COMBIMATRIX CORP

FORM 10-K
(Annual Report)

Filed 03/17/15 for the Period Ending 12/31/14

Address	310 GODDARD SUITE 150 IRVINE, CA 92618
Telephone	949-753-0624
CIK	0001383183
Symbol	CBMX
SIC Code	3826 - Laboratory Analytical Instruments
Industry	Scientific & Technical Instr.
Sector	Technology
Fiscal Year	12/31

Use these links to rapidly review the document
TABLE OF CONTENTS
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Table of Contents

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, 2014

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 001-33523

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, 2014, 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 $23,699,000, 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 9, 2015, was 12,680,927.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for its Annual Meeting of Stockholders to be filed with the Commission within 120 days after the close of its fiscal year are incorporated by reference into Part III. Except with respect to the information specifically incorporated by reference into this Form 10-K, the registrant's definitive proxy statement is not deemed to be filed as part of this Form 10-K.

FORM 10-K ANNUAL REPORT
FISCAL YEAR ENDED DECEMBER 31, 2014
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, including changes in coding and reimbursement methods; legislative, regulatory and competitive developments in markets in which we and our subsidiaries operate; our ability to increase our authorized capital stock; 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 diagnostics testing and pediatric diagnostic testing, 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 analysis ("CMA"), 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 cost-effective, patient-centered medical management.

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 three distinct markets: miscarriage analysis (also referred to as products of conception analysis, or "POC"), prenatal genetics, and postnatal developmental disorders. 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"): adenine (A), thymine (T), guanine (G) and cytosine (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) 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 and Regions of Homozygosity

Microarray testing assesses genome-wide copy number variation by comparing a patient's genomic DNA to a reference genome to evaluate for relative losses and gains. Some losses and gains 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. Microarray testing is a powerful tool because it allows for simultaneous analysis of copy number variation 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 distinct segments 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, but always refer to DNA-based microarray testing.

We use the Illumina CytoSNP-850K BeadChip microarray to perform our microarray testing. The Illumina microarray is comprised of 50 nucleotide base (or "mer") probes attached to individual silica beads, which self-assemble into microwells on the array's surface. Each single nucleotide polymorphism (or "SNP") probe is represented with a high degree of redundancy to improve sensitivity by increasing the signal-to-noise ratio. To test a patient's genomic DNA, it is first fragmented and then amplified. These fragments are allowed to hybridize with the complementary DNA on the 50-mer probes and after hybridization, each fragment is extended by a fluorescently-labeled nucleotide (i.e., an A, T, C, or G). The fluorescent signal is subsequently amplified and detected by a scanner, which measures the intensity of each signal and the specific nucleotide detected for each SNP. This information is then compared to a control cluster, which is generated from pooling over 100 normal genomes tested using the same assay and is then evaluated for differences in copy number deletions and duplications, as well as for genotypic information (i.e., homozygosity versus heterozygosity).

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 three primary markets: (i) miscarriage analysis, (ii) prenatal diagnostic testing; and (iii) postnatal diagnostic testing. Our market analysis indicates that our potential client base for these markets can be divided into multiple general customer groups, as detailed below. Our services are therefore tailored to meet the specific needs of each of these customer segments.

Miscarriage Analysis

- *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 CMA. 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 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 reproductive endocrinologists, OB-GYNs and maternal fetal medicine ("MFM") specialists.

Prenatal Diagnostic Testing

- *Physician groups:* Prenatal diagnostic testing is performed on samples retrieved from specific invasive procedures performed during pregnancy. These procedures include chorionic villus sampling or amniocentesis and are performed by MFM specialists and some OB-GYNs. Typically, these physicians order testing directly from our laboratory from their private offices. This market continues to be important as diagnostic testing during pregnancy is critical to maternal clinical care.

Postnatal Diagnostic Testing

- *Pediatric geneticists, 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.

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 microarray-based technologies.

SNP Microarrays

The Illumina microarray that we utilize was designed by a consortium of academic and commercial laboratories, including CombiMatrix, using content recommendations from the International Collaboration for Clinical Cytogenomics and the Sanger Institute. The resulting assay is a dense, high-resolution, whole-genome array that covers 3,262 dosage-sensitive genes that are known to be associated with genetic disorders and/or syndromes. Probe coverage is highly focused in regions of known clinical significance, with additional probes to provide coverage for the remainder of the genome, or the "genomic backbone". In addition to copy number evaluation, SNP probes provide genotypic information that can point to imprinting disorders, regions of homozygosity that may contain a disease-causing gene, shared ancestry (which can lead to an increased risk for an autosomal recessive disorder in a child), and in the case of prenatal and miscarriage analysis, can detect maternal cell contamination.

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") samples.

SNP Microarray Analysis on FFPE Tissue

In certain cases of miscarriage analysis, the 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, it was critical that our microarray platform be able to evaluate genomic alterations not just in fresh miscarriage tissue, but also tissue from FFPE samples. Traditionally, working with FFPE samples has proven challenging because the fixation and storing process degrades the quality of the DNA. We believe we have successfully adapted our array protocol for analysis of FFPE specimens by using a specialized process, in which the fragmented DNA is 'restored' to longer segments by ligating free DNA ends together prior to analysis. This restoration step makes the array particularly useful in analyzing DNA samples that are of poorer quality, such as older samples or tissue that has been strongly 'fixed' in formalin. We believe this process and the results obtained from more than 100 normal FFPE samples have given us the proper protocol and the data to obtain robust results from FFPE samples.

Our Services

Overview

We utilize the latest in microarray technologies to deliver molecular diagnostic services for the diagnosis of developmental disorders associated with intellectual disability, congenital anomalies, dysmorphic features, and autism spectrum disorders. Such disorders may be diagnosed in the prenatal period, the pediatric period, or as one of the factors leading to a miscarriage or stillbirth.

Developmental Disorders: Prenatal and Pediatric Care

The focus of our prenatal and postnatal microarray is to assist in diagnosing genomic syndromes associated with intellectual disability, developmental delays, congenital anomalies, dysmorphic features and autism spectrum disorders. Although traditional karyotyping has been regarded as the "gold standard" for the diagnosis of chromosomal abnormalities for the past several decades, a large number of meta-analyses and 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. The College also recommended that microarray analysis be offered as an alternative to standard karyotyping for any patient undergoing a prenatal diagnostic procedure, given the increased sensitivity of microarray analysis to detect chromosomal abnormalities, even following a normal karyotype result.

CMA 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 recurrent syndromic and non-syndromic 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 peer-reviewed publications for information that allows us to make either incremental improvement to the current array design, or significant 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. Implementation and use of this high density whole-genome array provides valuable and clinically actionable information for over 10% of all pediatric patients evaluated for neurodevelopmental disorders. Significantly, recent studies from our group and others have enabled us to have a clearer appreciation of the extent and nature of structural variation in the human genome in health and disease. Additionally, the ability to identify recurrent and rare structural imbalances by microarray analysis is now allowing us to decipher potential mechanisms that result in complex chromosomal rearrangements with adverse phenotypic impact. Therefore, we believe that not only are we solving challenging diagnostic dilemmas for patients and their families, but also providing valuable long-term care and prognostic information.

More significantly, based upon an ongoing evaluation of current medical literature and critical evaluation of multiple microarray platforms available for clinical use, we adopted a microarray platform that analyzes SNPs across the genome at an extremely high resolution. In addition to assessing genomic copy number variations, analysis of SNPs enables detection of regions of heterozygosity involving single or multiple chromosomes, which may provide clues towards identifying possible genetic imprinting disorders and / or situations that increases the risk of autosomal recessive disorders due to shared ancestry. In the miscarriage analysis space, in addition to allowing identification of a whole spectrum of whole-chromosome and segmental genomic imbalances, SNPs readily enable detection of triploidy, molar pregnancies, and maternal cell contamination, thereby decreasing the number of additional ancillary testing often required for such samples.

Our Strategy

Our strategic intent is to become the preeminent diagnostic services laboratory for prenatal microarray testing. In our efforts to achieve this, we leverage our direct sales team to market our prenatal diagnostic testing, postnatal testing, and miscarriage analysis testing. In addition, we have established pathology partnerships and strategic alliances with industry partners to increase our commercial distribution footprint.

Direct Sales Efforts

Our sales and marketing representatives aggressively market our miscarriage analysis and prenatal diagnostic microarray testing to four primary physician groups: OB/GYNs, MFMs, reproductive endocrinologists, 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 miscarriage or fetal death. Pathologists are the custodians of this tissue and are often charged with determining which reference lab to utilize for send-out testing on these specimens. 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.

In December 2012, two studies by the National Institute of Health, which were published in the *New England Journal of Medicine* , demonstrated the diagnostic superiority of microarray analysis compared to traditional karyotyping for both stillbirths (Reddy, et al.) and prenatal diagnosis for ongoing pregnancies (Wapner, et al.). As mentioned above, in December 2013, the American College of Obstetricians and Gynecologists issued a Committee Opinion not only recommending microarray analysis *in lieu of karyotyping* for fetal death and stillbirths, but also as a superior test modality for prenatal diagnosis. We are leveraging our direct sales channel and our strategic partners' channels to capitalize on the prenatal diagnostic testing 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.

Strategic Alliances

Strategic alliances with established industry partners allow us to round-out our test menu to offer complete testing solutions to MFM specialists, reproductive endocrinologists, and OB/GYNs, and to capitalize on the demand for complementary test options, such as non-invasive prenatal testing ("NIPT"), which remains a screening modality. We have established several key partnerships in the past, most notably with Sequenom, Inc., whereby 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 after obtaining normal NIPT screening results.

In addition, we have focused our reimbursement efforts on maximizing 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 have previously announced payor contracts covering our suite of diagnostics services, and expect to execute additional payor contracts in the future.

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 and 2015 Clinical Lab Fee Schedule. Among these were molecular codes we use in billing for our microarray testing.

The omission of certain CPT codes utilized by us from the Clinical Lab Fee Schedule could have an adverse impact on our revenue and cash reimbursement going forward. We continue to work with billing consultants and industry advisory groups to determine what information and action is needed to ensure reimbursement. There is also a possibility that other third-party payors will not establish positive or adequate coverage policies or reimbursement rates.

Reimbursement

For the years ended December 31, 2014 and 2013, approximately 30% and 31% of our diagnostic services revenues were derived from direct bill customers, 68% and 67% from third-party commercial insurance carriers and 2% and 2% 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, and continue to seek additional in-network contracts. 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. The ACA contains a number of provisions that are expected to impact our business and operations, albeit in ways we cannot currently predict. Provisions governing enrollment in federal healthcare programs, reimbursement changes, and the treatment of fraud and abuse will impact existing government healthcare programs and will result in the development of new programs. 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 ("CLIA")

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."

On October 3, 2014, the FDA published two draft guidance documents regarding proposals for the regulation of LDTs in the Federal Register. The 120-day public comment period on the draft documents began at issuance and lasted until February 2, 2015. A public comment meeting was held in January 2015 and the final guidance is anticipated to be published later in 2015. While key physician groups, such as the American Medical Association and the American College of Medical Genetics have vigorously engaged the FDA due to concerns about limitations on patient access to critical diagnostic testing, it is not clear what the FDA's final decisions will be in this respect. There can be no assurance that changes to the FDA's involvement in LDTs 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, 2015. There is a possibility the transition will be pushed forward again since physician associations in the states of New York and Texas are urging members to pressure members of the U.S. Congress to push the transition forward to October 2017. 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 licensed by the New York State Department of Health to perform prenatal and postnatal/pediatric cytogenetic testing and microarray analysis for pediatric care and 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 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 clinical microarray laboratories, both commercial and academic, as well as large national companies such as LabCorp (through its acquisition of Genzyme), Quest Diagnostics, Natera, 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 based on the analysis of cell-free fetal DNA in the maternal blood stream as opposed to the analysis of pregnancy-related hormones and proteins, as has been the standard of care for several decades. Despite improvements to detection rates, NIPT remains a screening test, and as such, 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 test menu, which 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 miscarriage analysis, prenatal and pediatric developmental disorder genetic tests.

Employees

As of December 31, 2014, we had 56 full-time-equivalent employees, one of whom is both a Ph.D. and an M.D. and another of whom 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 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 microarray 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. Our revenues are also subject to seasonality factors and can be impacted by circumstances outside of our control, such as severe weather conditions that hamper or otherwise restrict when a patient seeking genetic diagnostic services such as ours visits the ordering physician.

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's decision to regulate LDTs could prevent us from offering existing tests and/or delay the introduction of new testing services.

During 2014, 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. On October 3, 2014, the FDA published two draft guidance documents regarding proposals for the regulation of LDTs in the Federal Register. The 120-day public comment period on the draft documents began at issuance and lasted until February 2, 2015. A public comment meeting was held in January 2015, and the final guidance is anticipated to be published later in 2015. 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 has forced 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.

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 comply 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.

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.

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 ("Strathmann") served us with a complaint ("the Complaint") filed in the Superior Court of the State of California for the County of Orange (the "Superior Court"). The Complaint alleged we and our former parent Acacia Research Corporation submitted false and fraudulent insurance claims to National Union Fire Insurance Company under the Directors and Officers Policy issued to Acacia, 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. 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 and Acacia filed our Answer to that pleading. A trial was held between June and August of 2014, followed by closing briefs and arguments filed in September and October of 2014. On January 2, 2015, the Superior Court issued a tentative ruling and proposed statement of decision in favor of us, Acacia and Amit Kumar and against all claims of Strathmann. Specifically, the Superior Court determined that we had no fraudulent intent when we pursued insurance benefits under the National Union Directors and Officers Policy over a decade ago. On March 6, 2015 the Superior Court issued its final Statement of Decision, confirming its tentative ruling that Strathmann failed to prove that we (or any other defendant) had a fraudulent intent when we pursued insurance benefits from National Union. Also on March 6, 2015 the Superior Court entered a Judgment in favor of all defendants and against Strathmann, and ordered that Strathmann's Complaint be dismissed with prejudice. A Notice of Entry of Judgment was filed with the Superior Court on March 11, 2015. If Strathmann chooses to appeal the Judgment, he has 60 days from March 11, 2015 to file a Notice of Appeal. The cost of defending an appeal alone could have a material adverse effect on our financial condition and results of operations.

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 conversion of the Series E convertible preferred stock and exercise of the warrants issued in our February 2015 registered direct offering are freely tradable. The shares of common stock issuable upon exercise of the warrants issued in our March 2013 registered direct offering and 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 and in our 2013 private placement offering of Series C convertible preferred stock and warrants 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, preferred stock anti-dilution provisions or exercises of warrants and common stock options.

As of December 31, 2014, we had approximately 11.1 million shares of common stock issued and outstanding. Assuming exercise in full of all options and warrants outstanding as of December 31, 2014, plus the additional shares of common stock sold in our February 2015 registered direct offering plus conversions of the Series E convertible preferred stock and exercise of the warrants issued in our February 2015 registered direct offering (not taking into account any price-based or anti-dilution adjustments related to the Series E convertible preferred stock, and excluding shares underlying warrants to be issued in a private placement the issuances of which are subject to stockholder approval not yet obtained), approximately 24 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 significant 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 E convertible preferred stock.

In order to raise financing from the sale of equity securities or convertible securities, we will need to increase our authorized capital stock.

We are presently authorized to issue 25,000,000 shares of common stock, of which 12,680,927 shares were issued and outstanding as of March 9, 2015 and approximately 11.3 million of our remaining authorized but unissued shares of common stock are reserved for issuance pursuant to the potential conversion of outstanding Series E convertible preferred stock (not taking into account any price-based or anti-dilution adjustments related to the Series E convertible preferred stock, and excluding shares underlying warrants to be issued in a private placement the issuances of which are subject to stockholder approval not yet obtained), the potential exercise of outstanding options and warrants or the potential future grant of options or other stock awards under our 2006 Stock Incentive Plan. In order to increase our authorized capital stock, we have submitted a proposal to our stockholders to amend our Certificate of Incorporation to increase the authorized shares of our common stock. There can be no assurance that such a proposal will be supported by our stockholders and, in fact, such a proposal did not receive a sufficient number of favorable votes from our stockholders at our 2014 Annual Meeting. Accordingly, we may not have sufficient authorized capital stock available to raise funds beyond what is currently available for issuance.

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 2020.

Item 3. LEGAL PROCEEDINGS

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.

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 "Superior Court"). The Complaint alleged we and our former parent Acacia Research Corporation submitted false and fraudulent insurance claims to National Union Fire Insurance Company under the Directors and Officers Policy issued to Acacia, 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. 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 and Acacia filed our Answer to that pleading. A trial was held between June and August of 2014, followed by closing briefs and arguments filed in September and October of 2014. On January 2, 2015, the Superior Court issued a tentative ruling and proposed statement of decision in favor of us, Acacia and Amit Kumar and against all claims of Strathmann. Specifically, the Superior Court determined that we had no fraudulent intent when we pursued insurance benefits under the National Union Directors and Officers Policy over a decade ago. On March 6, 2015 the Superior Court issued its final Statement of Decision, confirming its tentative ruling that Strathmann failed to prove that we (or any other defendant) had a fraudulent intent when we pursued insurance benefits from National Union. Also on March 6, 2015 the Superior Court entered a Judgment in favor of all defendants and against Strathmann, and ordered that Strathmann's Complaint be dismissed with prejudice. A Notice of Entry of Judgment was filed with the Superior Court on March 11, 2015. If Strathmann chooses to appeal the Judgment, he has 60 days from March 11, 2015 to file a Notice of Appeal. The cost of defending an appeal alone could have a material adverse effect on our financial condition and 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.

	2014				2013			
	Fourth Quarter	Third Quarter	Second Quarter	First Quarter	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
High	$ 1.74	$ 2.70	$ 3.10	$ 3.65	$ 4.44	$ 4.55	$ 4.62	$ 7.64
Low	$ 1.09	$ 1.15	$ 2.01	$ 2.30	$ 2.14	$ 2.67	$ 2.46	$ 2.80

As of March 9, 2015, there were approximately 28 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, 2014:

Plan Category	(a) Number of securities to be issued upon exercise of outstanding options and rights(2)	(b) Weighted average exercise price of outstanding options and rights(3)	(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)	990,584	$ 9.82	995,294
Equity compensation plans not approved by security holders:			
None	—	—	—
TOTAL	990,584	$ 9.82	995,294

(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. Please refer to Note 12 to our consolidated financial statements for additional information.

(2) Includes shares of common stock subject to restricted stock units ("RSUs") that entitle each holder to one share of common stock for each such unit that vests over the holder's period of continued service.

(3) Calculated without taking into account the 302,725 shares of common stock subject to outstanding RSUs that become issuable as those units vest, without any cash consideration or other payment required for such shares.

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

As of December 31, 2014, the combination of cash, cash equivalents and short term investments totaled $5.2 million. On February 18, 2015, we closed a registered direct offering (the "Series E Offering") with existing, accredited institutional investors for net proceeds of approximately $4.7 million. We believe the combination of our year-end existing cash balances coupled with the proceeds from the Series E Offering will be sufficient to meet our expected cash requirements for current operations into the second quarter of 2016. See the Liquidity and Capital Resources section below as well as Notes 1 and 13 to our consolidated financial statements included elsewhere in this report for additional discussion of these matters.

Overview of Recent Business Activities

During 2014, our business activities were driven primarily by commercialization efforts for our suite of microarray diagnostic tests, and expansion of our test menu and of our leadership team. For the year ended December 31, 2014, our operating activities included the recognition of $8.0 million of total revenues, which increased by $1.7 million from 2013, 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 65% from 2013, and total microarray testing increased by 30% year over year. Our net loss from operations increased over the comparable period primarily due to increased legal defense costs from ongoing litigation in 2014 as well as increased sales and marketing expenses from expansion of our sales force, partially offset by increased revenues. Our net loss also increased from non-cash, non-operating gains recognized in 2013 relating to mark-to-market adjustments of our warrant derivative liabilities, which were substantially diminished in 2014 due to modifications of certain warrant contracts in June 2014 that eliminated the derivative characteristics requiring mark-to-market accounting.

On April 9, 2014, we announced that Trilochan Sahoo, M.D. FACMG, had joined the Company as Director of Cytogenetics. Dr. Sahoo's expertise is in the development, evaluation and implementation of microarray-based technologies, especially as used as an important diagnostic tool in clinical cytogenetics and genomics. Following the retirement of our former Chief Medical Officer, Dr. R. Weslie Tyson on December 12, 2014, we announced the promotions of Dr. Sahoo to Vice President of Clinical Affairs and Director of Cytogenetics and Dr. Karine Hovanes to Vice President of Scientific Advancement and Laboratory Director.

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.

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 various state Medicaid programs, and individuals. We report revenues from contracted payors based on a fixed 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 and also considers recent collection trends. 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 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 four years. The fair value of each stock option award is estimated on the date of grant using a Black-Scholes option valuation model. The fair value of each restricted stock unit ("RSU") award is based on the number of shares granted and the closing price of our common stock on Nasdaq on the date of grant. 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	
	2014	2013	$	%
Diagnostic services revenues	$ 7,893	$ 6,204	$ 1,689	27%
Royalty revenues	149	163	(14)	(9%)
Cost of services	(4,432)	(3,527)	(905)	(26%)

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

	For the Years Ended December 31,		Change	
	2014	2013	#	%
Total billable tests	7,761	6,150	1,611	26%
Total microarray tests	5,883	4,540	1,343	30%
Microarray percentage of total tests	76%	74%		
Total prenatal(1) microarray tests	3,660	2,222	1,438	65%
Prenatal percentage of total microarray tests	62%	49%		
Revenue per test—total	$ 1,017	$ 1,009	$ 8	1%
Revenue per test—all microarrays	$ 1,244	$ 1,278	$ (34)	(3%)
Revenue per test—prenatal(1) microarrays	$ 1,386	$ 1,598	$ (212)	(13%)

(1) includes both miscarriage analysis and prenatal microarray tests

For the year ended December 31, 2014, total billable tests and total diagnostic services revenues increased by 26% and 27%, respectively, compared to the year ended December 31, 2013. Driving the increase in billable tests and revenues was the increase in prenatal microarray tests, which increased by 65% over the same period. This reflects the commercialization strategies and focus of our sales force, which have emphasized prenatal microarray diagnostics testing over traditional genomics testing. While this has led to a higher concentration of prenatal microarray tests as a percentage of total tests performed in 2014 compared to 2013, a change in payor mix and adoption of new billing codes for molecular testing that were adopted during the second quarter of 2013 has resulted in lower average reimbursement per prenatal microarray tests performed in 2014 as compared to 2013.

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, 2014 and 2013, net positive revenue adjustments were $381,000 and $607,000, respectively. Because approximately 68% 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.

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 2014 than 2013, 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	
	2014	2013	$	%
Research and development	$ 725	$ 1,011	$ (286)	(28%)
Sales and marketing	4,349	2,764	1,585	57%
General and administrative	7,176	5,206	1,970	38%

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. For the year ended December 31, 2014, increased research and development activities associated with new test offerings launched in 2014 were offset by decreased activity relating to the microarray platform change efforts that were incurred during 2013, resulting in the overall decrease in these expenses from 2013 to 2014. 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. For the year ended December 31, 2014, sales and marketing expenses increased from 2013 due primarily to increased headcount in sales representatives as well as increased marketing and promotional related activities. Non-cash stock compensation expenses were not significant for the years presented. 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 increased from 2013 to 2014 due primarily to increased litigation expense, where we incurred $2.2 million of litigation-related costs and expenses during 2014 compared to only $244,000 in 2013. Also included in general and administrative expenses are non-cash stock-based compensation expenses, which were $444,000 and $411,000 for the years ended December 31, 2014 and 2013, respectively. Changes to stock-based compensation expenses are driven by timing of when stock-based 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	
	2014	2013	$	%
Interest expense	$ (84)	$ (356)	$ 272	76%
Warrant derivatives gains	152	2,804	(2,652)	(95%)
Warrant modification charge	(44)	—	(44)	(100%)

Interest Expense. For the year ended December 31, 2014, interest expense was entirely comprised of interest charges associated with certain capital leases and secured promissory notes for laboratory equipment. For the year ended December 31, 2013, $280,000 of interest expense recognized was related to the amortization of offering-related costs incurred during the fourth quarter of 2012. These costs were being amortized over certain common stock warrants' (the "Series A Warrants") 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. Excluding this amortization, interest expense has increased in 2014 compared to 2013 due to increased capital leasing activity from the purchase of laboratory equipment in 2014.

Warrant Derivatives Gains. 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. Under applicable accounting guidance, common 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. Prior to June 2014, the Series A Warrants issued to investors (the "Series A Investors") contained 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 gain or charge in the consolidated statement of operations. In June 2014, we executed modification agreements (the "Modification") with the remaining Series A Investors to remove the full-ratchet anti-dilution adjustment provisions as well as the Black-Scholes cash buy-back provisions from the terms of the Series A Warrants, thereby eliminating the requirement for derivative accounting and liability classification for the Series A Warrants subsequent to the Modification date. In consideration for agreeing to the Modification, we issued additional warrants to the Series A Investors to purchase 25,303 shares of common stock at an exercise price of $2.06 per share and with an expiration date in April 2018.

Warrant Modification Charge. During 2014, we valued the Series A Warrants using the Monte-Carlo simulation method using the following assumptions immediately prior to the Modification: (i) closing stock price and Series A Warrant contractual exercise price; (ii) term to expiration commensurate with the individual Series A Warrant terms of 3.8 years; (iii) historical volatilities commensurate with the term of the Series A Warrants of 129.6%; (iv) risk-free interest rates commensurate with the term of the Series A Warrants of 1.2%; 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 prices during the Series A Warrant terms. The result of this valuation simulation was to value the remaining Series A Warrants held by Series A Investors at $281,000 as of the Modification date. As a result, warrant derivative gains of $152,000 were recognized, and the remaining $281,000 was reclassified to additional paid-in capital. As a result of a similar valuation analysis performed during the first quarter of 2014, the combined warrant derivative gains recognized in our consolidated statements of operations and the amount of warrant derivative liabilities reclassified to stockholders' equity resulting from Series A Warrant exercises for the year ended December 31, 2014 was $152,000 and $416,000, respectively. The additional Series A Warrants to purchase 25,303 shares of common stock issued to the Series A Investors as consideration for agreeing to the Modification were valued using the Black-Scholes valuation model, using the following assumptions as of the Modification: (i) closing stock price and Series A Warrant contractual exercise price; (ii) term to expiration commensurate with the individual Series A Warrant terms of 3.8 years; (iii) historical volatility commensurate with the term of the Series A Warrants of 129.6%; and (iv) risk-free interest rates commensurate with the term of the Series A Warrants of 1.2%. The resulting valuation of $44,000 was recognized as a warrant modification charge for the year ended December 31, 2014. No such modification transactions occurred during 2013.

As a result of similar valuation analyses performed during the year ended December 31, 2013, the combined warrant derivative gains recognized in our consolidated statement of operations and the amount of the warrant derivative liabilities reclassified to stockholders' equity resulting from Series A Warrant exercises was $2.8 million and $1.1 million, respectively.

Inflation

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

Liquidity and Capital Resources

At December 31, 2014, cash, cash equivalents and short-term investments totaled $5.2 million, compared to $14.0 million at December 31, 2013. 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 $6.6 million and $13.9 at December 31, 2014 and 2013, respectively. The primary reason for the decrease in working capital was due to higher cash balances at December 31, 2013 compared to 2014, driven by operating, investing and financing activities described below.

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,		
	2014	2013	Change
Net cash (used in) provided by:			
Operating activities	$ (8,640)	$ (5,605)	$ (3,035)
Investing activities	(2,771)	(2,054)	(717)
Financing activities	132	17,577	(17,445)
(Decrease) increase in cash and cash equivalents	$ (11,279)	$ 9,918	$ (21,197)

Operating Activities. The increase in net cash flows used in operating activities was primarily the result of higher operating expenses driven by higher litigation costs, increased purchases of laboratory supplies resulting from higher billable test volumes and increased sales and marketing expenses described above, partially offset by increased cash reimbursement from customers due to increased sales and from improved billing and collection efforts experienced during 2014 compared to 2013.

Investing Activities. The increase in net cash flows used in investing activities was due primarily to the increased purchase and sales activity of available-for-sale short-term investments made during 2014 as compared to 2013.

Financing Activities. The decrease in net cash flows from financing activities was due primarily to the $14.8 million of net proceeds received from the Series B, C and D Financings coupled with $3.0 million in net proceeds received from the exercise of certain Series A Warrants less issuance costs paid during 2013, compared to only $328,000 and $254,000 of net proceeds received from the issuance of a secured promissory note and exercise of certain common stock warrants, respectively, in 2014.

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. However, we believe the combination of our year-end existing cash balances coupled with the proceeds received in February 2015 from the Series E Offering will be sufficient to meet our expected cash requirements for current operations into the second quarter of 2016. 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 stockholders. 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. In addition, unless our stockholders approve an increase in our authorized shares above our current authorized limit of 25 million, we will not be able to issue any additional equity securities. See Notes 1 and 13 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, new test development 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 2015 or beyond. We have executed eleven capital leases totaling $257,000 for certain laboratory equipment.

Off-Balance Sheet Arrangements

As of December 31, 2014, 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.

On October 24, 2014, we entered into an Amendment No. 6 to the Lease (the "Amendment") with PPC Goddard Investment, LLC (the "Landlord"), concerning our existing building lease for laboratory space and corporate offices in Irvine, California. The Amendment, in part (i) extends the term of the Lease by five years until January 31, 2020; (ii) provides for monthly base rent (excluding allocated common area expenses) of $1.00 per square foot per month for the first year, increasing by $0.05 per year thereafter throughout the term of the lease to a maximum of $1.20 per square foot per month in the fifth year of the lease; (iii) provides for certain tenant improvements to be provided by the Landlord at no cost to us; (iv) at our choosing, provides for an early termination after thirty-six months upon payment by us of the Landlord's unamortized tenant improvement cost and unamortized brokerage commissions payable in connection with the Amendment at an interest rate of eight percent; and (v) provides for a period of abated rent for the first three months of the renewal period (or February 1, 2015 through April 30, 2015). Pursuant to the Amendment, the monthly base rent together with the current estimated monthly common area expense of $0.85 per square foot will result in an aggregate monthly expense of approximately $22,500 for the first year, assuming no increase in the monthly common area expense, and increasing to approximately $25,000 per month for the fifth year, assuming we do not exercise our option to terminate the lease after thirty-six months, and assuming no increase in the monthly common area expense.

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 criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (or "COSO") in Internal Control-Integrated Framework (specifically, the 2013 Framework). 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, 2014.

There has been no change in our internal controls over financial reporting that occurred during the fiscal quarter ended December 31, 2014 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

Except as provided below, the information required by this Item is incorporated by reference from the information under the captions entitled "Board of Directors," "Executive Officers and Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance" in our definitive proxy statement to be filed with the SEC no later than 120 days after our most recent fiscal year end, which is December 31, 2014.

Code 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 Business Conduct and 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, or accessible through, our web site into this report.

Item 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated by reference from the information under the caption entitled "Executive Compensation and Other Information" in our definitive proxy statement to be filed with the SEC no later than 120 days after our most recent fiscal year end, which is December 31, 2014.

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

The information required by this Item is incorporated by reference from the information under the caption entitled "Security Ownership of Certain Beneficial Owners and Management" in our definitive proxy statement to be filed with the SEC no later than 120 days after our most recent fiscal year end, which is December 31, 2014.

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

The information required by this Item is incorporated by reference from the information under the caption entitled "Certain Transactions" and "Board of Directors" in our definitive proxy statement to be filed with the SEC no later than 120 days after our most recent fiscal year end, which is December 31, 2014.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item is incorporated by reference from the information under the caption entitled "Principal Accountants" in our definitive proxy statement to be filed with the SEC no later than 120 days after our most recent fiscal year end, which is December 31, 2014.

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. 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.
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation. Incorporated by reference to Exhibit 3.1A to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on August 14, 2008.
3.3	Certificate of Amendment to Amended and Restated Certificate of Incorporation. 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.
3.4	Certificate of Designation of Preferences, Rights and Limitations of Series A 6% Convertible Preferred Stock. 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.
3.5	Certificate of Designation of Preferences, Rights and Limitations of Series B 6% Convertible Preferred Stock. 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.
3.6	Certificate of Designation of Preferences, Rights and Limitations of Series C 6% Convertible Preferred Stock. 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.
3.7	Certificate of Designation of Preferences, Rights and Limitations of Series D Convertible Preferred Stock. Incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on December 23, 2013.
3.8	Certificate of Designation of Preferences, Rights and Limitations of Series E 6% Convertible Preferred Stock. 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 February 13, 2015.
3.9	Second Amended and Restated Bylaws. 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.
10.1†	Restated Executive Change in Control Severance Plan. 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.

Exhibit Number	Description
10.2	Amendment No. 3 to Lease dated as of January 11, 2010. 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.
10.3	Amendment No. 4 to the Lease effective as of October 21, 2012. 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.
10.4†	2006 Stock Incentive Plan, as amended. Incorporated by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-8 (File No. 333-197322) filed with the SEC on July 9, 2014.
10.5†	Form of Stock Incentive Plan Agreement. Incorporated by reference to the Company's Registration Statement on Form S-1 (SEC File No. 333-139679), which became effective June 8, 2007.
10.6†	Employment Agreement for Mark McDonough. 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.
10.7	Form of Amended and Restated Indemnification Agreement. 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.
10.8	Form of Securities Purchase Agreement dated as of April 1, 2011. 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.
10.9	Form of Investors Rights Agreement dated as of April 1, 2011. 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.
10.10	HLM Rights Agreement dated as of April 1, 2011. 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.
10.11	Form of Warrant to Purchase Common Stock issued on April 7, 2011. 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.
10.12	Form of Indemnity Agreement. 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.
10.13	Form of Securities Purchase Agreement dated as of September 28, 2012. 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.
10.14	Form of Warrant to Purchase Common Stock. 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.
10.15	Form of Registration Rights Agreement dated as of September 28, 2012. 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.

Exhibit Number	Description
10.16	Form of Lock-Up Agreement dated as of September 28, 2012. 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.
10.17	Form of Voting Agreement dated as of September 28, 2012. 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.
10.18	Consent and Waiver executed on December 4, 2012. 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.
10.19	Form of Amendment No. 1 to Common Stock Purchase Warrant dated February 26, 2013. 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.
10.20	Form of Warrant to Purchase Common Stock. 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.
10.21	Form of Securities Purchase Agreement dated as of March 19, 2013. 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.
10.22†	Mark McDonough Compensation Arrangement. 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.
10.23	Form of Waiver Regarding HLM Rights Agreement dated April 5, 2013. 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.
10.24	Form of Securities Purchase Agreement dated as of May 3, 2013. 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.
10.25	Form of Warrant to Purchase Common Stock. 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.
10.26	Form of Registration Rights Agreement dated as of May 3, 2013. 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.
10.27	Form of Voting Agreement dated as of May 3, 2013. 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.
10.28†	Form of Stock Incentive Plan Agreement for Performance-Based Options. 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.
10.29†	Letter Agreement dated June 27, 2013 regarding Mark McDonough's bonus arrangement. 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.

Exhibit Number	Description
10.30	Amendment No. 5 to Lease effective as of July 16, 2013. 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.
10.31	Form of Warrant to Purchase Common Stock. 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 9, 2013.
10.32†	2014 Executive Performance Bonus Plan, as amended. 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.
10.33†	Form of Restricted Stock Unit Award Agreement under the Company's 2006 Stock Incentive Plan. 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.
10.34	Form of Amendment No. 2 to Common Stock Purchase Warrant dated June 4, 2014. 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 June 10, 2014.
10.35	Form of Additional Common Stock Purchase Warrant issued June 4, 2014. 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 June 10, 2014.
10.36	Amendment No. 6 to the Lease effective as of October 24, 2014. 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 28, 2014.
10.37	Form of Warrant to Purchase Common Stock (Series E Financing). 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 February 13, 2015.
10.38	Form of Amendment of Outstanding Warrants. Incorporated by reference to Exhibit 4.5 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on February 13, 2015.
10.39	Form of Securities Purchase Agreement dated as of February 13, 2015 (Series E Financing). 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 13, 2015.
10.40	Form of Private Placement Securities Purchase Agreement dated as of February 13, 2015 (Warrant Financing). 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 13, 2015.
10.41†	2015 Executive Performance Bonus Plan. 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 5, 2015.
10.42	Collaboration Agreement, effective May 23, 2013, between CombiMatrix and Sequenom Center for Molecular Medicine, LLC(*)
21.1	Subsidiaries of the Registrant(*)
23.1	Consent of Haskell & White LLP(*)

Exhibit Number	Description
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, 2014, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets as of December 31, 2014 and December 31, 2013; (ii) Consolidated Statements of Operations for the Years ended December 31, 2014 and 2013; (iii) Consolidated Statements of Comprehensive Loss for the Years ended December 31, 2014 and 2013; (iv) Consolidated Statements of Stockholders' Equity for the Years ended December 31, 2014 and 2013 (v) Consolidated Statements of Cash Flows for the Years ended December 31, 2014 and 2013; and (vi) Notes to Consolidated Financial Statements.

(*) Included herewith.

† Denotes management contract or compensatory plan or arrangement.

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 17, 2015

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, (Principal Executive Officer)	March 17, 2015
/s/ SCOTT R. BURELL SCOTT R. BURELL	Chief Financial Officer, Treasurer and Secretary (Principal Financial and Accounting Officer)	March 17, 2015
/s/ R. JUDD JESSUP R. JUDD JESSUP	Chairman of the Board	March 17, 2015
/s/ SCOTT GOTTLIEB, M.D. SCOTT GOTTLIEB, M.D.	Director	March 17, 2015
/s/ JEREMY M. JONES JEREMY M. JONES	Director	March 17, 2015
/s/ ROBERT E. HOFFMAN ROBERT E. HOFFMAN	Director	March 17, 2015
/s/ LÂLE WHITE LÂLE WHITE	Director	March 17, 2015

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, 2014 and December 31, 2013, 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 consolidated financial position of CombiMatrix Corporation as of December 31, 2014 and December 31, 2013, and the consolidated 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 17, 2015

COMBIMATRIX CORPORATION
CONSOLIDATED BALANCE SHEETS
As of December 31, 2014 and 2013
(In thousands, except share and per share information)

	December 31, 2014	December 31, 2013
ASSETS		
Current assets:		
Cash and cash equivalents	$ 1,010	$ 12,289
Short-term investments	4,230	1,747
Accounts receivable, net of allowance for doubtful accounts of $241 and $288	2,133	1,695
Supplies	367	171
Prepaid expenses and other assets	181	128
Total current assets	7,921	16,030
Property and equipment, net	584	581
Investments in unconsolidated subsidiaries and other	127	221
Total assets	$ 8,632	$ 16,832
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable, accrued expenses and other	$ 1,107	$ 1,367
Current portion, long-term debt	172	168
Common stock warrants	—	568
Total current liabilities	1,279	2,103
Capital lease obligations, net of current portion	82	65
Secured promissory note payable, net of current portion	151	—
Total liabilities	1,512	2,168
Stockholders' equity:		
Convertible preferred stock; $0.001 par value; 5 million shares authorized; Series D—12,000 shares authorized; none and 2,200.7 issued and outstanding	—	—
Common stock; $0.001 par value; 25 million shares authorized; 11,063,246 and 9,870,838 shares issued and outstanding	11	10
Additional paid-in capital	96,259	95,098
Accumulated other comprehensive loss	(3)	(4)
Accumulated net loss	(89,147)	(80,440)
Total stockholders' equity	7,120	14,664
Total liabilities and stockholders' equity	$ 8,632	$ 16,832

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

COMBIMATRIX CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
For the Years Ended December 31, 2014 and 2013
(In thousands, except share and per share information)

	For the Years Ended December 31,	
	2014	**2013**
Revenues:		
Diagnostic services	$ 7,893	$ 6,204
Royalties	149	163
Total revenues	8,042	6,367
Operating expenses:		
Cost of services	4,432	3,527
Research and development	725	1,011
Sales and marketing	4,349	2,764
General and administrative	7,176	5,206
Patent amortization and royalties	114	254
Total operating expenses	16,796	12,762
Operating loss	(8,754)	(6,395)
Other income (expenses):		
Interest income	23	5
Interest expense	(84)	(356)
Warrant derivative gains	152	2,804
Warrant modification charge	(44)	—
Total other income (expense)	47	2,453
Net loss	$ (8,707)	$ (3,942)
Series A convertible preferred stock dividends	$ —	$ (247)
Series C convertible preferred stock dividends	—	(27)
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	$ (8,707)	$ (12,213)
Basic and diluted net loss per share	$ (0.79)	$ (1.00)
Series A convertible preferred stock dividends	—	(0.06)
Series C convertible preferred stock dividends	—	(0.01)
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	$ (0.79)	$ (3.11)
Basic and diluted weighted average common shares outstanding	11,029,577	3,940,965

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, 2014 and 2013
(In thousands, except share and per share information)

	For the Years Ended December 31,	
	2014	**2013**
Net loss	$ (8,707)	$ (3,942)
Unrealized loss on available-for-sale securities	1	(4)
Total comprehensive loss	$ (8,706)	$ (3,946)

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, 2014 and 2013
(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 Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
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
Conversion of Series D convertible preferred stock to common stock	—	—	—	—	—	—	(2,200.7)	—	1,068,297	1	(1)	—	—	—
Exercise of Series A common stock warrants	—	—	—	—	—	—	—	—	124,111	—	256	—	—	256
Issuance costs from various securities filings	—	—	—	—	—	—	—	—	—	—	(82)	—	—	(82)
Reclassification of derivative warrant liability from warrant exercises	—	—	—	—	—	—	—	—	—	—	416	—	—	416
Warrant modificaiton charge	—	—	—	—	—	—	—	—	—	—	44	—	—	44
Non-cash stock compensation	—	—	—	—	—	—	—	—	—	—	528	—	—	528
Unrealized loss on available-for-sale securities	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	(8,707)	(8,707)
Balances, December 31, 2014	—	$ —	—	$ —	—	$ —	—	$ —	11,063,246	$ 11	$ 96,259	$ (3)	$ (89,147)	$ 7,120

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, 2014 and 2013
(In thousands)

	For the Years Ended December 31,	
	2014	**2013**
Operating activities:		
Net loss	$ (8,707)	$ (3,942)
Adjustments to reconcile net loss to net cash flows from operating activities:		
Depreciation and amortization	317	698
Non-cash stock compensation	528	432
Warrant derivative gains	(152)	(2,804)
Warrant modification charge	44	—
Provision for bad debts	303	290
Loss on disposal of fixed assets	—	49
Changes in assets and liabilities:		
Accounts receivable	(662)	(723)
Supplies, prepaid expenses and other assets	(169)	294
Accounts payable, accrued expenses and other	(142)	101
Net cash flows from operating activities	(8,640)	(5,605)
Investing activities:		
Purchase of property and equipment, net of cash received from disposals	(210)	(304)
Purchase of available-for-sale investments	(6,811)	(1,750)
Sale of available-for-sale investments	4,250	—
Net cash flows from investing activities	(2,771)	(2,054)
Financing activities:		
Proceeds from secured promissory note payable, net of issuance costs	328	—
Payments of secured promissory note	(69)	—
Payments of capital lease obligations	(179)	(259)
Net proceeds from issuance of Series B convertible preferred and common 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	(204)	10,892
Issuance costs relating to Series A convertible preferred stock	—	(106)
Net proceeds from exercise of common stock warrants	256	3,142
Net cash flows from financing activities	132	17,577
(Decrease) increase in cash and cash equivalents	(11,279)	9,918
Cash and cash equivalents, beginning	12,289	2,372
Unrealized loss on cash equivalents	—	(1)
Cash and cash equivalents, ending	$ 1,010	$ 12,289
Cash paid in interest expense	$ 50	$ 54
Non-cash investing and financing activities:		
Property and equipment purchased on capital leases	$ 88	$ 13
Make-whole Series A convertible preferred stock paid in common stock	$ —	$ 247
Deemed dividends from issuing convertible preferred stock	$ —	$ 7,997
Reclassification of derivative warrant liability to equity from warrant exercises and modifications	$ 416	$ 1,111

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 fluorescent in-situ hybridization ("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 laboratory facilities and corporate headquarters 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 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. As of December 31, 2014, we had cash, cash equivalents and short-term investments of $5.2 million and anticipate that our cash and cash equivalent balances, combined with approximately $4.7 million of net proceeds from the sale of equity securities subsequent to year-end (see Note 13), will be sufficient to meet our cash requirements into the second quarter of 2016. In order for us to continue as a going concern beyond the second quarter of 2016 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 stockholders. At present, we cannot issue additional equity or convertible debt securities unless our stockholders approve amending our certificate of incorporation to increase our authorized capital stock. 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.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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;
- variability in third-party reimbursement of our diagnostic tests;
- 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.

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.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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 various state Medicaid programs, and individuals. We report revenues from contracted payors based on a contractual rate, or in the case of state Medicaid contracts, 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, and also take into account recent collection trends. 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, 2014 and 2013, net positive revenue adjustments were $381,000 and $607,000, 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.

Cash Equivalents and Short-Term Investments. We consider all highly liquid investments purchased with maturities of three months or less when purchased to be cash equivalents. Short-term investments consist of fixed income investments with maturities between three and 12 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 sheets. Unrealized holding gains and losses are reported within comprehensive loss in the consolidated statements 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. 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.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

We classify our cash equivalents 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. Accounts receivable from one commercial insurance carrier of $318,000 exceeded 10% of our total accounts receivable balance as of December 31, 2014.

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. In the case of contracted third-party payors, governmental payors or direct-bill customers, accounts receivable are stated at principal amounts and are primarily comprised of amounts contractually due from customers for services performed. In the case of non-contracted customers, accounts receivable are stated at amounts expected to be collected based on historical collection experience with the third-party payor. 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 after appropriate collection efforts have been exhausted. Such write-offs increase the contractual allowances for those accounts in the period of adjustment. 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 private-pay clients is generally subject to increased credit risk due to credit-worthiness or inability to pay. For these customers, an allowance for doubtful accounts is recorded for estimated uncollectible amounts, and 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 to assess our allowance at each period end. Additions to the allowance for doubtful accounts are charged to bad debt expense as a component of general and administrative expenses in the consolidated statements of operations.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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 statements 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 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 four years. The fair value of each stock option award is estimated on the date of grant using a Black-Scholes option valuation model. The fair value of each restricted stock unit ("RSU") award is based on the number of shares granted and the closing price of our common stock on Nasdaq on the date of grant. 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 stock option 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,	
	2014	**2013**
Risk free interest rate	2.3%	1.7%
Volatility	107.7%	106.0%
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 2014 and 2013 attributable to our functional expense categories from stock option and RSU awards vesting during the periods presented was as follows (in thousands):

	For the Years Ended December 31,	
	2014	2013
Cost of services	$ 17	$ 7
Sales and marketing	67	14
General and administrative	444	411
Total non-cash stock compensation	$ 528	$ 432

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, 2014 and 2013, we incurred marketing and advertising expenses of $376,000 and $249,000, 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,	
	2014	**2013**
Common stock options	690,904	639,019
Restricted stock units	302,725	—
Common stock warrants	7,408,905	7,623,677
Series D preferred stock convertible into common stock	—	1,068,297
Excluded potentially dilutive securities	8,402,534	9,330,993

Recent Accounting Pronouncements. In November 2014, the Financial Accounting Standards Board ("FASB") issued new guidance on determining whether a host contract in a hybrid financial instrument issued in the form of a share is more akin to debt or to equity. This guidance does not change the current criteria in GAAP for determining when separation of certain embedded derivative features in a hybrid financial instrument is required, but instead clarifies how current GAAP should be interpreted in the evaluation of the economic characteristics and risks of a host contract in a hybrid financial instrument that is issued in the form of a share, thereby reducing existing diversity in practice. We do not expect the adoption of this guidance to have a material impact on our consolidated financial statements.

In August 2014, the FASB issued new guidance requiring management of all entities to evaluate whether there are conditions and events that raise substantial doubt about the entity's ability to continue as a going concern within one year after the financial statements are issued (or available to be issued when applicable). The guidance is effective for fiscal years beginning after December 15, 2016 and for interim periods within that fiscal year. We do not expect the adoption of this guidance to have a material effect on our consolidated financial statements.

In May 2014, the FASB issued new accounting guidance regarding revenue recognition from contracts with customers, which when effective will supersede existing revenue recognition requirements and will eliminate most industry-specific guidance from generally accepted accounting principles. The core principle of the new guidance is to require an entity to recognize as revenue the amount that reflects the consideration to which it expects to be entitled in exchange for goods or services as it transfers control to its customers. The new guidance requires additional qualitative and quantitative disclosures about the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. An entity can apply the new guidance retrospectively to each prior reporting period presented (i.e., the full retrospective method) or retrospectively with the cumulative effect of initially applying the standard recognized at the date of initial application in retained earnings. The new guidance becomes effective and will be adopted in the first quarter of fiscal year 2017 with early adoption not permitted. We are currently evaluating the appropriate transition method and any further impact of this guidance on our consolidated financial statements and related disclosures.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In April 2014, the FASB amended guidance to clarify the accounting for disposals of groups of assets and business units. The amendments alter the definition of a discontinued operation to cover only asset disposals that are a strategic shift with a major effect on an entity's operations and finances. The changes should be applied in fiscal years that start on December 15, 2014, or later, but the changes can be applied ahead of the effective date for asset disposals that have not been reported in a set of financial statements. We do not believe adoption of this guidance will have a material impact on our consolidated financial statements or related disclosures.

In July 2013, the FASB issued guidance on the presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. Under this guidance, 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. The adoption of this guidance did not have a material impact on our consolidated financial statements or related disclosures.

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.

3. CASH AND SHORT-TERM INVESTMENTS

As of December 31, 2014 and 2013, we held $1.0 million and $12.3 million in cash and cash equivalents and $4.2 million and $1.7 million of short-term investments, respectively, which are reported at fair value. Cash, cash equivalents and short-term investments consisted of the following as of December 31, 2014 and 2013 (in thousands):

	As of December 31, 2014				As of December 31, 2013			
	Cost	Unrealized Gain	Unrealized Loss	Fair Value	Cost	Unrealized Gain	Unrealized Loss	Fair Value
Cash and money market securities	$ 1,010	$ —	$ —	$ 1,010	$ 11,290	$ —	$ —	$ 11,290
Corporate bonds	1,003	—	—	1,003	—	—	—	—
Certificates of deposit	3,230	—	(3)	3,227	2,750	—	(4)	2,746
	$ 5,243	$ —	$ (3)	$ 5,240	$ 14,040	$ —	$ (4)	$ 14,036
Included in cash and cash equivalents	$ 1,010	$ —	$ —	$ 1,010	$ 12,290	$ —	$ (1)	$ 12,289
Included in short-term investments	4,233	—	(3)	4,230	1,750	—	(3)	1,747
	$ 5,243	$ —	$ (3)	$ 5,240	$ 14,040	$ —	$ (4)	$ 14,036

There were no realized gains or losses for the years ended December 31, 2014 and 2013.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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, 2014 and 2013, and the classification by level of input within the fair value hierarchy defined above (in thousands):

		Fair Value Measurements		
December 31, 2014	**Total**	**Level 1**	**Level 2**	**Level 3**
Assets:				
Cash equivalents	$ 676	$ 676	$ —	$ —
Short-term investments	4,230	—	4,230	—
Total	$ 4,906	$ 676	$ 4,230	$ —

		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

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, 2014 (in thousands):

	Derivative Warrant Liability
Balance, December 31, 2013	$ 568
Changes in fair value	(152)
Reclassifications	(416)
Balance, December 31, 2014	$ —

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 11 for further discussion of the derivative warrant liability.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. PROPERTY AND EQUIPMENT

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

	December 31,	
	2014	2013
Laboratory equipment	$ 1,599	$ 1,737
Furniture and fixtures	290	225
Computer hardware and software	38	42
Leasehold improvements	252	279
	2,179	2,283
Less—accumulated depreciation and amortization	(1,595)	(1,702)
	$ 584	$ 581

Depreciation and amortization expense was $312,000 and $352,000 for the years ended December 31, 2014 and 2013, respectfully. The net book value of assets under capital lease obligations was $159,000 and $246,000 as of December 31, 2014 and 2013, respectively.

6. BALANCE SHEET COMPONENTS

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

	December 31,	
	2014	2013
Accounts payable	$ 381	$ 636
Payroll and other employee benefits	149	353
Accrued vacation	207	144
Royalties	252	211
Other accrued expenses	118	23
	$ 1,107	$ 1,367

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,	
	2014	2013
Deferred tax assets:		
Deferred settlement costs	$ 797	$ 1,215
Stock-based compensation	466	423
Accrued liabilities and other	442	500
Net operating loss carryforwards and credits	64,804	61,756
Total deferred tax assets	66,509	63,894
Less: valuation allowance	(66,514)	(63,944)
Deferred tax assets, net of valuation allowance	(5)	(50)
Deferred tax liabilities:		
Depreciation and amortization	5	50
Net deferred tax liability	$ —	$ —

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

	December 31,	
	2014	2013
Statutory federal tax rate	(34%)	(34%)
Impact on state tax rates	1%	(7%)
Warrant valuation	(1%)	(22%)
Cancellation of vested non-qualified stock options	0%	1%
Valuation allowance	29%	59%
Other non deductible permanent items	5%	3%
	0%	0%

At December 31, 2014 and 2013, we had net deferred tax assets totaling approximately $66.5 million and $63.9 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, 2014, we had federal net operating loss carryforwards of approximately $169 million, which begin to expire in 2017 through 2033. 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, 2014 and 2013.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. SECURED PROMISSORY NOTE

On May 20, 2014 ("Execution Date"), we executed a secured promissory note (the "Note") with ACC Investment Ltd. in the amount of $350,000, payable in equal amortized payments over a thirty-six month period (the "Term") from the Execution Date. The Note bears an annual interest rate of 10% and is secured by certain laboratory equipment used in our microarray services business. Legal and other closing costs totaling $22,000 were capitalized with the Note and are being amortized over the Term as interest expense. As of December 31, 2014, the fair value of the Note approximated its carrying value of $281,000, which is exclusive of unamortized closing costs of $18,000. The current portion of the $263,000 in net carrying value of the Note was $112,000.

9. COMMITMENTS AND CONTINGENCIES

Leases

On October 24, 2014, we entered into an Amendment No. 6 to the Lease (the "Amendment") with PPC Goddard Investment, LLC (the "Landlord"), concerning our existing building lease for laboratory space and corporate offices in Irvine, California. The Amendment, in part (i) extends the term of the Lease by five years until January 31, 2020; (ii) provides for monthly base rent (excluding allocated common area expenses) of $1.00 per square foot per month for the first year, increasing by $0.05 per year thereafter throughout the term of the lease to a maximum of $1.20 per square foot per month in the fifth year of the lease; (iii) provides for certain tenant improvements to be provided by the Landlord at no cost to us; (iv) at our choosing, provides for an early termination after thirty-six months upon payment by us of the Landlord's unamortized tenant improvement cost and unamortized brokerage commissions payable in connection with the Amendment at an interest rate of eight percent; and (v) provides for a period of abated rent for the first three months of the renewal period (or February 1, 2015 through April 30, 2015). Pursuant to the Amendment, the monthly base rent together with the current estimated monthly common area expense of $0.85 per square foot will result in an aggregate monthly expense of approximately $22,500 for the first year, assuming no increase in the monthly common area expense, and increasing to approximately $25,000 per month for the fifth year, assuming we do not exercise our option to terminate the lease after thirty-six months, and assuming no increase in the monthly common area expense.

At December 31, 2014, we had eleven capital leases for laboratory equipment with original purchase amounts totaling $257,000 and with useful lives of five years. As of December 31, 2014, the remaining lease obligations (including interest charges) were $158,000 with minimum future lease payments shown below. The weighted average interest rate on the capital lease obligations was 8.2%, based on remaining lease obligations as of December 31, 2014. The fair value of the capital lease obligations was not significantly different from their carrying amounts for all periods presented.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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
2015	$ 111	$ 69	$ 180
2016	153	51	204
2017	160	22	182
2018	167	11	178
2019 and thereafter	189	5	194
Total minimum lease payments	$ 780	158	$ 938
Less—imputed interest		(17)	
Present value of capital lease obligations		141	
Less—current portion		(59)	
Capital lease obligations, net of current portion		$ 82	

Rent expense for the years ended December 31, 2014 and 2013 was $288,000 and $297,000, 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 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, 2014 and 2013, and are included in patent amortization and royalties in the accompanying consolidated statements of operations.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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 "Superior Court"). The Complaint alleged we and our former parent Acacia Research Corporation submitted false and fraudulent insurance claims to National Union Fire Insurance Company under the Directors and Officers Policy issued to Acacia, 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. 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 and Acacia filed our Answer to that pleading. A trial was held between June and August of 2014, followed by closing briefs and arguments filed in September and October of 2014. On January 2, 2015, the Superior Court issued a tentative ruling and proposed statement of decision in favor of us, Acacia and Amit Kumar and against all claims of Strathmann. Specifically, the Superior Court determined that we had no fraudulent intent when we pursued insurance benefits under the National Union Directors and Officers Policy over a decade ago. On March 6, 2015 the Superior Court issued its final Statement of Decision, confirming its tentative ruling that Strathmann failed to prove that we (or any other defendant) had a fraudulent intent when we pursued insurance benefits from National Union. Also on March 6, 2015 the Superior Court entered a Judgment in favor of all defendants and against Strathmann, and ordered that Strathmann's Complaint be dismissed with prejudice. A Notice of Entry of Judgment was filed with the Superior Court on March 11, 2015. If Strathmann chooses to appeal the Judgment, he has 60 days from March 11, 2015 to file a Notice of Appeal. The cost of defending an appeal alone could have a material adverse effect on our financial condition and results of operations.

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.

10. 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)

11. STOCKHOLDERS' EQUITY

Series A Convertible Preferred Stock and Warrants Financing

During the fourth quarter of 2012, we issued Series A convertible preferred stock (the "Series A Stock") and warrants to purchase common stock (the "Series A Warrants") to certain accredited investors (the "Series A Investors") for gross proceeds of $2.5 million. During the fourth quarter of 2012 and the first quarter of 2013, all of the Series A convertible preferred stock converted into 1.25 million shares of common stock, and during 2013, 1.2 million shares of common stock were issued from the exercise of the Series A Warrants, leaving Series A Warrants to purchase 292,817 shares of common stock unexercised as of December 31, 2013. During 2014, Series A Investors exercised Series A Warrants to purchase 124,111 shares of our common stock, resulting in proceeds of $256,000 to us.

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. Early in 2013, 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 year ended December 31, 2013 was $246,000.

For as long as the Series A Warrants remain unexercised through their expiration date in October 2018, 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. Prior to June 2014, the exercise price of the Series A Warrants and the number of shares of common stock underlying the Series A Warrants were 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. In June 2014, we executed modification agreements (the "Modification") with the remaining Series A Investors to remove the full-ratchet anti-dilution adjustment provisions as well as the Black-Scholes cash buy-back provisions from the terms of the Series A Warrants, thereby eliminating the requirement for derivative accounting and liability classification for the Series A Warrants as of the Modification date. In consideration for agreeing to these Modifications, we issued additional warrants to the Series A Investors to purchase 25,303 shares of common stock at an exercise price of $2.06 per share and an expiration date in April 2018, which are equivalent to the terms of the existing Series A Warrants as modified by the Modification, but are not subject to any registration rights.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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. Prior to the Modification, the Series A Warrants issued to Series A Investors contained 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. We valued the Series A Warrants using the Monte-Carlo simulation method using the following assumptions immediately prior to the Modification: (i) closing stock price and Series A Warrant contractual exercise price; (ii) term to expiration commensurate with the individual Series A Warrant terms of 3.8 years; (iii) historical volatilities commensurate with the term of the Series A Warrants of 129.6%; (iv) risk-free interest rates commensurate with the term of the Series A Warrants of 1.2%; 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 prices during the Series A Warrant terms. The result of this valuation simulation was to value the remaining Series A Warrants held by Series A Investors at $281,000 as of the Modification date. As a result, warrant derivative gains of $152,000 were recognized during the second quarter of 2014, and the remaining $281,000 was reclassified to additional paid-in capital. As a result of a similar valuation analysis performed during the first quarter ended March 31, 2014, the combined warrant derivative gains recognized in our consolidated statements of operations and the amount of warrant derivative liabilities reclassified to stockholders' equity resulting from Series A Warrant exercises for the year ended December 31, 2014 was $152,000 and $416,000, respectively. The additional Series A Warrants to purchase 25,303 shares of common stock issued to Series A Investors as consideration for agreeing to the Modification were valued using the Black-Scholes valuation model, using the following assumptions as of the Modification: (i) closing stock price and Series A Warrant contractual exercise price; (ii) term to expiration commensurate with the individual Series A Warrant terms of 3.8 years; (iii) historical volatility commensurate with the term of the Series A Warrants of 129.6%; and (iv) risk-free interest rates commensurate with the term of the Series A Warrants of 1.2%. The resulting valuation of $44,000 was recognized as a non-operating charge in our consolidated statements of operations for year ended December 31, 2014.

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. 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.

Amortization of the deferred offering-related costs allocated to the Series A Warrants was $280,000 during the year ended December 31, 2013, and was recognized as a component of interest expense. See Note 13 for further discussion of modifications made to the Series A Warrants subsequent to year-end.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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 shelf registration statement on Form S-3. 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. During 2013, the Series B Investor converted all of the Series B Stock into common stock.

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 were not exercisable for the first six months following issuance. The Series B Warrants are not subject to price anti-dilution protection. We also agreed with the Series B Investor pursuant to the Series B Purchase Agreement that, except under certain permitted circumstances, until the time that less than 7.5% of the Series B Warrants remain outstanding, neither we nor our subsidiaries shall issue, or enter into any agreement to issue, common stock or equivalents thereof at a price below the exercise price of the Series B Warrants. See Note 13 for further discussion of modifications made to the Series B Warrants subsequent to year-end.

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 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 paid, the net proceeds from the Series C Financing was approximately $2.14 million.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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 Series C Stock was entitled to 6% annual dividends, and accrued dividends were 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 were paid in shares of common stock, the number of shares of common stock comprising the dividend on each share of Series C Stock was 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. During the remainder of 2013, the Series C Investors converted all 2,400 shares of Series C stock into 839,864 shares of common stock.

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 Series C Warrants have a $5\ ^{1}/_{2}$ year term, were not exercisable for the first six months following issuance and include a cash-less exercise provision which is only applicable if the common stock underlying the Series C Warrants is not subject to an effective registration statement or otherwise cannot be sold without restriction pursuant to Rule 144. Until all Series C Investors no longer hold Series C Warrants: (i) we may not sell any variable rate securities except for certain exempt issuances; and (ii) if we enter into a subsequent financing on more favorable terms than the Series C Financing, then the agreements between us and the Series C Investors will be amended to include such more favorable terms. In addition, until 7.5% or less of the Series C Warrants remain unexercised, we may not sell any dilutive securities, except for certain exempt issuances. See Note 13 for further discussion of modifications made to the Series C Warrants subsequent to year-end.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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 a Registration Statement on Form S-1, 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 December 31, 2014, net proceeds received by us were approximately $10.7 million. As of December 31, 2013, 9,799.3 shares of Series D Stock had converted into 4,756,946 shares of common stock. During the first quarter of 2014, all of the remaining Series D Stock 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 then 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 was 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
	2014	2013		
Liability-classified warrants:				
October 2012	—	292,817	$2.06(1)	April 2018
	—	292,817		
Equity-classified warrants:				
December 2013	5,825,243	5,825,243	$3.12	December 2018
June 2013	491,803	491,803	$3.55	December 2018
May 2013	491,803	491,803	$3.77	November 2018
March 2013	275,000	275,000	$3.49	September 2018
October 2012	194,009	—	$2.06(1)	April 2018
April 2011	131,047	131,047	$21.40	April 2016
October 2009	—	3,000	$77.80	October 2014
May 2009	—	2,967	$75.00 - $90.00	May 2014 - July 2014
May 2009	—	109,997	$90.00	May 2014
Total	7,408,905	7,330,860		
Total—all warrants	7,408,905	7,623,677		

(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. Also, due to the Modification previously discussed, these warrants are no longer liability classified as of September 30, 2014.

As discussed in Note 13 below, in connection with the February 18, 2015 Private Placement Warrant Financing, the October 2012, March 2013, May 2013 and June 2013 warrants reflected above were modified such that the exercise prices of those warrant contracts were lowered to $1.97, and their respective expiration dates were increased by six months.

12. EQUITY-BASED COMPENSATION

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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 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 Committee may grant other forms of equity based compensation, such as restricted stock units ("RSU's"), which the Committee awarded to certain executives and directors of the Company for the first time during 2014. RSU awards vest in equal annual installments over a four-year period following the date of grant. At December 31, 2014, there were approximately 2.0 million authorized shares under the CombiMatrix Plan, with approximately 995,000 shares available for grant.

The following is a summary of the stock option activities under the CombiMatrix Plan for 2014 and 2013:

	Shares	Weighted Average Price	Weighted Contractual Term	Aggregate Intrinsic Value ('000s)
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
Granted	158,500	$ 2.87		
Exercised	—	$ —		
Forfeited	(103,555)	$ 3.89		
Cancelled	(6,105)	$ 31.09		
Balance at December 31, 2014	687,859	$ 9.82	8.0 years	$ —
Exercisable at December 31, 2013	98,259	$ 47.75	6.0 years	$ —
Exercisable at December 31, 2014	173,153	$ 29.05	6.3 years	$ —

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Information related to options granted under the CombiMatrix Plan for 2014 and 2013 is as follows:

	December 31,	
	2014	2013
Weighted average fair values of options granted	$ 2.40	$ 2.39
Options granted with exercise prices:		
Greater than market price on the grant date	—	—
Equal to market price on the grant date	158,500	502,586
Less than market price on the grant date	—	—

The aggregate fair value of options vested during the years ended December 31, 2014 and 2013 was $359,000 and $279,000, respectively. As of December 31, 2014, the total unrecognized compensation expense related to non-vested stock option awards was $867,000, which is expected to be recognized over a weighted average term of approximately 2.4 years.

The following is a summary of the RSU activities under the CombiMatrix Plan for 2014 (there was no activity in 2013):

	Restricted Stock Units	Weighted Average Grant Date Fair Value
Nonvested RSU's at December 31, 2013	—	$ —
Granted	380,220	$ 2.83
Vested	—	$ —
Cancelled	(77,495)	$ 2.81
Nonvested RSU's at December 31, 2014	302,725	$ 2.83
Vested RSU's at December 31, 2014	—	$ —

As of December 31, 2014, the total unrecognized compensation expense related to RSU awards was $672,000, which is expected to be recognized over a weighted-average period of approximately 3.1 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, 2014, 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.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following is a summary of stock option activities for the CMDX Plan for 2014 and 2013:

	Shares	Weighted Average Price	Weighted Contractual Term	Aggregate Intrinsic Value ('000s)
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
Granted	—	$ —		
Exercised	—	$ —		
Cancelled	—	$ —		
Balance at December 31, 2014	291,000	$ 0.34	1.1 years	$ 51
Exercisable at December 31, 2013	241,000	$ 0.30	2.1 years	$ 50
Exercisable at December 31, 2014	241,000	$ 0.30	1.1 years	$ 50

There were no option grants during 2014 or 2013 under the CMDX Plan. The fair value of options vested during the years ended December 31, 2014 and 2013 was not significant. As of December 31, 2014, the total unrecognized compensation expense related to non-vested stock option awards was not significant.

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, 2014 and 2013, non-cash charges recognized from stock option awards granted to non-employees was not significant.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. SUBSEQUENT EVENT

Series E Convertible Preferred Stock Financing

On February 13, 2015, we and certain accredited institutional pre-existing investors (the "Series E Investors") entered into a securities purchase agreement (the "Series E Purchase Agreement"), pursuant to which sold 1,541,998 shares common stock at a price of $1.75 per share, 2,201.493 shares of Series E 6% Convertible Preferred Stock (the "Series E Preferred Stock") and warrants to purchase 700,000 shares of common stock at an exercise price of $1.97 per share, which was the consolidated closing bid price of our common stock on Nasdaq immediately prior to entering into the Series E Purchase Agreement (the "Series E Warrants", and the transactions contemplated by the Series E Purchase Agreement, the "Series E Financing"). The Series E Preferred Stock and Series E Warrants were sold in a fixed combination consisting of one share of Series E Preferred Stock and a Series E Warrant to purchase approximately 317.965 shares of Common Stock. Each fixed combination of Series E Preferred Stock and Series E Warrants were sold at a price of $1,000. The Series E Preferred Stock sold is convertible into 1,257,996 shares of common stock at an initial conversion price of $1.75 per share. The Series E Preferred Stock is not convertible into greater than 19.99% of our outstanding common stock unless stockholder approval is obtained. The closing under the Series E Purchase Agreement occurred on February 18, 2015 (the "Series E Closing Date"), where we received gross proceeds of $4.9 million from the Series E Investors. We expect the net proceeds to us, after closing-related costs and expenses, to be approximately $4.7 million.

The Series E Preferred Stock is non-voting (except to the extent required by law and except for certain consent rights relating to amending the certificate of incorporation or bylaws, and the like), but ranks senior to our common stock with respect to dividends and with respect to distributions upon a deemed dissolution, liquidation or winding-up of the Company. Each share of Series E Preferred Stock carries a 6% per annum dividend that will begin accruing six months after the Series E Closing Date and will be payable only in cash. Until the volume weighted average price of our common stock on Nasdaq exceeds 200% of the conversion price of the Series E Preferred Stock for ten consecutive trading days, the Series E Preferred Stock is subject to full ratchet price based anti-dilution protection, subject to the limits imposed by General Instruction I.B.6. of Form S-3.

The Series E Warrants issued have a $5\ ^{1}/_{2}$ year term and have a cashless exercise provision in the event there is no effective registration statement covering the common stock issuable upon exercise of the Series E Warrants. The Series E Warrants are not exercisable for the first six months following issuance. The Series E Warrants are not subject to price based anti-dilution protection. Subject to the beneficial ownership limitation described below, if, after the one year anniversary of the Series E Closing Date, the volume weighted average price of our common stock on Nasdaq exceeds 200% of the exercise price for ten consecutive trading days, then we have the right to, within one trading day thereafter, call for cancellation of up to 50% of the Series E Warrants for consideration equal to $0.001 per share of common stock underlying the Series E Warrants. The Company may not exercise its call rights if, among other things, there is no effective registration statement registering the shares of common stock issuable upon exercise of the Series E Warrants or the prospectus contained in the registration statement is not available for the issuance of the shares of common stock issuable upon exercise of the Series E Warrants.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Pursuant to the terms of the Series E Purchase Agreement, while such Series E Investor holds Series E Preferred Stock and Series E Warrants, we may not enter into an agreement to effect a "Variable Rate Transaction," which means a transaction in which the Company: (i) issues or sells any convertible securities either (A) at a conversion, exercise or exchange rate or other price that is based upon and/or varies with the trading prices of, or quotations for, the shares of the common stock at any time after the initial issuance of such convertible securities, or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such convertible securities or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company; or (ii) enters into any agreement (including, without limitation, an equity line of credit) whereby we may sell securities at a future determined price. Also, except under certain permitted circumstances: (i) until the later of the date that is six months from the closing or 30 days following the date on which less than 7.5% of the Series E Preferred Stock remains outstanding, we will not issue, or enter into any agreement to issue, any shares of common stock or equivalents thereof; (ii) until the time that less than 7.5% of the Series E Warrants remain outstanding, neither the Company nor its subsidiaries will issue, or enter into any agreement to issue, common stock or equivalents thereof at a price below the exercise price of the Series E Warrants; (iii) until the time that less than 7.5% of the Series E Preferred Stock remains outstanding, neither the Company nor its subsidiaries will issue, or enter into any agreement to issue, common stock or equivalents thereof at a price below the conversion price of the Series E Preferred Stock unless all shares of common stock underlying the Series E Preferred Stock (taking into consideration the effect of the full adjustment of the anti-dilution provisions from such dilutive issuance) are permitted by General Instruction I.B.6. of Form S-3 to be issued under the registration statement; (iv) if we issue securities within the six months following the Series E Closing Date under the Series E Purchase Agreement, and subject to the preexisting rights of other security holders, the Series E Investors shall have the right of first refusal to purchase all of the securities on the same terms, conditions and price provided for in the proposed issuance of securities; and (v) we will indemnify the Series E Investors against certain losses resulting from the Company's breach of any of its representations, warranties, or covenants under agreements with the Investors, as well as under certain other circumstances described in the Series E Purchase Agreement.

The Series E Investors have agreed to be subject to a blocker that (i) would prevent each of their respective 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 E Investors upon the conversion of Series E Preferred Stock if the issuance of such shares, when aggregated with all other shares of common stock sold to the Series E Investors under the Series E Purchase Agreement together with all shares of common stock issued upon the conversion of Series E Preferred 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 have agreed to seek stockholder approval at a special stockholders' meeting to be held on April 28, 2015 for the terms of the Series E Preferred 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 E Preferred Stock.

The Series E Financing was effected as a takedown off the Company's shelf registration statement on Form S-3 (File No. 333-198848), which became effective on September 19, 2014, pursuant to a prospectus supplement filed with the Securities and Exchange Commission on February 13, 2015.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Private Placement Warrant Financing

Substantially concurrently with the closing of the Series E Financing, on February 13, 2015, the Company entered into a separate securities purchase agreement (the "Warrant Purchase Agreement") with selected accredited institutional pre-existing investors (the "Private Placement Investors"), pursuant to which we agreed to sell to the Private Placement Investors warrants to purchase 1,540,000 shares of Common Stock (the "Private Placement Warrants", and the transactions contemplated by the Warrant Purchase Agreement, the "Warrant Financing"). In consideration of an aggregate of $1,000, we agreed to sell the Private Placement Warrants, which will not be issued unless and until our stockholders approve amending our Certificate of Incorporation to increase our authorized common stock in an amount sufficient to permit the issuance of the common stock issuable upon exercise of the Private Placement Warrants (the "Charter Amendment").

When issued, each Private Placement Warrant will have an exercise price of $2.167 per share of common stock (subject to adjustment for stock splits and the like), which represents 110% of the consolidated closing bid price of our common stock on Nasdaq immediately prior to entering into the Warrant Purchase Agreement, and will be exercisable at any time after the six month anniversary of entering into the Warrant Purchase Agreement and on or prior to the close of business on the five year anniversary of the initial exercise date, subject to the beneficial ownership limitation described below. The Private Placement Warrants are not subject to price based anti-dilution protection. If, at the time of exercise of a Private Placement Warrant, there is no effective registration statement registering for resale the shares of Common Stock issuable upon exercise of the Private Placement Warrant, the holder may exercise the Private Placement Warrant on a cashless basis. When exercised on a cashless basis, a portion of the Private Placement Warrant is cancelled in payment of the purchase price payable in respect of the number of shares of common stock purchasable upon such exercise. Subject to the beneficial ownership limitation described below, if, after the one year anniversary of the date of entering into the Warrant Purchase Agreement, the volume weighted average price of our common stock on Nasdaq exceeds 200% of the Private Placement Warrant exercise price for ten consecutive trading days, then we may, within one trading day thereafter, call for cancellation of up to 50% of the Private Placement Warrants for consideration equal to $0.001 per share of common stock underlying the Private Placement Warrants. We may not exercise our call rights if, among other things, there is no effective registration statement registering for resale the shares of common stock issuable upon exercise of the Private Placement Warrants. Subject to limited exceptions, a holder of Private Placement Warrants will not have the right to exercise any portion of its Private Placement Warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% (which may be increased, but not above 9.99%) of the number of shares of our common stock outstanding immediately after giving effect to such exercise.

For as long as the Private Placement Investors hold any Private Placement Warrants, we will not enter into an agreement to effect a "Variable Rate Transaction," with similar terms and prohibitions described above. We also agreed that, except under certain permitted circumstances until the time that less than 7.5% of the Private Placement Warrants remain outstanding, neither the Company nor its subsidiaries shall issue, or enter into any agreement to issue, common stock or equivalents thereof at a price below the exercise price of the Private Placement Warrants. We also agreed that the terms of the Warrant Financing will be amended to the reflect the most favorable terms obtained by us in any future equity financing.

We have agreed to seek stockholder approval at a special stockholders' meeting to be held on April 28, 2015 for the Charter Amendment in connection with the Warrant Financing.

COMBIMATRIX CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Modification of Certain Outstanding Warrants

In connection with the purchase of the Private Placement Warrants, we modified previously issued and outstanding warrants held by the Private Placement Investors that were issued in connection with the Series A, Series B and Series C financings described above, to (i) reduce the exercise prices thereunder to $1.97, which represents the consolidated closing bid price of our common stock on Nasdaq immediately prior to the date we entered into the Warrant Purchase Agreement; (ii) prohibit the exercise of such modified warrants for a period of six months after the date of the modification; and (iii) extend the exercise period of such modified warrants for an additional six months (such modifications, collectively, the "Warrant Price Modifications"). Separately, we also agreed to a Warrant Price Modification with a holder of Series C Warrants solely in consideration for such holder's waiver of certain preemptive rights.

EXHIBIT INDEX

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation. 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.
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation. Incorporated by reference to Exhibit 3.1A to the Company's Quarterly Report on Form 10-Q (File No. 001-33523) filed with the SEC on August 14, 2008.
3.3	Certificate of Amendment to Amended and Restated Certificate of Incorporation. 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.
3.4	Certificate of Designation of Preferences, Rights and Limitations of Series A 6% Convertible Preferred Stock. 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.
3.5	Certificate of Designation of Preferences, Rights and Limitations of Series B 6% Convertible Preferred Stock. 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.
3.6	Certificate of Designation of Preferences, Rights and Limitations of Series C 6% Convertible Preferred Stock. 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.
3.7	Certificate of Designation of Preferences, Rights and Limitations of Series D Convertible Preferred Stock. Incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on December 23, 2013.
3.8	Certificate of Designation of Preferences, Rights and Limitations of Series E 6% Convertible Preferred Stock. 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 February 13, 2015.
3.9	Second Amended and Restated Bylaws. 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.
10.1†	Restated Executive Change in Control Severance Plan. 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.
10.2	Amendment No. 3 to Lease dated as of January 11, 2010. 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.
10.3	Amendment No. 4 to the Lease effective as of October 21, 2012. 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.
10.4†	2006 Stock Incentive Plan, as amended. Incorporated by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-8 (File No. 333-197322) filed with the SEC on July 9, 2014.
10.5†	Form of Stock Incentive Plan Agreement. Incorporated by reference to the Company's Registration Statement on Form S-1 (SEC File No. 333-139679), which became effective June 8, 2007.

Exhibit Number	Description
10.6†	Employment Agreement for Mark McDonough. 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.
10.7	Form of Amended and Restated Indemnification Agreement. 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.
10.8	Form of Securities Purchase Agreement dated as of April 1, 2011. 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.
10.9	Form of Investors Rights Agreement dated as of April 1, 2011. 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.
10.10	HLM Rights Agreement dated as of April 1, 2011. 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.
10.11	Form of Warrant to Purchase Common Stock issued on April 7, 2011. 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.
10.12	Form of Indemnity Agreement. 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.
10.13	Form of Securities Purchase Agreement dated as of September 28, 2012. 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.
10.14	Form of Warrant to Purchase Common Stock. 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.
10.15	Form of Registration Rights Agreement dated as of September 28, 2012. 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.
10.16	Form of Lock-Up Agreement dated as of September 28, 2012. 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.
10.17	Form of Voting Agreement dated as of September 28, 2012. 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.
10.18	Consent and Waiver executed on December 4, 2012. 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.
10.19	Form of Amendment No. 1 to Common Stock Purchase Warrant dated February 26, 2013. 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.
10.20	Form of Warrant to Purchase Common Stock. 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.

Exhibit Number	Description
10.21	Form of Securities Purchase Agreement dated as of March 19, 2013. 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.
10.22†	Mark McDonough Compensation Arrangement. 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.
10.23	Form of Waiver Regarding HLM Rights Agreement dated April 5, 2013. 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.
10.24	Form of Securities Purchase Agreement dated as of May 3, 2013. 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.
10.25	Form of Warrant to Purchase Common Stock. 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.
10.26	Form of Registration Rights Agreement dated as of May 3, 2013. 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.
10.27	Form of Voting Agreement dated as of May 3, 2013. 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.
10.28†	Form of Stock Incentive Plan Agreement for Performance-Based Options. 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.
10.29†	Letter Agreement dated June 27, 2013 regarding Mark McDonough's bonus arrangement. 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.
10.30	Amendment No. 5 to Lease effective as of July 16, 2013. 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.
10.31	Form of Warrant to Purchase Common Stock. 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 9, 2013.
10.32†	2014 Executive Performance Bonus Plan, as amended. 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.
10.33†	Form of Restricted Stock Unit Award Agreement under the Company's 2006 Stock Incentive Plan. 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.
10.34	Form of Amendment No. 2 to Common Stock Purchase Warrant dated June 4, 2014. 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 June 10, 2014.
10.35	Form of Additional Common Stock Purchase Warrant issued June 4, 2014. 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 June 10, 2014.

Exhibit Number	Description
10.36	Amendment No. 6 to the Lease effective as of October 24, 2014. 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 28, 2014.
10.37	Form of Warrant to Purchase Common Stock (Series E Financing). 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 February 13, 2015.
10.38	Form of Amendment of Outstanding Warrants. Incorporated by reference to Exhibit 4.5 to the Company's Current Report on Form 8-K (File No. 001-33523) filed with the SEC on February 13, 2015.
10.39	Form of Securities Purchase Agreement dated as of February 13, 2015 (Series E Financing). 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 13, 2015.
10.40	Form of Private Placement Securities Purchase Agreement dated as of February 13, 2015 (Warrant Financing). 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 13, 2015.
10.41†	2015 Executive Performance Bonus Plan. 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 5, 2015.
10.42	Collaboration Agreement, effective May 23, 2013, between CombiMatrix and Sequenom Center for Molecular Medicine, LLC(*)
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, 2014, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets as of December 31, 2014 and December 31, 2013; (ii) Consolidated Statements of Operations for the Years ended December 31, 2014 and 2013; (iii) Consolidated Statements of Comprehensive Loss for the Years ended December 31, 2014 and 2013; (iv) Consolidated Statements of Stockholders' Equity for the Years ended December 31, 2014 and 2013 (v) Consolidated Statements of Cash Flows for the Years ended December 31, 2014 and 2013; and (vi) Notes to Consolidated Financial Statements.

(*) Included herewith.

† Denotes management contract or compensatory plan or arrangement.

Exhibit 10.42

COLLABORATION AGREEMENT

THIS COLLABORATION AGREEMENT (this " ***Agreement*** ") is made and entered into as of May 23, 2013 (the " ***Effective Date*** ") by and between **COMBIMATRIX DIAGNOSTICS, INC.,** a Delaware corporation, with its principal place of business at 300 Goddard, Suite 100, Irvine, California 92618 (" ***CombiMatrix*** ") and **SEQUENOM CENTER FOR MOLECULAR MEDICINE, LLC** , a Michigan limited liability company, with a place of business at 3595 John Hopkins Court, San Diego, California 92121 (" ***SCMM*** ").

RECITALS

WHEREAS , CombiMatrix is a company engaged in chromosomal micro-array testing in the pre-natal field in its CLIA-certified & CAP-accredited commercial clinical laboratory located in Irvine, California;

WHEREAS , SCMM is a life sciences company engaged in the research, development and commercialization of testing services related to diagnostic testing and genetic analysis in diagnosis in its CLIA-certified & CAP-accredited commercial clinical laboratories located in San Diego, California, and Grand Rapids, Michigan;

WHEREAS , SCMM has marketing, customer service and result reporting capabilities with respect to diagnostic testing services and genetic analysis; and

WHEREAS , the parties desire to enter into a collaboration pursuant to which (a) SCMM will perform certain marketing activities with respect to CombiMatrix Testing Services, and perform order coordination, customer service and result reporting activities with respect to CombiMatrix Testing Services ordered through SCMM; and (b) CombiMatrix will compensate SCMM for such activities, perform such CombiMatrix Testing Services, and coordinate with SCMM with respect to reporting results of such CombiMatrix Testing Services and related matters, each on the terms and conditions set forth herein.

NOW, THEREFORE , in consideration of the covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, SCMM and CombiMatrix agree as follows:

1. DEFINITIONS

1.1 " **Affiliate** " shall mean any company or entity controlled by, controlling, or under common control with a party hereto, for as long as such control exists. As used in this Section 1.1, " **control** " shall mean: (a) possession, directly or indirectly, of the power to direct the management and policies of such company or entity, whether through ownership of voting securities or by contract relating to voting rights or corporate governance; or (b) direct or indirect beneficial ownership of more than 50% (or such lesser percentage that is the maximum allowed to be owned by a foreign corporation in a particular jurisdiction) of the voting share capital in such company or entity.

1.2 " **CombiMatrix Testing Services** " means testing services utilizing the laboratory developed tests known as the CombiSNP™ Array Pre-natal and the CombiSNP ™ Array for POC.

1.3 " **Confidential Information** " means all information which is generated by or on behalf of a party or its Affiliates in the course of activities contemplated by this Agreement or which one party or any of its Affiliates has furnished or otherwise made available to the other party or its Affiliates.

1.4 " **DHHS** " means the United States Department of Health and Human Services, and any successor thereto.

1.5 " **HIPAA** " means the Health Insurance Portability and Accountability Act of 1996, Public Law 104-191, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, and all of their respective implementing regulations, including without limitation the regulations promulgated at 45 C.F.R. parts 160 through 164.

1.6 " **SCMM Testing Service** " means SCMM's non-invasive prenatal aneuploidy testing services utilizing the laboratory developed test known as the MateriT21™ PLUS test.

1.7 " **Third Party** " means any person or entity other than SCMM and its Affiliates or CombiMatrix and its Affiliates.

2. COLLABORATION PROGRAM

2.1 **Marketing of CombiMatrix Testing Services.** In accordance with the terms set forth in this Article 2, SCMM shall use commercially reasonable efforts to promote and market the CombiMatrix Testing Services in the same channels in which SCMM markets the SCMM Testing Services. Without limiting the foregoing, SCMM shall, at its expense and in accordance with the terms set forth in this Article 2, use commercially reasonable efforts to: (a) promote the sale of the CombiMatrix Testing Services among its sales force and physicians in the same channels in which SCMM markets the SCMM Testing Services including, without limitation, by adding to its test requisition form for the SCMM Testing Services an option for physicians to order the CombiMatrix Testing Services, as more fully described in Section 2.2; (b) coordinate logistics associated with marketing the CombiMatrix Testing Services, including collection and shipping of specimens and reporting of results, as more fully described in Sections 2.3 and 2.5; and (c) coordinate customer service and support for the CombiMatrix Testing Services. CombiMatrix shall, at its expense, assist SCMM in promoting and marketing the CombiMatrix Testing Services including, without limitation, by (i) providing marketing, sales and technical training and support as requested by SCMM in connection with the launch and promotion of the CombiMatrix Testing Services through SCMM, with the frequency and content of the training and support to be determined by agreement between CombiMatrix and SCMM; and (ii) sharing its product and service educational materials and scientific publications to utilize in patient education through SCMM, as to which CombiMatrix hereby grants SCMM the right to use such materials and publications as reasonably necessary for SCMM to carry out its obligations under this Agreement.

2.2 Test Requisition Form for CombiMatrix Testing Services. SCMM shall add to its test requisition form for the SCMM Testing Services (" ***TRF*** ") an option for physicians to order the CombiMatrix Testing Services for patients through SCMM. The TRF shall be watermarked, branded with SCMM's name and trademark, and shall include CombiMatrix's name and trademark at the bottom of the form, together with express identification of CombiMatrix as the laboratory performing the CombiMatrix Testing Services. Except as expressly set forth in the preceding sentence, the parties acknowledge that SCMM shall have sole discretion with respect to the form and content of the TRF. The parties acknowledge that the CombiMatrix Testing Services may be ordered together with the SCMM Testing Services, as a reflex, confirmatory test following results of the SCMM Testing Services, or separately from the SCMM Testing Services. The parties also acknowledge that, if a physician orders a SCMM Testing Services but does not order a CombiMatrix Testing Services, SCMM may (but shall not be obligated to) at the time it reports to the physician the results of the SCMM Testing Services, advise the physician of the availability of the CombiMatrix Testing Services.

2.3 Collection and Shipment of Specimens. SCMM and CombiMatrix will collaborate to produce co-marketed kits for specimen transport. CombiMatrix shall deliver to SCMM all necessary supplies as needed, as well as deliver all other materials necessary for collection of the sample from the patient for performance of the CombiMatrix Testing Services (the " ***Test Supplies*** ") which Test Supplies shall, if desired by both parties, be co-branded with each party's applicable names and trademarks. Following receipt of the Test Supplies from CombiMatrix, SCMM shall forward the Test Supplies, together with the TRF, to the physician requesting the CombiMatrix Testing Services for use in collecting the specimens from the patient. SCMM shall receive specimens following collection by the physician and shall transport all specimens for use in the CombiMatrix Testing Services to CombiMatrix via a courier designated by CombiMatrix. SCMM shall include with each specimen a completed TRF. All expenses for shipping of Test Supplies and specimens to and from SCMM shall be paid by CombiMatrix. Following execution of this Agreement, the parties will jointly determine the optimal method for supplying the Test Supplies to physicians.

2.4 Performance of CombiMatrix Testing Services; Billing. CombiMatrix shall be responsible for performance of the CombiMatrix Testing Services on the specimens shipped to it by SCMM, including testing process, testing quality control, laboratory regulatory compliance and legal compliance. CombiMatrix shall perform all CombiMatrix Testing Services in accordance with all applicable laws, rules and regulations. Upon receipt of specimens from SCMM, CombiMatrix shall perform the CombiMatrix Testing Services in accordance with its standard operating procedures at its laboratory located at 310 Goddard, Suite 150, Irvine, California 92618. In no event shall CombiMatrix subcontract or otherwise delegate performance of any part of the CombiMatrix Testing Services, nor perform any part of the CombiMatrix Testing Services at any location other than the laboratory noted in the immediately preceding sentence, unless otherwise agreed in writing by SCMM, which shall not be unreasonably withheld, conditioned or delayed. CombiMatrix shall not change the CombiMatrix Testing Services, or any method of performing such test, without 60 days' prior written notification to SCMM. CombiMatrix shall use commercially reasonable efforts to perform the CombiMatrix Testing Services ordered through SCMM as soon as possible following receipt of the specimens. Without limiting the foregoing, the parties shall agree from time to time on the required turnaround time for CombiMatrix's performance of the CombiMatrix Testing Services and

delivery of results to SCMM, which shall be longer than fifteen (15) days from receipt by CombiMatrix of the specimens unless an inadequate amount of sample is initially received from SCMM and CombiMatrix reports that the sample is disqualified for testing. Upon completion of the CombiMatrix Testing Services, all specimens not otherwise consumed through the analysis may be destroyed or retained by CombiMatrix solely for quality control or testing purposes, provided that CombiMatrix shall always comply with all applicable laws. CombiMatrix shall be solely responsible for all billing for CombiMatrix Testing Services ordered through SCMM and performed by CombiMatrix, including collecting and obtaining reimbursement from Third Party payors or the patient directly. SCMM shall use commercially reasonable efforts to provide to CombiMatrix, together with delivery of the specimens as described in Section 2.3, any relevant billing information delivered to SCMM together with the specimens.

2.5 Test Results and Reporting. CombiMatrix shall report to SCMM all results of CombiMatrix Testing Services performed on specimens provided by SCMM in the manner specified in the TRF on a written report that identifies CombiMatrix as the laboratory that performed the CombiMatrix Testing Services. All results shall be delivered to SCMM by fax or electronically through CombiMatrix's Web Portal, and CombiMatrix shall train those employees of SCMM that have been identified by SCMM as appropriate and HIPAA-compliant regarding how to access reports through CombiMatrix's Web Portal. SCMM shall forward CombiMatrix Testing Services results, as reported by CombiMatrix, to the physician who ordered such CombiMatrix Testing Services; provided that, in the case of abnormal (i.e., positive results for fetal aneuploidy), (SCMM shall have the right, in its discretion, to incorporate the reports provided by CombiMatrix into SCMM's systems to generate a final, comprehensive report.) CombiMatrix's Chief Medical Officer ("CMO"), Laboratory Director or one of its Genetic Counselors ("GC") shall also report such results directly by attempting to connect with the ordering physician by phone. The parties agree that a definition of an "attempt to connect by phone" is three phone calls to the ordering physician from one of the aforementioned CombiMatrix staff members. Additionally, CombiMatrix shall provide customer service and support for the CombiMatrix Testing Services ordered through SCMM using the same methods and adhering to the same standards that it employs with respect to other products and services sold by CombiMatrix, recognizing that it is the parties' general intent that SCMM shall be the customer facing party, such that CombiMatrix shall provide such customer service and support through SCMM if and to the extent requested by SCMM. CombiMatrix shall also provide national genetic counseling (GC) support to physicians with access to CombiMatrix's CMO and GCs in all states where CombiMatrix is then currently licensed.

2.6 Core Teams. Promptly after the Effective Date, each party shall appoint a core team of key personnel from such party (the "***Core Teams***") to ensure the collaboration runs as smoothly and efficiently as possible. The Core Teams shall be the primary contacts for the parties regarding the activities contemplated by this Agreement and shall facilitate all such activities hereunder. Each party may replace members of its Core Team with alternative representatives at any time with prior written notice to the other party. Any member of a Core Team may designate a substitute to temporarily perform the functions of that Core Team member. Each Core Team shall be charged with creating and maintaining a collaborative work environment between the parties with respect to the activities under this Agreement.

2.7 Records. Each party shall maintain records of performance of its activities under this Agreement, including records of all patient specimens received by each party for the CombiMatrix Testing Services ordered through SCMM, and, in the case of CombiMatrix, all CombiMatrix Testing Services performed and results generated and reported for such CombiMatrix Testing Services. The parties shall jointly review and reconcile their records relating to specimens received for CombiMatrix Testing Services and the CombiMatrix Testing Services performed on a monthly basis. During the Term and for three years thereafter, SCMM shall have the right, exercisable on reasonable prior written notice to CombiMatrix, to audit CombiMatrix's records relating to specimens received and performance of CombiMatrix Testing Services under this Agreement, including the results thereof.

3. COMPENSATION

3.1 Compensation to SCMM. As compensation for performance of SCMM's obligations under this Agreement, CombiMatrix shall pay to SCMM a fee of two hundred dollars (US$200) for each billable specimen received by SCMM for use in performance of a CombiMatrix Testing Services.

3.2 Invoices; Method of Payment. SCMM shall invoice CombiMatrix on a monthly basis for specimens received by SCMM during such month for use in performance of a CombiMatrix Testing Services. All payments due hereunder to SCMM shall be paid to SCMM in U.S. Dollars not later than 30 days following the date of the applicable invoice. All payments owed under this Agreement shall be made by wire transfer in immediately available funds to a bank and account designated in writing by SCMM, unless otherwise specified in writing by SCMM. In the event that any payment due under this Agreement is not made when due, the payment shall accrue interest from the date due at the rate of 1% above the U.S. Prime Rate (as set forth in the *Wall Street Journal*, Eastern U.S. Edition); provided, however, that in no event shall such rate exceed the maximum legal annual interest rate. The payment of such interest shall not limit SCMM from exercising any other rights it may have as a consequence of the lateness of any payment.

3.3 Arm's-Length Compensation. The parties hereto agree that the compensation provided herein has been determined in arm's-length bargaining and is consistent with fair market value in arm's-length transactions. Furthermore, the compensation is not and has not been determined in a manner that takes into account the volume or value of any referrals or business otherwise generated between the parties for which payment may be made in whole or in part under Medicare or any federal or state health care program or under any other Third Party payor program.

3.4 Costs and Expenses; Taxes. Except as may be set forth in this Agreement, each party shall be solely responsible for its own costs and expenses incurred in connection with the performance of its activities pursuant to this Agreement. Each party shall also bear and be responsible for paying any sales, use, property, or other federal, state or local taxes it incurs as a direct or indirect result of entering into this Agreement.

4. EXCLUSIVITY AND NON-SOLICITATION

4.1 Exclusivity. During the Term, neither CombiMatrix nor any Affiliate of CombiMatrix shall (a) enter into any collaboration similar to the collaboration described in this Agreement with any provider of non-invasive prenatal tests (" ***NIPT Provider*** ") other than SCMM or an Affiliate of SCMM; or (b) grant to any NIPT Provider the right to market or promote, or otherwise collaborate with any NIPT Provider with respect to, the CombiMatrix Testing Services or any other prenatal test performed or marketed by CombiMatrix.

4.2 Non-Solicitation. During the Term, neither party shall hire, employ, retain or solicit for employment, directly or indirectly, an employee of the other party, without the prior written consent of the other party. Notwithstanding the foregoing, each party may engage in solicitation of employees through generally available advertisements.

5. COMPLIANCE WITH LAW AND REGULATIONS

5.1 Compliance with Laws. CombiMatrix and SCMM and their respective Affiliates each agree to perform their respective obligations under this Agreement in compliance with all applicable federal, state and local laws, rules, and regulations, including, without limitation, statutes and regulatory guidelines of the DHHS and Centers for Medicare & Medicaid Services related to federal healthcare programs, and all applicable regulations, rules, and policies of Third Party payors that pay for the CombiMatrix Testing Services. Without limiting the foregoing, each party shall be solely responsible for obtaining and maintaining, throughout the Term, all licenses, permits, registrations and other authorizations necessary to perform its obligations under this Agreement including, in the case of CombiMatrix, all licenses, permits, registrations and other authorizations necessary to perform CombiMatrix Testing Services.

5.2 Privacy. CombiMatrix and SCMM and their respective Affiliates agree to protect the privacy and provide for the security of any information that relates to a patient's individually identifiable health information, including, without limitation, past, present, or future physical or mental health or condition, in accordance with HIPAA and any other applicable federal and state laws and regulations in the U.S. and countries and territories outside the U.S. Without limiting the foregoing, the parties understand and agree that they are "covered entities" and do not have to execute a Business Associate Agreement (" ***BAA*** ") and other required HIPAA-compliance documentation; provided, however, in the event the relationship of the parties changes so that one party becomes a Business Associate of the other party, the parties shall enter into a BAA. For clarity, such BAA shall include obligations of confidentiality with respect to Protected Health Information, as defined by HIPAA, and, to the extent such obligations of confidentiality are more stringent than those set forth in Article 6 hereof, the obligations of confidentiality set forth in the BAA shall govern with respect to all Protected Health Information disclosed hereunder.

5.3 Participation in Federal Healthcare Programs. Each of CombiMatrix and SCMM, and each of their respective employees who will perform any activities pursuant to this Agreement is, and during the Term will be, eligible to participate in federal healthcare programs, and neither CombiMatrix nor SCMM, nor any of their respective employees who will perform any activities pursuant to this Agreement has been, nor during the Term will be, sanctioned by

the DHHS Office of the Inspector General as set forth on the Cumulative Sanctions Report or excluded by the General Services Administration as set forth on the List of Excluded Providers.

5.4 Federal Reporting. If applicable to the parties under this Agreement, upon written request, the parties shall make available, for a period of four (4) years after the furnishing of services under this Agreement or such longer period required by applicable laws, rules or regulations, to the Secretary of DHHS, or any of its duly authorized representatives, this Agreement and any of the parties' books, documents and records that are necessary to certify the nature and extent of costs incurred pursuant to this Agreement and which are required to be made available under the Omnibus Reconciliation Act of 1980, Public Law 96-499, Section 952, or any regulation promulgated thereunder.

5.5 Changes in Law or Regulation. In the event of any material change in laws, rules and/or regulations applicable to the parties' activities under this Agreement, the parties agree to promptly discuss and, if necessary, negotiate in good faith any amendments to this Agreement that are necessary in order to comply with such change in laws, rules or regulations applicable to such activities.

6. CONFIDENTIALITY; INTELLECTUAL PROPERTY

6.1 Confidential Information. Except to the extent expressly authorized by this Agreement or otherwise agreed in writing by the parties, the parties agree that, during the Term and continuing for 10 years thereafter, each party (in such capacity, the "***receiving party***") shall keep confidential and shall not publish or otherwise disclose and shall not use for any purpose other than as expressly provided for in this Agreement any Confidential Information of the other party (in such capacity, the "***disclosing party***"). The receiving party may use Confidential Information of the disclosing party only to the extent required to accomplish the purposes of this Agreement. The receiving party will use at least the same standard of care as it uses to protect proprietary or confidential information of its own (but not less than reasonable care) to ensure that its employees, agents, consultants and other representatives do not disclose or make any unauthorized use of the Confidential Information of the disclosing party. The receiving party will promptly notify the disclosing party upon discovery of any unauthorized use or disclosure of the Confidential Information of the disclosing party.

6.2 Exceptions. Confidential Information shall not include any information which the receiving party can demonstrate by competent evidence: (a) is now, or hereafter becomes, through no act or failure to act on the part of the receiving party, generally known or available; (b) is known by the receiving party at the time of receiving such information, as evidenced by its records; (c) is hereafter furnished to the receiving party by a Third Party, as a matter of right and without restriction on disclosure; or (d) is independently discovered or developed by the receiving party without the use of Confidential Information of the disclosing party.

6.3 Authorized Disclosure. The receiving party may disclose Confidential Information of the disclosing party as expressly permitted by this Agreement or if and to the extent such disclosure is reasonably necessary in the following instances:

(a) complying with applicable court orders or governmental regulations; and

(b) disclosure to Affiliates, subcontractors, employees, consultants, agents or other Third Parties who need to know such information in connection with performance of such party's obligations under this Agreement, and disclosure to potential Third Party investors or acquirers in connection with due diligence or similar investigations by such Third Parties or in confidential financing documents with such Third Parties, provided, in each case, that any such Affiliate, subcontractor, employee, consultant, agent or Third Party agrees to be bound by similar terms of confidentiality and non-use at least equivalent in scope to those set forth in this Article 6.

Notwithstanding the foregoing, in the event the receiving party is required to make a disclosure of the disclosing party's Confidential Information pursuant to Section 6.3(a), it will, except where impracticable, give reasonable advance notice to the disclosing party of such disclosure and use reasonable efforts to assist the disclosing party to secure confidential treatment of such information. In any event, if, in the event the disclosing party is unable to secure confidential treatment of such information and the receiving party is required to disclose such information, the receiving party shall disclose only the information it is required to disclose and such disclosure shall not be deemed a breach of this Agreement.

6.4 Confidentiality of this Agreement and its Terms. Except as otherwise provided in this Article 6, each party agrees not to disclose to any Third Party the existence of this Agreement or the terms of this Agreement without the prior written consent of the other party hereto, except that each party may disclose the terms of this Agreement that are not otherwise made public as contemplated by Section 6.5 as permitted under Section 6.3.

6.5 Public Announcements. As soon as practicable following the date hereof, the parties shall issue a mutually agreed press release, which may be joint or individual, announcing the existence of this Agreement. Except as required by applicable laws and regulations (including disclosure requirements of the U.S. Securities and Exchange Commission or any stock exchange on which securities issued by a party or its Affiliates are traded), neither party shall make any other public announcement concerning this Agreement or the subject matter hereof without the prior written consent of the other, which shall not be unreasonably withheld, conditioned or delayed; provided that each party may make any public statement in response to questions by the press, analysts, investors or those attending industry conferences or financial analyst calls, or issue press releases, so long as any such public statement or press release is not inconsistent with prior public disclosures or public statements approved by the other party pursuant to this Section 6.5 and which do not reveal Confidential Information about the other party. In the event of a required public announcement, to the extent practicable under the circumstances, the party making such announcement shall provide the other party with a copy of the proposed text of such announcement sufficiently in advance of the scheduled release to afford such other party a reasonable opportunity to review and comment upon the proposed text.

6.6 Equitable Relief. Given the nature of the Confidential Information and the competitive damage that would result to the disclosing party upon unauthorized disclosure, use or transfer of its Confidential Information to any Third Party, the parties agree that monetary damages may not be a sufficient remedy for any breach of this Article 6. In addition to all other remedies, the disclosing party shall be entitled to seek specific performance and injunctive and

other equitable relief without having to post bond or other security as a remedy for any breach or threatened breach of this Article 6.

6.7 Intellectual Property.

(a) Ownership. Each party shall own and retain all rights in any patents, patent applications, inventions, copyrights, trademarks, know-how, marketing materials and other information, trade secrets or other proprietary or intellectual property owned or licensed by such party (collectively, such party's " ***Intellectual Property*** "). Without limiting the foregoing, (a) CombiMatrix owns, and SCMM acknowledges CombiMatrix's ownership of, the CombiMatrix Testing Services, including all Intellectual Property therein, and (b) SCMM owns, and CombiMatrix acknowledges SCMM's ownership of, the SCMM Testing Services. All data and results from performance of the CombiMatrix Testing Services on specimens provided by SCMM shall be jointly owned by CombiMatrix and SCMM, and each party shall be entitled to use such data and results for any purpose without the consent of, or any payment or duty of accounting to, the other party. Each party shall comply with all applicable laws, rules and regulations in its use of such data and results.

(b) Claims relating to CombiMatrix Testing Services. If any Third Party claims or brings an action alleging that any activities of CombiMatrix or SCMM or their Affiliates with respect to the marketing, use or performance of CombiMatrix Testing Services under this Agreement infringe any of such Third Party's intellectual property rights, CombiMatrix shall use commercially reasonable efforts to address such claims. If CombiMatrix determines to seek a license or otherwise obtain the right to use such Third Party intellectual property rights on behalf of CombiMatrix and SCMM, then CombiMatrix shall be solely responsible for the payment of any reasonable royalties or other payments that may be due to such Third Party. CombiMatrix shall immediately inform SCMM of any such claim by a Third Party, and SCMM shall have the right to cease performance of activities pursuant to Article 2 pending satisfactory resolution of such claim. CombiMatrix shall be solely responsible for any and all damages, liabilities, expenses and/or losses incurred by SCMM or its Affiliates as a result of such claims.

(c) Grant of Rights to SCMM. CombiMatrix hereby grants SCMM a non-exclusive, royalty-free license under all trademarks, trade names, brands and logos of CombiMatrix and/or the CombiMatrix Testing Services (the " ***CombiMatrix Trademarks*** ") to perform all activities and obligations of SCMM under this Agreement including, without limitation, to market, offer for sale and sell CombiMatrix Testing Services. All use of CombiMatrix Trademarks by SCMM hereunder shall inure to the benefit of CombiMatrix, and these rights, whether registered or not registered, at all times shall remain the sole property of CombiMatrix. CombiMatrix shall provide SCMM with copies of all CombiMatrix Trademarks in an appropriate form for the uses contemplated herein. CombiMatrix shall be responsible and bear the expense of any filing, prosecution, maintenance and enforcement of the CombiMatrix Trademarks. In addition, during the Term, CombiMatrix hereby grants to SCMM a non-exclusive, royalty-free license under Intellectual Property of CombiMatrix relating to the CombiMatrix Testing Services (other than the CombiMatrix Trademarks as provided above) to perform all activities and obligations of SCMM under this Agreement including, without limitation, to market, offer for sale and sell CombiMatrix Testing Services.

7. TERM AND TERMINATION

7.1 Term. The term of this Agreement shall commence on the Effective Date and, unless terminated earlier pursuant to the terms hereof, shall continue until the second anniversary of the Effective Date (the " ***Initial Term*** "). This Agreement shall automatically renew for successive twelve (12)-month periods, unless terminated earlier pursuant to the terms hereof (each, a " ***Renewal Term*** ") at the end of the Initial Term and each Renewal Term thereafter, unless either party provides written notice of termination to the other party at least 60 days before the end of the Initial Term or then-current Renewal Term, as applicable (the Initial Term, together with any Renewal Term(s), the " ***Term*** ").

7.2 Termination.

(a) Material Breach. Each party shall have the right to terminate this Agreement upon written notice to the other party if such other party is in material breach of this Agreement and has not cured such breach within 60 days (or 10 days with respect to any payment breach) after receipt of written notice from the terminating party requesting cure of the breach. Any such termination shall become effective at the end of such 60-day (or 10-day with respect to any payment breach) period unless the breaching party has cured such breach prior to the end of such period.

(b) Bankruptcy. Each party shall have the right to terminate this Agreement upon 60 days' prior written notice to the other party upon or after the filing or institution of bankruptcy, reorganization, liquidation or receivership proceedings by or against the other party, or upon an assignment of a substantial portion of the other party's assets for the benefit of creditors; *provided, however,* that in the case of any involuntary bankruptcy proceeding such right to terminate shall only become effective if the other party consents to the involuntary bankruptcy or such proceeding is not dismissed within 90 days after the filing thereof.

(c) SCMM Entry Into Similar Collaboration. CombiMatrix shall have the right to terminate this Agreement upon 60 days' prior written notice to SCMM if, during the Term, SCMM enters into a collaboration with any Third Party provider of invasive prenatal diagnostic tests (other than CombiMatrix or an Affiliate of CombiMatrix) pursuant to which SCMM markets or promotes, together with the SCMM Testing Services, the invasive prenatal diagnostic test owned by such Third Party provider.

7.3 Effect of Termination.

(a) Generally. Upon any expiration or termination of this Agreement, all rights and obligations under this Agreement shall automatically terminate, except as provided in this Section 7.3.

(b) Return of Confidential Information. Within 30 days following any expiration or termination of this Agreement, each party shall return to the other party, at its own expense, all Confidential Information of the other party.

(c) Accrued Obligations; Survival. Neither expiration nor any termination of this Agreement shall relieve either party of any obligation or liability accruing prior to such

expiration or termination, including any obligation to make payments hereunder, nor shall expiration or any termination of this Agreement preclude either party from pursuing all rights and remedies it may have under this Agreement, at law or in equity, with respect to breach of this Agreement. In addition, the parties' rights and obligations under Sections 2.7, 5.4, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7(a), 7.3, 7.4, 8.2 and 8.3, and Articles 1, 3 (for payments owed to SCMM hereunder) and 9, of this Agreement shall survive expiration or any termination of this Agreement.

7.4 Rights Upon Bankruptcy. All rights and licenses granted under or pursuant to this Agreement are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title 11 of the United States Code and other similar laws in any jurisdiction outside the U.S. (collectively, the " ***Bankruptcy Laws*** "), licenses of rights to be "intellectual property" as defined under the Bankruptcy Laws. If a case is commenced during the Term by or against a party under Bankruptcy Laws then, unless and until this Agreement is rejected as provided in such Bankruptcy Laws, such party (in any capacity, including debtor-in-possession) and its successors and assigns (including a trustee) shall perform all of the obligations provided in this Agreement to be performed by such party. If a case is commenced during the Term by or against a party under the Bankruptcy Laws, this Agreement is rejected as provided in the Bankruptcy Laws and the other party elects to retain its rights hereunder as provided in the Bankruptcy Laws, then the party subject to such case under the Bankruptcy Laws (in any capacity, including debtor-in-possession) and its successors and assigns (including a Title 11 trustee), shall provide to the other party copies of all information necessary for such other party to prosecute, maintain and enjoy its rights under the terms of this Agreement promptly upon such other party's written request therefor. All rights, powers and remedies of the non-bankrupt party as provided herein are in addition to and not in substitution for any and all other rights, powers and remedies now or hereafter existing at law or in equity (including, without limitation, the Bankruptcy Laws) in the event of the commencement of a case by or against a party under the Bankruptcy Laws.

8. REPRESENTATIONS AND WARRANTIES; LIMITATION OF LIABILITY

8.1 Representations and Warranties. Each party represents and warrants to the other that: (a) it is duly organized and validly existing under the laws of its jurisdiction of incorporation or formation, and has full corporate or other power and authority to enter into this Agreement and to carry out the provisions hereof; (b) it is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person or persons executing this Agreement on its behalf has been duly authorized to do so by all requisite corporate or partnership action; (c) this Agreement is legally binding upon it, enforceable in accordance with its terms, and does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound, nor violate any material law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it; (d) it shall ensure that all of its employees or contractors acting on its behalf pursuant to this Agreement are and will abide by and comply with this Agreement, including all obligations of confidentiality and non-use consistent with those set forth in this Agreement and each party shall be responsible for any breach of such obligation on the part of any of its employees or contractors; and (e) it is not debarred under any U.S. or foreign government health care programs or the United States Federal Food, Drug and Cosmetic Act or comparable applicable law or regulation in any other country or jurisdiction and it does not, and will not during the Term,

employ or use the services of any person or entity who is debarred, in connection with the development, manufacture or commercialization of CombiMatrix Testing Services or SCMM Testing Services, as applicable. In the event that either party becomes aware of the debarment or threatened debarment of any person or entity providing services to such party, including the party itself and its Affiliates, which directly or indirectly relate to activities under this Agreement, the other party shall be immediately notified in writing. Additionally, CombiMatrix represents and warrants that neither CombiMatrix nor any Affiliate of CombiMatrix (i) has received written notice from any Third Party claiming that the manufacture, use, sale, offer for sale or import of the CombiMatrix Testing Services, or use of any CombiMatrix Trademark, infringes or would infringe the Intellectual Property of any Third Party; (ii) is a party to any legal action, suit or proceeding relating to the CombiMatrix Testing Services or CombiMatrix Trademarks; or (iii) has received any written communication from any Third Party threatening any action, suit or proceeding relating to the CombiMatrix Testing Services or CombiMatrix Trademarks.

8.2 Disclaimer. Except as expressly set forth in this Agreement, EACH PARTY EXPRESSLY DISCLAIMS ANY AND ALL WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF DESIGN, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THE INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICES.

8.3 Limitation of Liability. EXCEPT FOR PAYMENTS UNDER SECTION 3 OR LIABILITY FOR BREACH OF SECTION 6, NEITHER PARTY SHALL BE ENTITLED TO RECOVER FROM THE OTHER PARTY ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES IN CONNECTION WITH THIS AGREEMENT OR ANY LICENSE GRANTED HEREUNDER. Except for SCMM's indemnity obligations under Section 9.13(c) of this Agreement and notwithstanding anything else to the contrary set forth herein, SCMM's and its Affiliates' total liability to CombiMatrix under or in connection with this Agreement shall not exceed an amount equal to the total fees paid by CombiMatrix under Article 3 hereof up to the date of SCMM and/or its Affiliate(s) incurring such liability.

9. GENERAL PROVISIONS

9.1 Governing Law. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding its conflicts of laws principles.

9.2 Dispute Resolution.

(a) Claims. Except for Excluded Claims, and subject to Section 9.2(c) below, any claim, dispute, or controversy of whatever nature arising out of or relating to this Agreement that is not resolved under Section 9.2(a) within the required 30-day period, including, without limitation, any action or claim based on tort, contract, or statute, or concerning the interpretation, effect, termination, validity, performance and/or breach of this Agreement (" **Claim** "), shall be resolved by final and binding arbitration administered by JAMS (the " ***Administrator*** ") in

accordance with its then-effective Comprehensive Arbitration Rules and Procedures (the " ***Rules*** "), except to the extent any such Rule conflicts with the express provisions of this Section 9.2. The arbitration shall be conducted by one neutral arbitrator selected in accordance with the Rules. The arbitration and all associated discovery proceedings and communications shall be conducted in English, and the arbitration shall be held in San Diego, California, USA.

(b) Arbitrators' Award. The arbitrator's award shall include a written statement describing the essential findings and conclusions on which the award is based, including the calculation of any damages awarded. The arbitrator shall, in rendering his or her decision, apply the substantive laws of the State of California, USA, without giving effect to its conflicts of laws principles, and without giving effect to any rules or laws relating to arbitration. The arbitrator's authority to award special, incidental, consequential or punitive damages shall be subject to the limitation set forth in Section 8.3. The award rendered by the arbitrator shall be final, binding and non-appealable, and judgment may be entered upon it in any court of competent jurisdiction. However, the parties agree that the JAMS Optional Arbitration Appeal Procedures shall apply to the arbitration, at the request by either party in accordance with such Appeal Procedures. If a party appeals the award rendered by the arbitrator, the award issued by the Appeal Panel (as defined in such Appeal Procedures) shall be final, binding and non-appealable, and judgment may be entered upon it in any court of competent jurisdiction.

(c) Costs. Each party shall bear its own attorney's fees, costs, and disbursements arising out of the arbitration, and shall pay an equal share of the fees and costs of the arbitrator; *provided, however,* the arbitrator shall be authorized to determine whether a party is the prevailing party, and if so, to award to that prevailing party reimbursement for any or all of its reasonable attorneys' fees, costs and disbursements (including, for example, expert witness fees and expenses, photocopy charges, travel expenses, etc.), and/or the fees and costs of the Administrator and the arbitrator.

(d) Court Actions. Nothing contained in this Agreement shall deny either party the right to seek injunctive or other equitable relief from a court of competent jurisdiction in the context of a bona fide emergency or prospective irreparable harm, and such an action may be filed and maintained notwithstanding any ongoing discussions between the parties or any ongoing arbitration proceeding. In addition, either party may bring an action in any court of competent jurisdiction to resolve disputes pertaining to the validity, construction, scope, enforceability, infringement or other violations of intellectual property rights, and no such claim shall be subject to arbitration pursuant to Section 9.2(b).

9.3 Entire Agreement; Modification. This Agreement (including the Exhibits hereto) is both a final expression of the parties' agreement and a complete and exclusive statement with respect to all of its terms. This Agreement supersedes all prior and contemporaneous agreements and communications, whether oral, written or otherwise, concerning any and all matters contained herein. This Agreement may only be modified or supplemented in a writing expressly stated for such purpose and signed by the parties to this Agreement.

9.4 Relationship between the Parties. The parties' relationship, as established by this Agreement, is solely that of independent contractors. This Agreement does not create any partnership, joint venture or similar business relationship between the parties. Neither party is a legal representative of the other party and neither party can assume or create any obligation, representation, warranty or guarantee, express or implied, on behalf of the other party for any purpose whatsoever.

9.5 Non-Waiver. The failure of a party to insist upon strict performance of any provision of this Agreement or to exercise any right arising out of this Agreement shall neither impair that provision or right nor constitute a waiver of that provision or right, in whole or in part, in that instance or in any other instance. Any waiver by a party of a particular provision or right shall be in writing, shall be as to a particular matter and, if applicable, for a particular period of time and shall be signed by such party.

9.6 Assignment. Except as expressly provided hereunder, neither this Agreement nor any rights or obligations hereunder may be assigned or otherwise transferred by either party without the prior written consent of the other party (which consent shall not be unreasonably withheld, conditioned or delayed); *provided, however,* that either party may assign this Agreement and its rights and obligations hereunder without the other party's consent: (a) in connection with the transfer or sale of all or substantially all of the business of such party to which this Agreement relates to a Third Party, whether by merger, sale of stock, sale of assets or otherwise; or (b) to an Affiliate, *provided* that the assigning party shall remain liable and responsible to the non-assigning party hereto for the performance and observance of all such duties and obligations by such Affiliate. The rights and obligations of the parties under this Agreement shall be binding upon and inure to the benefit of the successors and permitted assigns of the parties, and the name of a party appearing herein will be deemed to include the name of such party's successors and permitted assigns to the extent necessary to carry out the intent of this section. Any assignment not in accordance with this Agreement shall be void.

9.7 No Third Party Beneficiaries. This Agreement is neither expressly nor impliedly made for the benefit of any party other than those executing it.

9.8 Severability. If, for any reason, any part of this Agreement is adjudicated invalid, unenforceable or illegal by a court of competent jurisdiction, then such adjudication shall not, to the extent feasible, affect or impair, in whole or in part, the validity, enforceability or legality of any remaining portions of this Agreement. All remaining portions shall remain in full force and effect as if the original Agreement had been executed without the invalidated, unenforceable or illegal part.

9.9 Notices. Any notice to be given under this Agreement must be in writing and delivered either in person, by any method of mail (postage prepaid) requiring return receipt, or by overnight courier or facsimile confirmed thereafter by any of the foregoing, to the party to be notified at its address(es) given below, or at any address such party has previously designated by prior written notice to the other. Notice shall be deemed sufficiently given for all purposes upon the earliest of: (a) the date of actual receipt; (b) if mailed, three (3) days after the date of postmark; or (c) if delivered by overnight courier, the next business day the overnight courier regularly makes deliveries.

If to CombiMatrix, notices must be addressed to:

CombiMatrix Diagnostics, Inc.
300 Goddard, Suite 100
Irvine, California 92618
Attention: President and CEO)
Telephone: (949) 226-9630

If to SCMM, notices must be addressed to:

SCMM, Inc.
3595 John Hopkins Court
San Diego, California 92121
Attention: Senior Vice President and General Counsel
Telephone: (858) 202-9400

9.10 Force Majeure. Except for the obligation to make payment when due, each party shall be excused from liability for the failure or delay in performance of any obligation under this Agreement by reason of any event beyond such party's reasonable control, including but not limited to Acts of God, fire, flood, explosion, earthquake, or other natural forces, war, civil unrest, acts of terrorism, accident, destruction or other casualty, any lack or failure of transportation facilities, any lack or failure of supply of raw materials, any strike or labor disturbance, or any other event similar to those enumerated above. Such excuse from liability shall be effective only to the extent and duration of the event(s) causing the failure or delay in performance and *provided* that the party has not caused such event(s) to occur. Notice of a party's failure or delay in performance due to force majeure must be given to the other party within 10 days after its occurrence. All delivery dates under this Agreement that have been affected by force majeure shall be tolled for the duration of such force majeure. In no event shall any party be required to prevent or settle any labor disturbance or dispute.

9.11 Interpretation. The headings of clauses contained in this Agreement preceding the text of the sections, subsections and paragraphs hereof are inserted solely for convenience and ease of reference only and shall not constitute any part of this Agreement, or have any effect on its interpretation or construction. All references in this Agreement to the singular shall include the plural where applicable, and all references to gender shall include both genders and the neuter. Unless otherwise specified, references in this Agreement to any section shall include all subsections and paragraphs in such Section and references in this Agreement to any subsection shall include all paragraphs in such subsection. All references to days in this Agreement shall mean calendar days, unless otherwise specified. Ambiguities and uncertainties in this Agreement, if any, shall not be interpreted against either party, irrespective of which party may be deemed to have caused the ambiguity or uncertainty to exist. This Agreement has been prepared in the English language and the English language shall control its interpretation. In addition, all notices required or permitted to be given hereunder, and all written, electronic, oral or other communications between the parties regarding this Agreement shall be in the English language.

9.12 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original document, and all of which, together with this writing, shall be deemed one instrument. This Agreement may be executed by facsimile or PDF signatures, which signatures shall have the same force and effect as original signatures.

9.13 Insurance, Indemnification and Notice.

(a) Proof of Insurance. Each party shall procure and maintain, at its expense, during the Term of this Agreement, at least the following insurance covering activities performed by it under this Agreement and contractual obligations undertaken by it in this Agreement:

COVERAGE	LIMITS
(a) Workmen's Compensation	Statutory
(b) Employer's Liability	$500,000 each occurrence
(c) Public Liability (bodily injury)	$1,000,000 combined single limit
(d) Public Liability (property damage)	$1,000,000 combined single limit

Upon request, each party agrees to furnish the other party with insurance certificates, showing such party's compliance with this Section 9.13. Such certificates shall contain a statement that the insurance carrier will not cancel or modify such insurance without giving the other party at least thirty (30) day's prior written notice. Each party shall be named as an additional insured party under such policies. However, failure of either party to have insurance coverage, inability to obtain insurance coverage, or any inadequacy of insurance coverage of either party shall not relieve or decrease such party's liabilities under this Agreement.

(b) Indemnification by SCMM. SCMM hereby agrees to indemnify and hold CombiMatrix harmless from and against any and all liability, losses, damages, claims or causes of action, and expenses connected therewith, including, but not limited to, reasonable attorney's fees, caused directly or indirectly by or as a result of any negligent or intentional act, error or omission by SCMM, its employees, agents, servants or representatives in the performance of SCMM's duties and responsibilities hereunder.

(c) Indemnification by CombiMatrix. CombiMatrix agrees to indemnify and hold SCMM harmless from and against any and all liability, losses, damages, claims or causes of action, and expenses connected therewith, including, but not limited to, reasonable attorney's fees, caused directly or indirectly, by or as a result of any negligent or intentional act, error or omission by CombiMatrix, its employees, agents, servants or representatives with respect to its duties and responsibilities hereunder.

(d) Notice. The party seeking indemnification shall promptly notify the other party of any claim asserted against it for which such indemnification is sought, and shall promptly deliver to the Party from whom indemnification is sought a true copy of any such claim including, but not limited to, a true copy of any summons or other process, pleading or notice issued in any lawsuit or other proceeding to assert or enforce such claim. Where acceptance of its obligation to indemnify is deemed proper by the indemnifying party, said party reserves the right

to control the investigation, trial and defense of such lawsuit or action (including all negotiations to effect settlement) and any appeal arising therefrom and to employ or engage attorneys of its own choice. The party seeking indemnification may, at its own cost, participate in such investigation, trial and defense of such lawsuit or action and any appeal arising therefrom. The party seeking indemnification, its employees, agents, servants and representatives shall provide full cooperation to the indemnifying Party upon the indemnifying party's request for such cooperation at all times during the pendency of the claim or lawsuit, including, without limitation, providing it with all available information concerning the claim; provided, however, the indemnifying party shall reimburse the indemnified Party any reasonable expenses it incurs as the result of such cooperation.

IN WITNESS WHEREOF , the duly authorized representatives of the parties have executed this Agreement as of the Effective Date.

SEQUENOM CENTER FOR MOLECULAR MEDICINE, LLC.

By: /s/ William Welch

Name: William Welch

Title: President

COMBIMATRIX DIAGNOSTICS, INC.

By: /s/ Mark McDonough

Name: Mark McDonough

Title: President and CEO

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

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. 333-198848, 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. 333-197322, 333-190534, 333-193302 and 333-145704 on Form S-8 of CombiMatrix Corporation of our report dated March 17, 2015 relating to our audits of the consolidated financial statements of CombiMatrix Corporation as of and for each of the years ended December 31, 2014 and 2013.

/S/ HASKELL & WHITE LLP

Irvine, California
March 17, 2015

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 17, 2015

/s/ MARK MCDONOUGH

Mark McDonough
President and Chief Executive Officer

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 17, 2015

/s/ SCOTT R. BURELL

Scott R. Burell
Chief Financial Officer

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, 2014, as filed with the Securities and Exchange Commission on March 17, 2015 (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 17, 2015

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, 2014, as filed with the Securities and Exchange Commission on March 17, 2015, (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 17, 2015