COMBIMATRIX CORP

FORM 10-K
(Annual Report)

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2013

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

FOR THE TRANSITION PERIOD FROM TO .

Commission File Number 000-1383183

COMBIMATRIX CORPORATION
(Exact name of registrant as specified in its charter)

DELAWARE	**47-0899439**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
310 GODDARD, SUITE 150, IRVINE, CA	**92618**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(949) 753-0624**

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, $0.001 par value	**The NASDAQ Stock Market LLC**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of

1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark that disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

As of June 30, 2013, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the registrant's common stock held by non-affiliates was $12,310,000, based upon the last reported sale price of the registrant's common stock on that date as reported by Nasdaq. For the purposes of the foregoing calculation only, all of the registrant's directors, executive officers and persons known to the registrant to hold ten percent or greater of the registrant's outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not a determination for other purposes. The number of shares of the registrant's Common Stock, $0.001 par value, outstanding on March 21, 2014, was 11,063,246.

DOCUMENTS INCORPORATED BY REFERENCE

None.

FORM 10-K ANNUAL REPORT
FISCAL YEAR ENDED DECEMBER 31, 2013
COMBIMATRIX CORPORATION

PART I

CAUTIONARY STATEMENT

This report contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact included in this report, are forward-looking statements. Reference is made in particular to the description of our plans and objectives for future operations, assumptions underlying such plans and objectives, and other forward-looking statements included in this report. Such statements may be identified by the use of forward-looking terminology such as "may," "will," "expect," "believe," "estimate," "anticipate," "intend," "continue," "plan," "predict," "seek," "should," "would," "could," "potential," "ongoing," or similar terms, variations of such terms, or the negative of such terms, and include, but are not limited to, statements regarding projected results of operations, capital expenditures, earnings, management's future strategic plans, development of new technologies and services, litigation, regulatory matters, market acceptance and performance of our services, the success and effectiveness of our technologies and services, our ability to retain and hire key personnel, the competitive nature of and anticipated growth in our markets, market position of our services, marketing efforts and partnerships, liquidity and capital resources, our accounting estimates, and our assumptions and judgments. Such statements are based on management's current expectations, estimates and projections about our industry, management's beliefs, and certain assumptions made by us, all of which are subject to change. These forward looking statements are not guarantees of future results and are subject to a number of risks, uncertainties and assumptions that are difficult to predict and that could cause actual results to differ materially and adversely from those described in the forward-looking statements. The risks and uncertainties referred to above include, but are not limited to, our ability to successfully increase the volume of our existing tests, expand the number of tests offered by our laboratory, increase the number of customers and partners and improve reimbursement for our testing; market acceptance of chromosomal microarray analysis ("CMA") as a preferred method over karyotyping; the rate of transition to CMA from karyotyping; changes in consumer demand; our ability to attract and retain a qualified sales force and key technical personnel; our ability to successfully develop and introduce new technologies and services; rapid technological change in our markets; supply availability; the outcome of existing litigation; our ability to bill and obtain reimbursement for highly specialized tests; our ability to comply with regulations to which our business is subject; legislative, regulatory and competitive developments in markets in which we and our subsidiaries operate, including changes in coding and reimbursement methods; our limited market capitalization; future economic conditions; other circumstances affecting anticipated revenues and costs; and other factors as more fully disclosed in our discussion of risk factors in Item 1A of Part I of this report. These forward-looking statements speak only as of the date of this report and we expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations with regard thereto or any change in events, conditions, or circumstances on which any such statement is based, except as otherwise required by law. Additional factors that could cause such results to differ materially from those described in the forward-looking statements are set forth in connection with the forward-looking statements.

As used in this report, "the Company," "we," "us" and "our" refer to CombiMatrix Corporation and its majority-owned subsidiary companies.

Item 1. BUSINESS

Overview

CombiMatrix Corporation was originally incorporated in October 1995 as a California corporation. In September 2000, we were reincorporated as a Delaware corporation, and in December 2002, we merged with, and became a wholly owned subsidiary of, Acacia Research Corporation ("Acacia"). In August 2007,

we split off from Acacia and became publicly traded on The Nasdaq Stock Market. As a result of the split off, we ceased to be a subsidiary of, or affiliated with, Acacia.

We provide valuable molecular diagnostic solutions and comprehensive clinical support to foster the highest quality in patient care. We specialize in miscarriage analysis, prenatal testing and pediatric genetics, offering DNA-based testing for the detection of genetic abnormalities beyond what can be identified through traditional methodologies. We perform genetic testing utilizing a variety of advanced cytogenomic techniques, including chromosomal microarray, standardized and customized fluorescence *in situ* hybridization ("FISH") and high-resolution karyotyping. We are dedicated to providing high-level clinical support for healthcare professionals in order to help them incorporate the results of complex genetic testing into patient-centered medical decision making.

We also own a one-third minority interest in Leuchemix, Inc., a private drug development company focused on developing a series of compounds to address a number of oncology-related diseases.

Market Overview

We develop and market our molecular testing services in two distinct markets: prenatal/postnatal developmental disorders and hematology/oncology genomics. We believe the molecular diagnostics market is one of the fastest-growing segments within the overall diagnostics market. Molecular diagnostics, within the context of this discussion, refers to the use of an individual's genetic analysis to guide medical decision-making in the area of disease diagnosis and post-diagnostic management. Innovative approaches to re-sequencing of the human genome and a growing clinical appreciation and acceptance of the utility of genomic information in guiding clinical care have enabled the rapid growth of this market. Many experts believe that the use of molecular diagnostics will continue to grow in the coming years and will have a significant impact on the way in which medicine is practiced.

Genes and Proteins

The human body is composed of billions of cells, each containing DNA that encodes the basic instructions for cellular function. The complete set of an individual's DNA is called the genome, and is organized into 23 pairs of chromosomes, which are further divided into smaller regions called genes. Each gene is comprised of a specific sequence involving four nucleotides (also called "bases"): A, T, G and C. These bases are complementary to one another in that A binds only with T and G binds only with C. This interaction forms "base pairs", and is responsible for the double helix structure of DNA.

The human genome has approximately three billion nucleotides. The order of these nucleotides is known as the DNA sequence. When a gene is turned on, or expressed, the genetic information encoded in the DNA is transcribed (copied) to an intermediate format, called messenger RNA ("mRNA"). The mRNA code is then read and translated into a specific protein product. Proteins direct numerous cellular functions, some of which lead to the expression of individual traits, such as eye color or height. Some level of normal variability is seen throughout the genome, however, abnormal variations in the sequence of a gene, such as deletions, duplications, or point mutations, can interfere with the normal physiology of the cells in which that gene is expressed. These abnormal variations may lead to disease, predisposition to a disease, or an atypical response to certain types of drugs.

Genes and Molecular Diagnostics

There are a number of methods of genetic analysis that are used in diagnostic genetic testing. They broadly fall into three main categories: (i) re-sequencing of individual base pairs of DNA; (ii) assessing DNA copy number variation; and (iii) analyzing gene expression. In many diagnostic situations, it is only necessary to analyze either a single gene or a small number of genes. This diagnostic testing can be accomplished by a number of different techniques, depending on the situation. However, when a larger number of genetic factors need to be analyzed, one of the most efficient methods of analysis is to use a

chromosomal microarray (also referred to as "microarray" testing), which measures millions of DNA variations in a single experiment.

Microarray Testing for DNA Copy Number Variation

Microarray testing to assess DNA copy number variation is achieved by comparing a patient's genomic DNA to a reference genome to evaluate for relative gains and losses of genomic information. Some gains and losses of genomic information are known to cause genetic disorders, or predispose a person to a genetic disorder. Other gains and losses are considered benign because they occur in regions of the genome that are known to show variability and have not been associated with any disease or disease process. The reason we believe that microarray testing is such a powerful tool is that it enables simultaneous analysis across the entire genome in a single reaction, providing a comprehensive analysis of all 46 chromosomes in a single test. Unlike gene expression arrays, which evaluate mRNA levels to monitor the activity of specific genes, DNA-based microarray analysis identifies quantitative defects in the number of copies of genomic DNA in order to test for conditions that are known to be associated with gains and losses of chromosomal information. Throughout this discussion, the terms "microarray" and "array" are used interchangeably, and refer to DNA-based microarray testing.

Manufacturing microarrays involves affixing 'probes' (specific sequences of genomic DNA) to a solid surface and then allowing labeled patient DNA to hybridize, or to bind with the probes. We utilize oligonucleotide ("oligo") probes, which are typically 25-75 base pairs in length. The first platform has approximately 180,000 oligo probes, and only measures copy number variation. This platform utilizes array comparative genomic hybridization ("aCGH"), in which both patient DNA and reference DNA sets are differentially labeled and allowed to competitively hybridize to the probes. Differences in the intensity of the probe signals are used to assess patient DNA copy number changes. The second platform has approximately 850,000 oligo probes, which are designed not only to measure copy number variation, but also to assess single nucleotide polymorphisms, or "SNPs." SNPs are single points along the genome that are highly variable with respect to which base pair is present (A, T, G or C) in any given person. This platform compares labeled patient DNA to a computer-based reference sample, and it uses the differences in the intensity of the signal to assess copy number changes, as well as information regarding the specific base at the SNP locations to assess for chromosomal disorders that involve abnormalities not related to a *quantitative* change in the amount of DNA. We custom designed both platforms to optimize both the sensitivity and specificity of our microarray test.

Diagnostics Market Segmentation

In general, our diagnostic services and our test menu are focused around our highly specialized genomic microarray. While there are risks associated with billing and reimbursement of these highly specialized tests, we believe that our market position and test portfolio provide significant leverage in the rapidly growing personalized genomics/diagnostics space. Our test menu is further supplemented by what may be considered more routine tests, which allow us access to a broader, yet synergistic market. Our overall clinical market can be divided into two primary markets: (i) prenatal and postnatal developmental disorders; and (ii) oncogenomic testing for hematologic malignancies and solid tumors. Our market analysis indicates that our potential client base for both of these markets can be divided into three general customer segments, as detailed below. Our services are therefore tailored to meet the specific needs of each of these customer segments.

Prenatal Diagnostic Testing

- *Community-based hospital pathology laboratories and regional reference laboratories:* This segment of the market is characterized by hospitals that provide basic laboratory services but do not offer complex genetic testing, such as microarrays. Generally speaking, in the past decade, most community hospitals have relied on traditional methods of chromosomal analysis, such as

karyotyping or FISH for miscarriage testing (also referred to as "Products of Conception" or "POC"), and this testing is typically sent out to a specialty laboratory. However, based on more recent, highly compelling data demonstrating the superiority of microarray testing to karyotyping, we believe significant growth opportunities exist in this segment. Another distinguishing factor of this segment involves the larger national and regional laboratories. These laboratories have sufficient professional competence and sophistication to partner with other service organizations to offer microarray technology as part of their service offerings. This segment of the market is characterized by a preponderance of clients that require us to bill the patients' insurers directly, as opposed to engaging in an institutional, direct-bill relationship.

- *Physician groups:* In the developmental genetics market, physician groups collectively constitute a significant market opportunity. This segment of the market typically outsources all of their genetic testing services, meaning that they require a global level of service that necessitates processing all aspects of patient billing. The physicians that make up this market include geneticists, reproductive endocrinologists, OB-GYNs and maternal fetal medicine ("MFM") specialists.

Postnatal Diagnostic Testing

- *Pediatric neurology clinics and Children's Hospitals:* This market segment, particularly the Children's Hospital sector, generally has relatively comprehensive laboratory capabilities and performs most basic genetic and chromosomal testing in-house, such as chromosome analysis, fluorescent *in situ* hybridization ("FISH") and polymerase chain reaction ("PCR")-based tests. These facilities typically provide comprehensive genetic counseling to their patients, which is a key component in the clinical evaluation and utilization of complex genomic assays in the pediatric diagnostic arena. Due to economic conditions, some institutions find themselves in the untenable situation of having limited access to third-party manufactured kit components and being unable to internalize such highly specialized genomic testing platforms due to lack of expertise in this area. This segment of the market typically either outsources the testing completely or identifies a laboratory to perform the technical component of the testing while maintaining the professional component (test interpretation) in-house. From a billing perspective, many of the customers in this segment prefer the direct billing model, and individual test pricing is negotiated with each institution.

Oncogenomic Diagnostic Testing

- *National and regional reference laboratories and other large hospitals/multi-hospital systems:* This segment typically has comprehensive capabilities and performs most of the basic cancer genetic testing in-house including, but not limited to, flow cytometry, chromosome analysis, FISH and PCR-based testing, as well as routine pathology testing. However, we believe that many of these institutions face budgetary constraints and subsequently have difficulty trying to bring up new, specialized diagnostic tests, such as microarray testing. Perhaps even more so than with developmental disorders, we believe that this segment of the market will frequently outsource the technical component (i.e., the laboratory processing, or "TC") of their high-complexity genomic test menu, while maintaining the professional component (i.e., the interpretation of the test results, or "PC") in-house. In keeping with this strategy, we therefore focus on marketing our TC services to this segment of the market by providing direct billing options.

Technologies

In order to achieve the promise of personalized medicine, our objective is to provide a suite of molecular diagnostic tests based on the following array-based technologies.

Oligo Arrays with SNPs

Our custom-designed oligo arrays allow us to analyze DNA on a highly refined scale. By incorporating smaller probes (25 - 75 bases in length), and spacing these shorter probes closely together, we are able to provide a dense, high-resolution analysis of the whole genome. In addition, with the platform we utilize, the oligos measure SNPs as part of the analysis. Working with an industry-aligned consortium, this customized array focuses on regions of known clinical significance (i.e. regions known to cause well-described genetic syndromes when lost or gained) as well as regions that make up the remainder of the genome, sometimes referred to as the genomic backbone. Since the introduction of high-density oligonucleotide arrays with SNP analysis into clinical medicine, many new genetic syndromes caused by genomic gains and losses have been, and still continue to be, identified.

Meta-analyses and large prospective studies have demonstrated that microarray testing provides a significant increase in the detection rate of chromosomal abnormalities compared to standard cytogenetic testing (i.e., karyotyping and evaluation of the tips of chromosomes, called subtelomeres, by FISH). Although the percent increase varies based on the type of sample being tested (i.e. miscarriage tissue, pediatric sample, prenatal sample), the data has shown that standard chromosomal analysis misses many disorders that are easily identifiable by microarray testing. The ability to identify a specific cause for a disorder or the cause of a pregnancy loss assists not only with diagnostic management, but also with anticipatory care.

In addition, microarrays have been shown to assist in the assessment of genetic instability in many types of cancer, such as breast, hematologic, brain, and the gastro-intestinal tract. Previously, chromosomal evaluation of tumors through standard testing, such as karyotyping, proved exceedingly difficult, as karyotyping and FISH both require live, actively dividing cells. Unlike karyotyping, however, microarray testing is DNA-based, meaning that it can be performed on non-living tissue, including tissue samples that have been fixed in formalin and embedded in paraffin ("FFPE").

Oligo Arrays with SNPs for FFPE tissue

In oncology and some cases of miscarriage analysis, the involved tissue has typically been processed by a pathology laboratory by using formalin to fix the tissue and using a paraffin block to store the fixed sample. To be a comprehensive service provider, our microarray platform must be able to evaluate genomic alterations in FFPE samples. Working with our array platform manufacturer, we have successfully adapted our oligonucleotide array for analysis of FFPE specimens. During the specialized FFPE process, the fragmented DNA is 'restored' to longer segments by ligating free DNA ends together prior to analysis. This restoration step makes the oligo array particularly useful in analyzing DNA samples that are of poorer quality, such as older samples or tissue that have been strongly 'fixed' in formalin and placed in a paraffin block, because the process 'restores' large segments that increase the assay's robustness and reduces "noise" in the data.

Our Services

Overview

We utilize the latest in microarray technologies to deliver molecular diagnostic services for the diagnosis of diseases and the management of patient care in two primary areas: (i) developmental disorders associated with intellectual disability, congenital anomalies, dysmorphic features, autism spectrum disorders and miscarriage/stillbirth; and (ii) hematology/oncology.

Developmental Disorders: Prenatal and Pediatric Care

The focus of our developmental disorder suite of array tests is on the prenatal and postnatal application of microarrays to assist in diagnosing genomic syndromes associated with intellectual disability,

developmental delays, congenital anomalies, dysmorphic features and autism spectrum disorders. Although traditional karyotyping was regarded as the "gold standard" for this type of diagnosis for the past two decades, recent meta-analyses and large prospective multicenter studies have definitively demonstrated a significant improvement in the detection rate of chromosomal abnormalities by microarray analysis compared to standard karyotyping and/or FISH.

In 2010, the American College of Medical Genetics, which is the governing body for the utilization of genetic testing, recommended microarray testing *in lieu of* standard karyotyping children with intellectual disabilities, developmental disorders, congenital abnormalities, dysmorphic features, and autism/autism spectrum disorders based on the fact that microarray analysis *doubled* the detection rate of chromosomal abnormalities in these patients. In 2013, following the publication of a large, prospective, multicenter trial designed to compare karyotyping to microarray analysis in the prenatal population (Wapner et al.), the American College of Obstetricians and Gynecologists, which is the governing body for the practice of medicine in the area of obstetrics and gynecology, recommended that microarray analysis be performed *in lieu of* standard karyotyping when fetal anomalies are present on ultrasound, or there is a fetal death or stillbirth. They also recommended that microarray analysis be offered as an alternative to standard karyotyping for any other patient undergoing a prenatal diagnostic procedure, given the increased sensitivity of microarray analysis to detect chromosomal abnormalities, even following a normal karyotype result.

Microarray analysis provides critical information for families and their physicians. In prenatal care, it allows the physician and patient to make better pregnancy management and care decisions, as well as allowing for the opportunity to provide anticipatory care with respect to abnormalities that may be associated with a specific disorder that may not yet be recognizable. Such knowledge can inform decisions about where to deliver (such as at a tertiary care center for an infant with complex abnormalities) and how aggressive to be with neonatal support in very severe cases. In pediatric care, the same is true. Once the cause of a child's development disorder and/or congenital anomalies has been identified, parents, teachers and physicians can work toward ensuring that appropriate medical and educational care decisions are made based on the child's condition. And as with prenatal care, microarray analysis can assist in providing appropriate anticipatory care, such as initiating screening tests at an earlier age when the child's disorder is associated with an increased risk of a specific disorder or disease complication.

Developmental Disorders: Miscarriage and Stillbirth Analysis

As with prenatal and pediatric genetics, karyotyping has been considered the standard of care for evaluating pregnancy losses for chromosomal disorders. However, tissue from miscarriages, fetal deaths and stillbirths is difficult to culture (grow) in the laboratory, and this culturing process is required in order to perform a karyotype. Microarray analysis is particularly useful in this arena, as it does not depend on the successful growth of a cell culture. Instead, it relies solely on the cells' DNA, which can be directly extracted from nearly any fetal tissue sample. While karyotyping fails to provide a result in between 20-50% of these cases, microarray testing is able to provide a result greater than 95% of the time. This is particularly beneficial in the analysis of first trimester pregnancy loss, as it is estimated that 50-60% of all first trimester losses are due to chromosomal abnormalities. Being able to identify the cause of the miscarriage in one out of every two women means that physicians are better able to provide personalized reproductive counseling and plan future pregnancy management for a much larger segment of their patient population.

The Evolution of Our Clinical Microarray Testing

In 2006, we introduced our first developmental disorders microarray, which detected over 50 different genetic disorders in one multiplexed analysis. In October 2006, the U.S. Food and Drug Administration ("FDA") indicated that this test did not require approval under its guidance as it did not meet the definition of an *In Vitro* Diagnostics Multivariate Index Analysis ("IVDMIA"). Following this

determination, we launched our microarray test under the Clinical Laboratory Improvement Amendments of 1988 ("CLIA") guidelines for use in the clinical care of patients. Since then, we have launched several upgrades of this test. Our current microarray offering is capable of identifying more than 500 different chromosomal and genetic disorders, ranging from common conditions, such as Down syndrome (trisomy 21) and DiGeorge syndrome (deletion 22q11.2), to much more rare disorders.

We continue to monitor primary, peer-reviewed journals for information that allows us to make either incremental improvements to the current array design, or much larger changes for a new version of our array. As an example of our publication-driven approach, as early as 2009, we began to include specific coverage of regions shown to be strongly associated with autism spectrum disorders ("ASDs") or predisposition to ASDs, long before the guidelines to testing children with autism/ASDs included microarray analysis. It is now recognized that approximately 7% of all children with an ASD have a genomic abnormality that is identifiable by microarray. This contributes to the clinical recommendation that chromosomal microarray analysis be offered to all individuals with an ASD as part of a first-tier diagnostic evaluation.

More significantly, based upon an ongoing evaluation of current medical literature, we adopted an oligonucleotide microarray platform that analyzes SNPs throughout the genome. In addition to assessing genomic copy number variations, analysis of SNPs enables detection of regions of loss of heterozygosity ("LOH"), which indicate the presences of a genetic imprinting disorder, or an increased risk of an autosomal recessive disorder due to shared ancestry. In the miscarriage analysis space, SNPs readily detect triploidy, molar pregnancies, and maternal cell contamination, thereby decreasing the number of additional ancillary testing often required for such samples.

Oncology

Another area of focus for our diagnostic services is cancer. At any given time in the United States, there are several million individuals who either have cancer or are cancer survivors and are at risk for recurrence. Patients who are newly diagnosed with cancer require significant medical care, which often includes physical examinations, biopsies, diagnostic testing, chemotherapy, surgery, extended hospital stays and radiotherapy. We have developed, and continue to develop, a series of diagnostic microarray tests that, through the genetic analysis of blood, tissue or biopsy samples, will provide additional genomic information to physicians for use in providing more personalized management of their patients.

We offer microarray testing to address several of the common hematological malignancies, with a particular emphasis on Chronic Lymphocytic Leukemia ("CLL"). Our array-based test is designed to evaluate the underlying genetic aberrations in the cancer cells to assist in providing additional information regarding the likely clinical course of the disease. Such information can then be utilized by physicians, in combination with other tests, to make better-informed patient management and treatment decisions and recommendations.

In breast cancer, HER2 status has been traditionally determined by immunohistochemistry ("IHC") to assess the amount of HER2 protein present, or by FISH analysis to evaluate for the presence of HER2 gene amplification at the DNA level in cancer cells. However, both of these tests are relatively subjective, and studies have shown significant variability in interpretation between different pathologists on similar cases. To complicate matters further, some cases show equivocal results (i.e. not clearly positive or negative), and up to 20% of cases have discordant IHC and FISH results, in which one is positive and the other is negative. Due to the incomplete assessment of chromosome 17 and the complex structural alterations associated with breast cancer, we believe FISH and IHC remain imperfect diagnostic tests for HER2 status determination. In contrast, microarray analysis of chromosome 17 provides an objective result for the assessment of HER2 copy number and resolves both equivocal and discordant HER2 results obtained by FISH and IHC.

Our Strategy

Our strategic intent is to become the preeminent diagnostic services laboratory for prenatal microarray testing. To achieve this, we have recently implemented a three-pronged approach to drive market adoption. The three components we are leveraging include: 1) expanding our direct sales efforts and emphasizing direct sales in miscarriage analysis testing; 2) leveraging pathology partnerships; and 3) establishing strategic alliances with industry partners.

Direct Sales Efforts in Miscarriage Analysis

Our sales and marketing representatives aggressively market our miscarriage analysis microarray testing to the three primary physician groups involved in miscarriage analysis: OB/GYNs, MFMs, and the historically underserved pathology community. It is the OB/GYN, and occasionally the MFM who perform the surgical procedure to remove fetal and placental tissue from the uterus following a fetal death or a miscarriage. The pathologists are the custodians of this tissue and are often charged with determining which reference lab to utilize for send-out testing on the specimen. Our strategic sales approach is to engage with, and sell to, the multiple decision-makers in the laboratory and the clinic, culminating with the pathologist. We believe this pathology-centric approach to miscarriage analysis testing gives us a competitive edge against our competitors in that our competitors' primary sales call point is the medical office clinician and their primary test offering focus is on other product or service lines in developmental testing.

Recent studies by the National Institute of Health, which were published in the *New England Journal of Medicine* in December of 2012, indicate that the clinical benefit of DNA microarray testing is greater than that of traditional karyotyping for both stillbirths (Reddy, et al.) and for invasive procedures (Wapner, et al.). In addition, in December 2013, the American College of Obstetricians and Gynecologists ("ACOG") issued a Committee Opinion recommending microarray analysis *in lieu of karyotyping* for cases of fetal death and for stillbirths. We are leveraging our direct sales channel and our strategic partners' channels to capitalize on the opportunity created by the publishing of these landmark studies and the recommendation of ACOG, which we believe highlights the superiority of microarray testing compared to traditional testing, such as karyotyping and FISH.

Pathology Partnerships

Since pathologists are a critical component in the referral to reference lab testing, we have established and will continue to pursue multiple relationships to facilitate the expansion of our array services. We plan to pursue additional relationships and collaborations with pathology groups to gain access to sales, marketing and distribution channels. These relationships include alliances with other complementary laboratory service providers, which helps us increase our market reach and frequency of visits to potential customers.

Strategic Alliances

Strategic alliances with established industry partners allow us to round-out our test menu to offer complete testing solutions to MFM specialists and OB/GYNs, and enable us to capitalize on the demand for complementary techniques such as non-invasive prenatal testing ("NIPT"). We have established several key partnerships in the past year, most notably with Sequenom, Inc., where we jointly announced in August 2013 that we entered into a collaboration agreement to market and promote microarray analysis to confirm abnormal NIPT results and to offer a broader scope of detection of chromosomal abnormalities for patients undergoing diagnostic testing.

In addition, we have focused our reimbursement efforts to maximize collections for all of the tests that we perform. We internalized our billing and collections process in 2012 and are augmenting our billing and reimbursement department to secure future positive coverage decisions and optimize payer relations. We

are also focused on increasing our managed care relationships, and we recently announced payor contracts for cytogenomic testing for over 60 million covered lives in the United States.

Billing and Reimbursement

Payor Categories

Revenues from our clinical laboratory tests are generated primarily from the provision of test results to the referring healthcare provider, however reimbursement can come from several different sources. Depending on the billing arrangement and applicable law, parties that reimburse us for our services include direct-bill customers, third-party payors and individual patients. Where there is a coverage policy, contract or agreement in place, we bill the third-party payor, the hospital or referring laboratory as well as the patient (for deductibles and coinsurance or copayments, where applicable) in accordance with the policy or contractual terms. Where there is no coverage policy, contract or agreement in place, we pursue reimbursement on behalf of each patient on a case-by-case basis and rely on applicable billing standards to guide our claims process.

Our direct-bill payors include healthcare institutions such as hospitals and clinics, and in some circumstances, patients themselves. For the direct-bill and individual patient categories, our diagnostic services are billed and revenues are recognized at established contractual rates, once the test results have been delivered to the ordering physician.

Third-party payors include organizations such as commercial insurance companies, as well as government payors including Medicare and Medicaid. We bill our tests to these payors using individual billing codes known as Common Procedural Terminology ("CPT") codes established for array-based laboratory diagnostic testing. For the non-governmental third-party payor category, our diagnostic services are billed at our list prices for the tests performed, but they are recognized for accounting and financial reporting purposes as diagnostic service revenues based upon the amounts expected to be collected. The difference between the amount billed to each payor and the amount expected to be collected is recorded as a contractual allowance. For governmental payors, we recognize revenues based upon published fee schedules established by the Centers for Medicare and Medicaid Services ("CMS") or various state Medicaid fee schedules.

CPT Coding

CPT codes are the main data code set used by physicians, hospitals, laboratories and other health care professionals to report separately-payable clinical laboratory tests for reimbursement purposes. The CPT coding system is maintained and updated on an annual basis by the American Medical Association ("AMA"). In 2012, the AMA added over one hundred new CPT codes for specific molecular tests such as ours. These new codes replaced the more general "stacking" codes that were previously used to bill for these services, and they became effective January 2013. In the Final Physician Fee Schedule Rule, which was issued in November 2012, CMS stated that it had determined it would pay for the new codes as clinical laboratory tests, which are payable on the Clinical Laboratory Fee Schedule ("CLFS"). Although the various Medicare Administrative Contractors ("MACs") established pricing based on a "gap filling" methodology, not all of the codes were priced by CMS and were omitted from the 2014 Clinical Lab Fee Schedule. These include molecular codes used by CombiMatrix in billing for our molecular microarray tests.

The omission by CMS of pricing for certain CPT codes used by us could have an adverse impact on our revenues and cash reimbursement going forward. We continue to work with billing consultants and industry advisory groups to determine what information and action is required to ensure reimbursement. There is also a possibility that other third-party payors will not establish positive or adequate coverage policies or reimbursement rates. Though pricing will vary from payor to payor, it is too early to assess the impact, if any, that the omission of pricing on certain molecular CPT codes may have on our results of operations.

Reimbursement

For the years ending December 31, 2013 and 2012, approximately 31% and 38% of our diagnostic services revenues were derived from direct bill customers, 67% and 55% from third-party commercial insurance carriers and 2% and 7% from government payors, including Medicare and several state Medicaid plans, respectively.

With respect to the third-party payors that we bill, we are considered an "out-of-network" provider with the majority of the carriers, resulting in varying expected reimbursement amounts, which we believe is not unusual for a company such as ours that offers highly specialized and/or unique testing. An "in-network" provider has a contracted arrangement with the insurance company or benefits provider. This contract governs, among other things, service-level agreements and reimbursement rates. In certain instances, an insurance company may negotiate an "in-network" rate for our testing rather than pay the typical "out-of-network" rate. During our operating history, we have been able to receive reimbursement for most of our tests from major commercial third-party payors based on their established policies. Our efforts in obtaining reimbursement based on individual claims, including pursuing appeals or reconsiderations of claims denials, require a substantial amount of time and effort, and bills may not be paid for many months, if at all. Furthermore, if a third-party payor denies coverage after final appeal, payment may not be received. We implemented a revenue cycle management system and have expanded our billing and collections department to address these issues. We have also executed managed care contracts to become "in-network" with certain third-party payors. However, we cannot predict whether, or under what circumstances, payors will reimburse our microarray tests. Payment amounts can also vary across individual policies. Denial of coverage by payors, or reimbursement at inadequate levels, will have a material adverse impact on market acceptance of our tests.

Governmental Regulation

Our business is subject to extensive laws and regulations as described below. It is impossible to predict what future changes will be made to federal, state and local laws and regulations and the impact that such changes may have on us.

The Patient Protection and Affordable Care Act

Comprehensive health care reform legislation passed in 2010 and titled The Patient Protection and Affordable Care Act ("ACA") instituted permanent cuts to the CLFS, which are in addition to the automatic sequestration reductions mandated by the Budget Control Act of 2011. Most of the regulations implementing the ACA will not be finalized until the end of 2014 and beyond, making it impossible to predict with certainty the ultimate effects that the ACA will have on us. Generally, the ACA and private payers continue to experiment with various payment mechanisms designed to contain costs, for example, accountable care and managed care organizations. These reforms present challenges and unpredictability to laboratories like ours.

Clinical Laboratory Improvement Amendments of 1988

As a clinical reference laboratory, we are required to hold certain federal, state and local licenses as well as certain certifications and permits to conduct our business. Under CLIA, we are required to hold a certificate applicable to the type of work we perform and to comply with standards covering personnel, facilities administration, quality systems and proficiency testing. We have a certificate of accreditation under CLIA to perform testing and are accredited by the College of American Pathologists ("CAP"). To renew our CLIA certificate, we are subject to periodic inspection standards applicable to the testing we perform. Should regulatory compliance requirements become substantially more complex, operational costs at our lab might increase in the future. If our laboratory is out of compliance with CLIA requirements, we may be subject to certain sanctions including suspension or revocation of our CLIA

certificate and various civil and/or criminal penalties. We must maintain CLIA compliance and certification to be eligible to bill for services provided to Medicare beneficiaries. If we were to be found out of compliance with CLIA program requirements and subjected to sanction, our business could be harmed. We are not able to guarantee that we will pass all future license and/or certification inspections.

U.S. Food and Drug Administration

Regulations by the U.S. FDA regarding genetic testing are in a state of flux and changes to these regulations could dramatically affect the molecular diagnostics industry in the near future. While the FDA has the authority to regulate laboratory developed tests ("LDTs"), it has generally exercised enforcement discretion in the area of LDTs performed by CLIA-certified laboratories. However, with the advent of Direct-to-Consumer DNA testing (i.e., testing that is marketed directly to the public, does not require a physician's order, and provides risk factor information rather than diagnostic or prognostic information), genomic testing using microarray technology (particularly single nucleotide polymorphism arrays) has come under scrutiny. In July 2010, the FDA held a two-day public meeting to obtain input from key stakeholders, including physicians, laboratory directors, regulatory and accrediting body members and the general public, regarding the structuring of a regulatory framework for LDTs. During this meeting, we believe that it became clear that the FDA's primary concern had less to do with CLIA-certified laboratories (such as ours) performing *clinical* microarray testing (i.e., testing ordered by a physician for medically necessary reasons, including disease diagnosis, monitoring and treatment decisions) and more to do with Direct-to-Consumer laboratories performing *non-clinical* testing that relies on what the FDA has referred to as "black box" proprietary algorithms to interpret their microarray data. This meeting came on the heels of a U.S. Government Accountability Office report entitled "Direct-to-Consumer Genetic Tests: Misleading Test Results are Further Complicated By Deceptive Marketing and Other Questionable Practices." While no specific guidelines or timelines were stated, industry participants generally believe that changes to how the FDA regulates LDTs will be forthcoming. There can be no assurance, however, that such changes will not negatively impact our business. Generally speaking, the FDA and the legislative branch frequently entertain proposals that would increase FDA oversight of laboratories like ours and the testing that we conduct. The outcome and impact of such proposals on our business is impossible to predict. The FDA may impose a range of penalties for non-compliance with any of its rules, including recalls, injunctions and sanctions, any of which would negatively impact our business.

Health Insurance Portability and Accountability Act

Under the federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), the U.S. Department of Health and Human Services issued regulations to protect the privacy of individuals' personal medical and health information through the implementation of security measures that govern how such data is stored and maintained, and to limit the disclosure of this "protected health information" to only those who receive specific authorization from the individual. The federal Health Information Technology for Economic and Clinical Health ("HITECH") Act, enacted in February, 2009 expanded the HIPAA rules significantly, in particular HIPAA enforcement. For example, HITECH authorizes state attorneys general to bring civil actions on behalf of state residents and it requires HHS to conduct extensive auditing. Perhaps most importantly, HITECH renders HIPAA directly applicable to the "business associates" of covered entities, which in some cases may mean us. The omnibus regulation implementing most of the HITECH provisions was published in January, 2013. In February, 2014, CMS issued final rules amending HIPAA to provide individuals or their personal representatives with the right to receive copies of their test reports from laboratories covered by HIPAA and/or to request that such test reports be transmitted to certain third parties. This rule preempts many state laws that prohibit laboratories like ours from directly providing individuals with their test reports. Violations of HIPAA regulations include civil and criminal penalties, including up to ten years imprisonment. Consequently, our policies and procedures are designed to comply with such regulations. The requirements under these regulations may change periodically and we will continue to monitor such changes.

There are also a number of state laws governing confidentiality of health information that are applicable to our operations, and new laws governing privacy may be adopted in the future. Violation of such laws could affect our applicable state licensure and could also result in criminal and/or civil penalties.

In addition, HIPAA and many state laws would require that we provide a written notification to affected individuals, certain federal and state agencies, and possibly the media if we suffered a breach of personal medical or health information. While we believe that we comply with regulations currently, we can provide no assurance that we are or will remain in compliance with diverse privacy requirements as they develop.

We believe that we are in compliance with the current Transactions and Code Sets Rule. The ICD-10-CM compliance date is October 1, 2014. Failure to comply could adversely impact our reimbursement and the ongoing efforts of other providers and payers to comply could have a negative effect on our receipts and net revenue. We also believe that we are in compliance with the Operating Rules for electronic funds transfers and remittance advice transactions. We will continue to assess our computer systems to ensure compliance with such requirements.

Federal and State Insurance Regulations, Self-referral Prohibitions and Anti-kickback Laws

We are subject to federal and state laws, such as the Federal False Claims Act, state false claims acts, the illegal remuneration provisions of the Social Security Act, the federal anti-kickback laws, state anti-kickback laws, and the federal "Stark" laws, that govern financial and other arrangements among healthcare providers, their owners, vendors and referral sources, and that are intended to prevent healthcare fraud and abuse. Among other things, these laws prohibit kickbacks, bribes and rebates, as well as other direct and indirect payments or fee splitting arrangements that are designed to induce the referral of patients to a particular provider for medical products or services payable by any federal healthcare program, and prohibit presenting a false or misleading claim for payment under a federal or state program. They also prohibit some physician self-referrals. These laws are liberally interpreted and aggressively enforced by multiple state and federal agencies and law enforcement (including individual "qui tam" plaintiffs) and such enforcement is increasing. For example, the ACA increased funding for federal enforcement actions and many states have established their own Medicare/Medicaid Fraud Units and require providers to conspicuously post the applicable Unit's hotline number. Possible sanctions for violation of any of these restrictions or prohibitions include loss of eligibility to participate in federal and state reimbursement programs and civil and criminal penalties. Changes in these laws at all levels of government are frequent and could increase our cost of doing business. If we fail to comply, even inadvertently, with any of these requirements, we could be required to alter our operations, refund payments to the government, lose our licensure or accreditation, enter into corporate integrity, deferred prosecution or similar agreements with state or federal government agencies, and become subject to significant civil and criminal penalties.

State Laboratory Licensing

In addition to federal certification requirements of laboratories under CLIA, licensure is required and maintained for our clinical reference laboratory under California law. We currently maintain a license in good standing with the California Department of Health Services ("DHS"), but if our clinical reference laboratory is found to be out of compliance with California standards, our license may be suspended or revoked by the California DHS, and we may be subject to fines and penalties.

We must also satisfy various application and provisional requirements for other states in which we desire to conduct business, and we have obtained licenses for Florida, Maryland, Pennsylvania and Rhode Island. We are also licensed by the New York State Department of Health specifically for cytogenetics and genomic microarrays relating to pediatric specimens and to products of conception samples for miscarriage analysis. We may become aware from time to time of additional states that require out-of-state laboratories

to obtain licensure in order to accept patient specimens from those states, and it is possible that other states do have such requirements or will have such requirements in the future. If we identify any other state with such requirements or if we are contacted by any other states advising us of such requirements, we intend to strictly adhere to the instructions and guidelines from the state regulators as to how we should comply with such requirements. There can be no assurance, however, that our efforts to comply will be successful.

Commercial Operations

All services offered by us are performed in our CLIA certified, CAP accredited clinical laboratory in Irvine, California. Our commercial operations infrastructure includes sales, marketing, clinical support services and billing/reimbursement. We continue to build a nationally focused commercialization strategy by interacting directly with pathologists, medical geneticists, maternal fetal medicine specialists, reproductive endocrinologists, obstetrician/gynecologists, pediatric neurologists and genetic counselors. The market-specific experience of our direct sales force, coupled with regional and local territory experience, is expected to increase physician awareness and demand for our services. Our marketing and clinical support services teams work in tandem to increase awareness and appropriate utilization of our services by both physicians and patients. Our marketing initiatives include traditional marketing tactics such as physician education, professional medical society and advocacy tradeshows as well as web based initiatives. Our billing and reimbursement team works to facilitate access to our services by assisting ordering physicians and their patients with healthcare insurance billing, appeal processes, patient payment options, and securing managed care contracts with willing payers. In addition to our direct sales approach, we actively market our services to other laboratories through pathology partnerships and through strategic alliances with complementary industry partners.

Seasonality

Our business is subject to the impact of seasonality, particularly during the mid-summer months when patients tend to be less likely to visit their healthcare providers and pursue diagnostic testing and physicians are on vacation. In addition, during the winter months, disruptions in transportation due to inclement weather may affect not only patients' ability to visit their healthcare providers, but it may also prompt provider concerns about potential disruption or delay in sample processing, both of which negatively impact our business. Consequently, the demand for our services, in general, could be subject to declines in the summer and during periods of severe weather.

Patents, Trademarks and Licenses

As a part of our corporate restructuring that occurred in 2010, many of the patents listed below were licensed to a private company, CustomArray, Inc., for which we receive minimum royalties of $100,000 per year. The intellectual property rights listed below are not currently used in our molecular diagnostics services business.

In the United States, we have been issued ten United States patents related to our former CustomArray tool business. Three of these patents (U.S. Patent Nos. 6,093,302 and 6,280,595, which expire on January 5, 2018 and 6,444,111, which expires October 13, 2019) are first generation technology relating to methods for electrochemical synthesis of arrays of DNA and other biological materials as well as non-biological materials. The fourth United States Patent (U.S. Patent No. 6,456,942 which expires January 25, 2020) describes and claims a network infrastructure for array synthesis and analysis.

The fifth United States Patent (U.S. Patent No. 7,075,187 which expires November 9, 2021) describes and claims a porous coating material that covers electrodes and is used as a three-dimensional support material for electrochemical synthesis on the individual electrodes of an array of electrodes. The sixth (U.S. Patent No. 7,323,320 which expires September 12, 2022) and seventh (U.S. Patent No. 7,563,600 which expires September 12, 2022) United States Patents have been assigned to another company. The eighth United

States Patent (U.S. Patent No. 7,507,837 which expires December 22, 2025) describes and claims a process for performing an isolated palladium (II)-mediated oxidation reaction on our electrode for building libraries of organic compounds electrochemically and in parallel. The ninth United States Patent (U.S. Patent No. 7,541,314 which expires February 24, 2026) describes and claims a microarray with a linker that is cleaved by a base for use in selective removal of oligonucleotides from the microarray. A tenth United States Patent (U.S. Patent No. 7,718,579 which expires September 13, 2024) describes and claims method for electrochemical removal of acid-labile protecting groups on an electrode microarray using an organic solution. Corresponding patents describing and claiming methods for electrochemical synthesis of arrays have been issued to us in the European Union, Australia, and Taiwan and are pending in the remaining major industrialized markets. We have filed patent applications relating to new methods of, and materials for, electrochemical synthesis and for electrochemical detection, which eliminates the need for optical readers.

We seek to protect our corporate identity and services with trademarks and service marks. In addition, our trademark strategy includes protecting the identity and goodwill associated with our technologies and services. Currently, our registered trademarks include COMBIMATRIX®.

We attempt to obtain licenses to the patent rights of others when required to meet our business objectives. For example, we purchase chemical reagents from suppliers who are licensed under appropriate patent rights. Further, our policy is to obtain licenses from patent holders for our services whenever such licenses are required. We evaluate if and when a license is needed or required depending upon the individual circumstance.

Competition

We believe that competition within our market is increasing. Our business competitors in the United States include regional DNA microarray clinical laboratories, both commercial and academic, as well as large national companies such as LabCorp (through its acquisition of Genzyme), Perkin-Elmer (through its acquisition of Signature Genomics), and approximately ten others. Some of these competitors may possess greater financial, technical, human and other resources than we do. In addition, technological advances or entirely different approaches developed by one or more of our competitors could render our services obsolete or uneconomical. The existing approaches of competitors or new approaches or technology developed by competitors may be more effective than those developed by or currently utilized by us.

Our market is rapidly changing, and we expect to face additional competition from new market entrants, new product and service developments and consolidation of our existing competitors. As new competitors emerge, the intensity of competition may increase in the future. An example of this is the emergence of NIPT companies in the past several years. These companies offer a screening test that is complementary to diagnostic microarray testing, as clinical guidelines recommend that all positive NIPT results be confirmed with diagnostic testing performed using an invasive technique, such as chorionic villus sampling or amniocentesis. We believe that by including NIPT as part of our testing repertoire, we have a more complete offering that helps mitigate competitive risk and optimizes patient care.

Research and Development

Our research and development activities primarily relate to the development and validation of diagnostic tests in connection with our specialized developmental disorder and oncology array-based diagnostic services.

Employees

As of December 31, 2013, we had 43 full-time-equivalent employees, one of whom is an M.D. and another who is a Ph.D. We believe that we maintain good relationships with our employees and are not subject to collective bargaining arrangements.

Environmental Matters

Our operations involve the use, transportation, storage and disposal of hazardous substances. As a result, we are subject to environmental and health and safety laws and regulations. The cost of complying with these and any future environmental regulations could be substantial, though historically such costs have not been significant. In addition, if we fail to comply with environmental laws and regulations, or release any hazardous substances into the environment, we could be exposed to substantial liability in the form of fines, penalties, remediation costs and other damages and could even suffer a curtailment or shut down of our operations.

Available Information

We are subject to the informational requirements of the Securities Exchange Act of 1934. Therefore, we file periodic reports, proxy statements and other information with the SEC. Such reports, proxy statements and other information may be obtained by visiting the Public Reference Room of the SEC at 100 F Street N.E., Washington, D.C. 20549 or by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers that file electronically.

Additional financial and company-related information can be found in the Investor Relations section of our website at www.combimatrix.com. Our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, are made available free of charge on our website as soon as reasonably practicable after we electronically file them with or furnish them to the SEC. Information contained on our web site is not part of this Annual Report on Form 10-K or our other filings with the SEC.

The charters of our Audit Committee, our Compensation Committee and our Nominating and Governance Committee are available on the Investor Relations section of our website under "Corporate Governance." Also available on that section of our website is our Code of Business Conduct and Ethics, which we expect every employee, officer and director to read, understand and abide by. This information is also available by writing to us at the address on the cover of this report.

Item 1A. RISK FACTORS

An investment in our securities involves a high degree of risk. Before making a decision to purchase our securities, you should carefully consider all of the risks described in this annual report. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business and results of operations. If any of these risks actually occur, our business, financial condition or results of operations could be seriously harmed. In that event, the market price for our common stock could decline and you may lose part or all of your investment.

Risks Related To Our Business

We have a history of losses and expect to incur additional losses in the future.

We have sustained substantial losses since our inception. We may never become profitable, or if we do, we may not be able to sustain profitability. We expect to incur significant research and development, marketing, general and administrative expenses. As a result, we expect to incur losses for the foreseeable future.

To date, we have relied primarily upon selling equity and convertible debt and equity securities, as well as payments from strategic partners, to generate the funds needed to finance the implementation of our

business strategies. We cannot assure you that we will not encounter unforeseen difficulties, including the outside influences identified below that may deplete our capital resources more rapidly than anticipated. Our subsidiary companies also may be required to obtain additional financing through bank borrowings, debt or equity financings or otherwise, which would require us to make additional investments or face a dilution of our equity interests. We cannot be sure that additional funding will be available on favorable terms, if at all. If we fail to obtain additional funding when needed for our subsidiary companies and ourselves, we may not be able to execute our business plans or continue operations, and our business may be materially adversely affected.

We began commercialization of our molecular diagnostics services in 2006. Accordingly, we have a limited operating history of generating revenues from services. In addition, we are still developing our technologies and service offerings and are subject to the risks, expenses and difficulties frequently encountered by companies with such limited operating histories. Since we have a limited operating history, we cannot assure you that our operations will become profitable or that we will generate sufficient revenues to meet our expenditures and support our activities.

Because our business operations are subject to many uncontrollable outside influences, we may not succeed.

Our business operations are subject to numerous risks from outside influences, including the following:

- *Technological advances may make our array-based technology obsolete or less competitive, and as a result, our revenue and the value of our assets could materially decrease.*

  Our services are dependent upon oligonucleotide and SNP array-based technologies. These technologies compete with conventional diagnostic technologies such as karyotyping, FISH and polymerase chain reaction, or PCR-based tests. Our services are substantially dependent upon our ability to offer the latest in microarray technology in the chromosomal microarray analysis and proteomic markets. We expect to face additional competition from new market entrants and consolidation of our existing competitors. Many of our competitors have existing strategic relationships with major pharmaceutical and biotechnology companies, greater commercial experience and substantially greater financial and personnel resources than we do. We expect new competitors to emerge and the intensity of competition to increase in the future. If these companies are able to offer technological advances, our services may become less valuable or even obsolete. We cannot provide any assurance that existing or new competitors will not enter the market with the same or similar technological advances before we are able to do so.

- *New environmental regulation may materially increase the net losses of our business.*

  Our operations involve the use, transportation, storage and disposal of hazardous substances, and as a result, we are subject to environmental and health and safety laws and regulations. If we were to be found in violation of these laws and regulations, we may face fines or other penalties. Also, any changes in these laws and regulations could increase our compliance costs, and as a result, could materially increase our net losses.

- *Our technologies face uncertain market value.*

  Our business includes many services, some of which were more recently introduced into the market. We cannot provide any assurance that the increase, if any, in market acceptance of these technologies and services will meet or exceed our expectations.

  Further, we are developing services, some of which have not yet been introduced into the market. A lack of or limited market acceptance of these technologies and services will have a material adverse effect upon our results of operations.

- *We obtain components and raw materials from a limited number of sources, and, in some cases, a single source, and the loss or interruption of our supply sources may materially adversely impact our ability to provide testing services to meet our existing or future sales targets.*

  Substantially all of the components and raw materials used in providing our testing services, including array slides and reagents, are currently provided to us from a limited number of sources or in some cases from a single source. Any supply interruption in a sole sourced component or raw material might result in up to a several month delay and materially harm our ability to provide testing services until a new source of supply, if any, could be located and qualified. In addition, an uncorrected impurity or supplier's variation in a raw material, either unknown to us or incompatible with our process, could have a material adverse effect on our ability to provide testing services. We may be unable to find a sufficient alternative supply channel in a reasonable time period, or on commercially reasonable terms, if at all.

Any one of the foregoing outside influences may require us to seek additional financing to meet the challenges presented or to mitigate a loss in revenue, and we may not be able to obtain the needed financing in a timely manner on commercially reasonable terms or at all. Further, any one of the foregoing outside influences affecting our business could make it less likely that we will be able to gain acceptance of our array technology by researchers in the pharmaceutical, biotechnology and academic communities.

Our revenues will be unpredictable, and this may materially adversely affect our financial condition.

The amount and timing of revenues that we may realize from our business will be unpredictable because whether our services are commercialized and generate revenues depends, in part, on the efforts and timing of our potential customers. Also, our sales cycles may be lengthy. As a result, our revenues may vary significantly from quarter to quarter, which could make our business difficult to manage and cause our quarterly results to be below market expectations. If this happens, the price of our common stock may decline significantly.

The genetic diagnostic laboratory market is characterized by rapid technological change, frequent new product and services introductions, and evolving industry standards, and we may encounter difficulties keeping pace with changes in this market.

The introduction of diagnostic tests embodying new technologies and the emergence of new industry standards can render existing tests obsolete and unmarketable in short periods of time. We expect our competitors to introduce new products and services and enhancements to their existing products and services. We may not be able to enhance our current tests, or to develop new tests, in a manner that keeps pace with emerging industry standards and achieves market acceptance. Our inability to accomplish any of these endeavors will likely have a material adverse effect on our business, operating results, cash flows, and financial condition.

If we do not enter into successful partnerships and collaborations with other companies, we may not be able to fully develop our technologies or services, and our business could be materially adversely affected.

Since we do not possess all of the resources necessary to develop and commercialize services that may result from our technologies on a mass scale, we will need either to grow our sales, marketing and support group or make appropriate arrangements with strategic partners to market, sell and support our services. We believe that we will have to enter into additional strategic partnerships to develop and commercialize future services. If we cannot identify adequate partners, if we do not enter into adequate agreements, or if our existing arrangements or future agreements are not successful, our ability to develop and commercialize services will be impacted negatively, and our revenues will be materially adversely affected.

We have limited commercial experience in marketing or selling any of our potential services, and unless we develop these capabilities, we may not be successful.

Even if we are able to develop our services for commercial release on a large scale, we have limited experience in performing our tests in the volumes that will be necessary for us to achieve commercial sales and in marketing or selling our services to potential customers. We cannot assure you that we will be able to commercially perform our tests on a timely basis, in sufficient quantities, or on commercially reasonable terms.

We face intense competition, and we cannot assure you that we will be successful competing in the market.

The diagnostics market is characterized by rapidly changing technology, evolving industry standards, changes in customer needs, emerging competition and new product and services introductions. One or more of our competitors may offer technology superior to ours and render our technology obsolete or uneconomical. Many of our competitors have greater financial and personnel resources and more experience in marketing, sales and research and development than we have. If we were not able to compete successfully, our business and financial condition would be materially harmed.

If our technology is not widely adopted by physicians and laboratories in the diagnostics market, our business will be materially adversely affected.

In order to be successful, our test offerings must meet the commercial requirements of hospitals and physicians and be considered the standard of care in order to be widely adopted. Market acceptance will depend on many factors, including:

- the benefits and cost-effectiveness of our services relative to others available in the market;
- our ability to provide testing services in sufficient quantities with acceptable quality and reliability and at an acceptable cost;
- our ability to develop and market additional tests and enhance existing tests that are responsive to the changing needs of our customers; and
- the willingness and ability of customers to adopt new technologies or the reluctance of customers to change technologies upon which they have previously relied.

The FDA may decide to regulate LDTs, which could prevent us from offering existing tests and/or delay the introduction of new testing services.

During 2010, the FDA publicly announced that it has decided to exercise regulatory authority over LDTs and that it plans to issue guidance to the industry regarding its regulatory approach. The FDA has indicated that it will use a risk-based approach to regulation and will direct more resources to tests with wider distribution and with the highest risk of injury, but that it will be sensitive to the need to not adversely impact patient care or innovation. The FDA has not announced a framework or timetable for implementing its new regulatory approach. The regulatory approach adopted by the FDA may lead to an increased regulatory burden, including additional costs and delays in introducing new tests. While the ultimate impact of the FDA's approach is unknown, it may be extensive and may result in significant change. Our failure to adapt to these changes could have a material adverse effect on our business.

U.S. healthcare reform legislation may result in significant changes and our business could be adversely impacted if we fail to adapt.

Government oversight of and attention to the healthcare industry in the United States is significant and increasing. In March 2010, U.S. federal legislation was enacted to reform healthcare. The legislation provides for reductions in the Medicare clinical laboratory fee schedule beginning in 2011 and also

includes a productivity adjustment that reduces the CPI market basket update beginning in 2011. The legislation imposes an excise tax on the seller for the sale of certain medical devices in the United States, including those purchased and used by laboratories, beginning in 2013. The legislation establishes the Independent Payment Advisory Board, which will be responsible, beginning in 2014, annually to submit proposals aimed at reducing Medicare cost growth while preserving quality. These proposals automatically will be implemented unless Congress enacts alternative proposals that achieve the same savings targets. Further, the legislation calls for the Center for Medicare and Medicaid Innovation to examine alternative payment methodologies and conduct demonstration programs. The legislation provides for extensive health insurance reforms, including the elimination of pre-existing condition exclusions and other limitations on coverage, fixed percentages on medical loss ratios, expansion in Medicaid and other programs, employer mandates, individual mandates, creation of state and regional health insurance exchanges, and tax subsidies for individuals to help cover the cost of individual insurance coverage. The legislation also permits the establishment of accountable care organizations, a new healthcare delivery model. Additionally, in November, 2013, CMS finalized a proposal to annually evaluate reimbursement rates for Clinical Laboratory Fee Schedule codes based on technological changes, volume, growth, and so on. Payment adjustments are scheduled to begin on January 1, 2015 and CMS plans to have evaluated all 1,250 CLFS codes by December 31, 2019. The cuts described in this section are in addition to various automatic sequestration cuts mandated by the Budget Control Act of 2011 and the possibility that Congress will at some future date fail to prevent reductions to the Physician Fee Schedule under the Sustainable Growth Rate formula. While the ultimate impact of the health reform and related legislation on the healthcare industry is unknown, it is likely to be extensive and may result in significant change. Our failure to adapt to these changes could have a material adverse effect on our business.

A significant component of our revenue is dependent upon successful insurance claims. Our revenue will be diminished if payors do not adequately cover or reimburse us for our services.

Physicians and patients may decide not to order our high-complexity genomic microarray tests unless third-party payors, such as managed care organizations as well as government payors such as Medicare and Medicaid, pay a substantial portion of the test price. Reimbursement by a third-party payor may depend on a number of factors, including a payors' determination that tests using our technologies are:

- not experimental or investigational;
- medically necessary;
- appropriate for the specific patient;
- cost-effective;
- supported by peer-reviewed publications; and
- included in clinical practice guidelines.

A substantial portion of the testing for which we bill our hospital and laboratory clients is ultimately paid by third-party payors. However, there is uncertainty concerning third-party payor reimbursement of any test, including our high-complexity genomic microarray tests. Several entities conduct technology assessments of medical tests and devices and provide the results of their assessments for informational purposes to other parties. These assessments may be used by third-party payors and health care providers as grounds to deny coverage for a test or procedure. It is possible that federal, state and third-party insurers may limit their coverage of our tests in the future.

Increasing emphasis on managed care in the United States is likely to put pressure on the pricing of healthcare services. Uncertainty exists as to the coverage and reimbursement status of new applications or services. Governmental payors and private payors are scrutinizing new medical products and services. Such third-parties may not cover, or may limit coverage and resulting reimbursement for our services.

Additionally, third-party insurance coverage may not be available to patients for any of our existing tests or tests we may add in the future. Any pricing pressure exerted by these third-party payors on our customers may, in turn, be exerted by our customers on us. If governmental payors, including their contracted administrators, and other third-party payors do not provide adequate coverage and/or timely reimbursement for our services, our operating results, cash flows, or financial condition may materially decline.

Our business could be adversely impacted by the adoption of new coding for molecular genetic tests.

Certain CPT codes that we use to bill for our microarray tests were omitted by CMS from the Clinical Laboratory Fee Schedule in 2013. The pricing omission will force state Medicaid plans and third party payors to determine their own price independent of CMS's recommendations (or lack thereof). There can be no guarantees that Medicaid and other payors will establish favorable reimbursement rates or adequate coverage policies. If payors do not recognize the value of the molecular genetic tests we offer or do not provide coverage for molecular tests such as ours, our revenues, earnings and cash flows could be adversely impacted.

Our cash flows and financial condition may materially decline if payors do not reimburse us for our services in a timely manner.

We depend on our payors to reimburse us for our services in timely manner. If our payors do not reimburse us in a timely manner, our cash flows and financial condition may materially decline.

Third-party billing is extremely complicated and could result in us incurring significant additional costs.

Billing for molecular laboratory services is extremely complicated. The client is the party that orders the tests and the payor is the party that pays for the tests, and the two are not typically the same. Depending on the billing arrangement and/or applicable law, we need to bill various payors, such as patients, health insurance companies, Medicare, Medicaid, doctors and employer groups, all of which have different billing requirements. Health insurance companies and governmental payors also generally require complete and correct billing information within certain filing deadlines. Additionally, our billing relationships require us to undertake internal audits to evaluate compliance with applicable laws and regulations as well as internal compliance policies and procedures. Health insurance companies also impose routine external audits to evaluate payments made. Additional factors complicating billing include:

- pricing differences between our fee schedules and the reimbursement rates of the payors;
- disputes with payors as to which party is responsible for payment; and
- disparity in coverage and information requirements among various carriers.

We incur significant additional costs as a result of our participation in the Medicare and Medicaid programs, as billing and reimbursement for laboratory testing are subject to considerable and complex federal and state regulations. The additional costs we expect to incur as a result of our participation in the Medicare and Medicaid programs include costs related to, among other factors: (1) complexity added to our billing processes; (2) training and education of our employees and customers; (3) implementing compliance procedures and oversight; (4) collections and legal costs; (5) challenging coverage and payment denials; and (6) providing patients with information regarding claims processing and services, such as advanced beneficiary notices. If these costs increase, our results of operations will be materially adversely affected.

Loss of or adverse changes to our accreditations or licenses could materially and adversely affect our business, prospects and results of operations.

The clinical laboratory testing industry is highly regulated. We are subject to CLIA, a federal law that regulates clinical laboratories that perform testing on specimens derived from humans for the purpose of providing information for the diagnosis, prevention or treatment of disease. CLIA is intended to ensure the quality and reliability of clinical laboratories in the United States by mandating specific standards in the areas of personnel qualifications, administration, and participation in proficiency testing, patient test management, quality control, quality assurance and inspections. We have a current certificate of accreditation under CLIA to perform testing. To renew this certificate, we are subject to survey and inspection every two years. Moreover, CLIA inspectors may make random inspections of our clinical reference laboratory. A failure to pass such inspections would result in suspension of our certificate of accreditation, which would have a material adverse effect on our business and results of operations.

We are also required to maintain a laboratory license to conduct testing in California. California laws establish standards for day-to-day operation of our clinical reference laboratory, including the training and skills required of personnel and quality control. Moreover, several states require that we hold licenses to test specimens from patients in those states. Other states may have similar requirements or may adopt similar requirements in the future. A failure to obtain and maintain these licenses would have a material adverse effect on our business and results of operations.

Complying with numerous regulations pertaining to our business is an expensive and time-consuming process, and failure to comply could result in significant penalties and suspension of one or more of our licenses.

Areas of the regulatory environment that may affect our ability to conduct business include, without limitation:

- Federal and state laws applicable to billing and claims payment and/or regulatory agencies enforcing those laws and regulations;
- Federal and state laboratory anti-mark-up laws;
- Federal and state anti-kickback laws;
- Federal and state false claims laws;
- Federal and state self-referral and financial inducement laws, including the federal physician anti-self-referral law, or the Stark Law;
- Coverage and reimbursement levels by Medicare, Medicaid, other governmental payors and private insurers;
- Restrictions on reimbursements for our services;
- Federal and state laws governing laboratory testing, including CLIA;
- Federal and state laws governing the development, use and distribution of diagnostic medical tests known as "home brews";
- Health Insurance Portability and Accountability Act of 1996 ("HIPAA");
- Federal and state regulation of privacy, security and electronic transactions;
- State laws regarding prohibitions on the corporate practice of medicine;
- State laws regarding prohibitions on fee-splitting;

- Federal, state and local laws governing the handling and disposal of medical and hazardous waste; and
- Occupational Safety and Health Administration ("OSHA") rules and regulations.

The above-noted laws and regulations are extremely complex and, in many instances, there are no significant regulatory or judicial interpretations of such laws and regulations. We also may be subject to regulation in foreign jurisdictions as we seek to expand international distribution of our tests. Any determination that we have violated these laws, or the public announcement that we are being investigated for possible violations of these laws, would materially adversely affect our business, prospects, results of operations and financial condition. Violations could also result in extensive civil and/or criminal penalties, loss of licensure or accreditation (which could in turn affect our ability to operate or collect reimbursement), exclusion from government healthcare programs or private payer networks, and other materially adverse effects. In addition, a significant change in any of these laws may require us to change our business model in order to maintain compliance with these laws, which could reduce our revenue or increase our costs and materially adversely affect our business, prospects, results of operations, and financial condition.

We are subject to significant environmental, health and safety regulation.

We are subject to licensing and regulation under federal, state and local laws and regulations relating to the protection of the environment and human health and safety, including laws and regulations relating to the handling, transportation and disposal of medical specimens, infectious and hazardous waste and radioactive materials, as well as to the safety and health of laboratory employees. In addition, OSHA has established extensive requirements relating to workplace safety for health care employers, including clinical laboratories, whose workers may be exposed to blood-borne pathogens such as HIV and the hepatitis B virus. These regulations, among other things, require work practice controls, protective clothing and equipment, training, medical follow-up, vaccinations, and other measures designed to minimize exposure to, and transmission of, blood-borne pathogens. In addition, the federally enacted Needlestick Safety and Prevention Act requires, among other things, that we include in our safety programs the evaluation and use of engineering controls such as safety needles if found to be effective at reducing the risk of needlestick injuries in the workplace. If we are found in violation of any of these regulations, we could be subject to substantial penalties or discipline and our business, prospects and results of operations could be materially and adversely affected.

We are subject to federal and state laws governing the financial relationship among healthcare providers, including Medicare and Medicaid laws, and our failure to comply with these laws could result in significant penalties and other material adverse consequences.

We anticipate that a component of our future revenue will be dependent on reimbursement from Medicare and state Medicaid programs. The Medicare program is administered by CMS which, like the states that administer their respective state Medicaid programs, imposes extensive and detailed requirements on diagnostic services providers, including, but not limited to, rules that govern how we structure our relationships with physicians, how and when we submit reimbursement claims and how we provide our specialized diagnostic services. Our failure to comply with applicable Medicare, Medicaid and other governmental payor rules could result in our inability to participate in a governmental payor program, our returning of funds already paid to us, civil monetary penalties, criminal penalties and/or limitations on the operational function of our laboratory. Any of these outcomes would have a material adverse effect on our business and results of operations.

Our business is subject to stringent laws and regulations governing the privacy, security and transmission of medical information, and our failure to comply could subject us to criminal penalties and civil sanctions.

Governmental laws and regulations protect the privacy, security and transmission of medical information. Such laws and regulations restrict our ability to use or disclose patient identifiable laboratory data, without patient authorization, for purposes other than payment, treatment or healthcare operations (as defined by HIPAA), except for disclosures for various public policy purposes and other permitted purposes outlined in the privacy regulations. The privacy and security regulations provide for significant fines and other penalties for wrongful use or disclosure of PHI, including potential civil and criminal fines and penalties. Such regulations were expanded under the HITECH Act, including rules impacting the release of protected health information, patients' right to access such information, the content and manner of providing notice of a breach, and information system security requirements. We also could incur damages under state laws to private parties for the wrongful use or disclosure of confidential health information or other private personal information. In addition, the Secretary of the Department of Health and Human Services has published HIPAA regulations to protect the privacy of health information when it is exchanged electronically during certain financial and administrative transactions. These HIPAA transaction standards are complex and different payers interpret them differently. Complying with applicable transmission standards is costly and failure to do so could disrupt our receipts or subject us to penalties. Generally, any security breach of our information systems, including the theft of our patients' financial information due to our failure to comply with applicable security standards, would adversely impact our business and our reputation.

Failure to comply with the ICD-10-CM Code Set could adversely impact reimbursement.

We believe that we are in compliance with the current Transactions and Code Sets Rule. The ICD-10-CM compliance date is October 1, 2014. Failure to comply could adversely impact our reimbursement and the ongoing efforts of other providers and payers to comply could have a negative effect on our receipts and net revenue. We also believe that we are in compliance with the Operating Rules for electronic funds transfers and remittance advice transactions. We will continue to assess our computer systems to ensure compliance with such requirements.

Our services development efforts may be hindered if we are unable to gain access to patients' tissue and blood samples.

The development of our diagnostic services requires access to tissue and blood samples from patients who have the diseases we are addressing. Our clinical development relies on our ability to secure access to these samples, as well as information pertaining to their associated clinical outcomes. Access to samples can be difficult since it may involve multiple levels of approval, complex usage rights and privacy rights, among other issues. Lack of or limited access to samples would harm our future services development efforts, which would have a material adverse effect on our business and results of operations.

If our current laboratory facility becomes inoperable or loses certification, we will be unable to perform our tests and our business will be materially adversely affected.

Our diagnostic tests are operated out of our CLIA-certified laboratory in Irvine, California. Currently, we do not have a second certified laboratory. Should our only CLIA-certified laboratory be unable to perform tests, for any reason, we may be unable to perform needed diagnostic tests in connection with our development of technologies services and our business will be materially adversely affected.

Our future success depends on the continued service from our scientific, technical and key management personnel and our ability to identify, hire and retain additional scientific, technical and key management personnel in the future.

There is intense competition for qualified personnel in our industry, particularly for laboratory technicians, scientific and medical experts and senior level management. Loss of the services of, or failure to recruit, these key personnel could be significantly detrimental to us and could materially adversely affect our business and operating results. We may not be able to continue to attract and retain scientific and medical experts or other qualified personnel necessary for the development of our business or to replace key personnel who may leave us in the future. If our business grows, it will place increased demands on our resources and likely will require the addition of new management personnel. An inability to recruit and retain qualified management and employees on commercially reasonable terms would adversely and materially affect our business.

As our operations expand, our costs to comply with environmental laws and regulations will increase, and failure to comply with these laws and regulations could materially harm our financial results.

Our operations involve the use, transportation, storage and disposal of hazardous substances and, as a result, we are subject to environmental and health and safety laws and regulations. As we expand our operations, our use of hazardous substances will increase and lead to additional and more stringent requirements. The cost to comply with these and any future environmental and health and safety regulations could be substantial. In addition, our failure to comply with laws and regulations, and any releases of hazardous substances into the environment or at our disposal sites, could expose us to substantial liability in the form of fines, penalties, remediation costs and other damages, or could lead to a curtailment or shut down of our operations. These types of events, if they occur, would materially adversely affect our financial results.

Any litigation to protect our intellectual property, or any third-party claims of infringement, could divert substantial time and money from our business and could shut down some of our operations.

Our commercial success depends, in part, on our non-infringement of the patents or proprietary rights of third-parties. Many companies developing technology for the biotechnology and pharmaceutical industries use litigation aggressively as a strategy to protect and expand the scope of their intellectual property rights. Accordingly, third-parties may assert that we are employing their proprietary technology without authorization. In addition, third-parties may claim that use of our technologies infringes their current or future patents. We could incur substantial costs defending against such allegations regardless of their merit, and the attention of our management and technical personnel could be diverted while defending ourselves against any of these claims. We may incur the same liabilities in enforcing our patents against others. We have not made any provision in our financial plans for potential intellectual property related litigation, and we may not be able to pursue litigation as aggressively as competitors with substantially greater financial resources.

If parties making infringement claims against us are successful, they may be able to obtain injunctive or other relief, which effectively could block our ability to further develop, commercialize, and sell services, and could result in the award of substantial damages against us. If we are unsuccessful in protecting and expanding the scope of our intellectual property rights, our competitors may be able to develop, commercialize, and sell services that compete against us using similar technologies or obtain patents that could effectively block our ability to further develop, commercialize, and sell our services. In the event of a successful claim of infringement against us, we may be required to pay substantial damages and either discontinue those aspects of our business involving the technology upon which we infringed or obtain one or more licenses from third parties, which may not be available on commercially reasonable terms, or at all. While we may license additional technology in the future, we may not be able to obtain these licenses at a reasonable cost, or at all. In that event, we could encounter delays in services introductions while we

attempt to develop alternative methods or services, and such attempts may not be successful. Defense of any lawsuit or failure to obtain any of these licenses could prevent us from commercializing available services, which would have a material adverse effect on our business and results of operations.

We could face substantial liabilities if we are sued for product liability.

Product liability claims could be filed by someone alleging that our tests failed to perform as claimed. We may also be subject to liability for errors in the performance of our tests. Such product liability and related claims could be substantial. Defense of such claims could be time consuming and expensive and could result in damages that are not covered by our insurance.

Exposure to possible litigation and legal liability may adversely affect our business, financial condition and results of operations.

In the past, we have been exposed to a variety of litigation claims and there can be no assurance that we will not be subject to other litigation in the future that may adversely affect our business, financial condition or results of operations. On February 14, 2011, Relator Michael Strathmann served us with a Complaint filed in the Superior Court of the State of California for the County of Orange. The Complaint alleged that we submitted false and fraudulent insurance claims to National Union Fire Insurance Company of Pittsburgh, PA in connection with a prior lawsuit that was settled with Nanogen, Inc., thereby allegedly violating the California Insurance Fraud Prevention Act, and sought penalties and unspecified treble damages. On May 4, 2011, the Superior Court dismissed the Complaint by ordering that it be stricken for violation of the California Anti SLAPP statute, which prevents plaintiffs from filing abusive lawsuits against public policy. On June 15, 2011, Strathmann filed a Notice of Appeal with the California Court of Appeals, appealing the granting of the Motion to Strike. Subsequently, Strathmann filed a Notice of Appeal of the award of attorneys' fees against him. On October 24, 2012, the California Court of Appeals reversed the Superior Court's dismissal, finding that the anti SLAPP statute was not applicable and remanding the case to the Superior Court. Strathmann has filed an Amended Complaint, and we have filed an Answer to that pleading. A trial date has been set for June 9, 2014 in the Orange County Superior Court and discovery has begun. Defense of this lawsuit could be time consuming and expensive, and there can be no assurance that we will be successful in our defense.

Failure to effectively manage our growth could place strains on our managerial, operational and financial resources and could materially adversely affect our business and operating results.

Our growth has placed, and is expected to continue to place, a strain on our managerial, operational and financial resources. Any further growth by us or an increase in the number of our strategic relationships will increase this strain on our managerial, operational and financial resources. This strain may inhibit our ability to achieve the rapid execution necessary to successfully implement our business plan.

As a public company, we are subject to complex legal and accounting requirements that will require us to incur substantial expense and will expose us to risk of non-compliance.

As a public company, we are subject to numerous legal and accounting requirements that do not apply to private companies. The cost of compliance with many of these requirements is substantial, not only in absolute terms but, more importantly, in relation to the overall scope of the operations of a small company. Failure to comply with these requirements can have numerous material adverse consequences including, but not limited to, our inability to file required periodic reports on a timely basis, which would result in the loss of our eligibility to use Form S-3 for raising capital, loss of market confidence, delisting of our securities, governmental or private actions against us and/or liquidated damages payable to the holders of our Series A Warrants and Series C Warrants. We cannot assure you that we will be able to comply with all

of these requirements or that the cost of such compliance will not prove to be a substantial competitive disadvantage compared to our privately held and larger public competitors.

Ethical, legal and social concerns surrounding the use of genetic information could reduce demand for our test offerings.

Genetic testing has raised ethical issues regarding privacy and the appropriate uses of the resulting information. For these reasons, governmental authorities may call for limits on or regulation of the use of genetic testing or prohibit testing for genetic predisposition to certain conditions, particularly for those that have no known cure. Similarly, such concerns may lead individuals to refuse to use genetics tests even if permissible. Any of these scenarios could reduce the potential markets for our molecular diagnostic services, which reduction could have a material adverse effect on our business.

Risks Related To Investment In Our Securities

Small company stock prices are especially volatile, and this volatility may depress the price of our stock.

The stock market has experienced significant price and volume fluctuations, and the market prices of small companies have been highly volatile. We believe that various factors may cause the market price of our stock to fluctuate, perhaps substantially, including, among others, announcements of:

- our or our competitors' technological innovations;
- supply, manufacturing, or distribution disruptions or other similar problems;
- proposed laws regulating participants in the laboratory services industry;
- developments in relationships with collaborative partners or customers;
- our failure to meet or exceed securities analysts' expectations of our financial results; or
- a change in financial estimates or securities analysts' recommendations.

In the past, companies that have experienced volatility in the market price of their stock have been the objects of securities class action litigation. If we become the object of securities class action litigation, it could result in substantial costs and a diversion of management's attention and resources, all of which could materially adversely affect the business and financial results of our business.

Future sales or the potential for future sales of our securities in the public markets may cause the trading price of our common stock to decline and could impair our ability to raise capital through subsequent equity offerings.

Sales of a substantial number of shares of our common stock or other securities in the public markets, or the perception that these sales may occur, could cause the market price of our common stock or other securities to decline and could materially impair our ability to raise capital through the sale of additional securities. The shares of common stock issuable upon exercise of the warrants issued in our December 2013 public offering are freely tradable. We have obligations to the investors in our 2012 private placement offering of Series A convertible preferred stock and warrants to purchase common stock to maintain the public registration of common stock underlying their issued and outstanding warrants. We also have obligations to the investors in our April 2011 private placement that could require us to register shares of common stock held by them and shares issuable upon exercise of their warrants for resale on a registration statement. If we raise additional capital in the future through the use of our existing shelf registration statement or if we register existing, or agree to register future, privately placed shares for resale on a registration statement, such additional shares would be freely tradable, and, if significant in amount, such sales could further adversely affect the market price of our common stock. The sale of a large number of shares of our common stock also might make it more difficult for us to sell equity or equity-related securities in the future at a time and at the prices that we deem appropriate.

Our stock price could decline because of the potentially dilutive effect of future financings, warrant anti-dilution provisions or exercises of warrants and common stock options.

Assuming exercise in full of all options and warrants outstanding as of December 31, 2013 (not taking into account any price based or anti-dilution adjustments), approximately 19.2 million shares of our common stock would be outstanding. Any additional equity or convertible debt financings in the future could result in further dilution to our stockholders. Existing stockholders also will suffer dilution in ownership interests and voting rights and our stock price could decline as a result of potential future application of anti-dilution features of our Series A Warrants.

We may fail to meet market expectations because of fluctuations in our quarterly operating results, all of which could cause our stock price to decline.

Our revenues and operating results have fluctuated in the past and may continue to fluctuate significantly from quarter to quarter in the future. It is possible that, in future periods, our revenues could fall below the expectations of securities analysts or investors, all of which could cause the market price of our stock to decline. The following are among the factors that could cause our operating results to fluctuate significantly from period to period:

- our unpredictable revenue sources;
- the nature, pricing and timing of our and our competitors' products and/or services;
- changes in our and our competitors' research and development budgets;
- expenses related to, and our ability to comply with, governmental regulations of our services and processes; and
- expenses related to, and the results of, patent filings and other proceedings relating to intellectual property rights.

We anticipate significant fixed expenses, due in part to our need to continue to invest in services development. We may be unable to adjust our expenditures if revenues in a particular period fail to meet our expectations, all of which would materially adversely affect our operating results for that period. As a result of these fluctuations, we believe that period-to-period comparisons of our financial results will not necessarily be meaningful, and that you should not rely on these comparisons as an indication of our future performance.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

We currently lease office and laboratory space of approximately 12,200 square feet in Irvine, California under a lease agreement that expires in January 2015.

Item 3. LEGAL PROCEEDINGS

On February 14, 2011, Relator Michael Strathmann ("Strathmann") served us with a complaint ("the Complaint") filed in the Superior Court of the State of California for the County of Orange. The Complaint alleged that we submitted false and fraudulent insurance claims to National Union Fire Insurance Company of Pittsburgh, PA in connection with a prior lawsuit that was settled with Nanogen, Inc., thereby allegedly violating the California Insurance Fraud Prevention Act, and sought penalties and unspecified treble damages. On May 4, 2011, the Superior Court dismissed the Complaint by ordering that it be stricken for violation of the California Anti-SLAPP statute, which prevents plaintiffs from filing abusive lawsuits against public policy. On June 15, 2011, Strathmann filed a Notice of Appeal with the California Court of Appeals, appealing the granting of the Motion to Strike. Subsequently, Strathmann filed a Notice of Appeal of the award of attorneys' fees against him. On October 24, 2012, the California Court of Appeals reversed the Superior Court's dismissal, finding that the anti-SLAPP statute was not applicable and remanding the case to the Superior Court. Strathmann filed an Amended Complaint, and we have filed our Answer to that pleading. On February 14, 2014, we filed a Motion for Summary Judgment, requesting that the Court enter judgment in our favor without trial. That Motion is to be heard by the Court on April 30, 2014. In the event that the Motion is not successful, then trial has been set for June 9, 2014 in the Orange County Superior Court. While discovery has commenced in the case, and we believe that there is no merit to Strathmann's claims and intend to vigorously defend against them, there can be no assurance that we will ultimately be successful.

From time to time, we are involved in other litigation arising in the normal course of business. Management believes that resolution of these other matters will not result in any payment that, in the aggregate, would be material to our financial position or results of operations.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Recent Market Prices

The following table sets forth, for the periods indicated, the high and low quarterly sales prices of our common stock as reported by The Nasdaq Capital Market under the symbol of "CBMX". These prices represent prices among dealers, do not include retail markups, markdowns or commissions, and may not represent actual transactions. For comparability purposes, per-share amounts prior to the reverse stock split which occurred on December 4, 2012 have been adjusted for the split ratio of 1:10.

	2013				2012			
	Fourth Quarter	Third Quarter	Second Quarter	First Quarter	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
High	$ 4.44	$ 4.55	$ 4.62	$ 7.64	$ 14.14	$ 10.50	$ 15.90	$ 20.00
Low	$ 2.14	$ 2.67	$ 2.46	$ 2.80	$ 1.40	$ 5.60	$ 7.40	$ 14.50

As of March 19, 2014, there were approximately 26 holders of record of our common stock.

No dividends have been paid on our common stock. We currently intend to retain all future earnings, if any, for use in our business and do not anticipate paying any cash dividends on our common stock in the foreseeable future.

Equity Compensation Plan Information

The following table provides information with respect to our common shares issuable under our equity compensation plans as of December 31, 2013:

Plan Category	(a) Number of securities to be issued upon exercise of outstanding options	(b) Weighted average exercise price of outstanding options	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders:			
2006 CombiMatrix Stock Incentive Plan(1)	639,019	$ 10.79	202,580
Equity compensation plans not approved by security holders:			
None	—	—	—
TOTAL	639,019	$ 10.79	202,580

(1) Our 2006 CombiMatrix Stock Incentive Plan, as amended, or the CombiMatrix Plan, allows for the granting of stock options and other awards to eligible individuals, which generally includes directors, officers, employees and consultants. The share reserve under the CombiMatrix Plan automatically increases on the first trading day in January each calendar year by an amount equal to three percent (3%) of the total number of shares of our common stock outstanding on the last trading day of December in the prior calendar year; in no event will the total number of shares of common stock in the share reserve (as adjusted for all such annual increases) exceed thirty million shares. Please refer to Note 11 to our consolidated financial statements for additional information.

Recent Sales of Unregistered Securities

None.

Purchases of Equity Securities by the Issuer or Affiliated Purchasers

None.

Item 6. SELECTED FINANCIAL DATA

Not required for smaller reporting companies.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with our consolidated financial statements included elsewhere in this report. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors including those set forth under the heading "Risk Factors" elsewhere in this report.

General

We provide valuable molecular diagnostic solutions and comprehensive clinical support for the highest quality of care. We specialize in miscarriage analysis, prenatal and pediatric healthcare, offering DNA-based testing for the detection of genetic abnormalities beyond what can be identified through traditional methodologies. We perform genetic testing utilizing a variety of advanced cytogenomic techniques, including microarray, standardized and customized fluorescent in-situ hybridization (or "FISH") and high resolution karyotyping. We emphasize support for healthcare professionals, to ensure data understanding and communication of results to patients. We deliver high-technology driven answers, with a high degree of assistance for the ordering physician and staff. Our clinical lab and corporate offices are located in Irvine, California.

We also own a one-third minority interest in Leuchemix, Inc. ("Leuchemix"), a private drug development company focused on developing a series of compounds to address a number of oncology-related diseases.

Liquidity

At December 31, 2013, the combination of cash, cash equivalents and short term investments totaled $14.0 million, which we believe will be sufficient to meet our expected cash requirements for current operations beyond the next twelve months. See the Liquidity and Capital Resources section below as well as Note 1 to our consolidated financial statements included elsewhere in this report for additional discussion of these matters.

Overview of Recent Business Activities

During 2013, our business activities were driven primarily by commercialization efforts for our suite of microarray diagnostic tests, expansion of our test menu and of our leadership team. For the year ended December 31, 2013, our operating activities included the recognition of $6.4 million of total revenues, which increased by $1.0 million from 2012, due primarily to increased volumes of microarray diagnostic tests performed, particularly in the prenatal diagnostics testing market. Volumes from our prenatal microarray testing services increased by 126% from 2012, and total microarray testing increased by 25% year over year. Our net loss from operations decreased over the comparable period primarily due to increased revenues, partially offset by increased cost of revenues due to increased volumes and also from

reduced operating expenses as a result of cost reduction efforts executed during the second quarter of 2012, which included the elimination of certain staff positions across all functional areas of the Company.

Our net loss also decreased due partially from our improved net operating loss but also, more significantly, from gains recognized in 2013 relating to mark-to-market adjustments of our warrant derivative liabilities, which were issued as part of the fourth quarter 2012 Series A convertible preferred stock and warrant financing discussed below.

On February 18, 2013, R. Judd Jessup informed our Board of Directors that he would retire as Chief Executive Officer effective March 15, 2013. Martin Felsenthal also resigned from our Board of Directors on the same date. Mark McDonough, our Chief Commercial Officer, became a director on February 28, 2013 and Chief Executive Officer on March 15, 2013. Richard Hockett, Jr., MD, our Chief Medical Officer, was also named to our Board of Directors on February 28, 2013. On March 12, 2013, Mark McGowan announced his resignation from our Board of Directors, and R. Judd Jessup was appointed Chairman of the Board on that date. On July 17, 2013, we announced that Robert Hoffman, CFO of Arena Pharmaceuticals, Inc., joined our Board of Directors. On February 19, 2014, Dr. Hockett resigned his position as Chief Medical Officer and director. On March 10, 2014, we announced that R. Weslie Tyson, M.D. was hired as our Chief Commercial Officer, effective April 8, 2014. Dr. Tyson has been a practicing pediatric and perinatal pathologist for 24 years, and has practiced perinatal and pediatric pathology in the Denver community for the past 20 years. He was with The Children's Hospital in Denver from 1993 to 1998. Dr. Tyson was formerly with UniPath, a multispecialty pathology group that staffs eight metro hospitals and a large central laboratory. Dr. Tyson founded the Pediatric/Neonatology section of UniPath and directed the pediatric and perinatal service for UniPath since 1999.

During 2013, we entered into three convertible preferred stock and warrant financing transactions as described in further detail below:

- On March 19, 2013, we entered into a definitive securities purchase agreement with an existing institutional investor to purchase 130,000 shares of our common stock at a price of $3.05 per share and approximately 1,610 units consisting of Series B 6% convertible preferred stock (the "Series B Stock") and warrants to purchase up to 275,000 shares of common stock at an exercise price of $3.49 per share (the "Series B Warrants") in a registered direct offering (the "Series B Offering") of securities off of our existing shelf registration statement on Form S-3 (File No. 333-176372). The Series B Offering closed on March 20, 2013 ("Series B Closing"). The Series B Stock and Series B Warrants were sold in multiples of fixed combinations, with each fixed combination consisting of one share of Series B Stock and a Series B Warrant to purchase approximately 171 shares of common stock. Each fixed combination of Series B Stock and Series B Warrants were sold at a price of $1,000. The Series B Stock was convertible into an aggregate of 528,000 shares of common stock at an initial conversion price of $3.05 per share. The Series B Warrants were not exercisable for six months from the Series B Closing, and the Series B Stock accrued dividends at an annual rate of 6% beginning September 20, 2013 for any unconverted Series B Stock issued and outstanding at that time. Upon the closing of the Series B Offering, we received proceeds of $1.76 million, net of placement agent fees and other related costs. As of December 31, 2013, all of the Series B Stock has been converted into an aggregate of 535,932 shares of common stock. Also, as a result of the Series B Offering, the exercise price of the then-outstanding Series A Warrants automatically ratcheted down by their terms from their original exercise price of $9.50 per share to an adjusted exercise price of $3.05 per share, and the underlying shares for which such warrants were exercisable was automatically increased by an additional 452,440 shares of common stock.

- On May 3, 2013, we entered into a securities purchase agreement (the "Series C Purchase Agreement") with certain accredited investors (the "Series C Investors"), pursuant to which we sold and issued 1,200 shares of our newly created Series C 6% convertible preferred stock (the "Series C Stock") to the Series C Investors at a purchase price of $1,000 per share in an initial closing that occurred on May 6, 2013 (the "Series C First Closing"), and we sold and issued 1,200 additional

shares of Series C Stock to the Series C Investors on June 28, 2013 at a purchase price of $1,000 per share after stockholder approval was obtained on June 27, 2013 (the "Series C Second Closing") (combined, the "Series C Financing"). In addition, we issued warrants at the Series C First Closing to purchase 491,803 shares of our common stock with an exercise price of $3.77 per share and, at the Series C Second Closing, we issued additional warrants to purchase 491,803 shares of our common stock with an exercise price of $3.55 per share (collectively, the "Series C Warrants").

The Series C Warrants have a 5.5 year term and were not exercisable for the first six months following their issuance. After certain offering-related costs, the net proceeds from the Series C Financing were $2.14 million. As a result of the Series C Second Closing, the conversion price for the Series C Stock was set at $2.85759 per share, or the equivalent of 839,864 shares of common stock issuable upon conversion of all Series C Stock. Registration statements were filed with the SEC for the shares of common stock underlying the Series C Stock and Series C Warrants, and the registration statements were declared effective. As of December 31, 2013, all of the Series C Stock has converted into an aggregate of 839,864 shares of common stock. Also, as a result of the Series C Offering, the exercise price of the then-outstanding Series A Warrants automatically ratcheted down by their terms from their then-existing exercise price of $3.05 per share, as a result of the prior Series B Offering, to an adjusted exercise price of $2.86 per share, and the underlying shares for which such warrants were exercisable was automatically increased by an additional 29,341 shares of common stock.

- On December 20, 2013 (the "Series D Closing"), we closed an underwritten public offering (the "Series D Offering") and issued 12,000 units of securities to investors, with each unit consisting of: (i) one share of Series D preferred stock ("Series D Preferred Stock") convertible into shares of our common stock equal to 1,000 divided by the conversion price of $2.06, which was 72.5% of the consolidated closing bid price of our common stock on the NASDAQ Capital Market on December 16 2013, the date we entered into the underwriting agreement ("UA date"); and (ii) one warrant exercisable for 485.4369 shares of our common stock, at an exercise price per share equal to $3.12 ("Series D Warrants"), which was 110% of the consolidated closing bid price of our common stock on the NASDAQ Capital Market as of the UA date. The Series D Preferred Stock was immediately convertible, and the Series D Warrants were immediately exercisable for shares of common stock and have a term of five years. In total, there were 5,825,243 shares of common stock issuable upon conversion of the Series D Preferred Stock and up to 5,825,243 shares of common stock issuable upon exercise of the Series D Warrants. The units were sold for a purchase price equal to $1,000 per unit, resulting in gross proceeds of $12 million at the Series D Closing. After certain offering-related costs paid to the underwriters and others at the Series D Closing and through February 2014, net proceeds received were $10.7 million. As of December 31, 2013, 9,799.3 shares of Series D Preferred Stock have been converted into an aggregate of 4,756,946 shares of common stock. Also, as a result of the Series D Offering, the exercise price of the then-outstanding Series A Warrants automatically ratcheted down by their terms from their then-existing exercise price of $2.86 per share, as a result of the prior Series C Financing, to an adjusted exercise price of $2.06 per share, and the underlying shares for which such warrants were exercisable was automatically increased by an additional 81,910 shares.

Critical Accounting Policies

Our consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States of America. In preparing these financial statements, we make assumptions, judgments and estimates that can have a significant impact on amounts reported in our financial statements. We base our assumptions, judgments and estimates on historical experience and various other factors that we believe to be reasonable under the circumstances. Actual results could differ materially

from these estimates under different assumptions or conditions. On a regular basis we evaluate our assumptions, judgments and estimates and make changes accordingly.

We believe that, of the significant accounting policies discussed in Note 2 to our consolidated financial statements, the following accounting policies require our most difficult, subjective or complex judgments:

- revenue recognition and estimates for contractual allowances;
- accounting for stock-based compensation;
- accounting for derivative financial instruments;
- fair value measurements; and
- accounting for income taxes.

We discuss below the critical accounting assumptions, judgments and estimates associated with these policies. Historically, our assumptions, judgments and estimates relative to our critical accounting policies have not differed materially from actual results. For further information on our critical accounting policies, refer to Note 2 to our consolidated financial statements included elsewhere in this report.

Revenue Recognition

As described below, significant management judgments must be made and used in connection with the revenue recognized in any accounting period. Material differences may result in the amount and timing of revenue recognized or deferred for any period if management made different judgments.

In general, we recognize revenue when (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred or services have been performed, (iii) amounts are fixed or determinable and (iv) collectability of amounts is reasonably assured.

Service revenues from providing diagnostic tests are recognized when the testing process is complete and test results are reported to the ordering physician or clinic. These diagnostic services are billed to various payors, including commercial insurance companies, healthcare institutions, individuals and government payors including Medicare and Medicaid. We report revenues from contracted payors based on a contractual rate, or in the case of Medicare and Medicaid, published fee schedules for our tests. We report revenues from non-contracted payors based on the amount expected to be collected. The difference between the amount billed and the amount expected to be collected from non-contracted payors is recorded as a contractual allowance to arrive at net recognized revenues. The expected revenues from non-contracted payors are based on the historical collection experience of each payor or payor group, as appropriate. In each reporting period, we review our historical collection experience for non-contracted payors and adjust our expected revenues for current and subsequent periods accordingly. We also recognize additional revenue from actual cash payments that exceed amounts initially recognized, in the period the payments are received. Because a substantial portion of our revenues is from non-contracted third-party payors, it is likely that we will be required to make positive or negative adjustments to accounting estimates with respect to contractual allowances in the future, which may positively or adversely affect our results of operations. In all cases described above, we report revenues net of any applicable statutory taxes collected from customers, as applicable.

Accounting for Stock-Based Compensation

The compensation cost for all employee stock-based awards is measured at the grant date, based on the fair value of the award, and is recognized as an expense, on a straight-line basis, over the employee's requisite service period (generally the vesting period of the equity award) which is generally three to four years. The fair value of each option award is estimated on the date of grant using a Black-Scholes option valuation model. Stock-based compensation expense is recognized only for those awards that are expected

to vest using an estimated forfeiture rate. We estimate pre-vesting option forfeitures at the time of grant and reflect the impact of estimated pre-vesting option forfeitures in compensation expense recognized.

Accounting for Derivative Financial Instruments

We evaluate financial instruments for freestanding or embedded derivatives. Derivative instruments that do not qualify for permanent equity classification are recorded as liabilities at fair value, with changes in value recognized as other income (expense) in the consolidated statements of operations in the period of change. Derivative warrant liabilities are categorized as either short-term or long-term based upon management's estimates as to when the derivative instrument may be realized. Management judgment is required in identifying derivative instruments and whether or not such instruments should be classified as liabilities or as a component of permanent equity based upon interpretations of existing accounting literature. Also, management judgment is required in determining the assumptions and valuation methods to be used for valuing the derivatives. If actual results differ from these estimates, the future impact on our consolidated financial position and results of operations could be significant.

Fair Value Measurements

We measure fair value as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or liability. We utilize a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

- Level 1: Observable market inputs such as quoted prices in active markets;
- Level 2: Observable market inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and
- Level 3: Unobservable inputs where there is little or no market data, which require the reporting entity to develop its own assumptions

Accounting for Income Taxes

We recognize income taxes on an accrual basis based on tax positions taken or expected to be taken in our tax returns. A tax position is defined as a position in a previously filed tax return or a position expected to be taken in a future tax filing that is reflected in measuring current or deferred income tax assets and liabilities. Tax positions are recognized only when it is more likely than not (i.e., likelihood of greater than 50%), based on technical merits, that the position would be sustained upon examination by taxing authorities. Tax positions that meet the more likely than not threshold are measured using a probability-weighted approach as the largest amount of tax benefit that has a greater than 50% likelihood of being realized upon settlement. Income taxes are accounted for using an asset and liability approach that requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in our financial statements or tax returns. A valuation allowance is established to reduce deferred tax assets if all, or some portion, of such assets will more than likely not be realized. Should they occur, our policy is to classify interest and penalties related to tax positions as income tax expense. Since our inception, no such interest or penalties have been incurred, however.

Comparison of the Results of Operations

Revenues and Cost of Revenues (dollars in thousands):

	For the Years Ended December 31,		Change	
	2013	2012	$	%
Diagnostic services	$ 6,204	$ 4,975	$ 1,229	25%
Clinical trial support services	—	195	(195)	(100%)
Royalties	163	180	(17)	(9%)
Cost of services	(3,527)	(2,702)	(825)	(31%)

Diagnostic Services

Diagnostic services revenues are generated from providing DNA-based genomic testing services primarily in the areas of prenatal and postnatal development disorders in children and, to a lesser extent, in oncology. The key drivers and metrics relating to the change in diagnostic services revenues were as follows:

	For the Years Ended December 31,		Change	
	2013	2012	#	%
Total billable tests	6,150	5,782	368	6%
Total microarray tests	4,540	3,624	916	25%
Microarray percentage of total tests	74%	63%		
Total prenatal microarray tests	2,222	983	1,239	126%
Prenatal percentage of total microarray tests	49%	27%		
Revenue per test—total	$ 1,009	$ 860	$ 149	17%
Revenue per test—all microarrays	$ 1,278	$ 1,253	$ 25	2%
Revenue per test—prenatal microarrays	$ 1,598	$ 1,703	$ (105)	(6%)

Although total billable testing volumes increased by 6% for the year ended December 31, 2013 over 2012, diagnostic services revenues increased by 25% over the same period. The reason that diagnostic services revenues have increased by greater percentages than have total billable testing volumes is due to a shift in test mix during 2013 towards a higher concentration of microarray testing, particularly in the prenatal testing market. Because microarray tests are priced and reimbursed at significantly higher rates than our non-array tests, our overall average revenue per test has also increased year-over-year, thereby driving higher revenues in 2013 compared to 2012. In addition, decreases in oncology and pediatric testing volumes were offset by increases in prenatal testing, resulting in an overall increase in diagnostic services revenues year-over-year. The change in test mix has been driven by a change in sales and marketing efforts in mid-2012 towards the prenatal diagnostic testing market and less towards pediatric, oncology and non-array testing markets. Diagnostic services revenues also include adjustments relating to our revenue recognition policy of periodically adjusting our estimate for contractual allowances for revenues from non-contracted payors as well as from receiving cash payments in excess of amounts previously recognized for services revenues. For the years ended December 31, 2013 and 2012, net positive revenue adjustments were $607,000 and $570,000, respectively. Because approximately 67% of our diagnostic revenues are billed to non-contracted third-party payors, it is likely that we will be required to make adjustments to accounting estimates with respect to contractual allowances in the future, which may positively or adversely affect our revenues and results of operations. In addition, recent changes to the molecular codes used by laboratories such as ours for microarray testing could positively or negatively impact reimbursement from

certain non-contracted payors for our microarray tests, which would have a commensurate impact on revenues recognized from those payors.

Clinical Trial Support Services. In June of 2012, we entered into a materials transfer agreement with Affymetrix, Inc. in support of their clinical trial program. Under the terms of the agreement, we delivered over 300 anonymous patient samples during the third quarter. As a result, we fully satisfied our obligations to Affymetrix, which resulted in recognition of $195,000 of clinical trial support services revenues in 2012. There were no such programs or activities during 2013.

Royalties. In 2010, we entered into an exclusive licensing agreement with CustomArray, Inc. ("CA"), a private company located in Washington State, for certain of our patents and intellectual property developed as part of our prior microarray manufacturing business. This agreement requires CA to pay us royalties as a percentage of their gross revenues, not less than $25,000 per quarter. CA's actual sales were less in 2013 than 2012, resulting in lower royalty revenues recognized by us. It is uncertain whether in future periods, CA's revenues will increase, continue at current levels or return to the minimum contractual amounts.

Cost of Services. Cost of services relating to our diagnostic tests performed include direct materials such as microarray and laboratory costs, direct laboratory labor (wages and benefits), allocation of administrative overhead and stock-compensation expenses. Increases in cost of services were due primarily to increased diagnostic testing volumes period-over-period, as well as increased materials costs associated with converting microarray testing platforms in the first and second quarters of 2013. See Note 2 to our consolidated financial statements included elsewhere in this report for a detailed description of the amounts of non-cash stock compensation expense recognized for the periods presented.

Operating Expenses (dollars in thousands):

	For the Years Ended December 31,		Change	
	2013	2012	$	%
Research and development	$ 1,011	$ 1,400	$ (389)	(28%)
Sales and marketing	2,764	2,596	168	6%
General and administrative	5,206	5,378	(172)	(3%)

Research and Development. These expenses include labor (wages and benefits), non-cash stock compensation expenses and laboratory supply costs associated with investigating and validating new tests and technology platforms, costs to maintain and improve our existing suite of diagnostic tests offered and process improvement projects. Prior to launching a new test or technology, or modifying an existing test, appropriate clinical trials and extensive laboratory validations, consistent with the various regulations that govern our industry, must be performed. These costs are classified as research and development for all periods presented. Research and development expenses decreased from 2012 to 2013 due primarily to reduced headcount as well as from lower supply and materials costs incurred as our laboratory efforts migrate towards production efforts and less on new test development. See Note 2 to our consolidated financial statements included elsewhere in this report for a detailed description of the amounts of non-cash stock compensation expense recognized for the periods presented.

Sales and Marketing. These expenses include salaries and wages associated with our sales force and marketing resources, sales commissions and other expenses associated with promotional and advertising efforts as well as non-cash stock compensation expenses. Sales and marketing expenses increased from 2012 to 2013 due primarily to increased headcount in sales and marketing as well as increased marketing and promotional-related activities. See Note 2 to our consolidated financial statements included elsewhere in this report for a detailed description of the amounts of non-cash stock compensation expense recognized for the periods presented.

General and Administrative. These expenses include compensation and benefit costs of our administrative staff, client billing and collections, information technology, executive management, human resources and accounting personnel, as well as facilities-related costs, insurance, legal, audit and other professional services. General and administrative expenses decreased from 2012 to 2013 due primarily to reduced salaries and wages from executive retirements and prior year bonuses not repeated in the current periods, reduced third-party billing fees from bringing billing in-house in mid-2012, reduced tenant improvement amortization costs which became fully amortized at the end of 2012 and lower bad debt expenses. Also included in general and administrative expenses are non-cash stock-based compensation expenses, which were $411,000 and $386,000 for the years ended December 31, 2013 and 2012, respectively. Changes to stock-based compensation expenses are driven by timing of when option awards are granted compared to when older awards become fully vested or expire due to forfeitures, as well as by the valuations attributed to individual awards at the time they are granted. See Note 2 to our consolidated interim financial statements included elsewhere in this report for a detailed description of the amounts of non-cash stock compensation expense recognized for the periods presented.

Other Non-Operating Items (dollars in thousands):

	For the Years Ended December 31,		Change	
	2013	2012	$	%
Interest expense	$ (356)	$ (179)	$ (177)	(99%)
Warrant derivatives gains (charges)	2,804	(2,357)	5,161	219%

Interest Expense. Prior to the fourth quarter of 2012, interest expense was entirely comprised of interest charges associated with certain capital leases for laboratory equipment, which was $72,000 and $29,000 for the years ended December 31, 2013 and 2012, respectively. Increases are due to additional capital leases for certain laboratory equipment during late 2012 and early 2013. In addition, $280,000 of interest expense in 2013 is related to the amortization of offering-related costs incurred during the fourth quarter of 2012. These costs were being amortized over the Series A Warrant exercise restriction period of six months from issuance, but due to a modification on February 22, 2013 to the Series A Warrants resulting in immediate exercisability, all of the unamortized offering related costs as of December 31, 2012 were charged to interest expense during the first quarter of 2013. The amortization from the Series A Warrant-related offering costs was $147,000 in 2012.

Warrant Derivatives Gains (Charges). This activity represents the net gains or charges recognized from mark-to-market adjustments of the remaining Series A Warrants to their estimated fair values as of each balance sheet date or when the Series A Warrants are exercised. We valued the Series A Warrants at each balance sheet date using the Monte-Carlo simulation method with the following assumptions at each valuation date: (i) closing stock price and Series A Warrant contractual exercise price; (ii) term to expiration commensurate with the individual Series A Warrant terms ranging from 5.0 years to 4.3 years; (iii) historical volatilities commensurate with the term of the Series A Warrants ranging from 114.5% to 126.5%; (iv) risk-free interest rates commensurate with the term of the Series A Warrants ranging from 0.8% to 1.4%; and (v) simulated anti-dilution impact assuming various probabilities that the Company will raise additional capital by issuing equity securities at prices above or below the current contractual Series A Warrant exercise prices during the Series A Warrant terms. The result of these valuation simulations was to initially value the Series A Warrants issued at a combined $2.1 million derivative liability, with the residual value allocated to the Series A preferred stock. Subsequently, the fair value of the warrants increased to $4.5 million at December 31, 2012, resulting in $2.4 million of warrant derivative charges recognized during the fourth quarter of 2012. During 2013, the warrant derivative liability decreased primarily due to lower stock prices as well as from Series A Warrant exercises, resulting in a net gain of $2.8 million and $1.1 million of remaining warrant derivative liabilities that were reclassified to

additional paid-in capital as a result of the exercises that occurred during 2013. The Series A Warrants were valued as Level 3 liabilities under our policies for assessing fair value measurements. If the inputs such as volatility and probability of subsequent financings were to change, the concluded values could change significantly.

Inflation

Inflation has not had a significant impact in the current or prior periods.

Liquidity and Capital Resources

At December 31, 2013, cash, cash equivalents and short-term investments totaled $14.0 million, compared to $2.4 million at December 31, 2012. Cash is held primarily in general checking accounts as well as in money market mutual funds backed by U.S. government securities. Short-term investments are comprised primarily of certificates of deposits and fixed income securities issued by U.S. financial institutions. Working capital was $13.9 million and $(1.4 million) at December 31, 2013 and 2012, respectively. The primary reason for the improvement in working capital was due to higher cash balances at December 31, 2013 compared to 2012, driven by financing activities described above.

The net change in cash and cash equivalents for the periods presented was comprised of the following (in thousands):

	For the Years Ended December 31,		
	2013	2012	Change
Net cash (used in) provided by:			
Operating activities	$ (5,605)	$ (5,940)	$ 335
Investing activities	(2,054)	(31)	(2,023)
Financing activities	17,577	1,958	15,619
Increase (decrease) in cash and cash equivalents	$ 9,918	$ (4,013)	$ 13,931

Operating Activities. The decrease in net cash flows used in operating activities was primarily the result of higher cash reimbursement from increased sales, billing and collection efforts experienced during 2013 compared to 2012.

Investing Activities. The increase in net cash flows used in investing activities was due to purchases of available-for-sale short-term investments made during 2013, as well as from increased capital expenditures for laboratory and IT-related equipment to support our diagnostics business made during 2013 compared to 2012.

Financing Activities. The increase in net cash flows from financing activities was due primarily to the $17.8 million of net proceeds received from financing activities described above, including $3.1 million of proceeds received from common stock warrant exercises during 2013, compared to only $2.1 million of net proceeds received from 2012 financing activities.

Future Liquidity. We have a history of incurring net losses and net operating cash flow deficits. We are also deploying new technologies and continue to develop commercial technologies and services. We believe that our cash and cash equivalent balances as of December 31, 2013 will be sufficient to meet our expected cash requirements for current operations beyond the next twelve months. In order for us to continue as a going concern beyond this point and ultimately to achieve profitability, we may be required to obtain capital from external sources, increase revenues and reduce operating costs. However, there can be no assurance that our operations will become profitable or that external sources of financing, including

the issuance of debt and/or equity securities, will be available at times and at terms acceptable to us, or at all. The issuance of additional equity or convertible debt securities will also cause dilution to our shareholders. If external financing sources are not available or are inadequate to fund our operations, we will be required to reduce operating costs, including research projects and personnel, which could jeopardize our future strategic initiatives and business plans. See Note 1 to the consolidated financial statements included elsewhere in this report for additional discussion of these matters.

Capital Requirements. We may also encounter unforeseen difficulties that may deplete our capital resources more rapidly than anticipated. Any efforts to seek additional funding could be made through equity, debt or other external financing, and there can be no assurance that additional funding will be available on favorable terms, in a timely manner or at all. Our long-term capital requirements will be substantial and the adequacy of available funds will depend upon many factors, including:

- the costs of commercialization activities, including sales and marketing, manufacturing and capital equipment;
- competing technological developments;
- the creation and formation of strategic partnerships;
- the costs associated with leasing and improving our Irvine, California facility; and
- other factors that may not be within our control.

We have no significant commitments for capital expenditures in 2014 or beyond. We have executed eleven capital leases totaling $435,000 for certain laboratory equipment.

Off-Balance Sheet Arrangements

As of December 31, 2013, we did not have any significant off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K promulgated by the SEC. However, we have entered into an operating lease for our laboratory space and corporate offices, totaling approximately 12,200 square feet.

Recent Accounting Pronouncements

Refer to Note 2 to our consolidated financial statements included elsewhere in this report.

Quantitative and Qualitative Disclosures About Market Risk

Not required for smaller reporting companies.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not required for smaller reporting companies.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements and related financial information required to be filed hereunder are indexed under Item 15 of this report and are incorporated herein by reference.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rules 13a-15(e) and 15d-15(e) promulgated under the Securities Exchange Act of 1934, as amended. Based on this evaluation, our principal executive officer and our principal financial officer concluded that, as of the end of the period covered by this annual report, our disclosure controls and procedures were effective to ensure that the information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934 is accumulated and communicated to management, including our chief executive officer and chief financial officer, to allow timely decisions regarding required disclosure, and that such information is recorded, processed, summarized and reported within the time periods prescribed by the SEC.

Management's Report on Internal Controls Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal controls over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal controls over financial reporting based on the framework in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in Internal Control—Integrated Framework, our management concluded that our internal controls over financial reporting were effective as of December 31, 2013.

There has been no change in our internal controls over financial reporting that occurred during the fiscal quarter ended December 31, 2013 that has materially affected, or is reasonably expected to materially affect, our internal controls over financial reporting.

Item 9B. OTHER INFORMATION

None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Executive Officers and Directors

Our executive officers and directors and their ages as of March 24, 2014, are as follows:

Name	Age	Position(s)
Mark McDonough*	44	President, Chief Executive Officer and Director
Scott R. Burell	49	Chief Financial Officer, Secretary and Treasurer
R. Judd Jessup*	66	Chairman of the Board
Robert E. Hoffman*+^	48	Director
Scott Gottlieb, M.D.*^+†	41	Director
Wei Richard Ding*^+†	44	Director
Jeremy M. Jones*^†	72	Director

* Nominee for election to Board

\+ Member of the Audit Committee

† Member of the Compensation Committee

^ Member of the Nominating and Governance Committee

Mark McDonough has served as our President, Chief Executive Officer and a member of our Board since March 2013. From August 2012 to March 2013, Mr. McDonough served as our Chief Commercial Officer. Mr. McDonough has over 17 years of experience in diagnostic healthcare and life sciences. Prior to joining us, Mr. McDonough was Vice President of Sales and Service at Pathwork Diagnostics, a venture capital-backed molecular diagnostic company, from September 2008 to August 2012. From January 2002 to September 2007, Mr. McDonough held various positions at US LABS, a Pathology services company that eventually became a division of LabCorp, a public company, ultimately becoming Vice President of Sales. He also served in an executive capacity at Dianon, a division of Laboratory Corporation of America, from September 2007 to July 2008 and at Laboratory Corporation of America, a public laboratory services company, from July 2008 to September 2008. From May 2001 to January 2002, Mr. McDonough was a Sales executive with EMC Corporation, a data storage company, and from August 1997 to May 2001, he held various positions of increasing responsibility with Ventana Medical Systems, a capital equipment, cancer diagnostics company. Prior to entering the healthcare industry, Mr. McDonough was a ranking officer in the United States Navy for six years where he served as Navigator of the USS Fletcher (DD 992). Mr. McDonough received a Bachelor's Degree in Finance from Miami University—Ohio. We believe Mr. McDonough's qualifications to serve on our Board include his commercial expertise as an executive, his technical depth in microarray technology and cancer diagnostics, his strategic vision, and familiarity with senior executives in industry as well as with venture capitalists.

R. Judd Jessup has served on our Board since August 2010, has served as Chairman of our Board since March 2013 and served as our President and Chief Executive Officer from August 2010 to March 2013. Mr. Jessup has over 35 years of experience in the healthcare and managed care industries. Most recently, he was Chief Executive Officer of US LABS, a national laboratory which provides cancer diagnostics and genetic testing services, from 2002 to 2005. He has extensive background in the managed care industry having served as President of the Health Plans Division for FHP International from 1994 to 1996 as well as President of TakeCare, Inc., a publicly traded HMO operating in California, Colorado, Illinois and Ohio until it was sold to FHP. Mr. Jessup currently serves on the board of directors of Corvel Corporation, a publicly traded company. He served on the board of directors of NovaMed, Inc., a publicly traded company, from November 1998 until May 2011. We believe Mr. Jessup's qualifications to serve on our

Board include his significant executive experience with the strategic, financial, and operational requirements of large health care organizations, including serving as an audit committee chair.

Scott R. Burell has served as our Chief Financial Officer, Secretary and Treasurer since November 2006. Previously, he served as our Vice President of Finance from November 2001 through November 2006, and as our Controller from February 2000 through November 2001. From May 1999 to February 2001, Mr. Burell served as the Controller for Network Commerce, Inc., a publicly traded technology and infrastructure company located in Seattle. Prior to May 1999, Mr. Burell spent 9 years with Arthur Andersen's Audit and Business Advisory practice in Seattle. Mr. Burell is a certified public accountant in the state of Washington (currently inactive) and holds B.S. degrees in Accounting and Business Finance from Central Washington University. Mr. Burell is a member of the American Institute and Washington Society of Certified Public Accountants.

Robert E. Hoffman has served on our Board since July 2013. He is the Senior Vice President, Finance and Chief Financial Officer of Arena Pharmaceuticals, Inc., a publicly traded biopharmaceutical company, where he has served in various finance and accounting roles since 1997, except that from March 2011 to August 2011, Mr. Hoffman served as Chief Financial Officer for Polaris Group, a privately held drug development company. Mr. Hoffman is a member of the business and financial advisory board of Innovus Pharmaceuticals, a publicly traded emerging pharmaceuticals company. Mr. Hoffman also serves as a member of the Financial Accounting Standards Board's Small Business Advisory Committee and the steering committee of the Association of Bioscience Financial Officers. Mr. Hoffman is also a member and a former director and President of the San Diego Chapter of Financial Executives International. Mr. Hoffman holds a bachelor's degree in business administration from St. Bonaventure University, and is licensed as a C.P.A. (inactive) in the State of California. We believe Mr. Hoffman's qualifications to serve on our Board include his experience as an executive of a drug development company and knowledge of financial accounting in the medical technology field.

Scott Gottlieb, M.D. has served on our Board since January 2009. Dr. Gottlieb is currently a Resident Fellow at the American Enterprise Institute. Dr. Gottlieb is also a Clinical Assistant Professor at the NYU School of Medicine. From 2005 until 2007, Dr. Gottlieb served at the Food and Drug Administration ("FDA") as Deputy Commissioner for Medical and Scientific Affairs and before that, from 2003 until 2004, as Senior Advisor for Medical Technology to the FDA Commissioner and as the FDA's Director of Medical Policy Development. He left the FDA in the Spring of 2004 to work on implementation of the new Medicare Drug Benefit as a Senior Adviser to the Administrator of Medicare and Medicaid Services, where he supported the agency's policy work on quality improvement and coverage and payment decision-making, particularly related to new medical technologies. Dr. Gottlieb currently serves on the board of directors of Molecular Insight Pharmaceuticals. We believe Dr. Gottlieb's qualifications to serve on our Board include his experience as a Wall Street analyst, practicing physician, and most importantly in senior roles in the U.S. government, including his former role as Deputy Commissioner of the U.S. Food and Drug Administration. CombiMatrix operates in business segments where regulation and regulatory strategy need to be considered and Dr. Gottlieb's insights are beneficial to us. Dr. Gottlieb completed his residency in internal medicine at the Mount Sinai Hospital in New York City and is a graduate of the Mount Sinai School of Medicine and of Wesleyan University in Connecticut.

Wei Richard Ding has served on our Board since February 2012. He is the Chief Executive Officer and a member of the board of directors of bioTheranostics Inc., a San Diego-based developer of molecular diagnostic tests and laboratory. Mr. Ding has been bioTheranostics' CEO since September 2008 and was the Vice President, Strategy and Business Development of France-based bioMerieux, a global leader in the field of in vitro diagnostics from 2006 to 2008. Mr. Ding has also worked for Eli Lilly and Company, TenFold Corporation and Myriad Genetics, and is an active speaker and leader in the field of personalized medicine. We believe Mr. Ding's qualifications to serve on our Board include his detailed knowledge of the molecular diagnostics market. In addition, Mr. Ding's experience and expertise in operating an early stage diagnostics company will provide excellent insight to the Board.

Jeremy M. Jones has served on our Board since November 2012. He is the Chairman of On Assignment, Inc., a publicly traded professional staffing firm, where he has served as a director since May 1995. Mr. Jones has been an investor and business development consultant since February 1998. From 1987 to 1995, Mr. Jones was Chief Executive Officer and Chairman of the Board of Homedco Group, Inc., a home healthcare services company, which became publicly traded in 1991. Homedco merged into Apria Healthcare Group, Inc. in 1995 and from 1995 through January 1998, Mr. Jones was Chief Executive Officer and Chairman of the Board of Apria Healthcare Group, Inc., which also provided home healthcare services. Mr. Jones served as Chairman of the Board of Byram Healthcare Centers, a provider of retail medical supplies and wholesale medical and hospital equipment, from February 1999 until its sale in March of 2008. Mr. Jones was a director for Access Point Medical from May 2004 to December 2005. Mr. Jones was a director of US LABS, an esoteric oncology and hematopathology laboratory from November 2003 through February 2005. From July 2003 to January 2011, Mr. Jones served as Chairman of LifeCare Solutions, Inc., a provider of integrated home healthcare products and services. Mr. Jones holds a bachelor's degree in business administration from the University of Iowa. We believe Mr. Jones' qualifications to serve on our Board include his significant executive experience with the strategic, financial, and operational requirements of public health care organizations, including serving as Chairman for those organizations.

Directors and officers are elected on an annual basis. The term of each director's service expires at our next annual meeting of stockholders and at such time as his or her successor is duly elected and qualified. Officers serve at the discretion of the Board.

There are no family relationships between any of our director nominees or executive officers and any other of our director nominees or executive officers.

Board of Directors

Our Bylaws provide that the size of our Board is to be determined from time to time by resolution of the Board but shall consist of at least five and no more than nine members. Our Board has fixed the exact number of directors at seven. Our Board currently consists of six members, four of whom—Messrs. Gottlieb, Ding, Hoffman and Jones—our Board has determined to be independent under the rules of the NASDAQ Stock Market.

Mr. Jessup serves as Chairman of the Board, and we believe that separation of the Chairman and Chief Executive Officer roles supports the independent nature of our Board.

In connection with its investment in us in April 2011, HLM Venture Partners III, LP ("HLM") was given the right to require the Board to, consistent with its fiduciary duties, fill one vacancy on the Board with a director designated by HLM who is not an affiliate of HLM and who has industry experience relevant to our business and fill one vacancy on the Board with a director designated by HLM who is an affiliate of HLM. HLM has waived the requirement to maintain vacancies on our Board for this purpose, but such waiver is revocable by HLM at any time upon 45 days' prior written notice to us.

We are subject to a number of technological, regulatory, product, legal and other types of risks. The Board and its constituent committees are responsible for overseeing these risks, and we employ a number of procedures to help them carry out that duty. For example, Board members regularly consult with executive management about pending issues and expected challenges, and at each Board meeting directors receive updates from, and have an opportunity to interview and ask questions of, key personnel and management. Furthermore, because our Chief Executive Officer serves as a member of our Board, we believe that the Board has a direct channel and better access to insights into our performance, business and challenges.

Committees of the Board of Directors

The Board has established an Audit Committee, a Compensation Committee, and a Nominating and Governance Committee. Each committee operates pursuant to a charter that may be viewed on our website at *www.combimatrix.com* . The inclusion of our web site address in this report does not include or incorporate by reference the information on our web site into this report.

Audit Committee. Our Audit Committee oversees our accounting and financial reporting processes and is responsible for (i) retaining, evaluating and, if appropriate, recommending the termination of our independent registered public accounting firm, (ii) approving the services performed by our independent registered public accounting firm and (iii) for reviewing and evaluating our accounting principles, financial reporting practices, and system of internal accounting controls. The Audit Committee is also responsible for maintaining communication between the Board and our independent registered public accounting firm, and has established procedures for the receipt, retention and treatment of complaints regarding accounting, internal accounting controls or auditing matters, and for the confidential, anonymous submission by our employees of concerns regarding questionable accounting or auditing matters. In addition, all related person transactions are reviewed and approved by the Audit Committee.

In 2013, our Audit Committee consisted of Messrs. Ding (the committee's Chairman), Jones and Gottlieb. Our Audit Committee currently consists of Messrs. Ding (the committee's Chairman), Hoffman and Gottlieb. The Board has determined that all members of our Audit Committee are independent under the listing standards of the NASDAQ Stock Market and the rules of the Securities and Exchange Commission, and that Mr. Ding qualifies as an "audit committee financial expert," as defined by the rules of the Securities and Exchange Commission.

Compensation Committee. Our Compensation Committee assists our Board in determining the compensation of our executive officers and directors. The Compensation Committee is responsible for approving the compensation package of each executive officer and recommending each executive officer's compensation to the Board. The Compensation Committee also administers our 2006 Stock Incentive Plan, as amended. The Compensation Committee may form and delegate any of its responsibilities to subcommittees when appropriate.

Our Compensation Committee in 2013 consisted of and currently consists of Messrs. Jones (the committee's Chairman), Ding and Gottlieb. The Board has determined that all members of our Compensation Committee are independent under the listing standards of the NASDAQ Stock Market.

Nominating and Governance Committee. Our Nominating and Governance Committee assists our Board by identifying and recommending individuals qualified to become members of our Board (subject to legal rights, if any, of third parties to nominate or appoint directors), and establishing, evaluating and overseeing our corporate governance processes and guidelines.

In 2013, our Nominating and Governance Committee consisted of Messrs. Gottlieb (the committee's Chairman) and Ding. Our Nominating and Governance Committee currently consists of Messrs. Gottlieb (the committee's Chairman), Hoffman and Ding. The Board has determined that all members of our Nominating and Governance Committee are independent under the listing standards of the NASDAQ Stock Market.

The Nominating and Governance Committee will consider candidates recommended by stockholders. To recommend director candidates, stockholders should submit their suggestions in writing to the Corporate Secretary, providing the proposed nominee's name, biographical data and other information about the proposed nominee and the nominating stockholder(s) as required by our Bylaws, together with a consent from the proposed nominee to serve on the Board if nominated and elected.

There are no specific minimum qualifications that the Nominating and Governance Committee requires to be met by a director nominee recommended for a position on the Board, nor are there any

specific qualities or skills that are necessary for one or more members of our Board to possess, other than as are necessary to meet the requirements of the rules and regulations applicable to us. The Nominating and Governance Committee considers a potential candidate's experience, areas of expertise, and other factors relative to the overall composition of the Board, including the following characteristics:

- broad experience in business, finance or administration;
- the independence requirements imposed by the Securities and Exchange Commission and the NASDAQ Stock Market; and
- a background that provides a portfolio of experience and knowledge relevant to our industry.

The Nominating and Governance Committee has the following policy with regard to the consideration of any director candidates recommended by security holders for the annual meeting of stockholders (subject to legal rights, if any, of third parties to nominate or appoint directors):

- A stockholder wishing to nominate a candidate for election to the Board at the next annual meeting is required to give written notice addressed to CombiMatrix Corporation, 310 Goddard, Suite 150, Irvine, CA 92618, Attn: Corporate Secretary, of his or her intention to make such a nomination. The notice of nomination must be received by the Corporate Secretary at this address within the timeframe required by our Bylaws, in order to be considered for nomination at the next annual meeting.
- The notice of nomination should include information regarding the recommended candidate relevant to a determination of whether the recommended candidate would be barred from being considered independent under NASDAQ Stock Market's Listing Qualifications or, alternatively, a statement that the recommended candidate would not be so barred. The notice of nomination also must include the nominee's name, age, business address, residence address, principal occupation or employment, and any other information required by Section 2.10 of our Bylaws or by applicable laws or regulations. A nomination that does not comply with these requirements will not be considered.

The Nominating and Governance Committee also considers director candidates that are suggested by its members, the Board or management. The Nominating and Governance Committee may, in the future, retain a third-party executive search firm to identify candidates on terms and conditions acceptable to the Nominating and Governance Committee, in its sole discretion. The process used by the Nominating and Governance Committee for identifying and evaluating nominees for director, including nominees recommended by stockholders, involves (with or without the assistance of a retained search firm) compiling names of potentially eligible candidates, conducting background and reference checks, conducting interviews with the candidate and others (as schedules permit), meeting to consider and approve the final candidates and, as appropriate, preparing and presenting to the full Board an analysis with regard to particular recommended candidates. The Nominating and Governance Committee endeavors to identify director nominees who have the highest personal and professional integrity, have demonstrated exceptional ability and judgment, and, together with other director nominees and members, are expected to serve the long-term interest of our stockholders and contribute to our overall corporate goals. Candidates proposed by stockholders will be evaluated by the Nominating and Governance Committee using the same criteria as for all other candidates. The Nominating and Governance Committee does not have a formal policy with respect to diversity; however, the Board and the Nominating and Governance Committee believe that it is essential that the Board members represent diverse viewpoints.

In connection with HLM's investment in us in April 2011, we agreed that, for so long as HLM and its affiliates beneficially own not less than 5% of our outstanding shares of common stock (not counting the shares underlying HLM's warrants), a reasonably acceptable designee of HLM shall be appointed to our Board and Compensation Committee. In addition, for so long as HLM and its affiliates beneficially own

not less than 14% of our outstanding shares of common stock (not counting the shares underlying HLM's warrants), at HLM's request, a reasonably acceptable individual designated by HLM, who is independent of HLM and us, shall be appointed to the Board. We also agreed that for so long as HLM and its affiliates beneficially own not less than 25% of the shares of common stock issued to HLM in the private placement (treating the shares underlying HLM's warrants as if issued), at the request of HLM, the Board shall appoint one Board member designated by HLM to such committees of the Board as HLM shall request, if such designation is permitted under applicable Securities and Exchange Commission and stock exchange rules. HLM has waived the requirement to maintain vacancies on our Board for this purpose, but such waiver is revocable by HLM at any time upon 45 days' prior written notice to us.

Codes of Business Conduct and Ethics

We have adopted a corporate Code of Business Conduct and Ethics, which may be viewed on our website at www.combimatrix.com. The Code of Business Conduct and Ethics applies to all our officers, directors and employees, including our principal executive officer, principal financial and accounting officer and controller, or persons performing similar functions. If we effect an amendment to, or waiver from, a provision of our code of ethics, we intend to satisfy our disclosure requirements by posting a description of such amendment or waiver on the website above or via a current report on Form 8-K. The inclusion of our web site address in this report does not include or incorporate by reference the information on our web site into this report.

Stockholder Communications with Directors

Stockholders wishing to communicate with the Board or with a particular member or committee of the Board should address communications to the Board, or to an individual member or committee as follows: c/o CombiMatrix Corporation, Attention: Corporate Secretary, 310 Goddard, Suite 150, Irvine, California 92618. All communications will be relayed to that addressee. From time to time, the Board may change the process through which stockholders communicate with the Board or its members or committees. There were no changes in this process in 2013. Please refer to our website at www.combimatrix.com for any future changes in this process. The Board or the particular director or committee of the Board to which a communication is addressed will, if it deems appropriate, promptly refer the matter either to management or to the full Board depending on the nature of the communication. The inclusion of our web site address in this report does not include or incorporate by reference the information on our web site into this report.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), requires our directors, officers, and persons that own more than 10 percent of a registered class of our equity securities to file reports of ownership and changes in ownership with the SEC. Officers, directors and greater than 10 percent stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file.

Based solely upon our review of the copies of such forms received by us during the year ended December 31, 2013, we believe that each person who, at any time during such year, was a director, officer, or beneficial owner of more than 10% of our common stock met the filing requirements during such year.

Item 11. EXECUTIVE COMPENSATION

Director Compensation

Directors who are also our employees receive no separate compensation from us for their service as members of the Board. Non-employee directors automatically receive a non-discretionary initial grant of options to purchase 2,000 shares of our common stock upon joining the Board. On the first business day of each calendar year, each non-employee Board member then in office is automatically granted additional options to purchase 2,000 shares of our common stock, provided such individual has served as a non-employee Board member for at least six (6) months. All such grants are granted at an exercise price equal to the closing market price on the date of grant. Options granted since 2012 vest in four equal annual installments over a 48-month period measured from the grant date.

Non-employee directors receive compensation in the amount of $1,500 per month for their service as members of the Board. The Chairman of the Board receives compensation in the amount of $2,000 per month for service as Chairman of the Board. During 2013, non-employee directors received $1,000 for each meeting of the Board attended in person, $1,000 for each meeting attended by telephone that was longer than one hour in length, and $500 for each meeting attended by telephone if the meeting was one hour or less in length. Directors are also reimbursed for expenses incurred in connection with attendance at meetings of the Board and committees of the Board and in connection with the performance of Board duties.

Director Compensation Table

The following table summarizes the compensation of our directors who served during 2013 and who are not listed as named executive officers.

Name	Fees Earned or Paid In Cash ($)	Option Awards ($)(1)	All Other Compensation ($)	Total ($)	Outstanding And Unexercised Options to Purchase Common Stock (#)(2)
Mark McGowan	9,860	8,596	—	18,456	—
Scott Gottlieb, M.D.	29,000	8,596	—	37,596	7,500
Robert Hoffman.	14,325	5,028	—	19,353	—
Martin Felsenthal	7,750	8,596	—	16,346	—
Wei Richard Ding	34,500	8,596	—	43,096	1,500
Jeremy Jones	32,500	—	—	32,500	500

(1) Amounts shown do not reflect cash compensation actually received by the directors. Instead, the amounts shown are the non-cash aggregate grant date fair values of option awards made during 2013 as determined pursuant to ASC Topic 718 and excludes the effect of forfeiture assumptions. The assumptions used to calculate the fair value of option awards are set forth under Note 2 to the Consolidated Financial Statements.

(2) Amounts shown reflect option awards vested as of May 31, 2014.

Executive Compensation

The following Summary Compensation Table sets forth certain information regarding the compensation, for services rendered in all capacities to us during 2013 and 2012, of our current principal executive officer, our two other most highly compensated executive officers at the end of 2013, and a former executive officer (together, the "named executive officers"). We did not have any other executive officers during 2013.

Names and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)(1)	All Other Compensation ($)(2)	Total ($)
R. Judd Jessup(3)	2013	87,231	—	—	—	—	87,231
Former President and Chief Executive Officer	2012	421,615	—	—	—	—	421,615
Scott R. Burell	2013	236,980	25,000	—	147,775	45,979	455,734
Chief Financial Officer, Secretary and Treasurer	2012	236,190	—	—	8,905	9,500	254,595
Mark McDonough(4)	2013	252,865	35,000	—	301,434	123,498	712,797
President and Chief Executive Officer; Former Chief Commercial Officer	2012	112,211	—	—	94,885	34,641	181,737
Richard D. Hockett, Jr., MD(5)	2013	353,561	—	—	118,219	76,222	548,002
Former Chief Medical Officer	2012	238,829	—	—	57,450	198,102	494,381

(1) Amounts shown do not reflect cash compensation actually received by the named executive officer. Instead, the amounts shown are the non-cash aggregate grant date fair values of option awards made during the periods presented as determined pursuant to ASC Topic 718 and excludes the effect of forfeiture assumptions. The assumptions used to calculate the fair value of option awards are set forth under Note 2 to the Consolidated Financial Statements.

(2) Mr. Burell's Other Compensation in 2013 is for relocation costs. Mr. McDonough's Other Compensation in 2013 is for commuting and relocation costs. Dr. Hockett's Other Compensation in 2013 is for commuting and relocation costs.

(3) Mr. Jessup resigned as President and Chief Executive Officer effective March 15, 2013.

(4) Mr. McDonough joined us as Chief Commercial Officer on August 23, 2012 and was appointed President Chief Executive Officer effective March 15, 2013.

(5) Dr. Hockett was appointed Chief Medical Officer effective May 1, 2012 and resigned effective February 19, 2014. Dr. R. Weslie Tyson was appointed to replace Dr. Hockett to be effective April 8, 2014.

The objective of our executive compensation program is to attract, motivate and retain talented executives with related technical and business expertise in the competitive diagnostic laboratory market have a demonstrated ability to effectively grow revenue and control costs. We hope to retain our executives over the long term to provide continuity from year-to-year. Consequently, we have chosen to compensate our executives with a salary and, in some cases, with option awards in order to align the executive's interests with corporate success. In addition, since 2012, our executive option awards are generally granted with a four year vesting schedule in order to incentivize our executives to continue to invest their time and energy to ensure our collective success over a longer term.

In determining the total amount and mixture of the compensation for each of our named executive officers, our Compensation Committee subjectively evaluates each named executive in light of numerous factors including title and role, individual performance (including past and expected future contribution to our business objectives) and our long-term business needs and goals (including the need to attract and retain key management personnel). Our Compensation Committee reviews the performance of each named executive officer annually and determines whether the named executive officer should receive an increase in base salary or receive a stock option award based on such evaluation. The compensation reflected in the table above for Mr. McDonough in 2012 was for his services as Chief Commercial Officer. In March 2013, we increased Mr. McDonough's salary in connection with his new role as our President and Chief Executive Officer, and also offered him a bonus payable upon achieving break-even earnings. We also granted performance stock options to Messrs. McDonough and Burell in order to greater incentivize achieving break-even earnings.

Severance and Change in Control

We provide certain severance benefits such that if an executive officer of CombiMatrix is terminated for other than cause, death or disability, the executive will receive payments equal to three months' base salary plus medical and dental benefits.

Our Board of Directors adopted a Restated Executive Change of Control Severance Plan (the "Severance Plan") that affects certain of our senior management-level employees who are classified as "Section 16 Officers" of the Company. Pursuant to the Severance Plan, if a participating employee is involuntarily terminated (other than for death, disability or for cause) or resigns for "good reason" (as defined in the Severance Plan) during the two-year period following a "change of control" (as defined in the Severance Plan), then, subject to execution of a release of claims against us, the employee will be entitled to receive: (i) a cash severance payment equal to one-half times annual base salary, in the case of other participating employees; (ii) immediate vesting of outstanding compensatory equity awards; and (iii) payment of COBRA premiums for the participating employee and eligible dependents for a pre-determined period of time. Payment of benefits under the Severance Plan will be limited by provisions contained in Section 409A of the U.S. Internal Revenue Code, as amended (the "Code"). The Severance Plan is administered by a plan administrator, which initially is the Compensation Committee of the Board of Directors. In order to participate in the Severance Plan, an eligible employee must waive any prior retention or severance agreements.

2006 Stock Incentive Plan

Our 2006 Stock Incentive Plan, as amended, provides for the grant of incentive or non-statutory stock options to our employees, directors and consultants. As of December 31, 2013, options to purchase 639,019 shares of common stock were issued and outstanding, and 202,580 shares remained available for grant, under the 2006 Stock Incentive Plan.

The 2006 Stock Incentive Plan is administered by our Compensation Committee. Subject to the provisions of the 2006 Stock Incentive Plan, the Compensation Committee determines who will receive the options, the number of options granted, the manner of exercise and the exercise price of the options. The term of incentive stock options granted under the 2006 Stock Incentive Plan may not exceed ten years, or five years for options granted to an optionee owning more than 10% of our voting stock. The exercise price of any stock option granted under the 2006 Stock Incentive Plan must be equal to or greater than the fair market value of the shares of our common stock on the date the option is granted. However, an incentive stock option granted to an optionee owning more than 10% of our voting stock must have an exercise price equal to or greater than 110% of the fair market value of our common stock on the date the option is granted.

Outstanding Equity Awards at Fiscal Year-End 2013

The following table sets forth information concerning the outstanding equity awards as of December 31, 2013 granted to the named executive officers.

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Options Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock that Have Not Vested (#)	Market Value of Shares or Units of Stock that Have Not Vested ($)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights that Have Not Vested(#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or other Rights that Have Not Vested ($)
R. Judd Jessup	37,499(2)	2,500	—	27.40	8/11/2020	—	—	—	—
Scott R. Burell	6,000(3)	—	—	46.10	9/17/2017	—	—	—	—
	6,249(4)	—	—	105.00	7/21/2018	—	—	—	—
	2,749(5)	—	—	76.50	5/11/2019	—	—	—	—
	1,999(6)	1,000	—	26.00	4/08/2021	—	—	—	—
	250(7)	750	—	15.50	2/28/2022	—	—	—	—
	—(8)	55,332	—	3.23	4/29/2023	—	—	—	—
	—	—	44,265(9)	3.23	4/29/2023	—	—	—	—
Richard D. Hockett, Jr., M.D.	2,500(10)	7,500	—	10.00	5/1/2022	—	—	—	—
	—(11)	44,265	—	3.23	4/29/2023	—	—	—	—
	—	—	44,265(12)	3.23	4/29/2023	—	—	—	—
Mark McDonough	2,588(13)	7,762	—	6.14	12/20/2022	—	—	—	—
	3,212(14)	9,638	—	4.50	10/19/2022	—	—	—	—
	—(15)	73,450	—	3.36	3/15/2023	—	—	—	—
	—	—	58,760(16)	3.36	3/29/2023	—	—	—	—
	—(17)	37,214	—	3.23	4/29/2023	—	—	—	—
	—	—	29,771(18)	3.23	4/29/2023	—	—	—	—

(1) All awards were granted under the 2006 Stock Incentive Plan. The options were granted at an exercise price equal to the closing price of our common stock on the date of grant and have a term of ten years.

(2) These options were granted on August 11, 2010. One-fourth vest on the one-year anniversary of grant and the remaining vest monthly thereafter over a three-year period.

(3) These options were granted on September 17, 2007 and vest quarterly over a three-year period.

(4) These options were granted on July 21, 2008 and vest quarterly over a three-year period.

(5) These options were granted on May 11, 2009 and vest quarterly over a three-year period.

(6) These options were granted on April 8, 2011. One-fourth vest on the one-year anniversary of grant and the remaining vest monthly thereafter over a three-year period.

(7) These options were granted on February 28, 2012 and vest in four equal annual installments over a 48-month period measured from the grant date.

(8) These options were granted on April 29, 2013 and vest in four equal annual installments over a 48-month period measured from the grant date

(9) These options were granted on April 29, 2013 and originally were to vest when, and if, the Company achieves break-even EBITDA for one fiscal quarter within eighteen months following March 15, 2013. On February 20, 2014, the Compensation Committee of our Board of Directors approved a modification to the vesting period to be thirty months following March 15, 2013. If this target is not achieved within thirty months following March 15, 2013, the option will expire. The option is exercisable for vested shares only.

(10) These options were granted on May 1, 2012 and vest in four equal annual installments over a 48-month period measured from the grant date.

(11) These options were granted on April 29, 2013 and vest in four equal annual installments over a 48-month period measured from the grant date

(12) These options were granted on April 29, 2013 and vest when, and if, the Company achieves break-even EBITDA for one fiscal quarter within eighteen months following March 15, 2013.

(13) These options were granted on December 20, 2012 and vest in four equal annual installments over a 48-month period measured from the vesting commencement date of August 20, 2012.

(14) These options were granted on October 19, 2012 and vest in four equal annual installments over a 48-month period measured from the vesting commencement date of August 20, 2012.

(15) These options were granted on March 15, 2013 and vest in four equal annual installments over a 48-month period measured from the grant date

(16) These options were granted on March 29, 2013 and originally were to vest when, and if, the Company achieves break-even EBITDA for one fiscal quarter within eighteen months following March 15, 2013. On February 20, 2014, the Compensation Committee of our Board of Directors approved a modification to the vesting period to be thirty months following March 15, 2013. If this target is not achieved within thirty months following March 15, 2013, the option will expire. The option is exercisable for vested

shares only.

(17) These options were granted on April 29, 2013 and vest in four equal annual installments over a 48-month period measured from the grant date

(18) These options were granted on April 29, 2013 and originally were to vest when, and if, the Company achieves break-even EBITDA for one fiscal quarter within eighteen months following March 15, 2013. On February 20, 2014, the Compensation Committee of our Board of Directors approved a modification to the vesting period to be thirty months following March 15, 2013. If this target is not achieved within thirty months following March 15, 2013, the option will expire. The option is exercisable for vested shares only.

Compliance with Code Section 162(m)

Section 162(m) of the Code ("Section 162(m)") generally disallows a tax deduction to a publicly traded company for compensation in excess of $1 million paid to each of that company's chief executive officer and four other most highly compensated executive officers. Qualifying performance-based compensation is not subject to the deduction limit if certain requirements are met. In the year ended December 31, 2013, none of our executive officers received compensation in excess of $1 million.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table shows information regarding the beneficial ownership of our common stock as of March 19, 2014 by (a) each stockholder, or group of affiliated stockholders, that we know owns more than 5% of our outstanding common stock; (b) each of our named executive officers; (c) each of our directors; and (d) all of our current directors and executive officers as a group. The table is based upon information supplied by directors, executive officers and principal stockholders, and Schedules 13D and 13G filed with the Securities and Exchange Commission.

Percentage ownership in the table below is based on 11,063,246 shares of common stock outstanding as of March 19, 2014. Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission, and generally includes voting power and/or investment power with respect to the securities held. Any securities not outstanding but which are subject to options or warrants exercisable within 60 days of March 19, 2014 are deemed outstanding and beneficially owned for the purpose of computing the percentage of outstanding common stock beneficially owned by the stockholder holding such options or warrants, but are not deemed outstanding for the purpose of computing the percentage of common stock beneficially owned by any other stockholder.

Unless otherwise indicated, each of the stockholders listed below has sole voting and investment power with respect to the shares beneficially owned. The address for each director or named executive officer is c/o CombiMatrix Corporation, 310 Goddard, Suite 150, Irvine, California 92618.

Name of Beneficial Owner	No. of Shares Beneficially Owned	Percentage
Officers and Directors		
Mark McDonough(1)	34,967	*
Scott R. Burell(2)	32,942	*
Richard D. Hockett Jr., MD(3)	3,500	*
R. Judd Jessup(4)	56,991	*
Scott Gottlieb, M.D.(5)	7,700	*
Wei Richard Ding(6)	1,500	*
Jeremy M. Jones(7)	500	*
Robert E. Hoffman(8)	48,544	*
All current directors and executive officers as a group (8 persons)	186,644	1.67%
5% Stockholders Not Listed Above		
Great Point Partners, LLC(9)	1,095,541	9.99%
Dr. Jeffrey R. Jay, M.D.(9)	1,095,541	9.99%
David Kroin(9)	1,095,541	9.99%

* Less than 1.0%.

(1) Includes 1,500 shares of common stock. Also includes options to purchase 33,467 shares of common stock that were exercisable within 60 days of March 19, 2014.

(2) Includes 912 shares of common stock. Also includes options to purchase 31,642 shares of common stock and warrants to purchase 388 shares of common stock that were exercisable within 60 days of March 19, 2014.

(3) Includes 1,000 shares of common stock. Also includes options to purchase 2,500 shares of common stock that were exercisable within 60 days of March 19, 2014.

(4) Includes 13,679 shares of common stock. Also includes options to purchase 37,499 shares of common stock and warrants to purchase 5,813 shares of common stock that were exercisable within 60 days of March 19, 2014. Shares and warrants are held by the R. Judd & Charlene L. Jessup Trust.

(5) Includes 200 shares of common stock and options to purchase 7,500 shares of common stock that were exercisable within 60 days of March 19, 2014.

(6) Includes options to purchase 1,500 shares of common stock that were exercisable within 60 days of March 19, 2014.

(7) Includes options to purchase 500 shares of common stock that were exercisable within 60 days of March 19, 2014.

(8) Includes 24,272 shares of common stock. Also includes warrants to purchase 24,272 shares of common stock that were exercisable within 60 days of March 19, 2014.

(9) Includes (i) 151,363 shares of common stock and 297,936 shares of common stock issuable upon exercise of warrants owned by Biomedical Value Fund, LP ("BVF"), (ii) 89,038 shares of common stock and 175,257 shares of common stock issuable upon exercise of warrants

owned by Biomedical Offshore Value Fund, Ltd. ("BOVF"), (iii) 56,391 shares of common stock and 110,996 shares of common stock issuable upon exercise of warrants owned by Biomedical Institutional Value Fund, LP ("BIVF"), (iv) 61,049 shares of common stock and 120,166 shares of common stock issuable upon exercise of warrants owned by Class D Series of GEF-PS, LP ("GEF-PS"), (v) 2,442 shares of common stock and 4,807 shares of common stock issuable upon exercise of warrants owned by David J. Morrison ("Morrison") and (vi) 8,792 shares of common stock and 17,304 shares of common stock issuable upon exercise of warrants owned by WS Investments II, LLC ("WS"). Does not include 244,408 shares of common stock issuable upon the exercise of the warrants collectively held by BVF, BOVF, BIVF, GEF-PS, Morrison and WS. The provisions of the warrants restrict the exercise of such warrants to the extent that, after giving effect to such exercise, the holder of such warrants and its affiliates and any other person or entities with which such holder would constitute a group would beneficially own in excess of 9.99% of the number of shares of common stock of the Company outstanding immediately after giving effect to such exercise. Great Point Partners, LLC ("Great Point") is the investment manager of BVF, BOVF, BIVF, GEF-PS, Morrison and WS, and therefore it may be deemed to be the beneficial owner of the shares of common stock, including the shares of common stock issuable upon exercise of the warrants, owned by each of BVF, BOVF, BIVF, GEF-PS, Morrison and WS. Dr. Jeffrey R. Jay, M.D. ("Dr. Jay") is a senior managing member of Great Point, and Mr. David Kroin ("Mr. Kroin") is a special managing member of Great Point. Each of Dr. Jay and Mr. Kroin, as senior managing member of Great Point and special managing member of Great Point, respectively, has voting power over the shares of common stock owned by each of BVF, BOVF, BIVF, GEF-PS, Morrison and WS, and consequently they each may be deemed to be the beneficial owner of the shares of common stock, including the shares of common stock issuable upon exercise of the warrants, owned by each of BVF, BOVF, BIVF, GEF-PS, Morrison and WS. Each of Great Point, Dr. Jay and Mr. Kroin disclaim beneficial ownership of such shares. The reported mailing address for each of Great Point, Dr. Jay and Mr. Kroin is 165 Mason Street, 3rd Floor, Greenwich, CT 06830. Information based solely upon investor filings with the SEC.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table sets forth information as of December 31, 2013 relating to all of our equity compensation plans:

Plan Category	(a) Number of shares to be issued upon exercise of outstanding options	(b) Weighted-average exercise price of outstanding options	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))(2)
Equity compensation plan approved by stockholders(1)	639,019	$ 10.79	202,580
Equity compensation plans not approved by stockholders	—	—	—
TOTAL	639,019	$ 10.79	202,580

(1) Consists of our 2006 Stock Incentive Plan as amended.

(2) Consists of shares available for future issuance under our 2006 Stock Incentive Plan, as of December 31, 2013. The number of shares of common stock reserved under our 2006 Stock Incentive Plan will automatically be increased on the first trading day of each year, in an amount equal to 3% of the number of shares of our common stock outstanding on the last trading day of the preceding year. On January 2, 2013, the additional reserve for our 2006 Stock Incentive Plan was automatically increased by 45,334 shares.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Transactions with Management and Others

Since January 1, 2013, there has not been, nor has there been proposed, any transaction, arrangement or relationship or series of similar transactions, arrangements or relationships, including those involving indebtedness not in the ordinary course of business, to which we or our subsidiaries were or are a party, or in which we or our subsidiaries were or are a participant, in which the amount involved exceeded or exceeds the lesser of $120,000 or 1% of the average of our total assets at year-end for the last two completed fiscal years and in which any of our directors, nominees for director, executive officers, beneficial owners of more than 5% of any class of our voting securities or any member of the immediate family of any of the foregoing persons, had or will have a direct or indirect material interest, other than as described above under the heading "Executive Compensation" and other than the transactions described below. Each of the transactions described below was reviewed and approved or ratified by our Audit Committee.

On February 20, 2014, pursuant to the authority granted under the CombiMatrix Corporation 2006 Stock Incentive Plan, the Compensation Committee of the Company adopted a 2014 Executive Performance Bonus Plan (the "Bonus Plan"), effective as of January 1, 2014, to provide certain members of the Company's senior management the opportunity to earn incentive bonuses based on the Company's attainment of specific financial performance objectives for 2014. The Compensation Committee determined that the Company's Chief Executive Officer, Mark McDonough, and the Company's Chief Financial Officer, Scott Burell, are eligible to receive such awards under the Bonus Plan. Upon the commencement of Dr. Tyson's employment, Dr. Tyson will be an eligible participant under the Bonus Plan at the same level as our CFO. A participant's bonus under the Bonus Plan will consist of a cash incentive and will be based on achievement of between 90% and 150% of the Company's 2014 net revenue target as determined by the Company's Compensation Committee. If the Company achieves 90% of the target net revenue, the CEO's cash bonus will equal $77,500 and the CFO's and CMO's cash bonus will equal $55,000; if the Company achieves 100% of the target net revenue, the CEO's cash bonus will equal $155,000 and the CFO's and CMO's cash bonus will equal $110,000; if the Company achieves 110% of the target net revenue, the CEO's cash bonus will equal $180,000 and the CFO's and CMO's cash bonus will equal $135,000; if the Company achieves 130% of the target net revenue, the CEO's cash bonus will equal $240,000 and the CFO's and CMO's cash bonus will equal $190,000; and if the Company achieves 150% of the target net revenue, the CEO's cash bonus will equal $270,000 and the CFO's and CMO's cash bonus will equal $220,000 (and bonus payments will be computed on a pro rata basis between 101% and 150% of the target achieved). Cash bonus payments, if earned, will be paid once the Company's auditors have completed their annual audit and the actual 2014 net revenues are known, and will be paid out within seventy-five days following December 31, 2014. In order to receive a bonus payment, the participant must be employed by the Company or its subsidiary at the time bonuses are computed and distributed.

On February 20, 2014, pursuant to the authority granted under our 2006 Stock Incentive Plan, our Compensation Committee granted 136,909 restricted stock units to our Chief Executive Officer, Mark McDonough, 68,454 restricted stock units to our Chief Financial Officer, Scott Burell, and 17,495 restricted stock units to each of our non-employee Board members. 25% of the shares of common stock subject to the restricted stock units vest on each anniversary of the grant date over a four year period. The restricted stock units may vest on an accelerated basis in accordance with the terms of our 2006 Stock Incentive Plan and our Restated Executive Change of Control Severance Plan and, in the event of death or a permanent disability, the vesting of the restricted stock unit will accelerate by twelve months.

On March 3, 2014, we entered into an offer letter with R. Weslie Tyson for Dr. Tyson to serve as our Medical Director and Chief Medical Officer. Dr. Tyson's employment will be effective April 8, 2014. The terms of this offer letter provide that Dr. Tyson will receive an annual base salary of $325,000. The offer letter also provides that Dr. Tyson will receive a restricted stock unit award for 60,000 shares of common stock which will vest 25% on each anniversary of the grant date over a four year period. He will also be eligible to participate in the Bonus Plan. We will also pay to move his household goods from Colorado to California, reimburse him for the realtor commission on the sale of his house in Colorado, provide him a one bedroom apartment for up to six months in Irvine, California until his family joins him in Southern California and reimburse him for one house-hunting trip for his family, all of which will be grossed up to negate any applicable tax consequences. Dr. Tyson also will be eligible to participate in our Severance Plan.

Future transactions with our officers, directors or greater than five percent stockholders will be on terms no less favorable to us than could be obtained from independent third parties, and all such transactions will be reviewed and subject to approval by members of our Audit Committee.

Director Independence

Our Board currently consists of six members, four of whom—Messrs. Gottlieb, Ding, Hoffman and Jones—our Board has determined to be independent under the rules of the NASDAQ Stock Market.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Principal Accountant Fees and Services

Audit and Audit-Related Fees

Fees for audit and audit-related services by our principal independent registered public accounting firm, Haskell & White LLP ("H&W"), for the years ended December 31, 2013 and 2012 were as follows:

	2013	2012
Audit fees	$ 87,500	$ 89,000
Audit related fees	61,675	19,232
Total audit and audit related fees	$ 149,175	$ 108,232

We were not billed for any tax fees or for any other fees from our principal accountants in 2013 or 2012.

Audit Committee Pre-Approval Policies and Procedures

The Audit Committee charter provides that the Audit Committee will pre-approve all audit services and non-audit services to be provided by our independent auditors before the accountant is engaged to render these services. The Audit Committee may consult with management in the decision-making process but may not delegate this authority to management. The Audit Committee may delegate its authority to pre-approve services to one or more committee members, provided that the designees present the pre-approvals to the full committee at the next committee meeting. All audit and non-audit services performed by our independent accountants have been pre-approved by our Audit Committee to assure that such services do not impair the auditors' independence from us.

Determination of Independence

There were no fees billed by H&W for non-audit services.

PART IV

Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) (1) Financial Statements—See "Index to Consolidated Financial Statements" appearing on page F-1.

(2) Financial Statement Schedules

Schedules have been omitted, as they are not required for smaller reporting companies, not applicable or the information is otherwise included.

(3) Exhibits—Refer to Item 15(b) below.

(b) Exhibits. The following exhibits are either filed herewith or incorporated herein by reference:

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation(1)
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation(2)
3.3	Certificate of Amendment to Amendment and Restated Certificate of Incorporation(3)
3.4	Second Amended and Restated Bylaws(4)
3.5	Certificate of Designation of Preferences, Rights and Limitations of Series A 6% Convertible Preferred Stock(5)
3.6	Certificate of Designation of Preferences, Rights and Limitations of Series B 6% Convertible Preferred Stock(27)
3.7	Certificate of Designation of Preferences, Rights and Limitations of Series C 6% Convertible Preferred Stock(33)
3.8	Certificate of Designation of Preferences, Rights and Limitations of Series D Convertible Preferred Stock(40)
10.2†	Restated Executive Change in Control Severance Plan(6)
10.4	Amendment No. 3 to Lease dated as of January 11, 2010(7)
10.5	Amendment No. 4 to the Lease effective as of October 21, 2012(8)
10.6†	2006 Stock Incentive Plan, as amended(9)
10.7†	Form of Stock Incentive Plan Agreement(10)
10.8†	Employment Agreement for Mark McDonough(11)
10.9	Form of Amended and Restated Indemnification Agreement(12)
10.13	Form of Securities Purchase Agreement dated as of April 1, 2011(13)
10.14	Form of Investors Rights Agreement dated as of April 1, 2011(14)
10.15	HLM Rights Agreement dated as of April 1, 2011(15)
10.16	Form of Warrant to Purchase Common Stock issued on April 7, 2011(16)
10.17	Form of Indemnity Agreement(17)
10.18	Form of Securities Purchase Agreement dated as of September 28, 2012(18)
10.19	Form of Warrant to Purchase Common Stock(19)

Exhibit Number	Description
10.20	Form of Registration Rights Agreement dated as of September 28, 2012(20)
10.21	Form of Lock-Up Agreement dated as of September 28, 2012(21)
10.22	Form of Voting Agreement dated as of September 28, 2012(22)
10.23	Consent and Waiver executed on December 4, 2012(23)
10.24†	Employment Agreement for Richard Hockett, M.D.(24)
10.25†	Amendment to CombiMatrix 2006 Stock Incentive Plan(25)
10.26	Form of Amendment No. 1 to Common Stock Purchase Warrant dated February 26, 2013(26)
10.27	Form of Warrant to Purchase Common Stock(28)
10.28	Form of Securities Purchase Agreement dated as of March 19, 2013(29)
10.29	Placement Agent Agreement, dated July 13, 2012, between the Company and C. K. Cooper & Company(30)
10.30	Addendum to Placement Agent Agreement, dated September 10, 2012, between the Company and C. K. Cooper & Company(31)
10.31	Addendum to Placement Agent Agreement, dated March 14, 2013, between the Company and C. K. Cooper & Company(32)
10.32†	Mark McDonough Compensation Arrangement(42)
10.33	Form of Waiver Regarding HLM Rights Agreement dated April 5, 2013(47)
10.34	Form of Securities Purchase Agreement dated as of May 3, 2013(34)
10.35	Form of Warrant to Purchase Common Stock(35)
10.36	Form of Registration Rights Agreement dated as of May 3, 2013(36)
10.37†	Form of Voting Agreement dated as of May 3, 2013(37)
10.38†	Form of Stock Incentive Plan Agreement for Performance-Based Options(43)
10.39†	Letter Agreement dated June 27, 2013 regarding Mark McDonough's bonus arrangement(38)
10.40	Amendment No. 5 to Lease effective as of July 16, 2013(39)
10.50	Form of Warrant to Purchase Common Stock(41)
10.51†	2014 Executive Performance Bonus Plan, as amended(44)
10.52†	Form of Restricted Stock Unit Award Agreement under the Company's 2006 Stock Incentive Plan (45)
10.53†	Employment Agreement for R. Weslie Tyson, M.D.(46)
21.1	Subsidiaries of the Registrant(*)
23.1	Consent of Haskell & White LLP(*)
31.1	Certification of Chief Executive Officer pursuant to section 302 of the Sarbanes-Oxley Act of 2002(*)
31.2	Certification of Chief Financial Officer pursuant to section 302 of the Sarbanes-Oxley Act of 2002 (*)

Exhibit Number	Description
32.1	Certification of Chief Executive Officer pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (Furnished herewith)
32.2	Certification of Chief Financial Officer pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (Furnished herewith)
101.0	The following materials from CombiMatrix Corporation's Annual Report on Form 10-K for the year ended December 31, 2013, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets as of December 31, 2013 and 2012; (ii) Consolidated Statements of Operations for the years ended December 31, 2013 and 2012; (iii) Consolidated Statements of Comprehensive Loss for the years ended December 31, 2013 and 2012; (iv) Consolidated Statements of Stockholders' Equity (Deficit) for the years ended December 31, 2013 and 2012; (v) Consolidated Statements of Cash Flows for the years ended December 31, 2013 and 2012; and (vi) Notes to Consolidated Financial Statements.(*)

(*) Included herewith.

† Denotes management contract or compensatory plan or arrangement.

(1) Incorporated by reference to Exhibit 3.1 to the Company's Registration Statement on Form S-1 (SEC File No. 333-139679), filed with the SEC on December 26, 2006.

(2) Incorporated by reference to Exhibit 3.1A to the Company's Quarterly Report on Form 10-Q filed August 14, 2008.

(3) Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on December 4, 2012.

(4) Incorporated by reference to Exhibit 3.2 to the Company's Annual Report on Form 10-K (File No. 001-33523) filed with the SEC on March 18, 2010.

(5) Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 1, 2012.

(6) Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on August 16, 2010.

(7) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on January 15, 2010.

(8) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 25, 2012.

(9) Incorporated by reference to Exhibit 10.11 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on August 9, 2013.

(10) Incorporated by reference to the Company's Registration Statement on Form S-1 (SEC File No. 333-139679), which became effective June 8, 2007.

(11) Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on November 13, 2012.

(12) Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on August 12, 2011.

(13) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 7, 2011.

(14) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 7, 2011.

(15) Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 7, 2011.

(16) Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 7, 2011.

(17) Incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 7, 2011.

(18) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 1, 2012.

(19) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 1, 2012.

(20) Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 1, 2012.

(21) Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 1, 2012.

(22) Incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 1, 2012.

(23) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on December 7, 2012.

(24) Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on May 11, 2012.

(25) Incorporated by reference to Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on November 13, 2012.

(26) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on February 26, 2013.

(27) Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 20, 2013.

(28) Incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 20, 2013.

(29) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 20, 2013.

(30) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 20, 2013.

(31) Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 20, 2013.

(32) Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 20, 2013.

(33) Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on May 6, 2013.

(34) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on May 6, 2013.

(35) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on May 6, 2013.

(36) Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on May 6, 2013.

(37) Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on May 6, 2013.

(38) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on July 1, 2013.

(39) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on July 19, 2013.

(40) Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on December 23, 2013.

(41) Incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-1/A (File No. 333-191211) filed with the SEC on December 16, 2013.

(42) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 3, 2013.

(43) Incorporated by reference to Exhibit 10.11 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on May 13, 2013.

(44) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 10, 2014.

(45) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on February 24, 2014.

(46) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 10, 2014.

(47) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 8, 2013.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: March 24, 2014

COMBIMATRIX CORPORATION

/s/ MARK MCDONOUGH

Mark McDonough
President and
Chief Executive Officer
(Authorized Signatory)

Pursuant to the requirements of the Securities and Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and the capacities and on the dates indicated.

Signature	Title	Date
/s/ MARK MCDONOUGH Mark McDonough	President and Chief Executive Officer, Director (Principal Executive Officer)	March 24, 2014
/s/ SCOTT R. BURELL Scott R. Burell	Chief Financial Officer, Treasurer and Secretary (Principal Financial and Accounting Officer)	March 24, 2014
/s/ R. JUDD JESSUP R. Judd Jessup	Chairman of the Board	March 24, 2014
/s/ SCOTT GOTTLIEB, M.D. Scott Gottlieb, M.D.	Director	March 24, 2014
/s/ WEI RICHARD DING Wei Richard Ding	Director	March 24, 2014
/s/ JEREMY M. JONES Jeremy M. Jones	Director	March 24, 2014
/s/ ROBERT E. HOFFMAN Robert E. Hoffman	Director	March 24, 2014

COMBIMATRIX CORPORATION
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
CombiMatrix Corporation
Irvine, California

We have audited the accompanying consolidated balance sheets of CombiMatrix Corporation (the "Company") as of December 31, 2013 and December 31, 2012, and the related consolidated statements of operations, comprehensive loss, stockholders' equity (deficit), and cash flows for each of the years then ended. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. The Company has determined that it is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall consolidated financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of CombiMatrix Corporation as of December 31, 2013 and December 31, 2012, and the results of its operations and its cash flows for each of the years then ended, in conformity with accounting principles generally accepted in the United States.

/S/ HASKELL & WHITE LLP

Irvine, California
March 24, 2014

COMBIMATRIX CORPORATION
CONSOLIDATED BALANCE SHEETS
As of December 31, 2013 and 2012
(In thousands, except share and per share information)

	December 31, 2013	December 31, 2012
ASSETS		
Current assets:		
Cash and cash equivalents	$ 12,289	$ 2,372
Short-term investments	1,747	—
Accounts receivable, net of allowance for doubtful accounts of $288 and $245	1,695	1,262
Supplies	171	465
Prepaid expenses and other assets	128	138
Total current assets	16,030	4,237
Property and equipment, net	581	666
Investments in unconsolidated subsidiaries and other	221	211
Patents and licenses, net	—	66
Total assets	$ 16,832	$ 5,180
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable, accrued expenses and other	$ 1,367	$ 1,222
Current portion, capital lease obligations	168	253
Warrants, net of $0 and $280 in issuance costs	568	4,204
Total current liabilities	2,103	5,679
Capital lease obligations, net of current portion	65	226
Total liabilities	2,168	5,905
Commitments and contingencies (Note 8)		
Convertible preferred stock; $0.001 par value; 5 million shares authorized;		
Series A—4,000 shares authorized; none and 1,644.45186 issued and outstanding, net of $0 and $101 in issuance costs	—	394
Stockholders' equity (deficit):		
Convertible preferred stock; $0.001 par value; 5 million shares authorized;		
Series B—2,000 shares authorized; none issued and outstanding	—	—
Series C—2,500 shares authorized; none issued and outstanding	—	—
Series D—12,000 shares authorized; 2,200.7 and none issued and outstanding	—	—
Common stock; $0.001 par value; 25 million shares authorized; 9,870,838 and 1,511,133 shares issued and outstanding	10	2
Additional paid-in capital	95,098	67,106
Accumulated other comprehensive loss	(4)	—
Accumulated deficit	(80,440)	(68,227)
Total stockholders' equity (deficit)	14,664	(1,119)
Total liabilities and stockholders' equity (deficit)	$ 16,832	$ 5,180

The accompanying notes are an integral part of these consolidated financial statements.

COMBIMATRIX CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
For the Years Ended December 31, 2013 and 2012
(In thousands, except share and per share information)

	For the Years Ended December 31,	
	2013	**2012**
Revenues:		
Diagnostic services	$ 6,204	$ 4,975
Clinical trial support services	—	195
Royalties	163	180
Total revenues	6,367	5,350
Operating expenses:		
Cost of services	3,527	2,702
Research and development	1,011	1,400
Sales and marketing	2,764	2,596
General and administrative	5,206	5,378
Patent amortization and royalties	254	266
Total operating expenses	12,762	12,342
Operating loss	(6,395)	(6,992)
Other income (expenses):		
Interest income	5	1
Interest expense	(356)	(179)
Warrant derivative gains (charges)	2,804	(2,357)
Total other income (expense)	2,453	(2,535)
Net loss	$ (3,942)	$ (9,527)
Series A convertible preferred stock dividends	$ (247)	$ (123)
Series C convertible preferred stock dividends	(27)	—
Deemed dividends from issuing Series A convertible preferred stock	—	(617)
Deemed dividends from issuing Series B convertible preferred stock	(417)	—
Deemed dividends from issuing Series C convertible preferred stock	(1,213)	—
Deemed dividends from issuing Series D convertible preferred stock	(6,367)	—
Net loss attributable to common stockholders	$ (12,213)	$ (10,267)
Basic and diluted net loss per share	$ (1.00)	$ (8.75)
Series A convertible preferred stock dividends	(0.06)	(0.11)
Series C convertible preferred stock dividends	(0.01)	—
Deemed dividends from issuing Series A convertible preferred stock	—	(0.57)
Deemed dividends from issuing Series B convertible preferred stock	(0.11)	—
Deemed dividends from issuing Series C convertible preferred stock	(0.31)	—
Deemed dividends from issuing Series D convertible preferred stock	(1.62)	—
Basic and diluted net loss per share attributable to common stockholders	$ (3.11)	$ (9.43)
Basic and diluted weighted average common shares outstanding	3,940,965	1,088,833

The accompanying notes are an integral part of these consolidated financial statements.

COMBIMATRIX CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
For the Years Ended December 31, 2013 and 2012
(In thousands, except share and per share information)

	For the Years Ended December 31,	
	2013	**2012**
Net loss	$ (3,942)	$ (9,527)
Unrealized loss on available-for-sale securities	(4)	—
Total comprehensive loss	$ (3,946)	$ (9,527)

The accompanying notes are an integral part of these consolidated financial statements.

COMBIMATRIX CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
For the Years Ended December 31, 2013 and 2012
(In thousands, except share information)

	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Series C Convertible Preferred Stock		Series D Convertible Preferred Stock		Common Stock		Additional	Accumulated Other Comprehensive	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Paid-In Capital	Loss	Deficit	Equity (Deficit)
Balances, December 31, 2011	—	$ —	—	$ —	—	$ —	—	$ —	1,070,412	$ 2	$ 66,108	$ —	$ (57,960)	$ 8,150
Reverse stock split adjustment	—	—	—	—	—	—	—	—	(28)	—	—	—	—	—
Issuance of Series A convertible preferred stock, net of issuance costs	2,500.0	394	—	—	—	—	—	—	—	—	—	—	—	—
Beneficial conversion feature on Series A convertible preferred stock	—	(495)	—	—	—	—	—	—	—	—	495	—	—	495
Conversion of Series A convertible preferred stock to common stock	(855.54814)	—	—	—	—	—	—	—	427,878	—	—	—	—	—
Make-whole dividends paid in common stock	—	—	—	—	—	—	—	—	12,871	—	101	—	(101)	—
Accrued dividends on Series A convertible preferred stock	—	—	—	—	—	—	—	—	—	—	—	—	(22)	(22)
Deemed dividends from issuing Series A convertible preferred stock	—	495	—	—	—	—	—	—	—	—	—	—	(617)	(617)
Non-cash stock compensation	—	—	—	—	—	—	—	—	—	—	402	—	—	402
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	(9,527)	(9,527)
Balances, December 31, 2012	1,644.45186	394	—	—	—	—	—	—	1,511,133	2	67,106	—	(68,227)	(1,119)
Conversion of Series A convertible preferred stock to common stock	(1,644.45186)	(394)	—	—	—	—	—	—	822,421	1	393	—	—	394
Make-whole dividends paid in common stock	—	—	—	—	—	—	—	—	50,307	—	247	—	(247)	—
Issuance of Series B convertible preferred stock, net of issuance costs	—	—	1,610.4	—	—	—	—	—	130,000	—	1,769	—	—	1,769
Beneficial conversion feature on Series B														

convertible preferred stock	—	—	—	(417)	—	—	—	—	—	—	417	—	—	—
Deemed dividends from issuing Series B convertible preferred stock	—	—	—	417	—	—	—	—	—	—	—	—	(417)	—
Conversion of Series B convertible preferred stock to common stock	—	—	(1,610.4)	—	—	—	—	—	535,392	—	—	—	—	—
Issuance of Series C convertible preferred stock, net of issuance costs	—	—	—	—	2,400.0	—	—	—	—	—	2,139	—	—	2,139
Beneficial conversion feature on Series C convertible preferred stock	—	—	—	—	—	(1,213)	—	—	—	—	1,213	—	—	—
Deemed dividends from issuing Series C convertible preferred stock	—	—	—	—	—	1,213	—	—	—	—	—	—	(1,213)	—
Conversion of Series C convertible preferred stock to common stock	—	—	—	—	(2,400.0)	—	—	—	839,864	1	(1)	—	—	—
Issuance of Series D convertible preferred stock, net of issuance costs	—	—	—	—	—	—	12,000.0	—	—	—	10,720	—	—	10,720
Beneficial conversion feature on Series D convertible preferred stock	—	—	—	—	—	—	—	(6,367)	—	—	6,367	—	—	—
Deemed dividends from issuing Series D convertible preferred stock	—	—	—	—	—	—	—	6,367	—	—	—	—	(6,367)	—
Conversion of Series D convertible preferred stock to common stock	—	—	—	—	—	—	(9,799.3)	—	4,756,946	5	(5)	—	—	—
Preferred stock dividends paid in common stock	—	—	—	—	—	—	—	—	15,141	—	49	—	(27)	22
Exercise of Series A common stock warrants	—	—	—	—	—	—	—	—	1,209,634	1	3,141	—	—	3,142
Reclassification of derivative warrant liability from warrant exercises	—	—	—	—	—	—	—	—	—	—	1,111	—	—	1,111
Non-cash stock compensation	—	—	—	—	—	—	—	—	—	—	432	—	—	432
Unrealized loss on available-for-sale securities	—	—	—	—	—	—	—	—	—	—	—	(4)	—	(4)
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	(3,942)	(3,942)
Balances,														

December 31, 2013	—	$ —	—	$ —	—	$ —	2,200.7	$ —	9,870,838	$ 10	$ 95,098	$ (4)	$ (80,440)	$ 14,664

The accompanying notes are an integral part of these consolidated financial statements.

COMBIMATRIX CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Years Ended December 31, 2013 and 2012
(In thousands)

	For the Years Ended December 31,	
	2013	**2012**
Operating activities:		
Net loss	$ (3,942)	$ (9,527)
Adjustments to reconcile net loss to net cash flows from operating activities:		
Depreciation and amortization	698	490
Stock compensation	432	402
Warrant derivative (gains) charges	(2,804)	2,357
Provision for bad debts	290	276
Loss on disposal of fixed assets	49	—
Changes in assets and liabilities:		
Accounts receivable	(723)	(76)
Supplies, prepaid expenses and other assets	294	48
Accounts payable, accrued expenses and other	101	90
Net cash flows from operating activities	(5,605)	(5,940)
Investing activities:		
Purchase of property and equipment	(304)	(31)
Purchase of available-for-sale investments	(1,750)	—
Net cash flows from investing activities	(2,054)	(31)
Financing activities:		
Net proceeds from issuance of Series A convertible preferred stock	—	2,079
Issuance costs relating to Series A convertible preferred stock	(106)	—
Net proceeds from issuance of Series B convertible preferred stock	1,769	—
Net proceeds from issuance of Series C convertible preferred stock	2,139	—
Net proceeds from issuance of Series D convertible preferred stock	10,892	—
Net proceeds from exercise of common stock warrants	3,142	—
Repayment of capital lease obligations	(259)	(121)
Net cash flows from financing activities	17,577	1,958
Increase (decrease) in cash and cash equivalents	9,918	(4,013)
Cash and cash equivalents, beginning	2,372	6,385
Unrealized loss on cash equivalents	(1)	—
Cash and cash equivalents, ending	$ 12,289	$ 2,372
Cash paid in interest expense	$ 54	$ 25
Non-cash investing and financing activities:		
Property and equipment purchased on capital leases	$ 13	$ 306
Make-whole Series A convertible preferred stock paid in common stock	$ 247	$ 101
Deemed dividends from issuing convertible preferred stock	$ 7,997	$ 617
Reclassification of derivative warrant liability from warrant exercises	$ 1,111	$ —
Fair value of warrants issued in Series A convertible preferred stock offering	$ —	$ 2,127

The accompanying notes are an integral part of these consolidated financial statements.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. DESCRIPTION OF BUSINESS

CombiMatrix Corporation (the "Company," "we," "us" and "our") was originally incorporated in October 1995 as a California corporation and later reincorporated as a Delaware corporation in September 2000. In December 2002, we merged with, and became a wholly owned subsidiary of. Acacia Research Corporation ("Acacia"), and in August 2007, we split-off from Acacia and became publicly traded on The Nasdaq Stock Market. As a result of the split-off, we ceased to be a subsidiary of, or affiliated with, Acacia.

Description of the Company

We provide valuable molecular diagnostic solutions and comprehensive clinical support for the highest quality of care. We specialize in miscarriage analysis, prenatal and pediatric healthcare, offering DNA-based testing for the detection of genetic abnormalities beyond what can be identified through traditional methodologies. We perform genetic testing utilizing a variety of advanced cytogenomic techniques, including microarray, standardized and customized FISH and high resolution karyotyping. We emphasize support for healthcare professionals, to ensure data understanding and communication of results to patients. We deliver high-technology driven answers, with a high degree of assistance for the ordering physician and staff.

We also own a one-third minority interest in Leuchemix, Inc. ("Leuchemix"), a private drug development company focused on developing a series of compounds to address a number of oncology-related diseases.

Reverse Stock Split

On December 4, 2012, we filed a Certificate of Amendment to our Certificate of Incorporation with the Secretary of State of the State of Delaware to effect a reverse split of our common stock at a ratio of one-for-ten (the "Reverse Stock Split"), which became effective at the close of business on that day. As a result, each share of CombiMatrix common stock outstanding as of December 4, 2012 was automatically changed into one-tenth of a share of common stock. No fractional shares were issued in connection with the Reverse Stock Split, and cash paid to stockholders for potential fractional shares was insignificant. The number of shares of common stock subject to outstanding options, warrants and convertible securities were also reduced by a factor of ten as of December 4, 2012. All historical share and per share amounts reflected throughout this document have been adjusted to reflect the Reverse Stock Split. The authorized number of shares and the par value per share of our common stock were not affected by the Reverse Stock Split.

Liquidity and Risks

We have a history of incurring net losses and net operating cash flow deficits. We are also deploying new technologies and continue to develop new and improve existing commercial diagnostic testing services and related technologies. At December 31, 2013, we had cash, cash equivalents and short-term investments of $14.0 million and anticipate that our cash and cash equivalent balances will be sufficient to meet our cash requirements beyond 2014, thereby removing the substantial doubt that we can continue as a going concern beyond 2014. Our financial statements for the year ended December 31, 2012 were prepared assuming we would continue as a going concern. Our history of incurring net losses and net operating cash flow deficits led to the uncertainty regarding our ability to execute our business plans as of December 31, 2012, which also raised substantial doubt about our ability to continue as a going concern at December 31, 2012.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In order for us to continue as a going concern beyond 2014 and ultimately to achieve profitability, we may be required to obtain capital from external sources, increase revenues and reduce operating costs. However, there can be no assurance that our operations will become profitable or that external sources of financing, including the issuance of debt and/or equity securities, will be available at times and at terms acceptable to us, or at all. The issuance of additional equity or convertible debt securities will also cause dilution to our shareholders. If external financing sources are not available or are inadequate to fund our operations, we will be required to reduce operating costs, including research projects and personnel, which could jeopardize our future strategic initiatives and business plans.

Our business operations are also subject to certain risks and uncertainties, including:

- market acceptance of products and services;
- technological advances that may make our technologies and services obsolete or less competitive;
- increases in operating costs, including costs for supplies, personnel and equipment;
- the availability and cost of capital; and
- governmental regulation that may restrict our business.

Our services are concentrated in a highly competitive market that is characterized by rapid technological advances, frequent changes in customer requirements and evolving regulatory requirements and industry standards. Failure to anticipate or respond adequately to technological advances, changes in customer requirements, changes in regulatory requirements or industry standards, or any significant delays in the development or introduction of planned technologies or services, could have a material adverse effect on our business and operating results. The accompanying consolidated financial statements have been prepared assuming that we will continue as a going concern. The financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the matters discussed herein.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Accounting Principles and Fiscal Year End. The consolidated financial statements and accompanying notes are prepared on the accrual basis of accounting in accordance with U.S. generally accepted accounting principles ("GAAP"). We have a December 31 year-end.

Use of Estimates. The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

Basis of Presentation and Principles of Consolidation. The accompanying consolidated financial statements include the accounts of the Company and our wholly-owned subsidiaries. Investments for which we possess the power to direct or cause the direction of the management and policies, either through majority ownership or other means, are accounted for under the consolidation method. Material intercompany transactions and balances have been eliminated in consolidation. Investments in companies in which we maintain an ownership interest of 20% to 50% or exercise significant influence over operating and financial policies are accounted for under the equity method. The cost method is used where we maintain ownership interests of less than 20% and do not exercise significant influence over the investee.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Revenue Recognition. We recognize revenue when (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred or services have been performed, (iii) amounts are fixed or determinable and (iv) collectability of amounts is reasonably assured.

Service revenues from providing diagnostic tests are recognized when the testing process is complete and test results are reported to the ordering physician or clinic. These diagnostic services are billed to various payors, including commercial insurance companies, healthcare institutions, government payors including Medicare and Medicaid, and individuals. We report revenues from contracted payors based on a contractual rate, or in the case of Medicare and Medicaid, published fee schedules for our tests. We report revenues from non-contracted payors based on the amounts expected to be collected. The differences between the amounts billed and the amounts expected to be collected from non-contracted payors are recorded as contractual allowances to arrive at net recognized revenues. The expected revenues from non-contracted payors are based on the historical collection experience of each payor or payor group, as appropriate. In each reporting period, we review our historical collection experience for non-contracted payors and adjust our expected revenues for current and subsequent periods accordingly. We also recognize additional revenue from actual cash payments that exceed amounts initially recognized, in the period the payments are received. For the years ended December 31, 2013 and 2012, net positive revenue adjustments were $607,000 and $570,000, respectively. Because a substantial portion of our revenues is from non-contracted third-party payors, it is likely that we will be required to make adjustments to accounting estimates with respect to contractual allowances in the future, which may positively or adversely affect our results of operations. In all cases described above, we report revenues net of any applicable statutory taxes collected from customers, as applicable.

Clinical trials support services revenue is recognized when the related support services have been delivered to and accepted by the customer. Royalty revenue is recognized in the period when earned.

Cash Equivalents and Short-Term Investments. We consider all highly liquid investments purchased with original maturities of three months or less when purchased to be cash equivalents. Short-term investments consist of fixed income investments with maturities of greater than three months and other highly liquid investments that can be readily purchased or sold using established markets. These investments are classified as available-for-sale and are reported at fair value on the Company's consolidated balance sheet. Unrealized holding gains and losses are reported within comprehensive loss in the consolidated statement of comprehensive loss. Fair value is based on available market information including quoted market prices, broker or dealer quotations or other observable inputs. If a decline in the fair value of a short-term investment below our cost basis is determined to be other than temporary, such investment is written down to its estimated fair value as a new cost basis and the amount of the write-down is included in earnings as an impairment charge. To-date, no permanent impairment charges have been realized or recorded.

Fair Value Measurements. We measure fair value as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

As such, fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or liability. We utilize a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

- Level 1: Observable market inputs such as quoted prices in active markets;
- Level 2: Observable market inputs, other than the quoted prices in active markets, that are observable either directly or indirectly, such as quoted prices for similar assets or liabilities; and
- Level 3: Unobservable inputs where there is little or no market data, which require the reporting entity to develop its own assumptions.

We classify our cash and money market funds within the fair value hierarchy as Level 1 as these assets are valued using quoted prices in active markets for identical assets at the measurement date. We classify short-term investments within the fair value hierarchy as Level 2, primarily utilizing broker quotes in a non-active market for valuation of these investments. Financial instruments that contain valuation inputs that are not readily determinable from active markets or from similar securities trading in active markets, such as derivative financial instruments, are classified within the fair value hierarchy as Level 3.

Derivative Financial Instruments. We evaluate financial instruments for freestanding or embedded derivatives. Derivative instruments that do not qualify for permanent equity classification are recorded as liabilities at fair value, with changes in value recognized as other income (expense) in the consolidated statements of operations in the period of change. Derivative liabilities are categorized as either short-term or long-term based upon management's estimates as to when the derivative instrument may be realized or based upon the holder's ability to realize the instrument.

Concentration of Credit Risks. Cash and cash equivalents are invested in deposits with certain financial institutions and may, at times, exceed federally insured limits. We have not experienced any significant losses on our deposits of cash and cash equivalents. We do not believe that we are exposed to significant credit risk on cash and cash equivalents or on our short-term investments.

Substantially all of the components and raw materials used in providing our testing services, including array slides and reagents, are currently provided to us from a limited number of sources or in some cases from a single source. Although we believe that alternative sources for those components and raw materials are available, any supply interruption in a sole-sourced component or raw material might result in up to a several-month production delay and materially harm our ability to provide testing services until a new source of supply, if any, could be located and qualified.

Accounts Receivable and Allowance for Doubtful Accounts. Accounts receivable are stated at principal amounts and are primarily comprised of amounts contractually due from customers for services performed. An allowance for doubtful accounts is recorded for estimated uncollectible amounts due from various payor groups such as commercial insurance companies, healthcare institutions, government payors and individuals. The process for estimating the allowance for doubtful accounts involves significant assumptions and judgments. Specifically, the allowance for doubtful accounts is adjusted periodically and is principally based upon specific identification of past due or disputed accounts. We also review the age of receivables by payor class to assess our allowance at each period end. The payment realization cycle for certain governmental and commercial insurance payors can be lengthy, involving denial, appeal and adjudication processes, and is subject to periodic adjustments that may be significant. Accounts receivable are periodically written off when identified as uncollectible and deducted from the allowance for doubtful accounts after appropriate collection efforts have been exhausted. Additions to the allowance for doubtful

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

accounts are charged to bad debt expense as a component of general and administrative expenses in the consolidated statements of operations. Collection of governmental, private health insurer, and client receivables are generally a function of providing complete and correct billing information to the insurers and clients within the filing deadlines required by each payor. Collection of receivables due from patients and clients is generally subject to increased credit risk due to credit-worthiness or inability to pay.

Supplies. Supplies inventory, which consists primarily of raw materials to be used in the production of the arrays we use for our tests, is stated at the lower of cost or market using the first-in, first-out method.

Property and Equipment. Property and equipment is recorded at cost. Additions and improvements that increase the value or extend the life of an asset are capitalized. Maintenance and repairs are expensed as incurred. Disposals are removed at cost less accumulated depreciation or amortization and any gain or loss from disposition is reflected in the consolidated statement of operations in the period of disposition. Depreciation is computed on a straight-line basis over the following estimated useful lives of the assets:

Laboratory equipment	3 to 5 years
Furniture and fixtures	5 to 7 years
Computer hardware and software	3 years
Leasehold improvements	Lesser of lease term or useful life of improvement

Certain leasehold improvements, furniture and equipment held under capital leases are classified as property and equipment and are amortized over their useful lives using the straight-line method. Lease amortization is included in depreciation expense.

Stock-Based Compensation. The compensation cost for stock-based awards to employees is measured at the grant date, based on the fair value of the award, and is recognized as an expense, on a straight-line basis, over the employee's requisite service period (generally the vesting period of the equity award), which is generally three years. The fair value of each option award is estimated on the date of grant using a Black-Scholes option valuation model. Stock-based compensation expense is recognized only for those awards that are expected to vest using an estimated forfeiture rate. We estimate pre-vesting option forfeitures at the time of grant and reflect the impact of estimated pre-vesting option forfeitures in compensation expense recognized.

The weighted average assumptions used to estimate the fair value of awards granted for the periods presented are noted in the table below. Expected volatility is based on the separate historical volatility of the market prices of our common stock. The risk-free rate for the expected term, using the simplified method, of the option is based on the U.S. Treasury yield curve in effect at the time of grant.

	For the Years Ended December 31,	
	2013	**2012**
Risk free interest rate	1.7%	1.3%
Volatility	106.0%	78.5%
Expected term	6.3 years	6.3 years
Expected dividends	0%	0%

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Stock-based compensation expense for 2013 and 2012 attributable to our functional expense categories were as follows (in thousands):

	For the Years Ended December 31,	
	2013	2012
Cost of products and services	$ 7	$ 5
Research and development	—	7
Sales and marketing	14	4
General and administrative	411	386
Total non-cash stock compensation	$ 432	$ 402

Research and Development Expenses. Prior to launching a new test or modifying an existing test, extensive laboratory validations consistent with the various regulations that govern our industry must be performed. As a result, research and development expenses include labor, laboratory supplies, and other development costs required to maintain and improve our existing suite of diagnostic test offerings as well as to investigate and develop new tests. Costs to acquire technologies which are utilized in research and development and which have no alternative future use are expensed when incurred. Software developed for use in our services is expensed as incurred until both (i) technological feasibility for the software has been established and (ii) all research and development activities for the other components of the system have been completed. We believe these criteria are met after we have received evaluations from third-party test sites and completed any resulting modifications to the services. Expenditures to date have been classified as research and development expense.

Advertising. Costs associated with marketing and advertising of our services are expensed as incurred. For the years ended December 31, 2013 and 2012, we incurred marketing and advertising expenses of $249,000 and $312,000, respectively.

Income Taxes. We recognize income taxes on an accrual basis based on tax positions taken or expected to be taken in our tax returns. A tax position is defined as a position in a previously filed tax return or a position expected to be taken in a future tax filing that is reflected in measuring current or deferred income tax assets and liabilities. Tax positions are recognized only when it is more likely than not (i.e., likelihood of greater than 50%), based on technical merits, that the position would be sustained upon examination by taxing authorities. Tax positions that meet the more likely than not threshold are measured using a probability-weighted approach as the largest amount of tax benefit that is greater than 50% likely of being realized upon settlement. Income taxes are accounted for using an asset and liability approach that requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in our financial statements or tax returns. A valuation allowance is established to reduce deferred tax assets if all, or some portion, of such assets will more than likely not be realized. Should they occur, our policy is to classify interest and penalties related to tax positions as income tax expense. Since our inception, no such interest or penalties have been incurred, however.

Other Comprehensive Loss. Components of comprehensive loss include unrealized gains and losses on available-for-sale securities and are included in the consolidated statements of comprehensive loss.

Segments. We have determined that we operate in one segment for financial reporting purposes.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Net Loss Per Share. Basic and diluted net loss per share has been computed by dividing the net loss by the weighted average number of common shares issued and outstanding during the periods presented. Options and warrants to purchase CombiMatrix stock as well as preferred stock convertible into shares of common stock are anti-dilutive and therefore are not included in the determination of the diluted net loss per share. The following table reflects the excluded dilutive securities:

	For the Years Ended December 31,	
	2013	**2012**
Common stock options	639,019	161,933
Common stock warrants	7,623,677	1,219,479
Series A preferred stock convertible into common stock	—	822,431
Series D preferred stock convertible into common stock	1,068,297	—
Excluded dilutive securities	9,330,993	2,203,843

Recent Accounting Pronouncements. In July 2013, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2013-11, "Income Taxes (Topic 740), Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists" to eliminate diversity in practice. Under this ASU, an unrecognized tax benefit, or a portion of an unrecognized tax benefit that exists at the reporting date, should be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward if certain criteria are met. This guidance is effective for fiscal years and interim periods within those years beginning after December 15, 2013 with early adoption permitted. We do not believe the adoption of this ASU will have a material impact on our consolidated financial statements.

In February 2013, the FASB amended its guidance to require an entity to present the effect of certain significant reclassifications out of accumulated other comprehensive income or loss on the respective line items in net income or loss. The new accounting guidance does not change the items that must be reported in other comprehensive income or loss or when an item of other comprehensive income or loss must be reclassified to net income or loss. The guidance is effective prospectively for fiscal years beginning after December 15, 2012 and we were required to adopt these new provisions during the first quarter of 2013. As the guidance requires additional presentation only, there was no impact to our consolidated results of operations or financial position.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

3. CASH AND SHORT-TERM INVESTMENTS

As of December 31, 2013, we held $12.3 million in cash and cash equivalents and $1.7 million of short-term investments, which are reported at fair value. Cash, cash equivalents and short-term investments consisted of the following as of December 31, 2013 (in thousands):

	As of December 31, 2013			
	Cost	Unrealized Gain	Unrealized Loss	Fair Value
Cash and money market securities	$ 11,290	$ —	$ —	$ 11,290
Certificates of deposit	2,750	—	(4)	2,746
	$ 14,040	$ —	$ (4)	$ 14,036
Included in cash and cash equivalents	$ 12,290	$ —	$ (1)	$ 12,289
Included in short-term investments	1,750	—	(3)	1,747
	$ 14,040	$ —	$ (4)	$ 14,036

There were no realized gains or losses for the year ended December 31, 2013.

4. FAIR VALUE MEASUREMENTS

The following table summarizes, for each major category of financial assets or liabilities measured on a recurring basis, the respective fair value at December 31, 2013 and 2012, and the classification by level of input within the fair value hierarchy defined above (in thousands):

		Fair Value Measurements		
December 31, 2013	Total	Level 1	Level 2	Level 3
Assets:				
Cash equivalents	$ 8,263	$ 7,264	$ 999	$ —
Short-term investments	1,747	—	1,747	—
Total	$ 10,010	$ 7,264	$ 2,746	$ —
Liabilities:				
Derivative warrant liability	$ 568	$ —	$ —	$ 568

		Fair Value Measurements		
December 31, 2012	Total	Level 1	Level 2	Level 3
Assets:				
Cash equivalents	$ 14	$ 14	$ —	$ —
Liabilities:				
Derivative warrant liability	$ 4,483	$ —	$ —	$ 4,483

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table is a reconciliation of financial liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the year ended December 31, 2013 (in thousands):

	Derivative Warrant Liability
Balance, December 31, 2012	$ 4,483
Changes in fair value	(2,804)
Reclassifications	(1,111)
Balance, December 31, 2013	$ 568

The fair value of the derivative warrant liability is based on Level 3 inputs. For this liability, we developed our own assumptions that do not have observable inputs or available market data to support the fair value recorded. See Note 10 for further discussion of the derivative warrant liability.

5. PROPERTY AND EQUIPMENT

Property and equipment consists of the following (in thousands):

	December 31,	
	2013	2012
Laboratory equipment	1,737	$ 1,745
Furniture and fixtures	225	103
Computer hardware and software	42	214
Leasehold improvements	279	289
	2,283	2,351
Less—accumulated depreciation and amortization	(1,702)	(1,685)
	$ 581	$ 666

Depreciation and amortization expense was $352,000 and $276,000 for the years ended December 31, 2013 and 2012, respectfully. The net book value of assets under capital lease obligations was $246,000 and $523,000 as of December 31, 2013 and 2012, respectively.

6. BALANCE SHEET COMPONENTS

Accounts payable, accrued expenses and other accrued expenses consist of the following (in thousands):

	December 31,	
	2013	2012
Accounts payable	$ 636	$ 610
Payroll and other employee benefits	353	324
Accrued vacation	144	143
Deferred rent	—	4
Royalties	211	106
Other accrued expenses	23	35
	$ 1,367	$ 1,222

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

7. INCOME TAXES

The tax effects of temporary differences and carryforwards that give rise to significant portions of deferred assets and liabilities consist of the following (in thousands):

	December 31,	
	2013	2012
Deferred tax assets:		
Deferred settlement costs	$ 1,215	$ 1,574
Stock-based compensation	423	428
Accrued liabilities and other	500	485
Net operating loss carryforwards and credits	61,756	59,173
Total deferred tax assets	63,894	61,660
Less: valuation allowance	(63,944)	(61,620)
Deferred tax assets, net of valuation allowance	(50)	40
Deferred tax liabilities:		
Depreciation and amortization	50	(40)
Net deferred tax liability	$ —	$ —

A reconciliation of the federal statutory income tax rate and the effective income tax rate is as follows:

	December 31,	
	2013	2012
Statutory federal tax rate	(34%)	(34%)
Impact on state tax rates	(7%)	(5%)
Warrant valuation	(22%)	9%
Cancellation of vested non-qualified stock options	1%	9%
Valuation allowance	59%	20%
Other non deductible permanent items	3%	1%
	0%	0%

At December 31, 2013 and 2012, we had net deferred tax assets totaling approximately $63.9 million and $61.7 million, respectively. These assets are offset by valuation allowances due to our determination that the criteria for asset recognition have not been met, as well as by deferred tax liabilities. At December 31, 2013, we had federal net operating loss carryforwards of approximately $160 million, which begin to expire in 2017 through 2032. In addition, we have tax credit carryforwards of approximately $5.2 million. Utilization of net operating loss carryforwards and tax credit carryforwards are subject to the "change of ownership" provisions under Section 382 of the Internal Revenue Code. The amount of such limitations has not been determined. Also, given that our net operating losses have yet to be utilized, all previous tax years remain open to examination by Federal authorities and other jurisdictions in which we operate. We have no unrecognized tax benefits as of December 31, 2013 and 2012.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. COMMITMENTS AND CONTINGENCIES

Leases

We have entered into a non-cancelable operating lease for approximately 12,200 square feet of office and laboratory facilities in Irvine, California with a lease term through January 2015.

At December 31, 2013, we had eleven capital leases for laboratory equipment with original purchase amounts totaling $435,000 and with useful lives of five years. As of December 31, 2013, the remaining lease obligations (including interest charges) were $259,000 with minimum future lease payments shown below. The weighted average interest rate on the capital lease obligations was 13.5%, based on remaining lease obligations as of December 31, 2013. The fair value of the capital lease obligations was not significantly different from their carrying amounts for all periods presented.

Future minimum lease payments for all of our facilities and leased equipment are as follows (in thousands):

Years ending December 31:

	Operating Leases	Capital Leases	Total
2014	$ 161	$ 188	$ 349
2015	13	43	56
2016	—	25	25
2017	—	3	3
2018	—	—	—
Total minimum lease payments	$ 174	259	$ 433
Less—imputed interest		(26)	
Present value of capital lease obligations		233	
Less—current portion		(168)	
Capital lease obligations, net of current portion		$ 65	

Rent expense for the years ended December 31, 2013 and 2012 was $297,000 and $302,000, respectively.

Executive Severance

We provide certain severance benefits such that if an executive officer of CombiMatrix Corporation is terminated for other than cause, death or disability, the executive will receive payments equal to three months' base salary plus medical and dental benefits. In addition, we have implemented a Restated Executive Change of Control Severance Plan (the "Severance Plan") that affects certain of our senior management-level employees who are classified as "Section 16 Officers" of the Company. Pursuant to the Severance Plan, if a participating employee is involuntarily terminated (other than for death, disability or for cause) or resigns for "good reason" (as defined in the Severance Plan) during the two-year period following a "change of control" (as defined in the Severance Plan) of the Company, then, subject to execution of a release of claims against the Company, the employee will be entitled to receive: (i) one-half times annual base salary; (ii) immediate vesting of outstanding compensatory equity awards; and (iii) payment of COBRA premiums for the participating employee and eligible dependents for a pre-determined period of time. Payment of benefits under the Severance Plan will be limited by provisions contained in Section 409A of the U.S. Internal Revenue Code. The Severance Plan is administered by a plan administrator, which initially is the

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Compensation Committee of the Board of Directors. In order to participate in the Severance Plan, an eligible employee must waive any prior retention or severance agreements.

Litigation

On September 30, 2002, we entered into a settlement agreement with Nanogen, Inc. ("Nanogen") to settle all pending litigation between the parties. Pursuant to the terms of the settlement agreement, we agreed to make quarterly payments to Nanogen equal to 12.5% of total sales of products developed by us and our affiliates based on the patents that had been in dispute in the litigation, up to an annual maximum amount of $1.5 million. The minimum quarterly payments under the settlement agreement are $25,000 per quarter until the patents expire in 2018. Royalty expenses recognized under the agreement were $100,000 in each of the years ended December 31, 2013 and 2012, and are included in patent amortization and royalties in the accompanying consolidated statements of operations.

On February 14, 2011, Relator Michael Strathmann ("Strathmann") served us with a complaint ("the Complaint") filed in the Superior Court of the State of California for the County of Orange. The Complaint alleged that we submitted false and fraudulent insurance claims to National Union Fire Insurance Company of Pittsburgh, PA in connection with a prior lawsuit that was settled with Nanogen, Inc., thereby allegedly violating the California Insurance Fraud Prevention Act, and sought penalties and unspecified treble damages. On May 4, 2011, the Superior Court dismissed the Complaint by ordering that it be stricken for violation of the California Anti-SLAPP statute, which prevents plaintiffs from filing abusive lawsuits against public policy. On June 15, 2011, Strathmann filed a Notice of Appeal with the California Court of Appeals, appealing the granting of the Motion to Strike. Subsequently, Strathmann filed a Notice of Appeal of the award of attorneys' fees against him. On October 24, 2012, the California Court of Appeals reversed the Superior Court's dismissal, finding that the anti-SLAPP statute was not applicable and remanding the case to the Superior Court. Strathmann filed an Amended Complaint, and we have filed our Answer to that pleading. On February 14, 2014, we filed a Motion for Summary Judgment, requesting that the Court enter judgment in our favor without trial. That Motion is to be heard by the Court on April 30, 2014. In the event that the Motion is not successful, then trial has been set for June 9, 2014, in the Orange County Superior Court. While discovery has commenced in the case, and we believe that there is no merit to Strathmann's claims and intend to vigorously defend against them, there can be no assurance that we will ultimately be successful. No contingent liability has been recognized due to the lack of specificity relating to the damages being sought by Strathmann and management's assessment that the likelihood of a materially unfavorable outcome is remote.

From time to time, we are subject to other claims and legal actions that arise in the ordinary course of business. We believe that the ultimate liability with respect to these claims and legal actions, if any, will not have a material effect on our financial position, results of operations or cash flows. Any legal costs resulting from claims or legal actions are expensed as incurred.

9. RETIREMENT SAVINGS PLAN

We have an employee savings and retirement plan under section 401(k) of the Internal Revenue Code (the "Retirement Plan"). The Retirement Plan is a defined contribution plan in which eligible employees may elect to have a percentage of their compensation contributed to the Retirement Plan, subject to certain guidelines issued by the Internal Revenue Service. We may contribute to the Retirement Plan at the discretion of our board of directors. There were no contributions made by us during any of the years presented.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. STOCKHOLDERS' EQUITY

Series A Convertible Preferred Stock Financing

On September 28, 2012 (the "Commitment Date"), we entered into a securities purchase agreement with certain accredited investors (the "Series A Investors"), pursuant to which we sold and issued 1,050.70039 shares of newly created Series A 6% Convertible Preferred Stock (the "Series A Stock") to the Series A Investors at a purchase price of $1,000 per share in an initial closing that occurred on October 1, 2012 (the "Series A First Closing"), and we sold and issued 1,449.29961 additional shares of Series A Stock on December 6, 2012 to the Series A Investors at a purchase price of $1,000 per share after stockholder approval was obtained on November 29, 2012 (the "Series A Second Closing") (combined, the "Series A Financing"). After certain offering-related costs were incurred, the net proceeds received by us from the Series A Financing were $2.0 million. As a result of the Series A Second Closing, the conversion price for the Series A Stock was set to $1.9995 per share, or the equivalent of 1.25 million shares of common stock issuable upon conversion of all Series A Stock. We filed resale registration statements on Form S-3 related to the Series A financing, which have been declared effective by the SEC. Until all Series A Investors no longer hold Series A warrants to purchase common stock: (i) we may not sell any variable rate securities or dilutive securities except for certain exempt issuances; (ii) if we enter into a subsequent financing on more favorable terms than the Series A Stock financing, then the agreements between us and the Series A Investors will be amended to include such more favorable terms; and (iii) we may not sell securities at an effective price per share less than $4.91 except for certain exempt issuances, unless waivers from the Series A Investors are obtained.

Holders of the Series A Stock were entitled to receive accruing dividends at the annual rate of 6%, payable semi-annually. Upon conversion of Series A Stock into common stock, we paid to each holder of Series A Stock converting to common stock, as a "make-whole" payment in common stock, an amount equal to $118 per $1,000 of stated value of Series A Stock so converted, less the aggregate amount of dividends previously paid on such converting Series A Stock. During December 2012, the Series A Investors converted 855.54814 shares of Series A Stock into 427,878 shares of common stock. In addition, 12,871 shares of common stock were issued to the Series A Investors in payment of the make-whole dividends related to the Series A Stock conversions. On January 4, 2013, accrued Series A dividends of $22,000 were paid by issuing 4,164 shares of common stock to the Series A Investors. During the first quarter of 2013, the Series A Investors converted all of the remaining 1,644.45186 shares of Series A Stock into 822,421 shares of common stock. In addition, 50,307 shares of common stock were issued to the Series A Investors in payment of the make-whole and accrued dividends related to the Series A Stock conversions. The combination of make-whole and accrued dividends paid in shares of common stock for the twelve months ended December 31, 2013 was $247,000.

In addition to the issuance of the Series A Stock, at the Series A First Closing, we issued warrants to purchase 213,945 shares of common stock to the Series A Investors. These warrants have a term of 5 $^{1}/_{2}$ years and initially were to become exercisable six months from the Series A First Closing, with an initial exercise price of $9.50 per share. At the Series A Second Closing, we issued warrants to purchase 724,825 shares of common stock to the Series A Investors. These warrants have a term of 5 $^{1}/_{2}$ years and initially were to become exercisable six months from the Series A Second Closing, with an initial exercise price of $2.364 per share (collectively, the "Series A Warrants"). The exercise price of the Series A Warrants and the number of shares of common stock underlying the Series A Warrants are subject to full-ratchet anti-dilution adjustments in the event we issue securities, other than certain excepted issuances, at a price below the then current exercise price of the Series A Warrants. On February 26, 2013, we entered into an agreement with the Series A Investors to modify the Series A Warrants such that they would become immediately exercisable as of February 22, 2013 (the "Modification Date"). Since the Modification Date

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

through December 31, 2013, 1,209,634 shares of common stock have been issued from exercises of the Series A Warrants, resulting in proceeds to the Company of $3.1 million. See discussion below regarding further adjustments to the Series A Warrants as a result of the Series B, C and D financings executed during 2013.

We account for stock purchase warrants as either equity instruments or derivative liabilities depending on the specific terms of the warrant agreements. Under applicable accounting guidance, stock warrants must be accounted for as derivative financial instruments if the warrants contain full-ratchet anti-dilution provisions, which preclude the warrants from being considered indexed to our own stock. The Series A Warrants issued to the Series A Investors contain such provisions, thus requiring us to treat them as derivative financial instruments, to be recorded at fair value at issuance and subsequently adjusted to fair value at each reporting date, with the corresponding adjustment reflected as a non-operating credit / charge in the consolidated statement of operations. During 2013, we valued the Series A Warrants using the Monte-Carlo simulation method using the following assumptions at each valuation date: (i) closing stock price and Series A Warrant contractual exercise price; (ii) term to expiration commensurate with the remaining Series A Warrant terms of 5.0 to 4.3 years; (iii) historical volatilities commensurate with the term of the remaining Series A Warrants of between 114.5% to 126.5%; (iv) risk-free interest rates commensurate with the term of the remaining Series A Warrants of 0.8% to 1.4%; and (v) simulated anti-dilution impact assuming various probabilities that we will raise additional capital by issuing equity securities at prices above or below the current contractual Series A Warrant exercise price during the Series A Warrant terms. The result of these valuation simulations was to initially value the Warrants issued at a combined $2.1 million derivative liability, with the residual value allocated to the Series A preferred stock. Subsequently, the fair value of the warrants increased to $4.5 million at December 31, 2012, resulting in $2.4 million of warrant derivative charges recognized during the fourth quarter of 2012. During 2013, the warrant derivative liability decreased due primarily to lower stock prices as well as from Series A Warrant exercises, resulting in a net gain of $2.8 million and a reclassification to additional paid-in capital of $1.1 million, respectively.

During 2012, we valued the Series A Warrants using the Monte-Carlo simulation method using the following assumptions at each valuation date: (i) closing stock price and Series A Warrant contractual exercise price; (ii) term to expiration commensurate with the individual Series A Warrant terms ranging from 5.3 years to 5.5 years; (iii) historical volatilities commensurate with the term of the Series A Warrants ranging from 65.6% to 103.9%; (iv) risk-free interest rates commensurate with the term of the Series A Warrants ranging from 0.7% to 0.8%; and (v) simulated anti-dilution impact assuming various probabilities that the Company will raise additional capital by issuing equity securities at prices above or below the current contractual Series A Warrant exercise prices during the Series A Warrant terms. The result of these valuation simulations was to initially value the Series A Warrants issued at a combined $2.1 million derivative liability, with the residual value of $495,000 allocated to the Series A Stock. Because the value of the Series A Warrants issued at the First Closing exceeded the consideration paid by Investors by $123,000, this amount was recorded as a deemed dividend charged to retained earnings at the First Closing. Subsequently, the fair value of the warrants increased to $4.5 million, resulting in $2.4 million of non-operating, warrant derivative charges recognized for the period ended December 31, 2012.

Offering-related costs that were accrued or paid as of and for the period ending December 31, 2012 of $527,000 were allocated between the Series A Warrants and Series A Stock on a pro-rata basis, resulting in $427,000 allocated to the Series A Warrants and $101,000 allocated to the Series A Stock. Offering-related costs allocated to the Series A Warrants are being amortized over the Series A Warrant exercise restriction period of six months from issuance of the Series A Warrants, which resulted in $147,000 of additional

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

interest expense charges in the period ended December 31, 2012. The remaining $280,000 of unamortized costs were expensed during the first three months of 2013 and charged to interest expense.

Series B Convertible Preferred Stock Financing

On March 19, 2013, we entered into a securities purchase agreement (the "Series B Purchase Agreement") with an existing institutional investor (the "Series B Investor") to purchase 130,000 shares of common stock at a price of $3.05 per share and approximately 1,610.4 units consisting of, in the aggregate, Series B 6% convertible preferred stock (the "Series B Stock") and warrants to purchase up to 275,000 shares of common stock at an exercise price of $3.49 per share (the "Series B Warrants") in a registered direct offering (the "Series B Financing") of securities sold off of our existing shelf registration statement on Form S-3 (File No. 333-176372). The Series B Financing closed on March 20, 2013 (the "Series B Closing"). The Series B Stock and Series B Warrants were sold in multiples of fixed combinations, with each fixed combination consisting of one share of Series B Stock and a Series B Warrant to purchase approximately 171 shares of common stock. Each fixed combination of Series B Stock and Series B Warrants was sold at a price of $1,000. The Series B Stock was initially convertible into an aggregate of 528,000 shares of common stock at an initial conversion price of $3.05 per share. The Series B Warrants were not exercisable for six months from the Series B Closing, and the Series B Stock accrued dividends at an annual rate of 6% beginning six months after the Series B Closing, assuming the Series B Stock had not been converted by that time. Upon the Series B Closing, we received proceeds of $1.8 million, net of placement agent fees and other related paid and accrued costs. Given that the effective conversion price of the Series B Stock was below the closing market price of our common stock at the time of the Series B Closing, we recognized a beneficial conversion feature in the amount of $417,000. Since the Series B Stock was immediately convertible into common stock, the beneficial conversion feature was treated as a deemed dividend charged to retained earnings.

The Series B Warrants have a $5\ ^{1}/_{2}$ year term as well as a cashless exercise provision in the event there is no effective registration statement covering the common stock issuable upon exercise of the Series B Warrants, and are not exercisable for the first six months following issuance. The Series B Warrants are not subject to price anti-dilution protection.

The Series B Investor agreed to be subject to a blocker that (i) would prevent its common stock ownership at any given time from exceeding 4.99% (which may be increased, but not above 9.99%) of our outstanding common stock; or (ii) would prevent us from issuing any shares of common stock to the Series B Investor upon the conversion by such Series B Investor of Series B Stock if the issuance of such shares to the Series B Investor, when aggregated with all other shares of common stock sold to the Series B Investor under the Series B Purchase Agreement together with all shares of common stock issued upon the conversion of Series B Stock, would result in the total issuance of common stock to exceed 19.99% of our outstanding common stock, without first obtaining the approval of our stockholders. We obtained stockholder approval at our June 27, 2013 Annual Stockholders' Meeting for the terms of the Series B Stock and the issuance and delivery in the aggregate of that number of shares of common stock exceeding 19.99% of the outstanding shares of common stock upon conversion of the Series B Stock. Since the Series B Closing through December 31, 2013, the Series B Investor has converted all of the Series B stock into 535,392 shares of common stock. See discussion below regarding additional adjustments to the Series B Stock as a result of the Series C Financing. Also, as a result of the Series B Financing, the exercise price of the Series A Warrants issued in the Series A First Closing automatically ratcheted down by their terms from their original exercise price of $9.50 per share to an adjusted exercise price of $3.05 per share, and the underlying shares exercisable as of the Series B Closing were automatically increased from 213,935 shares to 666,375 shares at that time.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Series C Convertible Preferred Stock Financing

On May 3, 2013, we entered into a securities purchase agreement (the "Series C Purchase Agreement") with certain accredited investors (the "Series C Investors"), pursuant to which we sold and issued 1,200 shares of our newly created Series C 6% convertible preferred stock (the "Series C Stock") to the Series C Investors at a purchase price of $1,000 per share in an initial closing that occurred on May 6, 2013 (the "Series C First Closing"), and we sold and issued 1,200 additional shares of Series C Stock to the Series C Investors on June 28, 2013 at a purchase price of $1,000 per share after stockholder approval was obtained on June 27, 2013 (the "Series C Second Closing") (combined, the "Series C Financing"). After certain offering-related costs, the net proceeds from the Series C Financing were $2.14 million.

As a result of the Series C Second Closing, the conversion price for the Series C Stock was set to $2.85759 per share, or the equivalent of 839,864 shares of common stock issuable upon conversion of all Series C Stock. The conversion price of the Series C Stock was also subject to proportional adjustment for stock splits, stock dividends, recapitalizations and the like. The Series C Stock earned 6% annual dividends.

Accrued dividends are payable semi-annually, and also on the date of conversion of any Series C Stock, in cash or, subject to certain conditions and at our election, in shares of common stock. If the dividends are paid in shares of common stock, the number of shares of common stock comprising the dividend on each share of Series C Stock will be valued at a 20% discount to the average of the daily volume weighted average price for the five-day trading period immediately prior to the dividend payment date. Given that the effective conversion price of the Series C Stock was below the closing market price of our common stock at the time of both of the Series C closings, we recognized beneficial conversion features in the amount of $1.2 million, which were limited to and reduced the net proceeds allocated to the Series C Stock. Since the Series C Stock was immediately convertible into common stock, the beneficial conversion feature was treated as a deemed dividend charged to retained earnings.

Also as a result of the Series C Second Closing, the exercise price of the Series A Warrants issued in the Series A First Closing automatically ratcheted down by their terms from their most recent exercise price of $3.05 per share to an adjusted exercise price of $2.86 per share, and the underlying shares exercisable as of the Series C Second Closing were automatically increased from 441,566 shares to 470,907 shares. In addition, the conversion price of the Series B Stock automatically ratcheted down by their terms from $3.05 per share to an adjusted conversion price of $2.85759 per share, and the underlying shares issuable from conversion of Series B Stock as of the Series C Second Closing were automatically increased from 109,837 shares to 117,231 shares.

In addition to the issuance of the Series C Stock, we issued warrants at the Series C First Closing to purchase 491,803 shares of our common stock with an exercise price of $3.77 per share, and. at the Series C Second Closing, we issued additional warrants to purchase 491,803 shares of our common stock with an exercise price of $3.55 per share (collectively, the "Series C Warrants"). The exercise price of the Series C Warrants issued equaled 110% of the market value (as defined by Nasdaq rules) of one share of common stock on each closing date. The Series C Warrants have a $5\ ^{1}/_{2}$ year term, were not exercisable for the first six months following issuance and include a cashless exercise provision, which is only applicable if the common stock underlying the Series C Warrants was not subject to an effective registration statement or otherwise cannot be sold without restriction pursuant to Rule 144.

The common stock underlying the Series C Stock and Series C Warrants were initially unregistered under the Securities Act of 1933. In connection with the Series C Financing, however, we entered into a registration rights agreement with the Series C Investors (the "Registration Rights Agreement"). The Registration Rights Agreement required us to file registration statements with the SEC registering for resale: (i) the shares of common stock issuable upon conversion of the Series C Stock; (ii) the shares of

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

common stock issuable as dividends on the Series C Stock; (iii) the shares of common stock issuable upon exercise of the Series C Warrants; and (iv) any additional shares of common stock issuable in connection with any anti-dilution provisions associated with the Series C Stock. We filed registration statements relating to both of the Series C closings, and both registration statements have been declared effective by the SEC. Under the terms of the Registration Rights Agreement, we are obligated to maintain the effectiveness of the resale registration statements until all securities registered thereunder are sold or otherwise can be sold without restriction pursuant to Rule 144. The Registration Rights Agreement includes liquidated damages provisions in the event we fail to file or maintain the effectiveness of the registration statements. We do not plan, nor are we obligated, to register the Series C Stock or the Series C Warrants.

For the year ended December 31, 2013, the Series C Investors have converted all of their shares of Series C stock into 839,864 shares of common stock.

Series D Convertible Preferred Stock Financing

On December 20, 2013 (the "Series D Closing"), we closed an underwritten public offering (the "Series D Offering") and issued 12,000 units of securities to investors, with each unit consisting of: (i) one share of Series D preferred stock ("Series D Stock") convertible into shares of our common stock equal to 1,000 divided by the conversion price of $2.06, which was 72.5% of the consolidated closing bid price of our common stock on the Nasdaq Capital Market on December 16, 2013, the date we executed the underwriting agreement ("UA date"); and (ii) one warrant exercisable for 485.4369 shares of our common stock, at an exercise price per share equal to $3.12 ("Series D Warrants"), which was 110% of the consolidated closing bid price of our common stock on the Nasdaq Capital Market on the UA date. The shares of common stock underlying the Series D Stock and Series D Warrants were registered on Form S-1 (File No. 333-191221), which was declared effective by the SEC on December 16, 2013. The Series D Stock was immediately convertible and the Series D Warrants were immediately exercisable for shares of common stock and have a term of five years. In total, there were 5,825,243 shares of common stock issuable upon conversion of the Series D Stock and up to 5,825,243 shares of common stock issuable upon exercise of the Series D Warrants. The units were sold for a purchase price equal to $1,000 per unit, resulting in gross proceeds of $12 million at the Series D Closing. After certain offering-related costs paid to the underwriters and others at the closing and through February 2014, net proceeds received by us were $10.7 million. As of December 31, 2013, 9,799.3 shares of Series D Stock have converted into 4,756,946 shares of common stock. Subsequent to December 31, 2013 and through the date of this report, all of the remaining Series D Stock has converted into an additional 1,068,297 shares of common stock. Also as a result of the Series D Offering, the exercise price of the then-outstanding Series A Warrants automatically ratcheted down by their terms from their original exercise price of $2.86 per share to an adjusted exercise price of $2.06 per share, and the underlying shares exercisable was automatically increased by 81,910 shares. A registration statement on Form S-3 has been filed in order to register these shares as per the terms of our original Series A offering documents.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Warrants

Outstanding warrants to purchase our common stock are as follows:

	Shares of Common Stock Issuable from Warrants Outstanding as of December 31,		Exercise Price	Expiration
	2013	2012		
Liability-classified warrants:				
October 2012	292,817	213,945	$2.06(1)	April 2018
December 2012	—	724,825	$2.36	June 2018
	292,817	938,770		
Equity-classified warrants:				
December 2013	5,825,243	—	$3.12	December 2018
June 2013	491,803	—	$3.55	December 2018
May 2013	491,803	—	$3.77	November 2018
March 2013	275,000	—	$3.49	September 2018
April 2011	131,047	131,047	$21.40	April 2016
October 2009	3,000	3,000	$77.80	October 2014
May 2009	2,967	2,967	$75.00 - $90.00	May 2014 - July 2014
May 2009	109,997	109,997	$90.00	May 2014
July 2008	—	33,698	$118.70 - $136.50	July 2013
Total	7,330,860	280,709		
Total—all warrants	7,623,677	1,219,479		

(1) Prior to the anti-dilution adjustments which occurred on March 20, 2013, June 28, 2013 and December 20, 2013, these warrants had an initial exercise price of $9.50 per share.

11. STOCK OPTIONS

Our employees participate in the CombiMatrix Corporation 2006 Stock Incentive Plan (the "CombiMatrix Plan"), which was approved by our board of directors in 2006. In addition, during 2005, the board of directors of our wholly owned subsidiary, CombiMatrix Molecular Diagnostics, Inc., approved the CombiMatrix Molecular Diagnostics 2005 Stock Award Plan (the "CMDX Plan"). Our board of directors believes that granting employees stock-based awards from the CombiMatrix Plan is in the best interest of our Company and our stockholders. No awards have been granted to the CMDX Plan since 2010, and it is no longer being utilized.

CombiMatrix Corporation 2006 Stock Incentive Plan

The CombiMatrix Plan is administered by the Compensation Committee (the "Committee") of our Board of Directors. The Committee determines which eligible individuals are to receive option grants or stock issuances under the CombiMatrix Plan, the time or times when the grants or issuances are to be made, the number of shares subject to each grant or issuance, the status of any granted option as either an

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

incentive stock option or a non-statutory stock option under the federal tax laws, the vesting schedule to be in effect for the option grant or stock issuance and the maximum term for which any granted option is to remain outstanding.

The CombiMatrix Plan is divided into three separate equity incentive programs: a discretionary option grant / stock appreciation right program, a stock issuance program, and an automatic option grant program for outside directors. To date, the discretionary option grant program has been the primary program used in awarding stock-based compensation. Under the discretionary option grant program, the Committee may grant non-statutory options to purchase shares of CombiMatrix stock to eligible individuals in our employ (including employees, non-employee board members and consultants) at an exercise price not less than 100% of the fair market value of those shares on the grant date, and incentive stock options to purchase shares of CombiMatrix stock to eligible employees at an exercise price not less than 100% of the fair market value of those shares on the grant date. Options are generally exercisable over a three- or four-year vesting term following the date of grant and expire ten years after the grant date. The authorized number of shares of common stock subject to the CombiMatrix Plan increases by 3% of the total number of CombiMatrix common stock outstanding at the end of each calendar year. At December 31, 2013, there were approximately 856,000 authorized shares available under the CombiMatrix Plan, with approximately 203,000 shares available for grant.

The following is a summary of the stock option activities under the CombiMatrix Plan for 2013 and 2012:

	Shares	Weighted Average Price	Weighted Contractual Term	Aggregate Intrinsic Value ('000s)
Balance at December 31, 2011	223,243	$ 48.69	7.8 years	$ 6
Granted	60,000	$ 10.00		
Exercised	—	$ —		
Forfeited	(52,933)	$ 22.47		
Cancelled	(66,377)	$ 67.91		
Balance at December 31, 2012	163,933	$ 35.21	7.3 years	$ 23
Granted	502,586	$ 3.29		
Exercised	—	$ —		
Forfeited	(13,750)	$ 9.68		
Cancelled	(13,750)	$ 28.94		
Balance at December 31, 2013	639,019	$ 10.79	8.7 years	$ 1
Exercisable at December 31, 2012	86,335	$ 53.44	5.7 years	$ —
Exercisable at December 31, 2013	98,259	$ 47.75	6.0 years	$ —

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Information related to options granted under the CombiMatrix Plan for 2013 and 2012 is as follows:

	December 31,	
	2013	2012
Weighted average fair values of options granted	$ 2.39	$ 6.23
Options granted with exercise prices:		
Greater than market price on the grant date	—	—
Equal to market price on the grant date	502,586	60,000
Less than market price on the grant date	—	—

There were no option exercises during 2013 or 2012. The aggregate fair value of options vested during the years ended December 31, 2013 and 2012 was $279,000 and $600,000, respectively. As of December 31, 2013, the total unrecognized compensation expense related to non-vested stock option awards was $1.2 million, which is expected to be recognized over a weighted average term of approximately 2.5 years.

CombiMatrix Molecular Diagnostics 2005 Stock Award Plan

Our wholly owned subsidiary, CMDX, executed the CMDX Plan, with plan provisions and terms similar to that of the CombiMatrix Plan as described above. At December 31, 2013, there were 4.0 million authorized shares available under the CMDX Plan, with approximately 3.7 million shares available for grant. However, our Board of Directors has no intention of utilizing this plan in the future.

The following is a summary of stock option activities for the CMDX Plan for 2013 and 2012:

	Shares	Weighted Average Price	Weighted Contractual Term	Aggregate Intrinsic Value ('000s)
Balance at December 31, 2011	411,000	$ 0.36	4.2 years	$ 60
Granted	—	$ —		
Exercised	—	$ —		
Cancelled	(120,000)	$ 0.43		
Balance at December 31, 2012	291,000	$ 0.34	3.1 years	$ 51
Granted	—	$ —		
Exercised	—	$ —		
Cancelled	—	$ —		
Balance at December 31, 2013	291,000	$ 0.34	2.1 years	$ 51
Exercisable at December 31, 2012	241,000	$ 0.30	3.0 years	$ 50
Exercisable at December 31, 2013	241,000	$ 0.30	2.1 years	$ 50

There were no option grants during 2013 or 2012 under the CMDX Plan. The fair value of options vested during the years ended December 31, 2013 and 2012 was not significant. As of December 31, 2013, the total unrecognized compensation expense related to non-vested stock option awards was not significant.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Stock Option Awards Granted to Non-Employees

Stock option expense reflected in the consolidated statements of operations related to stock options issued to our non-employee scientific advisory board members and consultants are recognized at fair value using the Black-Scholes option-pricing model with weighted average assumptions as disclosed in Note 2 under "Stock-Based Compensation." For the years ended December 31, 2013 and 2012, non-cash charges recognized from stock option awards granted to non-employees was not significant.

12. SUBSEQUENT EVENT

From January 1, 2014 through the date of this report, certain investors have exercised Series A Warrants to purchase 124,111 shares of our common stock, resulting in net proceeds of $256,000 to us.

EXHIBIT INDEX

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation(1)
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation(2)
3.3	Certificate of Amendment to Amendment and Restated Certificate of Incorporation(3)
3.4	Second Amended and Restated Bylaws(4)
3.5	Certificate of Designation of Preferences, Rights and Limitations of Series A 6% Convertible Preferred Stock(5)
3.6	Certificate of Designation of Preferences, Rights and Limitations of Series B 6% Convertible Preferred Stock(27)
3.7	Certificate of Designation of Preferences, Rights and Limitations of Series C 6% Convertible Preferred Stock(33)
3.8	Certificate of Designation of Preferences, Rights and Limitations of Series D Convertible Preferred Stock(40)
10.2†	Restated Executive Change in Control Severance Plan(6)
10.4	Amendment No. 3 to Lease dated as of January 11, 2010(7)
10.5	Amendment No. 4 to the Lease effective as of October 21, 2012(8)
10.6†	2006 Stock Incentive Plan, as amended(9)
10.7†	Form of Stock Incentive Plan Agreement(10)
10.8†	Employment Agreement for Mark McDonough(11)
10.9	Form of Amended and Restated Indemnification Agreement(12)
10.13	Form of Securities Purchase Agreement dated as of April 1, 2011(13)
10.14	Form of Investors Rights Agreement dated as of April 1, 2011(14)
10.15	HLM Rights Agreement dated as of April 1, 2011(15)
10.16	Form of Warrant to Purchase Common Stock issued on April 7, 2011(16)
10.17	Form of Indemnity Agreement(17)
10.18	Form of Securities Purchase Agreement dated as of September 28, 2012(18)
10.19	Form of Warrant to Purchase Common Stock(19)
10.20	Form of Registration Rights Agreement dated as of September 28, 2012(20)
10.21	Form of Lock-Up Agreement dated as of September 28, 2012(21)
10.22	Form of Voting Agreement dated as of September 28, 2012(22)
10.23	Consent and Waiver executed on December 4, 2012(23)
10.24†	Employment Agreement for Richard Hockett, M.D.(24)
10.25†	Amendment to CombiMatrix 2006 Stock Incentive Plan(25)

10.26 Form of Amendment No. 1 to Common Stock Purchase Warrant dated February 26, 2013(26)

10.27 Form of Warrant to Purchase Common Stock(28)

10.28 Form of Securities Purchase Agreement dated as of March 19, 2013(29)

Exhibit Number	Description
10.29	Placement Agent Agreement, dated July 13, 2012, between the Company and C. K. Cooper & Company(30)
10.30	Addendum to Placement Agent Agreement, dated September 10, 2012, between the Company and C. K. Cooper & Company(31)
10.31	Addendum to Placement Agent Agreement, dated March 14, 2013, between the Company and C. K. Cooper & Company(32)
10.32†	Mark McDonough Compensation Arrangement(42)
10.33	Form of Waiver Regarding HLM Rights Agreement dated April 5, 2013(47)
10.34	Form of Securities Purchase Agreement dated as of May 3, 2013(34)
10.35	Form of Warrant to Purchase Common Stock(35)
10.36	Form of Registration Rights Agreement dated as of May 3, 2013(36)
10.37†	Form of Voting Agreement dated as of May 3, 2013(37)
10.38†	Form of Stock Incentive Plan Agreement for Performance-Based Options(43)
10.39†	Letter Agreement dated June 27, 2013 regarding Mark McDonough's bonus arrangement(38)
10.40	Amendment No. 5 to Lease effective as of July 16, 2013(39)
10.50	Form of Warrant to Purchase Common Stock(41)
10.51†	2014 Executive Performance Bonus Plan, as amended(44)
10.52†	Form of Restricted Stock Unit Award Agreement under the Company's 2006 Stock Incentive Plan (45)
10.53†	Employment Agreement for R. Weslie Tyson, M.D.(46)
21.1	Subsidiaries of the Registrant(*)
23.1	Consent of Haskell & White LLP(*)
31.1	Certification of Chief Executive Officer pursuant to section 302 of the Sarbanes-Oxley Act of 2002 (*)
31.2	Certification of Chief Financial Officer pursuant to section 302 of the Sarbanes-Oxley Act of 2002 (*)
32.1	Certification of Chief Executive Officer pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (Furnished herewith)
32.2	Certification of Chief Financial Officer pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (Furnished herewith)
101.0	The following materials from CombiMatrix Corporation's Annual Report on Form 10-K for the year ended December 31, 2013, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets as of December 31, 2013 and 2012; (ii) Consolidated Statements of Operations for the years ended December 31, 2013 and 2012; (iii) Consolidated Statements of Comprehensive Loss for the years ended December 31, 2013 and 2012; (iv) Consolidated Statements of Stockholders' Equity (Deficit) for the years ended December 31, 2013 and 2012; (v) Consolidated Statements of Cash Flows for the years ended December 31, 2013 and 2012; and (vi) Notes to Consolidated Financial Statements.(*)

(*) Included herewith.

† Denotes management contract or compensatory plan or arrangement.

(1) Incorporated by reference to Exhibit 3.1 to the Company's Registration Statement on Form S-1 (SEC File No. 333-139679), filed with the SEC on December 26, 2006.

(2) Incorporated by reference to Exhibit 3.1A to the Company's Quarterly Report on Form 10-Q filed August 14, 2008.

(3) Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on December 4, 2012.

(4) Incorporated by reference to Exhibit 3.2 to the Company's Annual Report on Form 10-K (File No. 001-33523) filed with the SEC on March 18, 2010.

(5) Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 1, 2012.

(6) Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on August 16, 2010.

(7) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on January 15, 2010.

(8) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 25, 2012.

(9) Incorporated by reference to Exhibit 10.11 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on August 9, 2013.

(10) Incorporated by reference to the Company's Registration Statement on Form S-1 (SEC File No. 333-139679), which became effective June 8, 2007.

(11) Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on November 13, 2012.

(12) Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on August 12, 2011.

(13) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 7, 2011.

(14) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 7, 2011.

(15) Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 7, 2011.

(16) Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 7, 2011.

(17) Incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 7, 2011.

(18) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 1, 2012.

(19) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 1, 2012.

(20) Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 1, 2012.

(21) Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 1, 2012.

(22) Incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on October 1, 2012.

(23) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on December 7, 2012.

(24) Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on May 11, 2012.

(25) Incorporated by reference to Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on November 13, 2012.

(26) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on February 26, 2013.

(27) Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 20, 2013.

(28) Incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 20, 2013.

(29) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 20, 2013.

(30) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 20, 2013.

(31) Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 20, 2013.

(32) Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 20, 2013.

(33) Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on May 6, 2013.

(34) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on May 6, 2013.

(35) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on May 6, 2013.

(36) Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on May 6, 2013.

(37) Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on May 6, 2013.

(38) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on July 1, 2013.

(39) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on July 19, 2013.

(40) Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on December 23, 2013.

(41) Incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-1/A (File No. 333-191211) filed with the SEC on December 16, 2013.

(42) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 3, 2013.

(43) Incorporated by reference to Exhibit 10.11 to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on May 13, 2013.

(44) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 10, 2014.

(45) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on February 24, 2014.

(46) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on March 10, 2014.

(47) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on April 8, 2013.

EXHIBIT 21.1

SUBSIDIARIES OF THE REGISTRANT

The following is a listing of the subsidiaries of CombiMatrix Corporation:

	Jurisdiction of Incorporation
CombiMatrix Molecular Diagnostics, Inc.	California

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SUBSIDIARIES OF THE REGISTRANT

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-192897, 333-191211 and 333-139679 on Form S-1 and in Registration Statement Nos. 333-193148, 333-189759, 333-188682, 333-187945, 333-185585, 333-184359, 333-176372, 333-152483, 333-152970, 333-153434 and 333-151075 on Form S-3 and in Registration Statement Nos. 333-190534, 333-193302 and 333-145704 on Form S-8 of CombiMatrix Corporation of our report dated March 24, 2014, on our audit of the consolidated financial statements of CombiMatrix Corporation as of and for each of the years ended December 31, 2013 and 2012.

/S/ HASKELL & WHITE LLP

Irvine, California
March 24, 2014

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EXHIBIT 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Mark McDonough, certify that:

1. I have reviewed this Annual Report on Form 10-K of CombiMatrix Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: March 24, 2014

/s/ MARK MCDONOUGH

Mark McDonough
President and Chief Executive Officer

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CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

EXHIBIT 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Scott R. Burell, certify that:

1. I have reviewed this Annual Report on Form 10-K of CombiMatrix Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: March 24, 2014

/s/ SCOTT R. BURELL

Scott R. Burell
Chief Financial Officer

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EXHIBIT 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

EXHIBIT 32.1

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of CombiMatrix Corporation (the "Company") on Form 10-K for the annual period ended December 31, 2013, as filed with the Securities and Exchange Commission on March 24, 2014 (the "Report"), based on my knowledge, I, Mark McDonough, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ MARK MCDONOUGH

Mark McDonough
President and Chief Executive Officer
March 24, 2014

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EXHIBIT 32.1

EXHIBIT 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of CombiMatrix Corporation (the "Company") on Form 10-K for the annual period ended December 31, 2013, as filed with the Securities and Exchange Commission on March 24, 2014, (the "Report"), based on my knowledge, I, Scott R. Burell, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ SCOTT R. BURELL

Scott R. Burell
Chief Financial Officer
March 24, 2014

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EXHIBIT 32.2