibit 3.1 to the Company s Current Report on Form 8-K, as filed with the SEC on December 31, 2015
4.5	Amended and Restated Bylaws	Incorporated by reference to Exhibit 3.1 to the Company s Current Report on Form 8-K, as filed with the SEC on October 17, 2014
4.6	Amendment to Amended and Restated Bylaws	Incorporated by reference to Exhibit 3.1 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2015, as filed with the SEC on November 6, 2015
4.7*	Form of Preferred Stock Certificate.	
4.8*	Form of Certificate of Designations.	
4.9*	Form of Warrant.	
4.10*	Form of Warrant Agreement.	

EXHIBIT INDEX

Exhibit No.	Description of Exhibit	Location
5.1	Opinion of Counsel	Provided herewith
23.1	Consent of Crowe Horwath LLP	Provided herewith
23.2	Consent of Kingery & Crouse, P.A.	Provided herewith
23.3	Consent of Snell & Wilmer L.L.P.	Incorporated by reference to the opinion filed as Exhibit 5.1 to this registration statement
24.1	Powers of Attorney	Incorporated by reference to the signature page hereto

* To be filed by amendment or incorporated herein by reference in connection with the offering of the securities.