CAS MEDICAL SYSTEMS INC
Form 10-K
March 18, 2015

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

Commission File Number 0-13839

CAS MEDICAL SYSTEMS, INC.
(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of Incorporation or organization)	06-1123096 (I.R.S. Employer Identification No.)

44 East Industrial Road, Branford, Connecticut 06405
(Address of principal executive offices, including zip code)

(203) 488-6056
(Registrant's telephone number, including area code)

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, $.004 par value	The NASDAQ Capital Market

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 o No x

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 o No x

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 such filing requirements for the past 90 days. Yes x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§

232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

Indicate by check mark if 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. x

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

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

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

As of June 30, 2014, which is 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 of the registrant was $34,056,000 based on the closing price as reported on the NASDAQ Capital Market. This calculation does not reflect a determination that persons are affiliates for any other purpose.

As of March 17, 2015, there were 26,749,960 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for its Annual Meeting of Stockholders to be held on June 23, 2015, are incorporated by reference in Part III of this Report. Except as expressly incorporated by reference, the Registrant's Proxy Statement shall not be deemed to be part of this Form 10-K.

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PART I

This report contains information that includes or is based on forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to risks and uncertainties. These statements may be identified by the use of words such as "anticipates," "expects," "estimates," "projects," “goal,” "intends," and "believes," and variations thereof, and other terms of similar meaning. Factors that could cause the Company's actual results and financial condition to differ from the Company's expectations include, but are not limited to: potential liquidity constraints, price and product competition, rapid technological changes, dependence on new product development, failure to introduce new products effectively or on a timely basis, the mix of products sold, supply and prices of raw materials and products, customer demand for the Company’s products, regulatory actions, changes in reimbursement levels from third-party payors, product liability or other litigation claims, changes in economic conditions that adversely affect the level of demand for the Company's products, changes in foreign exchange markets, changes in financial markets, changes in the competitive environment, and other risks described in Item 1A “Risk Factors” and Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in this Annual Report on Form 10-K. While the Company believes that the assumptions underlying such forward-looking statements are reasonable, there can be no assurance that future events or developments will not cause such statements to be inaccurate. All forward-looking statements contained in this report are qualified in their entirety by this cautionary statement.

The Company cautions you not to place undue reliance on these forward-looking statements, which speak only as of their respective dates. The Company undertakes no obligation to publicly update or revise forward-looking statements to reflect events or circumstances after the date of this Annual Report on Form 10-K or to reflect the occurrence of unanticipated events, except as required by law.

Unless the context indicates otherwise, as used in this report, the terms “CAS,” “CASMED,” the “Company,” “we,” “us,” and “our” refer to CAS Medical Systems, Inc.

Item 1. Business

Overview

We are a medical technology company that develops, manufactures, and markets non-invasive patient monitoring products that are vital to patient care. Our principal products are the FORE-SIGHT® and FORE-SIGHT ELITE® brand tissue oximeters and sensors which comprised 54% of our 2014 sales. We also sell various legacy products that we group into a category entitled Traditional Monitoring, which includes non-invasive blood pressure measurement technologies, stand-alone patient vital signs monitors, and neonatal medical disposables.

We believe that our FORE-SIGHT Tissue Oximetry products place CASMED in a unique position to expand the clinical application for monitoring tissue oxygenation. Standard non-invasive parameters such as pulse oximetry and blood pressure provide only surrogate markers of tissue oxygen delivery. The indirect nature of these parameters forces clinicians to infer the adequacy of oxygenation in vital organs, including the brain. However, data convincingly shows that clinician inferences of cerebral oxygenation during medical procedures often does not correlate with actual tissue oxygenation levels and that potentially dangerously low levels of cerebral oxygenation often go unrecognized. Therefore, direct monitoring of cerebral oxygenation with FORE-SIGHT oximeters provides a unique and powerful tool that allows clinicians to recognize and treat potentially dangerous tissue hypoxia to avoid adverse clinical outcomes.

As clinician education and experience demonstrates that use of cerebral and tissue oximetry improves patient care, the market for these monitors should continue to expand at attractive rates as the industry penetrates what we believe is

more than a $500-million addressable market. We believe the FORE-SIGHT Tissue Oximeter provides the most accurate and reliable readings and is well-positioned to compete in that expanding market.

Recent Developments

CASMED reached an inflection point in late 2013 when it launched its second-generation FORE-SIGHT oximeter under the brand FORE-SIGHT ELITE. This product was the result of an extensive three-year research, development, and production effort and brought to the market a user-friendly monitor at lower costs that significantly improved the Company's business model. The FORE-SIGHT ELITE oximeter also built upon the industry-leading accuracy of the first-generation monitor and empowers clinicians to better manage patients, improve outcomes, and lower costs.

The strong momentum apparent in the Company's 2014 performance was largely driven by this new product introduction. FORE-SIGHT cerebral oximetry sales were up 37%, gross profit rate improved 750 basis points, operating expenses were well-controlled and down nearly 10%, the Company's operating loss materially narrowed by 35%, and the Company's quarterly cash consumption rate fell significantly to approximately $1.3 million in the fourth quarter. We believe our FORE-SIGHT oximetry products are well positioned to help penetrate the addressable cerebral and tissue monitoring market that could ultimately reach $500 million or more, and therefore, a continued focus on that market opportunity is the correct strategy to create value for our stockholders over the longer term.

A drop in sales of some of the Company's other non-FORE-SIGHT legacy products masked some FORE-SIGHT performance and reduced our overall sales growth rate to just 4%. However, with recurring FORE-SIGHT disposable sales now accounting for approximately 45% of our sales and neonatal disposable sales accounting for another 10%, the Company's strategic plan to transition from a medical capital equipment company to a medical disposables company remains on track.

Strategy

Over the past three years, we took significant steps to capitalize on the opportunity for the growth of our FORE-SIGHT cerebral oximetry franchise, while we prudently invested to refresh and rebuild our Traditional Monitoring product lines.

Specifically, our current strategy has its foundation in the opportunity provided by FORE-SIGHT oximetry. Given the unique clinical value of FORE-SIGHT and its position as a best-in-class cerebral oximeter in an expanding market, we believe that substantial investment in the FORE-SIGHT opportunity is warranted. Therefore, over the past three years we have committed significant resources to expand, upgrade, and revitalize our FORE-SIGHT sales organization, and to increase our marketing and clinical support for the product. We also engaged in a major research and development initiative to launch a second-generation FORE-SIGHT product called FORE-SIGHT ELITE, in order to improve the functionality of the monitor, to lower manufacturing costs, and to meet the evolving needs of our customers. The FORE-SIGHT ELITE monitor and sensors were introduced to the market in late-September 2013 and have been the catalyst towards increased oximetry sales growth rates, higher margins, expanded international distribution, and leveraged operating expenses.

At the same time, we have made a measured investment to refresh and rebuild certain offerings within our Traditional Monitoring product lines where we enjoy strong brand loyalty and long-term customers who value the high-quality products and service we provide. We successfully engaged in development efforts to design both a new non-invasive blood pressure suite of products and an upgraded and refreshed vital signs monitor. These new products were also introduced to the markets in the third quarter of 2013.

With careful execution of this strategy, we realized many accomplishments in 2014, including:

- Worldwide FORE-SIGHT sales increased 37% over 2013 levels, including a 32% growth in worldwide disposable sensor sales.

FORE-SIGHT sales comprised 54% of 2014 total sales, and FORE-SIGHT disposable sales comprised approximately 45% of our total sales.

We realized worldwide net shipments of 394 FORE-SIGHT monitors for the year, more than doubling the number of monitors shipped in 2013. As of December 31, 2014, we have reached a cumulative worldwide net shipment of 1,329 monitors, since FORE-SIGHT was introduced, an increase of 42% from the cumulative total as of December 31, 2013. At year end, the installed base of FORE-SIGHT monitors in the U.S. reached 725.

In June 2014, we entered into a $10.0-million loan agreement with General Electric Capital Corporation ("GECC") which included a $7.5-million, 48-month term loan and a revolving line-of-credit in the maximum amount of $2.5 million.

We executed on our strategy to open and enhance the five largest medical markets in the world outside of the U.S. by engaging new high-quality distributors in Japan, France, Germany, and the U.K., and by supporting the sale of our FORE-SIGHT monitors in China after securing regulatory approval to market the product in late 2013.

We continued to shift our U.S. FORE-SIGHT distribution channel from one predominantly based upon independent manufacturer rep organizations to full-time direct personnel. Our U.S. direct-selling organization of 14 people at year-end was responsible for approximately 66% of our U.S. FORE-SIGHT sales, up from just 18% in 2011.

We believe we continued to gain market share in the cerebral oximetry business by winning customers from our competitors (approximately two-thirds of new accounts), by introducing cerebral oximetry into hospitals that were not previously utilizing cerebral oximetry (about one-third of new accounts), and by increasing usage in our existing base of U.S. customers (up 18%).

While sales in the Traditional Monitoring category fell in 2014 from the prior year due to lower vital signs monitor sales, our neonatal disposable product line grew 7%. Our OEM non-invasive blood pressure product sales fell 12%, although those sales grew 4% when excluding the expected loss of a customer in mid-2013.

Throughout 2014, we introduced FORE-SIGHT into many of the top academic and cardiac hospitals. Our FORE-SIGHT customers now include ten of the top-20 adult cardiac hospitals in the U.S., as ranked by U.S. News and World Report.

Description of Products and Services

The Company reports two categories of sales within one reportable business unit.

Tissue Oximetry Monitoring – includes sales of the Company's FORE-SIGHT Tissue Oximeter monitors, sensors, and accessories.

Traditional Monitoring – includes sales of the Company's legacy products comprising: (i) the OEM sale of the Company's proprietary non-invasive blood pressure technology (MAXNIBP® and MAXIQ™); (ii) low acuity vital signs monitors and accessories; (iii) neonatal intensive care disposable supplies; and (iv) monitor service and repair.

Tissue Oximetry Monitoring

CASMED's FORE-SIGHT Tissue Oximeter technology provides a simple, non-invasive, quantitative measurement of oxygenation in cerebral tissue. The percentage saturation of cerebral hemoglobin with oxygen is obtained by placing a sensor on both the right and the left side of the patient's forehead. The FORE-SIGHT ELITE sensors emit five different wavelengths of infrared light that harmlessly penetrate into the cerebral tissue and are reflected back to photo-detectors in the same sensor. An exclusive algorithm then determines the percentage of hemoglobin that is saturated with oxygen in the blood of the brain tissue underlying each sensor. Through these proprietary and patented processes, FORE-SIGHT provides clinicians with an accurate, absolute numerical measure of tissue oxygenation. FORE-SIGHT can also be used to monitor the oxygenation of other tissues such as muscle and abdominal tissues in newborns weighing less than 4 kilograms.

By non-invasively and continuously measuring absolute cerebral tissue oxygen levels, our FORE-SIGHT Tissue Oximeter enables clinicians to identify and quickly react to dangerously low brain oxygen levels and provide better care.

We believe that FORE-SIGHT incorporates a combination of features that permit oxygenation values obtained to be more reliable and more accurate and, therefore, more actionable by clinicians in critical care environments.

CASMED's FORE-SIGHT ELITE monitors emit five wavelengths of light, permitting an increased level of signal acquisition, thereby providing sufficient data to solve for other optical variables in the tissue sample, such as melanin in the skin, which would otherwise be confused as hemoglobin signals.

CASMED's FORE-SIGHT sensors are designed with a preferred geometry, maximizing the distance between the light source and the farthest photo-detector, thereby providing a light pathway that penetrates deeper into the tissue giving a greater tissue sample for interrogation.

CASMED's FORE-SIGHT patented and proprietary algorithm utilizes a combination of methods to sort out optical signals created by non-critical background tissue that otherwise confound measurement of oxygenated hemoglobin levels.

Monitors that predominantly provide trend-based values differ significantly from the FORE-SIGHT oximeter which provides absolute values. Trend-based monitors rely upon a baseline measurement from which a declination of some percentage is then considered to be an actionable "desaturation" event. However, the baseline presumes the patient's oxygenation levels are not already compromised by the introduction of anesthesia, inspired oxygen, existing cardiovascular disease, compromised physiology, or other confounding factors. Therefore, in those instances where a patient is already ill, is already being treated, or for which a single "spot check" value is sought, a valid baseline measurement may not be available.

With FORE-SIGHT's absolute tissue oxygenation measurement, clinicians can have confidence that the value displayed is an accurate reflection of the actual tissue oxygenation to enable clinical interventions once a predetermined absolute threshold is reached (for example, if the oxygen saturation levels drop below an absolute value of 60%).

We believe our FORE-SIGHT oximeter helps clinicians solve a serious deficit in the care of many critical care patients. Unrecognized and dangerous desaturation events occur with much greater frequency than previously known and can only be identified with the direct measurement that tissue oximeters provide. Given this evidence, we believe our best-in-class FORE-SIGHT technology continues to gain clinical adoption in new and existing accounts and is well-positioned in the market for significant future growth.

Creating an inflection point for our Company, we launched late in the third quarter of 2013 our next-generation FORE-SIGHT ELITE Tissue Oximeter. The FORE-SIGHT ELITE monitor is lighter and more portable than our prior model, includes more features, and provides for enhanced ease of use. New features include the ability to monitor four channels of patient data; a larger, higher contrast viewing screen; and intuitive touch-screen controls. Its revolutionary system, using five wavelengths of light to interrogate tissue under the sensor, allows the ELITE system to measure oxygenation at levels of accuracy previously not seen.

The FORE-SIGHT ELITE has also been designed for lower manufacturing and service costs. Therefore, as the percentage of sales comprising FORE-SIGHT ELITE monitors and sensors rose throughout 2014, so, too, did the Company's gross profit rate, ultimately finishing at 42%, a gain of 750 basis points over 2013 gross profit rate.

Since its introduction in 2007 through the end of 2014, we have shipped a cumulative total of 1,329 FORE-SIGHT monitors to customers throughout the world, including 394 monitors shipped in 2014. The quantity of "net units shipped" that we report each fiscal quarter adds to this cumulative total and reflects the number of monitors shipped to customers less returns. The cumulative total is not affected by exchanges or monitor upgrades. Cumulative net shipments in the U.S. stood at 725 monitors at year-end 2014, up 33% over the prior year-end base.

The Need for Tissue Oxygenation Monitoring

Oxygen is necessary to keep cells viable. The brain has a very high metabolic rate, consuming approximately 20% of the body's oxygen at rest. It is thus the organ that is least resistant to oxygen deprivation. Lack of sufficient oxygenation in the brain causes neurologic injury such as cognitive impairment, stroke, paralysis, coma and/or hypoxic encephalopathy. These injuries can result in severe morbidity or even death. Dangerous deficits in brain hemoglobin saturation (reflecting decreased brain oxygen levels) are termed "desaturation events" because the hemoglobin of the blood is no longer sufficiently "saturated" with oxygen molecules. Desaturations can be caused by many factors. The brain responds to insufficient levels of oxygen by increasing ventilation, cardiac output, and blood pressure in order to increase oxygen delivery. It also vasodilates to increase brain blood flow. This biologic process is called "auto-regulation." However, auto-regulation is compromised by illness, surgical intervention, trauma, and anesthesia, and neonates and children have immature auto-regulation capabilities.

Inadequate oxygen delivery to the brain can be caused by:

Hypoxemia: a decrease of hemoglobin oxygen saturation in arterial blood (inadequate oxygenation of the supply);

Ischemia: a decrease in blood flow to the brain caused by inadequate cardiac output, occlusion of cerebral vessels, or increased intracranial pressure (inadequate volume of supply); and

Anemia: a decrease in the concentration of red blood cells in the blood (inadequate oxygen carrying capacity).

Oxygen delivery must also match oxygen consumption related to the metabolic rate of the brain.

Most conventional monitoring is ultimately employed to assure an adequate balance between oxygen supply and demand. Reliably measuring the impact of complicated interactions among factors affecting cerebral oxygenation requires unacceptably invasive techniques. Standard parameters, such as pulse oximetry, heart rate and blood pressure determinations, capnometry, and cardiac output assessment, each provide only indirect predictions of cerebral oxygenation. From that information, a clinician can only infer that a patient's brain inadequately oxygenated. Data from cerebral oximetry convincingly shows that the estimations clinicians make about cerebral oxygenation based solely on these indirect measures are frequently wrong and that threatening cerebral desaturation events occur without recognition. Thus, in many acute care settings, such as surgery, intensive care, and other critical care environments, patients are exposed to potentially damaging cerebral hypoxia that could likely be prevented if recognized.

The following is a table that details a sampling of observational studies that show the percentage of patients who suffered from cerebral desaturation events (CDEs) as variously defined in each publication:

Incidence Of CDEs	Procedure	Citation
73%	Aortic arch surgery	Fischer GW, et.al. Noninvasive cerebral oxygenation may predict outcome in patients undergoing aortic arch surgery. J Thorac Cardiovasc Surg. 2011;141(3):815-21.
60%	Cardiac Surgery	Fedorow C, Grocott HP. Cerebral monitoring to optimize outcomes after cardiac surgery. Curr Opin Anaesthesiol. 2010 Feb;23(1):89-94.
25% with shunts 3.9% without	Carotid Endarterectomy	DeNaeyer S, et.al. Non-invasive absolute cerebral oximetry and intraluminal shunting during carotid endarterectomy. Presented at American Society of Anesthesiologists Annual Meeting 2010 # A398.
45.9± 134 (min-%)	EP Lab	Miller MA,et.al. Activation and entrainment mapping of hemodynamically unstable ventricular tachycardia using a percutaneous left ventricular assist device. J Am Coll Cardiol. 2011; 58(13):1363-71.
26%	General Abdominal Surgery, Elderly	Casati A, et.al. Monitoring cerebral oxygen saturation in elderly patients undergoing general abdominal surgery: a prospective cohort study. Eur J Anaesthesiol. 2007 Jan;24(1):59-65. Epub 2006 Jul 7.

50%	ICU, Post-cardiac surgery	Greenberg SB,et.al. The Incidence of cerebral oxygen desaturation event in the intensive care unit (ICU) following cardiac surgery. Presented at American Society of Anesthesiologists Annual Meeting 2011 #A1454.

18%	Craniotomy from acute intracerebral bleeding	Dylst D,et.al.Monitoring of absolute cerebral oxygen saturation during craniotomy for acute intracerebral bleeding. Eur J Anaesthesiol 2009; 26 (Suppl 45): 7AP5-6.
80%	Shoulder surgery- beach chair position	Murphy GS,et.al. Cerebral oxygen desaturation events assessed by near-infrared spectroscopy during shoulder arthroscopy in the beach chair and lateral decubitus positions. Anesth Analg 2010; 111(20: 496-5.
36%	Spine surgery in prone position	Hemmerling, Thomas M., et.al. Decrease of Cerebral Oxygen Saturation in Prone Position During Spine Surgery Measured by Absolute Cerebral Oximetry Presented at American Society of Anesthesiologists Annual Meeting 2010 #LB07.
43%	Thoracic Surgery	Roberts, et.al. Cerebral Oximetry and Recovery in Thoracic Surgery Presented at American Society of Anesthesiologists Annual Meeting 2013 #A2030.

This and a growing body of clinical evidence substantiates the premise that measuring cerebral oximetry offers valuable insight to clinicians during the management of critical care patients which could permit them to increase safety, improve clinical outcomes, and reduce costs.

The Market for Tissue Oximetry

Cerebral desaturation events occur with much greater frequency than previously believed. The large and growing body of published literature in support of cerebral oximetry provides a solid academic and data-driven support for the expanded use of the product in a variety of critical care settings including: heart surgery; lung surgery; major vascular surgery; neurosurgery; surgeries that provide a risk of large blood loss, such as orthopedic hip and spine; surgeries on elderly patients or those with compromised vascular systems or other co-morbidities; surgeries with non-supine patient positioning such as orthopedic “beach chair” shoulder surgery and bariatric surgery; trauma care; cardiac arrest; and intensive care patient management in adult, pediatric, and neonatal wards, among others. In the U.S. alone, therefore, cerebral monitoring could safeguard millions of patients each year.

While we believe the eventual addressable market for tissue oximetry exceeds $500 million, we estimate current total worldwide annual sales of tissue oximetry to be approximately $85 million to $100 million. Given the broad potential applicability of this parameter and the small current rate of market penetration, we also believe that market rates of growth can accelerate in the foreseeable future, particularly as the use of oximetry moves toward becoming a standard of care.

The literature in support of tissue oximetry, in general, and FORE-SIGHT oximetry, in particular, will play an increasingly important role in the expansion of the tissue oximetry market as clinicians continue to be educated regarding the potential benefits of this parameter. Therefore, a significant part of our longer-term strategy is to continue to encourage and support research related to the need for cerebral oximetry and its efficacy in improving care. FORE-SIGHT has already been referenced in hundreds of papers, abstracts, and posters, and the literature in support of the product grows every year.

Traditional Monitoring

In addition to Tissue Oximetry products, CASMED provides a series of vital signs monitoring products and services to clinicians around the world. Those include:

Sales to Original Equipment Manufacturers ("OEM") of the Company's proprietary non-invasive blood pressure technology (MAXNIBP and MAXIQ) for inclusion in the OEM customers' own multi-parameter monitors;

Vital signs monitors and accessories, incorporating various combinations of measurement parameters for both human and veterinary use such as MAXNIBP non-invasive blood pressure, pulse oximetry, electro-cardiography (ECG), temperature, and capnography (CO2 measurements); and

Supplies and service, including neonatal intensive care vital signs supplies (such as electrodes and skin temperature probes).

Blood Pressure Measurement Technology

The Company has developed a proprietary non-invasive blood pressure measurement technology that it sells under the MAXNIBP and MAXIQ brands. The Company believes this technology is more accurate, reliable, and able to produce a measurement result faster than its competitors in high-motion environments. These advantages are important, especially in the most challenging clinical situations where measurements can be difficult to obtain, such as emergency care and when caring for pediatric patients. The Company has entered into OEM agreements to supply its MAXNIBP and MAXIQ technology to various companies throughout the world. This technology is used in other monitoring systems where non-invasive blood pressure is one of many measurement parameters. The Company's OEM relationships are typically multi-year.

Vital Signs Monitoring

The Company offers a full line of non-invasive vital signs monitoring products for a variety of general care settings such as hospital wards, outpatient medical surgical units, recovery rooms, procedure labs, physician offices, long-term care facilities, and emergency response settings. The monitors are small, lightweight, portable, and easy to use.

The Company manufactures vital signs monitors, incorporating various combinations of measurement parameters, including the Company's non-invasive blood pressure, pulse oximetry, electro-cardiography, temperature, and capnography. CASMED monitors are ideal for a range of clinical settings, both human and veterinary. The Company's legacy monitor, first introduced in 2003, is sold under the 740 brand and will be discontinued in 2015.

In the last two years, we have received FDA 510(k) clearance for increasingly complex versions of our next-generation vital signs monitor, the 740 SELECT®. The 740 SELECT monitor has significantly upgraded features, including touchscreen controls and customizable information displays, and is offered with the newest technology available from our pulse oximetry, capnography, and thermometry partners. The 740 SELECT is targeted at the hospital market, outpatient surgery centers, non-hospital clinics, and long-term care facilities.

During 2014, we exited the oral surgery market with the PPM3™ vital signs monitor which was manufactured for us under an exclusive agreement.

Supplies and Service

CASMED supplies a line of specialty neonatal supplies, including Klear-Trace® ECG Electrodes and NeoGuard® skin temperature probes and adhesive reflectors. These high-quality single-patient-use products are designed specifically to meet the unique needs of neonatal intensive care. The Company also provides various repair services to its customers for monitors already in the field.

Sales and Marketing

The Company markets its products globally, through hospital, surgery center and outpatient facility, homecare, veterinary, and emergency medical distribution channels. A number of different sales channels are utilized to maximize opportunities for the various product lines we offer.

Tissue Oximetry Monitoring

The Company's FORE-SIGHT Tissue Oximeters are sold via a direct sales force and key manufacturer's representatives groups within the U.S. and via stocking distribution partners outside the U.S.

As of December 31, 2014, the Company's U.S. sales organization was comprised of one manager, three manufacturer's rep organizations, eight direct sales representatives, and five clinical specialists. In January and February of 2015, the Company hired an additional manager, an additional sales rep, and an additional clinical specialist, consistent with our strategy to significantly expand our direct U.S. selling organization in 2015.

As of December 31, 2014, the Company had three sales consultants located in Europe, the Middle East, and the Pacific Rim, all managing FORE-SIGHT sales through our distribution partner.

The Company continues to invest significant resources in hiring, engaging, educating, and supporting its FORE-SIGHT field sales organization.

Traditional Monitoring

The Company sells its non-invasive blood pressure technology in the form of sub-assemblies to be assembled into other OEM companies' multi-parameter monitors. The Company sells this product line on a direct basis, utilizing headquarters-based employees to solicit companies operating in both the domestic and international markets.

The Company's vital signs monitoring products are sold within the U.S. via manufacturer's representatives and distributors. Outside of the U.S., sales are conducted through distributors.

Sales of the Company's neonatal supplies are primarily sold via key stocking distribution partners in the U.S.

Financial Information Relating to Sales
Year Ended December 31,

	2014	2013
Domestic Sales	$ 17,726,150	$ 17,114,215
International Sales	5,187,099	4,801,579
Total	$ 22,913,249	$ 21,915,794

Competition

The Company competes in the broader medical equipment market for patient monitoring equipment and supplies. We believe that our reputation for producing innovative, accurate, and reliable products that are user-friendly, largely manufactured in the U.S., and contain best-in-class technology are key factors in our ability to successfully compete with larger organizations in the medical products market.

We believe that the principal competitive factors that we and other companies competing in our markets face are:

FDA clearance and other regulatory approvals;
The accuracy, reliability, and precision of any biologic measurements provided;
Publication of peer-reviewed clinical studies in support of the clinical use of product;
Acceptance by thought-leaders in anesthesia, surgery, perfusion, and other key clinical roles for new technologies, such as cerebral oxygenation monitoring;
Documented correlation to improved patient outcomes and lower costs;
The cost effectiveness of monitoring solutions and overall pricing;
Data interfaces with multi-parameter patient monitoring and data solutions;
The overall ease of use and product quality;
The scale and capability of sales and marketing organizations, including established sales distribution channels;
Contractual arrangements with hospitals, hospital systems, buying groups, and professional service providers; and
Proprietary technology.

Competitors for our Tissue Oximetry products include Covidien, Ornim, Masimo, Hutchinson Technology, Nonin Medical, and Hamamatsu.

Competitors for our Traditional Monitoring products are myriad and include large corporations such as Philips, General Electric, Mindray Medical, and Welch Allyn, among others in the vital signs monitor market and companies such as the SunTech Medical Division of Halma, Inc., Omron Corp., and Mindray in the OEM NIBP market. Many of the major patient monitoring solutions companies also have their own proprietary NIBP technology.

Research and Development

As of December 31, 2014, our Research and Development (R&D) organization consisted of a staff of 19 engineers and scientists focused on the following primary areas:

Advanced algorithm research;
Sensor and optical development;
Hardware development and support; and
Clinical research.

Our R&D efforts in 2014 were primarily focused on expanding the applications for our FORE-SIGHT ELITE monitor, reducing FORE-SIGHT ELITE sensor manufacturing costs, advancing the design and the performance of our MAXNIBP non-invasive blood pressure technology, and updating our vital signs monitoring product offering.

During 2014 and 2013, the Company incurred R&D expenses of approximately $3,466,000 and $4,211,000, or 15% and 19% of sales, respectively. The higher R&D expenses in 2013 were due to costs unique to the completion of many concurrent development projects for the Company’s slate of new products.

Trademarks, Patents and Copyrights

Certificates of Registration have been issued to the Company by the United States Patent and Trademark Office for the following marks: CAS®, CASMED®, FORE-SIGHT®, FORE-SIGHT ELITE®, 740 SELECT®, COOL-LIGHT®, For Every Life and Breath Situation®, For What’s Vital®, HOLD-TIGHT®, Klear-Trace®, LASER-SIGHT®, Limboard®, MAXNIBP®, Mother Baby®, Neo Guard®, and Heart-shaped design mark. In addition, the Company has pending trademark applications.

The Company holds 14 U.S. patents and 14 non-U.S. patents and has multiple pending patent applications for its FORE-SIGHT technologies which it believes provide it with a competitive market advantage. The Company believes the design concepts covered in its patents, patent applications, and provisional patent applications are important to providing a tissue oximeter capable of absolute tissue oxygen saturation measurements with FORE-SIGHT oximeter’s level of accuracy. Although the Company holds such patents and has patents pending related to certain of its products, it does not believe that its business as a whole is significantly dependent upon patent protection. The Company also relies on trade secret, copyright, and other laws and on confidentiality agreements to protect its technology. The Company has copyright protection for the software used in its blood pressure and tissue oximeter monitors.

The Company will continue to seek patent, trademark, and copyright protections as it deems advisable to protect the markets for its products and its R&D efforts.

Employees

As of December 31, 2014, the Company had 97 employees of which 96 were full-time. The Company has no collective bargaining agreements and believes that relations with its employees are good.

Government Regulation

Medical products of the type currently being marketed and under development by the Company are subject to regulation under the Food, Drug and Cosmetic Act (the "FD&C Act") and numerous acts and amendments such as the Quality System Regulations (“QSR”), often referred to as Good Manufacturing Practices (“GMP's”).

In addition, depending upon product type, the Company must also comply with those regulations governing the Conduct of Human Investigations, Pre-Market Notification Regulations, and other requirements, as promulgated by the FDA. The FDA is authorized to inspect a device, its labeling and advertising, and the facilities in which it is manufactured, in order to ensure that the device is not manufactured or labeled in a manner which could cause it to be in violation of the FD&C Act.

The FDA has adopted regulations which classify medical devices based upon the degree of regulation believed necessary to assure safety and efficacy. A device is classified as a Class I, II, or III device. Class I devices are subject only to general controls. Class II devices, in addition to general controls, are or will be subject to "performance standards." Most devices are also subject to the 510(k) pre-market notification provision. In addition, some Class III devices require FDA pre-market studies before they may be marketed commercially because their safety and effectiveness cannot be assured by the general controls and performance standards of Class I or II devices.

The Company's products are primarily Class I and II devices and most require FDA clearance under Section 510(k) of the FD&C Act.

In the last factory inspection of the Company by the FDA during March 2013, no material non-conformities were observed.

International Regulatory Compliance

CASMED maintains certification to ISO 13485:2003 by the Notified Body, BSI Inc., for its manufacturing facility. These certifications and compliance with the Medical Device Directive allow CASMED to use the "CE" mark on its products. The CE mark is required for medical devices to gain access to the European Union (“EU”) common market and other non-EU markets as well. The FDA, recognizing the value of this universally accepted quality system, has patterned its Quality System Regulations after ISO 9001 and ISO 13485. CASMED maintains full compliance with ISO 13485:2003 and the EU’s Medical Device Directive, as evaluated by annual assessment.

Manufacturing and Quality Assurance

The Company assembles, tests, or packages its products at its facility in Branford, Connecticut. The various components for the products, which include plastic moldings, wire, printed circuit boards, sub-assemblies, and many other parts, are obtained from outside vendors. The Company has not experienced any sustained interruption in production or the supply of components and does not anticipate any difficulties in obtaining the components necessary to manufacture its products.

Quality assurance procedures are performed by the Company at its Branford, Connecticut, facility and occasionally at its suppliers' facilities to standards set forth in the FDA's "Quality System Regulations." These procedures include the initial qualification of the supplier, inspection of components, and full testing of finished goods. The Company has a controlled environment where the final assembly of single-patient-use neonatal products is conducted.

Customers

Our five largest customers accounted for approximately 23% and 30% of sales in 2014 and 2013, respectively. Among these customers, Physio-Control, Inc. accounted for 9% of sales during each of 2014 and 2013. Also included above are sales to the U.S. Department of Veterans Affairs (“V.A.”). When aggregating sales to the individual V.A. hospitals, those sales accounted for 5% and 8% of overall sales for 2014 and 2013, respectively.

Backlog

The Company’s backlog includes orders pursuant to long-term OEM agreements as well as orders for products shippable on a current basis. Total backlog, therefore, is not a meaningful indicator of the Company’s future sales.

Corporate Information

CAS Medical Systems, Inc. is a Delaware corporation organized in 1984. Our corporate offices are located at 44 East Industrial Road, Branford, CT 06405, and our telephone number is (203) 488-6056. Our website address is www.casmed.com. The information on or that can be accessed through our website is not a part of this Annual Report on Form 10-K.

Item 1A. Risk Factors

Our business faces many risks. If any of the events or circumstances described in the following risk factors actually occurs, our business, financial condition, or results of operations could suffer, and the trading price of our common stock could decline. The risks described below may not be the only risks we face. Additional risks that we do not yet know of or that we currently believe are immaterial may also impair our business operations. You should consider the following risks, as well as the other information included or incorporated by reference in this Form 10-K, before deciding to invest in our common stock.

We have a recent history of net losses and are subject to risks regarding future liquidity.

We have experienced operating losses during our last seven fiscal years. The net loss applicable to common stockholders was $8,892,000 for the 2014 calendar year, and the accumulated deficit was $31,030,000 as of December 31, 2014. The Company does not anticipate a return to operating profits in the near-term, and there can be no assurance that we will be able to improve our results of operations in the near-term or at all.

The Company's ordinary short-term capital needs are expected to be met from our cash-on-hand which was supplemented by net proceeds of approximately $8,521,000 from a public offering of our common stock consummated on February 17, 2015, and amounts available under the revolving credit agreement with GECC. Cash flows may be impacted by a number of factors, including changing market conditions, market acceptance of the FORE-SIGHT system, and the loss of one or more key customers. There can be no assurance that we will be successful in raising additional capital if the need arises. The failure to raise any necessary additional capital on acceptable terms, or at all, could have a material adverse effect on our business and results of operations.

We are a small company in a highly competitive industry.

Competition from other medical device companies, diversified healthcare companies, and research and academic institutions is intense and expected to increase. Many companies engaged in the medical device sector have substantially greater financial and other resources and development capabilities than we do and have substantially greater experience in testing products, obtaining regulatory approvals, and manufacturing, marketing, and distributing medical devices.

Other companies may succeed in developing and commercializing products earlier than we do. In addition to competing with universities and other research institutions in the development of products, technologies, and processes, the Company may compete with other companies in acquiring rights to products or technologies from universities. Also, the medical device market is experiencing increasing customer concentration, due to the emergence of large purchasing groups and hospital systems. We cannot assure you that we will develop products that are more effective or achieve greater market acceptance than competitive products or that our competitors will not succeed in developing products and technologies that are more effective than those being developed by us or that would render our products and technologies less competitive or obsolete. Moreover, there can be no assurance that we will be able to successfully sell to large purchasing groups, which are increasingly looking to suppliers that can provide a broader range of products than we currently offer.

Our business is impacted by customer concentration.

The Company's five largest customers accounted for approximately 23% and 30% of sales in 2014 and 2013, respectively. Among these customers, Physio-Control, Inc. accounted for 9% of sales during each of 2014 and 2013, respectively. Also included above are sales to the U.S. Department of Veterans Affairs ("V.A."). When aggregating sales of the individual V.A. hospitals, those sales accounted for 5% and 8% of overall sales for 2014 and 2013, respectively. The loss of any significant customer could have a material adverse effect on our financial position and

results of operations.

We are devoting substantial resources to the development and marketing of our tissue oximetry products.

We expect to devote a significant amount of resources to continue the development and marketing of our FORE-SIGHT tissue oximetry products. We believe that substantial additional resources are required to further penetrate the markets for these products. Such investments include further research and development, including significant expenditures for clinical studies, equipment for placements at customer sites, further expansion of our selling organization, marketing expenditures and general working capital requirements. There can be no assurance that we will be successful in these endeavors. In addition, since we have limited financial resources, our emphasis on FORE-SIGHT tissue oximetry products may result in a lack of sufficient resources for our other product lines, which may negatively impact our overall financial results.

The sale of our products may result in significant product liability exposure.

As a manufacturer of medical equipment and products, we face product liability claims. We maintain product liability insurance in an aggregate amount of $5 million. We cannot assure you that this insurance coverage will be adequate to cover any product liability claims that occur in the future or that product liability insurance will continue to be available at reasonable prices. Any product liability judgments or settlements in excess of insurance coverage could have a material adverse effect on our business and results of operations.

Our business could be adversely affected if we cannot protect our proprietary technology or if we infringe on the proprietary technology of others.

Our proprietary technology aids our ability to compete effectively with other companies in certain markets in which we compete. Although we have been awarded or have filed applications for numerous patents, these patents may not fully protect our technology or competitive position. Further, our competitors may apply for and obtain patents that will restrict our ability to make and sell our products.

Our competitors may intentionally infringe our patents. Third parties may also assert infringement claims against us. Litigation may be necessary to enforce patents issued to us, to protect our trade secrets or know-how, to defend ourselves against claimed infringement of the rights of others, or to determine the scope and validity of the proprietary rights of others. The defense and prosecution of patent suits are both costly and time-consuming, even if the outcome is favorable to us. Such proceedings can be extremely expensive, and their outcome very unpredictable.

An adverse outcome in the defense of a patent suit could cause us to lose proprietary rights, subject us to significant liabilities to third parties or require us to license rights from third parties or to cease selling our products. Any of these events could have a material adverse effect on our business, operating results, and financial condition. We also rely on unpatented proprietary technology that others may independently develop or otherwise obtain access to.

Our inability to maintain the proprietary nature of our technologies could negatively affect our sales and earnings.

Cost-containment efforts of our customers, purchasing groups, third-party payors, and governmental organizations could adversely affect our sales and profitability.

Many existing and potential customers for our products within the United States have become members of group purchase organizations (GPOs) and integrated delivery networks (IDNs), in an effort to reduce costs. GPOs and IDNs negotiate pricing arrangements with healthcare product manufacturers and distributors and offer the negotiated prices to affiliated hospitals and other members. GPOs and IDNs typically award contracts on a category-by-category basis through a competitive bidding process. Bids are generally solicited from multiple manufacturers with the intention of driving down pricing. Due to the highly competitive nature of the GPO and IDN contracting processes, we may not be able to obtain or maintain contract positions with major GPOs and IDNs across our product portfolio. Furthermore, the increasing leverage of organized buying groups may reduce market prices for our products, thereby reducing our profitability.

While having a contract with a GPO or IDN for a given product category can facilitate sales to members of that GPO or IDN, such contract positions can offer no assurance that sales volumes of those products will be maintained. GPOs and IDNs increasingly are awarding contracts to multiple suppliers for the same product category. Even when we are the sole contracted supplier of a GPO or IDN for a certain product category, members of the GPO or IDN generally are free to purchase from other suppliers. Furthermore, GPO and IDN contracts typically are terminable without cause upon notice of 60 to 90 days. Accordingly, the members of such groups may choose to purchase from our competitors due to the price or quality offered by such competitors, which could result in a decline in our sales and profitability.

Distributors of our products and hospital purchasers negotiate terms of sale aggressively to increase their profitability. Reductions in our average selling prices or failure to negotiate arrangements having advantageous pricing and other terms of sale could adversely affect our business, results of operations, financial condition, and cash flows.

Outside the United States, we have experienced pricing pressure from centralized governmental healthcare authorities and increased efforts by such authorities to lower healthcare costs. We frequently are required to engage in competitive bidding for the sale of our products to governmental purchasing agents. Our failure to offer acceptable prices to these customers could adversely affect our sales and profitability in these markets.

Defects or failures associated with our products could lead to recalls or safety alerts and negative publicity.

Manufacturing flaws, component failures, design defects, off-label uses, or inadequate disclosure of product-related information could result in an unsafe condition or the injury or death of a patient. These problems could lead to a recall of, or issuance of a safety alert relating to, our products and result in significant costs and negative publicity. Due to the strong name recognition of our brands, an adverse event involving one of our products could result in reduced market acceptance and demand for all products within that brand and could harm our reputation and our ability to market our products in the future. In some circumstances, adverse events arising from or associated with the design, manufacture, or marketing of our products could result in the suspension or delay of regulatory reviews of our applications for new product approvals. We also may undertake a voluntary recall of products or temporarily shut down production lines based on performance relative to our own internal safety and quality monitoring and testing data. Any of the foregoing problems could disrupt our business and have a material effect on our business, results of operations, financial condition, and cash flows.

We depend on distributors for a substantial portion of our sales. Failure to establish and maintain relationships with distributors could materially and adversely affect our business, financial condition, and results of operations.

We depend on distributors for a substantial percentage of our sales. Certain of our distribution agreements may contain terms that are not favorable to us, and as our existing distribution agreements expire, we may be unable to renew with our desired distributors on favorable terms or at all. Furthermore, competition for distributors is intense. We compete for distributors domestically and internationally with other leading medical equipment and device companies that may have higher visibility, greater name recognition and financial resources, and a broader product selection than we do. Our competitors also often enter into long-term distribution agreements that effectively prevent their distributors from selling our products. At times, we may also become engaged in contract disputes or other negotiations with distributors. Consequently, establishing relationships with new distributors, maintaining relationships with existing distributors, and replacing distributors may be difficult and time consuming. Any disruption of our distribution network, including our failure to renew distribution agreements at favorable terms or our failure to successfully negotiate contract disputes, could negatively affect our ability to effectively sell our products and could materially and adversely affect our business, financial condition, and results of operations.

If we are unable to effectively structure and manage our distribution network, actions taken by our distributors could harm our corporate image and cause us to fail to meet our sales goals.

We have limited ability to manage the activities of our distributors, who are independent from us. Our distributors could take one or more of the following actions, some of which we have previously experienced, any of which could have a material adverse effect on our business, prospects, and brand:

sell products that compete with products that they have contracted to sell for us;

sell our products outside of our pricing guidelines, distorting the market price of our products;

sell our products outside their designated territory or to non-authorized end-users, possibly in violation of the exclusive distribution rights of other distributors;

directly or indirectly distribute products lacking necessary U.S. certifications into the U.S. market in violation of applicable U.S. law;

fail to adequately promote our products; and/or

fail to provide proper training, repair, and service to our end-users.

Failure to adequately manage our distribution network or non-compliance by distributors with our distribution agreements could harm our corporate image among end-users of our products and disrupt our sales, resulting in a failure to meet our sales goals.

Our direct sales operations are costly, and the related ongoing operational costs could have a material adverse effect on our business.

We maintain direct operations in the United States and rely on direct sales for a significant portion of our sales from the United States. Maintaining a direct sales force is costly. In the United States, we typically provide our direct operations personnel with payroll and other benefits that we do not provide independent distributors. Many of these benefits are fixed costs that do not depend on revenue generation. Maintaining these direct operations is costly and ongoing operational costs could have a material adverse effect on our business.

We are subject to significant government regulation.

Our business is subject to varying degrees of governmental regulation in the countries in which we operate. In the United States, our products are subject to regulation as medical devices by the FDA, and by other federal and state agencies. These regulations pertain to the manufacturing, labeling, development, and testing of our devices, as well as to the maintenance of required records. An FDA regulation also requires prompt reporting by all medical device manufacturers of an event or malfunction involving a medical device where the device caused or contributed to death or serious injury or is likely to do so.

Federal law provides for several routes by which the FDA reviews medical devices before their entry into the marketplace. Medical products of the type currently being marketed and under development by us are subject to regulation under the FD&C Act and numerous acts and amendments such as the Quality System Regulations which replaced the regulations formerly called Good Manufacturing Practices. In addition, depending upon product type, we must also comply with those regulations governing the Conduct of Human Investigations, Pre-Market Regulations, and other requirements, as promulgated by the FDA. The FDA is authorized to inspect a device, its labeling and advertising, and the facilities in which it is manufactured in order to ensure that the device is not manufactured or labeled in a manner which could cause it to be injurious to health.

The FDA has adopted regulations which classify medical devices based upon the degree of regulation believed necessary to assure safety and efficacy. A device is classified as a Class I, II, or III device. Class I devices are subject only to general controls. Class II devices, in addition to general controls, are or will be subject to "performance standards." Most devices are also subject to the 510(k) pre-market notification provision. In addition, some Class III devices require FDA pre-market approval before they may be marketed commercially because their safety and effectiveness cannot be assured by the general controls and performance standards of Class I or II devices. Our products are primarily Class I and II devices and several of them have required FDA notification under Section 510(k) of the FD&C Act.

Satisfaction of clearance or approval requirements may take up to several years or more and may vary substantially based upon the type, complexity, and novelty of the product. The effect of government regulation may be to delay marketing of new products for a considerable or indefinite period of time, to impose costly procedures upon our activities and to furnish a competitive advantage to larger companies that compete with us. We cannot assure you that FDA or other regulatory clearance or approval for any products we develop will be granted on a timely basis, if at all, or, once granted, that clearances or approvals will not be withdrawn or other regulatory action taken which might limit our ability to market our proposed products. Any delay in obtaining, or failure to obtain, or revocation of these clearances or approvals would adversely affect the manufacturing and marketing of our products and the ability to generate additional product revenue. The FDA also has the authority to, among other things, deny marketing approval until all regulatory protocols are deemed acceptable, halt the shipment of defective products, and seize defective products sold to customers. Adverse action or publicity from the FDA, if any, could have a negative impact upon our results from operations.

Federal regulatory reforms may adversely affect our ability to successfully market our products and impact our financial condition.

Efforts to reform the U.S. health care industry have resulted in legislation such as the Patient Protection and Affordable Care Act ("Affordable Care Act") and other measures which will effect changes in healthcare delivery and coverage and public and private reimbursements for services performed. Federal initiatives may also affect state programs. Legislative changes may affect hospital market expenditures for medical devices, the type and volume of procedures performed, and the demand for new and innovative products. These changes could be significant and may adversely affect the demand for our products, our results of operations, cash flows, and our overall financial condition.

The Affordable Care Act provisions are funded by a variety of taxes including a medical device excise tax ("MDET") of 2.3% imposed on manufacturers and importers of certain medical devices. The Company became subject to the MDET effective January 1, 2013. MDET expenses were $330,000 for 2014 and $302,000 for 2013.

Outside of the U.S., healthcare delivery and reimbursement systems vary by country. Efforts to control rising healthcare costs, changes in government-sponsored programs and participation, and various other economic factors may impact our ability to successfully market our products outside of the U.S.

Our products may become rapidly obsolete.

The markets in which we compete involve rapidly developing technology. Others may develop products that might cause products being developed, distributed, or licensed by us to become obsolete or uneconomical or result in products superior to our products.

Our international business is subject to currency, regulatory, and related risks.

Our international sales subject us to currency and related risks. We expect that international sales will continue to constitute a significant portion of our business. Although we sell our products in United States dollars and have only limited currency risks, an increase in the value of the United States dollar relative to foreign currencies in our international markets could make our products less price competitive in these markets. Our international sales accounted for 23% and 22% of our total net sales for the 2014 and 2013 fiscal years, respectively.

Our business practices in countries other than the United States are governed by U.S. laws, including the Foreign Corrupt Practices Act, as well as local laws and regulatory schemes. While we believe we maintain a robust compliance program requiring adherence by our employees and distribution partners to all U.S. and foreign laws and regulatory schemes, there can be no assurances that our foreign distribution partners so comply, which failure could cause us to suffer the loss of the ability to sell in those jurisdictions or other liability.

An acquisition of the company may be hindered.

Our Board of Directors is authorized to issue from time to time, without stockholder authorization, shares of preferred stock, in one or more designated series or classes. We are also subject to a Delaware statute regulating business combinations. These provisions could discourage, hinder or preclude an unsolicited acquisition of the Company and could make it less likely that stockholders receive a premium for their shares as a result of any takeover attempt.

We have outstanding shares of preferred stock with rights and preferences superior to those of our common stock.

The issued and outstanding shares of Series A Convertible Preferred Stock and Series A Exchangeable Preferred Stock grant the holders of such preferred stock voting, accretion, dividend and liquidation rights that are superior to those held by the holders of our common stock.

Ownership of our shares is concentrated in the hands of a few investors which could limit the ability of our other stockholders to influence the direction of the company.

As calculated by SEC rules of beneficial ownership, Thomas, McNerney & Partners and their affiliates, and Deerfield Management Company, L.P. each beneficially owned 28.0% and 12.0%, respectively, of our common stock as of the dates of their most recent public filings with the SEC. Accordingly, although they are not affiliated with one another, they collectively may have the ability to significantly influence or determine the election of all of our directors or the outcome of most corporate actions requiring stockholder approval. They may exercise this ability in a manner that advances their best interests and not necessarily those of our other stockholders.

Sales of a substantial number of shares of our common stock in the public market originally issued through the conversion of preferred stock, exercise of options or warrants, or additional financing transactions could adversely affect the market price of our common stock and would have a dilutive effect upon our stockholders.

Historically, our common stock has been thinly traded. This low trading volume may have had a significant effect on the market price of our common stock, which may not be indicative of the market price in a more liquid market. As of December 31, 2014, options and warrants for the purchase of 3,823,204 shares of our common stock were outstanding and 8,057,264 shares of common stock were issuable upon conversion of our outstanding Series A Convertible Preferred Stock and Series A Exchangeable Preferred Stock.

We depend highly on certain key management personnel.

We believe that our future success will depend to a significant extent on the efforts and abilities of our senior management, in particular, Thomas Patton, our President and Chief Executive Officer, Brian Wagner, our Chief Commercial Officer, Dr. Paul Benni, our Chief Scientific Officer, Dr. John Gamelin, our Vice President of Research and Development, and Jeffery Baird, our Chief Financial Officer. The loss of the services of these executives could have a material adverse effect on our business and results of operations.

We do not expect to pay cash dividends.

We have not paid cash dividends on our common stock since inception, and at this time we do not anticipate that we will pay cash dividends on our common stock in the foreseeable future. Furthermore, we are currently precluded from issuing dividends on our common stock unless we receive the consent of holders of a majority of our outstanding Series A Convertible Preferred Stock and Series A Exchangeable Preferred Stock.

Further, the Company's bank agreement executed with GECC on June 27, 2014, prohibits the payment of cash dividends to both common and preferred stockholders. As of December 31, 2014, $4,248,804 in accretion had accumulated on the Series A Convertible Preferred Stock and the Series A Exchangeable Preferred Stock.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

The Company currently leases two separate operating facilities as described in further detail below.

On September 6, 2007, the Company closed the sale and leaseback of its headquarters and manufacturing facility in Branford, Connecticut (the "Property") which comprises approximately 24,000 square feet of office and manufacturing space. Net proceeds from the sale were $2,791,529 of which $928,872 was used to retire the related outstanding mortgage debt. The gain of $1,346,373 realized on the sale was deferred and is being recognized in operations against rent expense over the initial term of the lease. The lease has an initial term of ten years expiring on September 6, 2017, and contains an option for two additional five-year periods. The lease provides for an annual base rent in years one through five of $244,800 and $268,800 in years six through ten. The Company is recognizing rent expense on a straight-line basis over the ten years. Under the lease, the Company is responsible for the costs of utilities, insurance, taxes, and maintenance expenses. Further, the Company is required to maintain at least $600,000 in cash and cash equivalents (increasing at 3% per annum) and net current assets of not less than $3,600,000.

The Company is also leasing one property adjacent to its corporate facilities. Approximately 9,600 square feet of office and warehouse space is being leased under an agreement effective July 1, 2007, as amended and expiring June 30, 2015. The Company expects to renew the lease. Minimum annual rental expense is approximately $110,000 excluding apportioned real estate taxes and certain common area maintenance charges.

The Company believes that its premises meet its current and expected operating needs and are adequately insured.

Item 3. Legal Proceedings

None.

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

The common stock of the Company had been trading on the NASDAQ Global Market, under the symbol “CASM”. However, on March 17, 2014, the Company’s voluntary request to transfer its common stock listing to the NASDAQ Capital Market from the NASDAQ Global Market was approved by the Listing Qualifications Department of The NASDAQ Stock Market ("NASDAQ").

The Company’s common stock began trading under its same ticker – CASM – on the NASDAQ Capital Market effective at the opening of trading on Tuesday, March 18, 2014.

The following table shows the high and low sales prices for the Company's common stock during each quarterly period for the last two years.

Quarter Ended		High		Low
March 31, 2013	$	2.38	$	1.79
June 30, 2013	$	2.37	$	1.58
September 30, 2013	$	1.65	$	1.29
December 31, 2013	$	2.00	$	1.21
March 31, 2014	$	2.50	$	1.65
June 30, 2014	$	2.33	$	1.80
September 30, 2014	$	2.06	$	1.37
December 31, 2014	$	1.98	$	1.50

The following table sets forth the approximate number of beneficial owners of common stock of the Company on December 31, 2014.

Title of Class	Number of Stockholders
Common stock, $.004 par value	1,750

To date, no cash dividends have been declared on the Company’s common stock. The Company does not currently intend to pay a cash dividend on its common stock in the near future. Furthermore, we are currently precluded from issuing dividends on our common stock unless we receive the consent of holders of a majority of our outstanding Series A Convertible Preferred Stock and Series A Exchangeable Preferred Stock and are precluded from paying cash dividends on both common and preferred stock pursuant to our loan agreement with GECC.

As of December 31, 2014, $4,248,804 in dividend accretion had accumulated on the Series A Convertible Preferred Stock and the Series A Exchangeable Preferred Stock.

The Company did not issue any shares of common stock during the fourth quarter of 2014 that were not registered under the Securities Act of 1933, as amended. In addition, the Company did not repurchase any of its common stock

during the fourth quarter of 2014.

On February 17, 2015, the Company completed a public offering (the "Offering") underwritten by Craig-Hallum Capital Group, LLC ("Craig-Hallum") of 7,130,000 shares of its common stock at $1.30 per share, resulting in gross proceeds of $9,269,000. The Offering included an option exercised by Craig-Hallum to purchase up to 930,000 shares. Pursuant to the underwriting agreement, Craig-Hallum purchased the shares of common stock from the Company at a price of $1.222 per share. Net proceeds to the Company under the transaction, after fees and expenses, were approximately $8,521,000. Proceeds from the transaction are intended to be used for general corporate purposes.

Item 6. Selected Financial Data

Information is not required for smaller reporting company filers.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Certain statements included in this report, including without limitation statements in the Management's Discussion and Analysis of Financial Condition and Results of Operations, which are not historical facts, are "forward looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements represent the Company's current expectations regarding future events. The Company cautions that such statements are qualified by important factors that could cause actual results to differ materially from expected results which may be contained in the forward-looking statements. All forward-looking statements involve risks and uncertainties, including, but not limited to, the following: potential liquidity constraints; price and product competition; rapid technological changes; dependence on new product development; failure to introduce new products effectively or on a timely basis; the mix of products sold; supply and prices of raw materials and products; customer demand for the Company's products; regulatory actions; changes in reimbursement levels from third-party payors; product liability or other litigation claims; changes in economic conditions that adversely affect the level of demand for the Company's products; changes in foreign exchange markets; changes in financial markets; changes in the competitive environment; and other risks described in Item 1A of this filing.

Overview

CASMED reached an inflection point in late 2013 when it launched its second-generation FORE-SIGHT® oximeter under the brand FORE-SIGHT ELITE®. This product was the result of an extensive three-year research, development, and production effort and brought to the market a user-friendly monitor at lower costs that significantly improved the Company's business model. The FORE-SIGHT ELITE oximeter also built upon the industry-leading accuracy of the first-generation monitor and empowers clinicians to better manage patients, improve outcomes, and lower costs.

The strong momentum apparent in the Company's 2014 performance was largely driven by this new product introduction. FORE-SIGHT cerebral oximetry sales were up 37%, gross profit rate improved 750 basis points, operating expenses were well-controlled and down nearly 10%, the Company's operating loss materially narrowed by 35%, and the Company's quarterly cash consumption rate fell significantly to approximately $1.3 million in the fourth quarter. We believe our FORE-SIGHT oximetry products are well positioned to help penetrate the addressable cerebral and tissue monitoring market that could ultimately reach $500 million or more, and therefore, a continued focus in that market is the correct strategy to create value for our stockholders over the longer term.

A drop in sales of some of the Company's other non-FORE-SIGHT legacy products masked some FORE-SIGHT performance and reduced our overall sales growth rate to just 4%. However, with recurring FORE-SIGHT disposable sales now accounting for 45% of our sales and neonatal disposable sales accounting for another 10%, the Company's

strategic plan to transition from a medical capital equipment company to a medical disposables company remains on track.

During the year ended December 31, 2014, specific accomplishments included:

Worldwide FORE-SIGHT sales increased 37% over 2013 levels, including a 32% growth in worldwide disposable sensor sales.

FORE-SIGHT sales comprised 54% of our 2014 total sales, and FORE-SIGHT disposable sales comprised 45% of our total sales.

We realized worldwide net shipments of 394 FORE-SIGHT monitors in 2014, more than doubling the number of monitors shipped in 2013. As of December 31, 2014, we have totaled a cumulative worldwide net shipment of 1,329 monitors, since FORE-SIGHT was introduced, an increase of 42% from the cumulative total as of December 31, 2013. At year end, the installed base of FORE-SIGHT monitors in the U.S. reached 725.

In June 2014, we entered into a $10.0-million loan agreement with GECC which included a $7.5-million, 48-month term loan and a revolving line-of-credit in the maximum amount of $2.5 million.

We executed on our strategy to open and enhance the five largest medical markets in the world outside of the U.S.\ by engaging new high-quality distributors in Japan, France, Germany, and the U.K., and by supporting the sale of our FORE-SIGHT monitors in China after securing regulatory approval to market the product in late 2013.

While sales in the Traditional Monitoring category fell in 2014 from the prior year due to lower vital signs monitor sales, our neonatal disposable product line grew 7%. Our OEM non-invasive blood pressure product sales fell 12%, although those sales grew 4% when excluding the expected loss of a customer in mid-2013.

The following discussion and analysis should be read together with our consolidated financial statements and related notes appearing elsewhere in this Annual Report on Form 10-K.

Year Ended December 31, 2014 Compared to Year Ended December 31, 2013

The Company recorded a net loss applicable to common stockholders of $8,892,000 for 2014, or ($0.46) per basic and diluted common share, compared to a net loss applicable to common stockholders of $11,566,000, or ($0.73) per basic and diluted common share, for 2013. The net loss for 2014 was $7,602,000, or ($0.40) per basic and diluted common share, compared to a net loss for 2013 of $10,362,000, or ($0.66) per basic and diluted common share.

The 2014 loss from operations of $6,833,000 decreased 35%, compared to $10,453,000 for 2013 due primarily to increased FORE-SIGHT oximetry sales, significantly improved gross profit rates, and lower operating expenses.

Overall, net worldwide sales for 2014 increased $997,000 or 5% to $22,913,000 from $21,916,000 in 2013. The following table provides comparative results of net sales by product and geographic category:

($000's)

	Year Ended December 31, 2014	Year Ended December 31, 2013	Increase / (Decrease)	% Change
Tissue Oximetry Monitoring	$12,416	$9,051	$3,365	37%
Traditional Monitoring	10,497	12,865	(2,368)	(18%)
	$22,913	$21,916	$997	5%

Domestic Sales	$17,726	$17,114	$612	4%
International Sales	5,187	4,802	385	8%
	$22,913	$21,916	$997	5%

Worldwide tissue oximetry product sales for 2014 of $12,416,000 increased $3,365,000 or 37% over the $9,051,000 reported for 2013 led by increased disposable sensor sales.

Traditional monitoring sales decreased $2,368,000 or 18% to $10,497,000 for 2014 from $12,865,000 for 2013. The decrease was primarily associated with lower shipments of the Company's vital signs monitors to the U.S. Government and lower OEM technology product sales to one international customer.

Total domestic sales increased $612,000 or 4% to $17,726,000 or 77% of total sales for 2014 from $17,114,000 for 2013. Domestic tissue oximetry sales increased 34% led by a 37% increase in disposable sensor sales. Gains in tissue oximetry sales were masked by a similar decrease in vital signs monitoring product sales and OEM technology product sales.

International sales increased $385,000 or 8% to $5,187,000 or 23% of total sales for 2014 from $4,802,000 or 22% of total sales for 2013. Increased tissue oximetry sales were partially offset by lower sales of vital signs monitoring products and OEM technology product sales.

The following table provides additional information with respect to tissue oximetry monitoring sales:

($000's)

	Year Ended December 31, 2014	Year Ended December 31, 2013	Increase / (Decrease)	% Change
Sensor Sales	$10,417	$7,903	$2,514	32%
Monitors & Accessories	1,999	1,148	851	74%
	$12,416	$9,051	$3,365	37%
Domestic Sales	$9,575	$7,119	$2,456	34%
International Sales	2,841	1,932	909	47%
	$12,416	$9,051	$3,365	37%

Worldwide tissue oximetry sensor sales for 2014 were $10,417,000, an increase of $2,514,000 or 32% over 2013 sales of $7,903,000. Worldwide sales of oximetry monitors and accessories for 2014 increased $851,000 or 74% to $1,999,000 from 2013 sales of $1,148,000. As of December 31, 2014, the Company's worldwide cumulative shipments of oximetry monitors were 1,329 units, an increase of 42% compared to December 31, 2013.

Gross profit as a percentage of net sales was 42% for 2014 and 34% for 2013. The improvement for 2014 was largely driven by both the increase in FORE-SIGHT sales as a percent of total sales and to the Company's transition from its first-generation FORE-SIGHT oximetry monitoring technology to its lower-cost next-generation FORE-SIGHT ELITE technology. Asset impairment charges, pertaining to the first-generation oximetry monitors, unfavorably affected gross profit for 2013 by $407,000, or 2% of sales.

During 2014 and 2013, the Company incurred R&D expenses of approximately $3,466,000 and $4,211,000, or 15% and 19% of sales, respectively. The higher R&D expenses in 2013 were due to costs unique to the completion of many concurrent development projects for the Company's slate of new products.

Due to careful expense control across all departments, selling, general and administrative ("S,G&A") expenses decreased $819,000, or 6%, to $12,973,000 for 2014 from $13,792,000 for 2013. The reductions in spending occurred

in multiple categories including meetings and conventions, investor relations, legal fees and traditional monitoring related sales commissions.

Interest expense for 2014 reflects the Company's expanded term debt agreement executed with General Electric Capital Corporation ("GECC") on June 27, 2014, as described below. Interest expense for 2014 includes a $168,000 charge for the unamortized balance of the deferred financing costs pertaining to the Company's termination of its loan agreements with East West Bank commensurate with the new loan agreements executed with GECC.

Other income for 2014 and 2013 includes $17,000 and $396,000, respectively, of income related to the sale and demutualization of one of the Company's commercial insurance providers.

There was no income tax benefit recorded for either 2014 or 2013. The Company does not expect to record taxable income during its 2015 fiscal year. Income tax benefits that may be generated during 2015 would be offset by a deferred income tax asset valuation allowance. Management established the valuation allowance as of December 31, 2009, as a result of then recent cumulative pre-tax losses and its estimates of future taxable income. Management has continued to perform the required analysis regarding the realization of our deferred income tax assets concluding that a full valuation allowance is warranted. As of December 31, 2014, the deferred income tax asset valuation allowance balance was $12,928,000.

Financial Condition, Liquidity and Capital Resources

The Company's operations used $5,255,000 in cash for 2014 compared to $8,741,000 used by operations during 2013, due to significant reductions in cash consumption in the second half of 2014. The reduction in cash used by operations of $3,486,000 was driven primarily by increased margins from FORE-SIGHT ELITE and lower operating expenses.

Net cash used in investing activities was $1,615,000 for 2014 compared to cash provided of $246,000 for 2013. During 2013, $1,251,000 of certificates of deposit had matured and were transferred to operating cash accounts. The Company incurred $1,509,000 of capital expenditures during 2014 compared to $1,230,000 for 2013. For both periods, the expenditures were primarily related to placements of FORE-SIGHT oximeter monitors at customer locations. Cash flows from investing activities for 2014 include $17,000 of cash from the sale and demutualization of the Company's insurance provider, compared to $396,000 for 2013.

The Company also expended $123,000 and $170,000 during 2014 and 2013, respectively, to purchase intangible assets which were primarily related to patent costs and product translations.

Net cash provided by financing activities was $3,174,000 for 2014 compared to cash provided of $7,440,000 for 2013. Cash provided by financing activities for 2014 reflects the net proceeds from a term loan executed with GECC on June 27, 2014, as described below and the Company's concurrent payoff of its term loan with East West Bank.

On June 27, 2014, the Company entered into a Loan and Security Agreement (the "Loan Agreement") with GECC. Pursuant to the Loan Agreement, GECC provided the Company with a 48-month secured term loan in the amount of $7,500,000 (the "Term Loan") and a Revolving Loan in the maximum amount of $2,500,000 (the "Revolver"). The Term Loan and the Revolver each mature on June 27, 2018. The obligations under the Loan Agreement are secured by a lien on substantially all assets of the Company.

The Term Loan bears interest on the outstanding daily balance at a fixed rate of 9.29%. Under the Term Loan, 36 equal payments of $202,703 commence on July 1, 2015, with one final payment due in an amount equal to the remaining principal balance on the final maturity date. Principal payments under the Term Loan may be deferred for an additional six months if the Company reaches certain financial targets at April 30, 2015. Management anticipates that the Company will successfully reach those targets.

Revolver advances will bear interest at a floating rate equal to 5.5% plus the higher of 1.5% per annum or GECC's base rate determined by a LIBOR-based formula. As of December 31, 2014 the effective rate was 7.0%. Amounts not borrowed against the Revolver up to the commitment amount of $2,500,000 bear interest at an annual rate of 0.30%. Maximum borrowings under the Revolver are based upon the Company's eligible accounts receivable as defined in the Loan Agreement. As of December 31, 2014, $1,000,000 was outstanding under the Revolver. The remaining amount available for borrowing as of December 31, 2014, was $1,105,000.

The Company has the right to prepay loans under the Loan Agreement in full at any time. If the Term Loan is prepaid prior to maturity, an additional fee of 2% of the Term Loan amount is due if such prepayment takes place within one year from the closing date. Thereafter, the additional fee declines to 1% for any prepayment taking place after such first anniversary and prior to the scheduled maturity date. Upon repayment of the Term Loan at any time, GECC is entitled to an additional fee equal to 4% of the Term Loan amount, or $300,000.

The Loan Agreement contains customary affirmative covenants, including covenants regarding the payment of taxes and other obligations, maintenance of insurance, reporting requirements, and compliance with applicable laws and regulations. Further, the Loan Agreement contains customary negative covenants limiting the ability of the Company and its subsidiary, among other things, to grant liens on the pledged collateral, incur additional indebtedness, make certain investments and acquisitions, and dispose of assets outside the ordinary course of business. The Loan Agreement also contains a financial covenant requiring the Company to maintain a continuing level of cash plus available borrowing capacity based on a formula. Management believes that the Company was in compliance with the Loan Agreement's covenants as of December 31, 2014.

Cash provided by financing activities in 2013 includes $1,500,000 in proceeds from the Company's amendment of its Loan and Security Agreement with East West Bank which had raised the principal amount under the term loan to $5,000,000. Cash provided by financing activities in 2013 also reflects the Company's public offering of 5,200,000 shares of its common stock at $1.25 per share resulting in net proceeds of $5,890,000.

The Company financed its directors' and officers' insurance premiums during 2014 under a note payable in the amount of $96,410. The note payable requires ten payments of $9,641 and will be repaid in full by September 2015.

The Company currently leases two facilities and certain equipment under non-cancellable operating leases. The following table sets forth a summary of the Company's cash commitments under contractual obligations as of December 31, 2014.

Contractual Obligations	Total	Less than One Year	2 - 3 Years	4 - 5 Years	More Than Five Years
Operating leases	$ 914,337	$ 363,171	$ 516,968	$ 34,198	$ —

The Company's ordinary short-term capital needs are expected to be met from our cash on hand which was supplemented by net proceeds of approximately $8,521,000 from a public offering of our common stock consummated on February 17, 2015, and amounts available under the revolving credit agreement with GECC. Cash flows may be impacted by a number of factors, including changing market conditions, market acceptance of the FORE-SIGHT system, and the loss of one or more key customers. There can be no assurance that we will be successful in raising additional capital if the need arises. The failure to raise any necessary additional capital on acceptable terms, or at all, could have a material adverse effect on our business and results of operations.

The Company's 2015 business plans call for operating expenditures to increase from 2014 levels. Sales-related expenditures are estimated to expand in 2015 as the Company continues to build out its U.S. FORE-SIGHT sales network and support its expanded international distribution efforts. R&D expenditures are expected to increase due to additional FORE-SIGHT clinical studies and the Company's sustaining efforts to expand the market applications for its FORE-SIGHT ELITE technology. Capital expenditures for 2015 are expected to increase over 2014 levels. Capital expenditures include the Company's placements of FORE-SIGHT monitors in customer accounts, whereby the Company retains title to the monitor in exchange for customer purchases of disposable sensors.

Cash flows may be impacted by a number of factors, including those detailed in Item 1A, of this report, entitled Risk Factors.

The Company's results of operations were not affected by inflation during 2014.

Off-Balance Sheet Arrangements

The Company has no off-balance sheet arrangements other than operating leases for office and warehouse space.

Critical Accounting Policies

The Company's financial statements have been prepared in accordance with generally accepted accounting principles in the United States. In preparing the financial statements, the Company is required to make estimated judgments. Such judgments are based upon historical experience and certain assumptions that are believed to be reasonable in the particular circumstances. Those judgments affect both balance sheet and income statement accounts and disclosures. The Company evaluates its assumptions on an ongoing basis by comparing actual results with its estimates. Actual results may differ from the original estimates. The following accounting policies are those that the Company believes to be most critical to the preparation of its financial statements.

Inventory Valuation – The Company's inventories are stated at the lower of cost or market. The Company provides allowances on inventories for any material that has become obsolete or may become unsalable based on estimates of future demand and the sale price in the market. Judgments with respect to salability and usage of inventories, estimated market value, and recoverability upon sale are complex and subjective. Such assumptions are reviewed periodically and adjustments are made, as necessary, to reflect changed conditions. There were no significant inventory write-offs for any period presented.

Deferred Income Tax Assets – The Company has recorded deferred income tax assets for the estimated benefit of future tax deductions on inventories, property and equipment and other accruals, as well as net operating loss carry forwards and tax credits. Based on recent cumulative pre-tax losses and the Company's estimates of future taxable income, management has established a deferred tax asset valuation allowance.

Accrued Warranty Costs – The Company warranties its products for up to three years and records the estimated cost of such product warranties at the time the sale is recorded. Estimated warranty costs are based upon actual past experience of product returns and the related estimated cost of labor and material to make the necessary repairs. Warranty costs have not been historically material to operating results. However, if actual future product return rates or the actual costs of material and labor differ from the estimates, adjustments to the accrued warranty liability would be made.

Stock-based Compensation - The Company records the fair value of stock-based compensation awards as expenses in its consolidated statements of operations. In order to determine the fair value of stock options on the date of grant, we apply the Black-Scholes option-pricing model. Inherent in this model are assumptions related to expected dividend yield, risk-free interest rate, expected stock-price volatility, expected term, and forfeiture rate. Restricted stock awards are generally based upon the closing price of the common stock on the date of the grant. Amortization of stock-based awards takes place over the vesting period associated with the award.

Revenue and Accounts Receivable Recognition - Revenue from sales and accounts receivable are recognized when evidence of an arrangement exists, delivery has occurred based upon shipping terms, the selling price is fixed and determinable, and collectability is reasonably assured. Terms of sale for most domestic sales are FOB origin and for most international sales are EX-Works reflecting that ownership and risk of loss are assumed by the buyer at the shipping point. In addition, the Company has certain agreements with its customers to ship FOB destination reflecting that ownership and risk of loss are assumed by the buyer upon receipt. While the Company accepts returns of products from its customers from time to time for various reasons including defective goods, order entry, shipping or other errors, the Company's business practices do not include providing right of return at the time of sale. Historically, such returns have not been significant. Payment terms range from prepayment to net 90 days depending upon certain factors including customer credit worthiness, geographic location and customer type (i.e., end-user, distributor, government or private entity) and also includes irrevocable letters of credit for certain international shipments. Price discounts that may be taken by customers under contractual arrangements for payment of invoices within specified periods are recorded as reductions to net sales. Further, the Company accrues expected payment discounts based upon specific customer accounts receivable balances. The Company does not incur post-shipment obligations with the exception of product warranties which are generally fulfilled from the Company's corporate facilities and which costs are not material relative to the sale of the product. Accounts receivable are charged to the allowance for doubtful accounts when deemed uncollectible.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

The Company holds no derivative securities for trading purposes and is not subject in any material respect to currency or other commodity risk.

Item 8. Financial Statements and Supplementary Data

Report of Independent Registered Public Accounting Firm

The Stockholders and Board of Directors
CAS Medical Systems, Inc.

We have audited the accompanying consolidated balance sheets of CAS Medical Systems, Inc. and Subsidiary (the "Company") as of December 31, 2014 and 2013, and the related consolidated statements of operations, changes in stockholders' equity, and cash flows for the years then ended. The Company's management is responsible for these financial statements. Our responsibility is to express an opinion on these 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of the Company's internal control over financial reporting. Our audit 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 controls over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of CAS Medical Systems, Inc. and Subsidiary as of December 31, 2014 and 2013, and their results of operations and their cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

/s/ CohnReznick LLP

Roseland, New Jersey
March 18, 2015

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CAS Medical Systems, Inc.
Consolidated Balance Sheets
As of December 31, 2014 and 2013

ASSETS	2014	2013
CURRENT ASSETS:		
Cash and cash equivalents	$4,494,663	$8,190,302
Accounts receivable, net	3,277,460	2,425,417
Inventories	3,358,908	3,931,007
Other current assets	556,760	510,710
Total current assets	11,687,791	15,057,436
PROPERTY AND EQUIPMENT:		
Leasehold improvements	139,970	139,970
Equipment at customers	3,795,659	3,365,636
Machinery and equipment	5,799,015	5,597,385
	9,734,644	9,102,991
Accumulated depreciation and amortization	(7,458,220)	(6,849,543)
Property and equipment, net	2,276,424	2,253,448
Intangible and other assets, net	1,471,900	851,737
Total assets	$15,436,115	$18,162,621

CAS Medical Systems, Inc.
Consolidated Balance Sheets
As of December 31, 2014 and 2013

LIABILITIES AND STOCKHOLDERS' EQUITY	2014	2013
CURRENT LIABILITIES:		
Accounts payable	$1,210,412	$1,594,147
Accrued expenses	1,808,529	1,737,312
Note payable	86,941	—
Note payable - line-of-credit	1,000,000	—
Current portion of long-term debt	1,216,218	994,898
Total current liabilities	5,322,100	4,326,357
Deferred gain on sale and leaseback of property	360,877	495,515
Long-term debt, less current portion	6,283,782	3,915,949
Other long-term liabilities	300,000	—
Total liabilities	12,266,759	8,737,821
Commitments and contingencies (Note 11)		
STOCKHOLDERS' EQUITY:		
Preferred stock, $.001 par value per share, 1,000,000 shares authorized		
Series A convertible preferred stock, 95,500 shares issued and outstanding, liquidation value of $12,255,072 at December 31, 2014	8,802,000	8,802,000
Series A exchangeable preferred stock, 54,500 shares issued and outstanding, liquidation value of $6,993,732 at December 31, 2014	5,135,640	5,135,640
Common stock, $.004 par value per share, 40,000,000 shares authorized, 19,563,333 and 19,324,549 shares issued at December 31, 2014 and December 31, 2013, respectively, including shares held in treasury	78,253	77,298
Common stock held in treasury, at cost - 86,000 shares	(101,480)	(101,480)
Additional paid-in capital	20,285,008	18,939,869
Accumulated deficit	(31,030,065)	(23,428,527)
Total stockholders' equity	3,169,356	9,424,800
Total liabilities and stockholders' equity	$15,436,115	$18,162,621

See accompanying notes.

CAS Medical Systems, Inc.
Consolidated Statements of Operations
For the Years Ended December 31, 2014 and 2013

	2014	2013
NET SALES	$22,913,249	$21,915,794
Cost of sales	13,306,592	13,958,451
Asset impairment charge	—	407,141
Total cost of sales	13,306,592	14,365,592
Gross profit	9,606,657	7,550,202
OPERATING EXPENSES:		
Research and development	3,465,920	4,211,492
Selling, general and administrative	12,973,393	13,792,156
Total operating expenses	16,439,313	18,003,648
OPERATING LOSS	(6,832,656)	(10,453,446)
Interest expense	786,963	316,312
Other income	(18,081)	(407,550)
NET LOSS	(7,601,538)	(10,362,208)
Preferred stock dividend accretion	1,290,470	1,203,953
NET LOSS APPLICABLE TO COMMON STOCKHOLDERS	$(8,892,008)	$(11,566,161)
PER SHARE BASIC AND DILUTED LOSS APPLICABLE TO COMMON STOCKHOLDERS	$(0.46)	$(0.73)
WEIGHTED-AVERAGE NUMBER OF COMMON SHARES OUTSTANDING - basic and diluted	19,235,015	15,771,760

See accompanying notes.

CAS Medical Systems, Inc.
Consolidated Statements of Changes in Stockholders' Equity
For the Years Ended December 31, 2014 and 2013

	Preferred Stock		Common Stock Issued		Common Stock Held in Treasury		Additional Paid-in	Accumulated	
	Shares	Amount	Shares	Amount	Shares	Amount	Capital	Deficit	Tota
BALANCE, December 31, 2012	150,000	$13,937,640	13,767,192	$55,069	86,000	$(101,480)	$12,023,721	$(13,066,319)	$12,848,
Net loss								(10,362,208)	(10,362
Common stock issued in lieu of cash bonus			11,000	44			21,956		22,000
Common stock issued in public offering			5,200,000	20,800			5,817,317		5,838,1
Common stock issued under stock purchase plan			13,750	55			23,932		23,987
Warrants issued to lender							31,878		31,878
Warrants exercised			300,000	1,200			91,800		93,000
Restricted stock issued, net of cancellations			32,607	130			(130)		—
Stock compensation							929,395		929,39
BALANCE, December 31, 2013	150,000	$13,937,640	19,324,549	$77,298	86,000	$(101,480)	$18,939,869	$(23,428,527)	$9,424,8
Net loss								(7,601,538)	(7,601,
Common stock issued upon exercise of stock options			38,170	153			50,717		50,870
			14,041	56			24,847		24,903

Common stock issued under stock purchase plan									
Warrants exercised			150,000	600			45,900		46,500
Warrants issued to lender							190,840		190,840
Restricted stock issued, net of cancellations			36,573	146			(146)		—
Stock compensation							1,032,981		1,032,9
BALANCE, December 31, 2014	150,000	$13,937,640	19,563,333	$78,253	86,000	$(101,480)	$20,285,008	$(31,030,065)	$3,169,3

See accompanying notes.

CAS Medical Systems, Inc.
Consolidated Statements of Cash Flows
For the Years Ended December 31, 2014 and 2013

	2014	2013
OPERATING ACTIVITIES:		
Cash flows from operating activities		
Net loss	$(7,601,538)	$(10,362,208)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,672,483	1,392,541
Amortization and write-off of deferred financing costs	181,188	59,332
Provision for doubtful accounts	148,160	14,653
Stock compensation	1,032,981	933,440
Gain from demutualization of insurance provider	(16,838)	(396,156)
Impairment of capitalized costs	6,569	52,721
Impairment of assets at customer sites	—	407,141
Amortization of gain on sale and leaseback of property	(134,637)	(134,637)
Changes in operating assets and liabilities:		
Accounts receivable	(1,000,203)	(242,557)
Inventories	572,099	(387,682)
Other current assets	197,523	101,372
Accounts payable and accrued expenses	(312,517)	(178,793)
Net cash used in operating activities	(5,254,730)	(8,740,833)
INVESTING ACTIVITIES:		
Expenditures for property and equipment	(1,509,160)	(1,230,397)
Short-term investments	—	1,250,794
Gain from demutualization of insurance provider	16,838	396,156
Additions to intangible assets	(122,915)	(170,070)
Net cash (used in) provided by investing activities	(1,615,237)	246,483
FINANCING ACTIVITIES:		
Repayments of note payable	(156,633)	—
Deferred financing costs	(291,312)	(11,500)
Debt extinquishment	(5,000,000)	—
Proceeds from long-term debt	7,500,000	1,500,000
Proceeds from line-of-credit	1,000,000	—
Proceeds from issuance of common stock	122,273	5,951,058
Net cash provided by financing activities	3,174,328	7,439,558
Net decrease in cash and cash equivalents	(3,695,639)	(1,054,792)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	8,190,302	9,245,094
CASH AND CASH EQUIVALENTS, END OF YEAR	$4,494,663	$8,190,302
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:		
Cash paid during the period for interest	$476,364	$248,800
Accrued liability settled with common stock	$—	$22,000

Insurance premiums funded with note payable	$243,574	$—
End-of-term fee payable to lender	$300,000	$—
Warrants issued to lender	$190,840	$—

See accompanying notes.

CAS Medical Systems, Inc.

Notes to Consolidated Financial Statements

(1) THE COMPANY

CAS Medical Systems, Inc. ("CASMED" or the "Company") is a medical technology company that develops, manufactures, and distributes non-invasive patient monitoring products that are vital to patient care. Our products include the FORE-SIGHT® series of absolute tissue oximeters and sensors, including the FORE-SIGHT ELITE® oximeter, and traditional monitoring products which include blood pressure measurement technologies, bedside monitoring products, and supplies for neonatal intensive care. These products are designed to provide accurate, non-invasive, biologic measurements that guide healthcare providers to deliver improved patient care. CASMED markets its products worldwide through its sales force, distributors, manufacturers' representatives, and original equipment manufacturers. The Company's facility and manufacturing operations are located in the United States.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of sales and expenses during the reporting period. Estimates that are particularly sensitive to change in the near-term are inventory valuation allowances, deferred income tax asset valuation allowances, allowance for doubtful accounts, and warranty accrual. Actual results could differ from those estimates.

Principles of consolidation

The consolidated financial statements included the accounts of CASMED and one inactive subsidiary.

Cash and cash equivalents

The Company considers all highly-liquid investments with a maturity of three months or less when purchased to be cash equivalents.

Inventories

Inventories are stated at the lower of cost determined by the first-in-first-out method or market.

Property and equipment

Property and equipment, including leasehold improvements, are stated at cost. Depreciation is computed using the straight-line method based on the estimated useful lives of the assets, which range from two to five years for machinery and equipment. Leasehold improvements are amortized over the life of the improvement or the lease term, whichever is shorter. Maintenance and repairs are charged to expense when incurred.

The Company owns certain FORE-SIGHT tissue oximetry monitors primarily located at customer sites within the United States. Such equipment is typically held under a no-cost program whereby customers purchase disposable

sensors for use with the Company's equipment. The Company retains title to the monitors shipped to its customers under this program. The monitors are depreciated on a straight-line basis over five years to cost of sales.

At the end of the third quarter of 2013, the Company launched its next-generation FORE-SIGHT ELITE cerebral oximetry technology which offers a significantly enhanced user interface and improved ease-of-use. The Company, therefore, expected that there would be significant demand for the new technology and that many customers utilizing the Company's first-generation cerebral oximetry technology under its monitor placement program would seek to upgrade to the latest technology.

Accordingly, management conducted an impairment analysis with respect to the Company-owned monitors at customer locations as of the launch date, based upon the projected net cash flows of the subject monitors through the estimated exchange date. We concluded that projected cash flows for certain monitors was less than their carrying value indicating impairment. We estimated the fair value of the impaired monitors by discounting the projected cash flows using a risk-free rate for the various periods. This fair value measurement technique was based upon significant inputs not observable in the market and thus represented a Level 3 measurement within the fair value hierarchy.

Management's analysis concluded that an impairment charge of $407,000 was required to reduce the net book value of the assets to estimated fair value. The impairment charge was recorded to cost of sales during the third quarter of 2013. Further, the monitors are being amortized using the straight-line method over the adjusted estimated remaining useful lives of the assets. This has increased amortization of the monitors until the monitors are removed from service.

Changes in the market or any of the assumptions used in determining the fair value of this asset may result in a further reduction to its estimated fair value and could result in additional and potentially full future impairment charges.

Depreciation and amortization expense on property and equipment was $1,486,000 in 2014 and $1,285,000 in 2013.

Intangible and other assets

The Company reviews its intangible and other long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. During 2014 and 2013, the Company charged off $6,569 and $52,721, respectively, of capitalized costs related to certain abandoned patents and trademarks. The Company believes that the carrying amounts of its long-lived assets are fully recoverable.

Intangible and other assets at December 31, 2014 and 2013 consist of:

	2014	2013
Patents and other assets	$ 997,076	$ 896,921
Patents pending	282,633	276,691
Purchased technology	33,893	33,893
Deferred financing costs	780,810	159,431
	2,094,412	1,366,936
Accumulated amortization	(622,512)	(515,199)
Total	$ 1,471,900	$ 851,737

Intangible and other assets are stated at cost. Patents are amortized on a straight-line basis over 20 years. Purchased technology is amortized over five years. Deferred financing costs are amortized over the term of the related debt. Amortization expense was $186,299 in 2014 and $107,357 in 2013. Deferred financing costs of $780,810 pertain to a Loan and Security Agreement (the "Loan Agreement") consummated with General Electric Capital Corporation ("GECC") as described in Note 5. The deferred financing costs include $300,000 of accrued fees payable to GECC at the maturity of the Loan Agreement or upon repayment of the term loan, warrants to purchase the Company's common stock valued at $190,840, as well as other legal and brokerage related costs. In connection with executing the agreement with GECC, the Company's secured term loan with East West Bank was repaid in full at the closing, and the revolving line-of-credit with East West Bank, which had no outstanding balance, was terminated. As a result, unamortized deferred financing costs of $92,035 at June 27, 2014, pertaining to the East West Bank agreements, were recorded to interest expense.

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Expected amortization expense of intangible assets as of December 31, 2014, over the next five calendar years follows:

2015	$ 275,100
2016	$ 247,400
2017	$ 209,700
2018	$ 105,100
2019	$ 24,500

Revenue and accounts receivable recognition

Revenue from sales and accounts receivable are recognized when evidence of an arrangement exists, delivery has occurred based upon shipping terms, the selling price is fixed and determinable, and collectability is reasonably assured. Terms of sale for most domestic sales are FOB origin and for most international sales are EX-Works reflecting that ownership and risk of loss are assumed by the buyer at the shipping point. In addition, the Company has certain agreements with its customers to ship FOB destination, reflecting that ownership and risk of loss are assumed by the buyer upon receipt. While the Company accepts returns of products from its customers from time to time for various reasons including defective goods, order entry, shipping, or other errors, the Company's business practices do not include providing right of return at the time of sale. Historically, such returns have not been significant. Payment terms range from prepayment to net 90 days, depending upon certain factors including customer credit worthiness, geographic location, and customer type (i.e., end-user, distributor, government, or private entity) and also includes irrevocable letters of credit for certain international shipments. Price discounts that may be taken by customers under contractual arrangements for payment of invoices within specified periods are recorded as reductions to net sales. Further, the Company accrues expected payment discounts based upon specific customer accounts receivable balances. The Company does not incur post shipment obligations with the exception of product warranties which are generally fulfilled from the Company's corporate facility and which costs are not material, relative to the sale of the product. Accounts receivable are charged to the allowance for doubtful accounts when deemed uncollectible.

In the normal course of business, the Company grants credit to its customers and does not require collateral. Credit losses are provided for in the period the related sales are recognized, based upon experience and an evaluation of the likelihood of collection. Credit losses have been within management's expectations.

The Company's five largest customers accounted for approximately 23% and 30% of sales in 2014 and 2013. Among these customers, Physio-Control, Inc. accounted for 9% of sales during each of 2014 and 2013, respectively. Also included above are sales to the U.S. Department of Veterans Affairs ("V.A."). When aggregating sales of the individual V.A. hospitals, those sales accounted for 5% and 8% of overall sales for 2014 and 2013, respectively.

Income taxes

The Company recognizes deferred income tax assets and liabilities for future tax consequences resulting from differences between the book and tax bases of existing assets and liabilities as well as for loss carryforwards. A valuation allowance is provided for that portion of deferred income tax assets which may not be realized.

The Company accrues for uncertain tax positions in accordance with accounting standards which prescribes a more likely-than-not threshold for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return.

The Company files U.S. Federal and multiple State income tax returns. The Company's U.S. Federal and State income tax returns prior to 2011 are closed. Interest and penalties related to uncertain tax positions are classified with income taxes.

Warranty costs

The Company warrants some of its products against defects and failures for up to three years and records the estimated cost of such warranties at the time the sale is recorded. Estimated warranty costs are based upon actual past experiences of product returns and the related estimated cost of labor and material to make the necessary repairs.

A summary of the changes in the Company's warranty accrual follows:

	2014	2013
Beginning balance	$ 100,000	$ 100,000
Provision	54,500	55,865
Warranty costs incurred	(54,500)	(55,865)
Ending balance	$ 100,000	$ 100,000

Research and development costs

The Company expenses all research and development costs as incurred. Research and development ("R&D") includes, among other expenses, direct costs for salaries, employee benefits, professional services, clinical studies, materials, and facility-related expenses.

Advertising costs

Non-direct response advertising costs are expensed as incurred and include product promotion, samples, meetings and conventions, and print media. Advertising expense was $601,000 and $989,000 in 2014 and 2013, respectively.

Income (loss) per common share applicable to common stockholders

Basic earnings (loss) per share is calculated by dividing net income (loss) applicable to common stockholders by the weighted-average number of common shares outstanding for the period. Diluted earnings (loss) per share reflects the potential dilution that could occur if common stock equivalents, such as unvested restricted common shares, outstanding warrants and options, or convertible preferred stock were exercised or converted into common stock. For all periods reported, the Company incurred net losses from continuing operations. Therefore, for each period reported, diluted loss per share is equal to basic loss per share because the effect of including such common stock equivalents or other securities would have been anti-dilutive.

At December 31, 2014, stock options and warrants to purchase 3,106,000 and 717,204 shares of common stock, respectively, were excluded from the diluted earnings per share calculation as they would have been anti-dilutive. On an as-converted basis, 8,057,264 shares of common stock pertaining to the private placement of 150,000 shares of Series A convertible and exchangeable preferred stock issued on June 8, 2011, were also excluded as they would have been anti-dilutive.

(3) ALLOWANCE FOR DOUBTFUL ACCOUNTS

Changes in the allowance for doubtful accounts during the years ended December 31, 2014 and 2013 follow:

	2014	2013

Balance at beginning of year	$ 110,000	$ 175,000
Provision	148,160	14,653
Accounts written off	(8,160)	(79,653)
Balance at end of year	$ 250,000	$ 110,000

The increase in the allowance for doubtful accounts during the year ended December 31, 2014, pertains to a dispute with a former distributor in the oral surgery market.

(4) INVENTORIES

Inventories at December 31, 2014 and 2013 consist of:

	2014	2013
Raw materials	$ 1,875,483	$ 2,388,380
Work in process	25,014	10,319
Finished goods	1,458,411	1,532,308
Total	$ 3,358,908	$ 3,931,007

(5) FINANCING ARRANGEMENTS

Common Stock Public Offering

On July 22, 2013, the Company entered into an underwriting agreement with Northland Securities, Inc. ("Northland") related to the public offering (the "Offering") of 5,200,000 shares of its common stock at $1.25 per share, resulting in gross proceeds of $6,500,000. Pursuant to the underwriting agreement, Northland purchased the shares of common stock from the Company at a price of $1.16875 per share. Net proceeds to the Company under the transaction, after fees and expenses, were $5,838,000. Proceeds from the transaction were used for general corporate purposes.

Private Placement of Preferred Stock

On June 8, 2011, the Company issued 95,500 shares of "Series A Convertible Preferred Stock" and 54,500 shares of "Series A Exchangeable Preferred Stock," (collectively, the "Series A Preferred Stock"), each with a par value $0.001 per share which are convertible into authorized but unissued shares of common stock, par value $0.004 per share, of the Company. The Series A Exchangeable Preferred Stock now has substantially identical terms to the Series A Convertible Preferred Stock.

The Company received an aggregate cash purchase price of $15,000,000, representing a per-share purchase price of $100 for the Series A Convertible Preferred Stock and $100 for the Series A Exchangeable Preferred Stock. The Company received net proceeds, after transaction costs and expenses, of $13,825,000.

The shares of Series A Preferred Stock were initially convertible at the option of the holder into common stock at a conversion price of $2.82 (the "Conversion Price"). The Conversion Price for a period of time was subject to standard weighted-average anti-dilution adjustments. On July 22, 2013, upon completion of the Company's public offering of common stock, the Conversion Price was adjusted to $2.389 per share. Those anti-dilution rights expired during June 2014.

The stated value ($100.00 per share) of the Series A Preferred Stock accretes at an annual rate of 7% compounded quarterly. On an annual basis, prior to the third anniversary of the original date of issuance, the holders could have elected, pursuant to certain requirements, to receive the following 12 months of accretion in the form of a dividend of 7% per annum, payable quarterly in cash at the holder's option. After the third anniversary of the closing, such accretion may be made in cash at the Company's option. The Series A Preferred Stock is subject to certain default

provisions whereby the dividend rate would be increased by an additional 5% per annum.

After the third anniversary of the original date of issuance, the Company can force conversion of all, and not less than all, of the outstanding Series A Preferred Stock into Company common stock as long as the closing price of its common stock is at least 250% of the Conversion Price, or $5.9725 per common share, for at least 20 of the 30 consecutive trading days immediately prior to the conversion and the average daily trading volume is greater than 50,000 shares per day over the 30 consecutive trading days immediately prior to such conversion. The Company's ability to cause a conversion is subject to certain other conditions as provided pursuant to the terms of the Series A Preferred Stock described above.

The Series A Preferred Stock is entitled to a liquidation preference equal to the greater of 100% of the accreted value for each share of Series A Preferred Stock outstanding on the date of a liquidation plus all accrued and unpaid dividends or the amount a holder would have been entitled to had the holder converted the shares of Series A Preferred Stock into common stock immediately prior to the liquidation. The Series A Preferred Stock votes together with the common stock as if converted on the original date of issuance. Holders of Series A Preferred Stock are entitled to purchase their pro rata share of additional stock issuances in certain future financings.

The Company's bank agreement with GECC prohibits the payment of cash dividends. As of December 31, 2014, $4,248,804 in dividend accretion has accumulated on the Series A Preferred Stock.

Bank Financing

On June 27, 2014, the Company entered into a Loan and Security Agreement (the "Loan Agreement") with GECC. Pursuant to the Loan Agreement, GECC provided the Company with a 48-month secured term loan in the amount of $7,500,000 (the "Term Loan") and a Revolving Loan in the maximum amount of $2,500,000 (the "Revolver"). The Term Loan and the Revolver each mature on June 27, 2018. The obligations under the Loan Agreement are secured by a lien on substantially all assets of the Company.

The Term Loan bears interest on the outstanding daily balance at a fixed rate of 9.29%. Under the Term Loan, 36 equal payments of $202,703 commence on July 1, 2015, with one final payment due in an amount equal to the remaining principal balance on the final maturity date. Principal payments under the Term Loan may be deferred for an additional six months if the Company reaches certain financial targets at April 30, 2015. Management anticipates that the Company will successfully reach those targets.

Revolver advances will bear interest at a floating rate equal to 5.5% plus the higher of 1.5% per annum or GECC's base rate determined by a LIBOR-based formula. As of December 31, 2014, the effective rate was 7.0%. Amounts not borrowed against the Revolver up to the commitment amount of $2,500,000 bear interest at an annual rate of 0.30%. Maximum borrowings under the Revolver are based upon the Company's eligible accounts receivable as defined in the Loan Agreement. As of December 31, 2014, $1,000,000 was outstanding under the Revolver. The remaining amount available for borrowing as of December 31, 2014, was $1,105,000.

The Company has the right to prepay loans under the Loan Agreement in full at any time. If the Term Loan is prepaid prior to maturity, an additional fee of 2% of the Term Loan amount is due if such prepayment takes place within one year from the closing date. Thereafter, the additional fee declines to 1% for any prepayment taking place after such first anniversary and prior to the scheduled maturity date. Upon repayment of the Term Loan at any time, GECC is entitled to an additional fee equal to 4% of the Term Loan amount, or $300,000.

The Loan Agreement contains customary affirmative covenants, including covenants regarding the payment of taxes and other obligations, maintenance of insurance, reporting requirements, and compliance with applicable laws and regulations. Further, the Loan Agreement contains customary negative covenants limiting the ability of the Company and its subsidiary, among other things, to grant liens on the pledged collateral, incur additional indebtedness, make certain investments and acquisitions, and dispose of assets outside the ordinary course of business. The Loan Agreement also contains a financial covenant requiring the Company to maintain a continuing level of cash plus available borrowing capacity based on a formula. Management believes that the Company was in compliance with the Loan Agreement's covenants as of December 31, 2014.

In connection with the Loan Agreement executed on June 27, 2014, the Company issued to GECC's affiliate, GE Capital Equity Investments, Inc., a warrant pursuant to which GE Capital Equity Investments, Inc. received the right to purchase 114,213 shares of Company common stock for a ten-year period, expiring on June 27, 2024, at an exercise price of $1.97 per share. The shares associated with the warrant were fully vested at the time of issuance. The

value of the warrant was estimated on the date of grant to be $1.67 per share based upon the fair value of the underlying common stock, using the Black-Scholes option pricing model assuming a weighted-average expected stock price of volatility of 86.1%, an expected warrant life of ten years, an average risk-free interest rate of 2.63%, and a 0.0% average dividend yield. The warrant cost of $190,840 as calculated above was capitalized to other assets as a deferred financing cost and is being recognized as interest expense over the 48 months of the Loan Agreement.

The Company's secured term loan with East West Bank was repaid in full at the closing, and the revolving line-of-credit with East West Bank, which had no outstanding balance, was terminated. East West Bank continues to hold warrants for the purchase of an aggregate of 163,590 shares of the Company's common stock which were fully vested at the time of issuance. The unamortized cost of $75,796 at June 27, 2014, pertaining to the warrants, was recorded to interest expense.

The outstanding balance of the bank term loan at December 31, 2014 and 2013 is as follows:

	2014	2013
Balance of bank term loan	$ 7,500,000	$ 5,000,000
Debt discount	—	(89,153)
	7,500,000	4,910,847
Current portion	1,216,218	994,898
Long-term portion	$ 6,283,782	$ 3,915,949

The Company financed its directors' and officers' insurance premiums during 2014 under a note payable in the amount of $96,410. The note payable requires ten payments of $9,641 and will be repaid in full by September 2015.

(6) ACCRUED EXPENSES

Accrued expenses at December 31, 2014 and 2013 consist of:

	2014	2013
Payroll	$ 410,057	$ 470,948
Employee compensation	418,000	339,098
Professional fees	277,527	300,788
Warranty	100,000	100,000
Travel and entertainment	8,159	41,045
Sales and use tax	267,013	235,921
Other	327,773	249,512
	$ 1,808,529	$ 1,737,312

(7) SHARE-BASED PAYMENT PLANS

On June 8, 2011, at the Company's annual meeting of stockholders, the CAS Medical Systems, Inc. 2011 Equity Incentive Plan, (the "Incentive Plan") was approved by the stockholders. The Incentive Plan was intended to replace the CAS Medical Systems, Inc. 2003 Equity Incentive Plan which was near full distribution. The Incentive Plan provided for the availability of a maximum of 1,000,000 shares of the Company's common stock, with a maximum of 500,000 shares available for issuance with respect to awards of restricted stock and restricted stock units. On June 20, 2013, and June 25, 2014, the Company's stockholders approved amendments to the Incentive Plan which increased the maximum number of shares that can be issued by 1,000,000, thereby increasing the maximum number of shares to 2,000,000 in 2013 and to 3,000,000 in 2014. As of December 31, 2014, 765,036 shares remain available for issuance

under the Incentive Plan, as amended.

Awards that may be granted under the Incentive Plan include options, restricted stock, restricted stock units, and other stock-based awards. The purposes of the Incentive Plan are to make available to key employees and directors certain compensatory arrangements related to growth in the value of the Company's stock so as to generate an increased incentive to contribute to the Company's financial success and prosperity; to enhance the Company's ability to attract and retain exceptionally qualified individuals, whose efforts can affect the Company's financial growth and profitability; and align, in general, the interests of employees and directors with the interests of stockholders. The Incentive Plan is administered by the Compensation Committee of the Board of Directors, which in turn determines the employees, officers, and directors to receive awards and the terms and conditions of these awards.

During 2014, stock options to purchase 644,000 shares of common stock were granted to our employees, officers, and a sales consultant. Of the total granted, options to officers of the Company accounted for 245,000 shares and included a grant of 100,000 shares issued to our CEO. Grants to purchase 399,000 shares were issued to senior and mid-level managers, other employees, and a sales consultant both in recognition of performance and to attract and retain key employees. The stock options contain various vesting formulas; however, they generally vest over a three- to four-year period. As of December 31, 2014, options to purchase 3,106,000 shares remain outstanding of which 1,990,500 pertain to options granted under the Incentive Plan, 615,500 pertain to stock options granted under the 2003 Plan, and 500,000 were issued as non-plan inducement grants to officers commensurate with the start of their employment with the Company.

The unamortized stock compensation expense associated with the stock options at December 31, 2014, was $1,795,000 and will be recognized through the fourth quarter of 2018.

A summary of the Company's stock options and changes during the years follow:

	2014			2013		
	Option Shares	Weighted-Average Exercise Price	Aggregate Intrinsic Value	Option Shares	Weighted-Average Exercise Price	Aggregate Intrinsic Value
Outstanding at beginning of year	2,618,625	$ 2.10		2,007,125	$ 2.25	
Granted	644,000	1.84		661,500	1.67	
Exercised	(38,170)	1.60		—	—	
Cancelled	(118,455)	2.02		(50,000)	2.56	
Outstanding at end of year	3,106,000	$ 2.05	$ 75,000	2,618,625	$ 2.10	$ 112,875
Exercisable at end of year	1,599,000	$ 2.25	$ 18,750	1,204,708	$ 2.30	$ 23,350
Vested and expected to vest at end of year	3,061,058	$ 2.06	$ 73,313	2,576,272	$ 2.10	$ 110,189
Weighted-average grant-date fair value of options granted during the year		$ 1.32			$ 1.21	

During 2014, 38,170 shares were issued upon the exercise of stock options, and options to purchase 118,455 shares were cancelled. The total intrinsic value of stock options exercised in 2014 was $20,023. The intrinsic value of a stock option is the amount by which the current market value of the underlying stock exceeds the option exercise price.

The fair value of each option is estimated on the date of grant using the Black-Scholes option pricing model. Similar to other option pricing models, the Black-Scholes model requires the input of highly subjective assumptions which may materially affect the estimated fair value of the Company's stock options.

The fair value of each option granted during 2014 was estimated on the date of grant using the Black-Scholes option-pricing model assuming a weighted-average expected stock volatility of 82.7%, a weighted-average expected option life of 6.3 years, an average risk-free interest rate of 1.87% and a 0.0% dividend yield. The fair value of each option granted during 2013 was estimated on the date of the grant using the Black-Scholes option-pricing model, assuming a weighted-average expected stock price volatility of 83.8%, a weighted average expected option life of 6.3 years, an average risk-free interest rate of 1.91% and a 0.0% average dividend yield. Risk-free interest rates approximate U.S. Treasury yields in effect at the time of the grant. The expected lives of the stock options are determined using historical data adjusted for the estimated exercise dates of unexercised options. Volatility is determined using both current and historical implied volatilities of the underlying stock which is obtained from public data sources.

Additional information about stock options outstanding and exercisable at December 31, 2014, follows:

Range of Exercise Prices	Number Outstanding	Weighted Remaining Contractual Life in Years	Average Exercise Price	Number Exercisable	Average Exercise Price
$1.35 - $1.79	1,249,000	7.0	$ 1.67	398,750	$ 1.64
1.87 - 2.30	1,401,500	8.6	2.05	766,625	2.09
2.54 - 3.16	420,500	4.6	3.04	398,625	3.03
3.59 - 4.50	35,000	0.7	3.98	35,000	3.98
$1.35 - $4.50	3,106,000	7.7	$ 2.05	1,599,000	$ 2.25

During 2014, 25,380 shares of restricted stock were granted to non-employee members of the Board of Directors. As of December 31, 2014, 178,694 restricted shares issued to employees and members of the Board of Directors remain issued and non-vested.

During 2014, 3,807 shares of restricted stock were cancelled due to the resignation of a member of the board of directors. Stock compensation expense of $210,000 and $235,000 related to restricted shares was recorded for 2014 and 2013, respectively. The unamortized stock compensation expense associated with the restricted shares at December 31, 2014, was $23,000 and will be recognized through the second quarter of 2015.

The fair value of the restricted common shares was calculated based upon the market value of the common stock on the date of issuance. Restricted stock granted to employees typically vests over a period of not less than three years while restricted stock granted to members of the Board of Directors vests ratably over 12 months from date of grant.

A summary of the restricted shares outstanding and changes for the years follow:

	2014	2013
Outstanding at beginning of year	241,359	320,476
Granted	40,380	37,266
Cancelled	(3,807)	(4,658)
Vested	(99,238)	(111,725)
Outstanding at end of year	178,694	241,359

Total stock compensation expense was $1,028,937 and $933,440 for 2014 and 2013, respectively.

Warrants to purchase 717,204 shares of common stock at a weighted-average exercise price of $1.07 per share were outstanding at December 31, 2014. The warrants have an exercise price range of $0.30 to $1.98 per share and, with the exception of the 277,803 shares subject to warrants issued to the Company’s current and former bank lenders, have no expiration date.

In connection with the Loan Agreement executed on June 27, 2014, the Company issued to GECC's affiliate, GE Capital Equity Investments, Inc., a warrant pursuant to which GE Capital Equity Investments, Inc. received the right to purchase 114,213 shares of Company common stock for a ten-year period, expiring on June 27, 2024, at an exercise price of $1.97 per share. The shares associated with the warrant were fully vested at the time of issuance. The value of the warrant was estimated on the date of grant to be $1.67 per share, using the Black-Scholes option pricing model assuming a weighted-average expected stock price of volatility of 86.1%, an expected warrant life of ten years, an average risk-free interest rate of 2.63%, and a 0.0% average dividend yield. The warrant cost of $190,840 as calculated above was capitalized to other assets as a deferred financing cost and is being recognized as interest expense over the 48 months of the Loan Agreement.

The Company maintains an employee stock purchase plan. The CAS Medical Systems, Inc. Employee Stock Purchase Plan (the "Stock Purchase Plan") was approved by stockholders on June 10, 2009, and accordingly, 150,000 shares of common stock were reserved for issuance under the Stock Purchase Plan. The initial offering period began on July 1, 2009. As of December 31, 2014, 58,469 shares were issued under the Stock Purchase Plan, and certain amounts had been withheld from employees' compensation to purchase an additional 7,627 shares which were issued during January 2015. The Stock Purchase Plan offers the Company's employees an opportunity to participate in a payroll-deduction-based program designed to incentivize them to contribute to the Company's success.

(8) BENEFIT PLANS

The Company maintains a 401(k) benefit plan for its employees, which generally allows participants to make contributions via salary deductions up to allowable Internal Revenue Service limits on a tax-deferred basis. Such deductions may be matched in part by discretionary contributions by the Company. The matching contributions for 2014 and 2013 were $56,416 and $56,394, respectively.

(9) INCOME TAXES

There are no current and deferred Federal and State income tax benefits for the years ended December 31, 2014 and 2013.

A reconciliation of U.S. Federal income taxes computed at the statutory rate to income taxes shown in operations for the years ended December 31, 2014 and 2013 follows:

	2014	2013
Income tax benefit at the statutory rate	$ (2,576,195)	$ (3,523,151)
State income taxes, net of Federal effect	(161,775)	(138,162)
R&D and other tax credits	(318,501)	(189,812)
Change in valuation allowance	3,029,450	3,837,816
Other	27,021	13,309
Income tax benefit	$ —	$ —

Deferred income tax assets and (liabilities) at December 31 relate to:

	2014	2013
Inventories	$ 295,856	$ 227,873
Warranty accrual	34,990	34,990
Allowance for doubtful accounts	87,475	38,489
Tax credits	918,843	600,342
Deferred gain on sale and leaseback	126,271	173,381
Restricted stock	945,383	660,460
Net operating loss carry forwards	10,450,108	8,203,163
Other	580,694	555,288
	13,439,620	10,493,986
Prepaid expenses	(138,726)	(159,397)
Fixed assets	(372,916)	(436,061)
Deferred income tax assets and liabilities	12,927,978	9,898,528
Valuation allowance	(12,927,978)	(9,898,528)
Net deferred income tax assets and liabilities	$ —	$ —

The Company has performed the required analysis of both positive and negative evidence regarding the realization of our deferred income tax assets, including our past results of operations, recent cumulative losses, and our forecast for future taxable income. The assessment required the use of assumptions about future sales and pre-tax income, making allowance for uncertainties surrounding the rate of adoption of our products in the market place, competitive influences, and the investments required to increase our market share in certain markets for our products. As of December 31, 2014, we have concluded that it is more likely than not that such deferred income tax assets will not be realized and, accordingly, have established a deferred income tax asset valuation allowance in the amount of $12,927,978.

The Company’s Federal net operating loss carry forward of $29,644,562 is scheduled to expire beginning in 2030. State net operating loss carry forwards of $6,773,654 are scheduled to expire between 2026 and 2034. The amount of the net operating loss carry forwards that may be utilized annually to offset future taxable income and tax liabilities may be limited as a result of certain ownership changes pursuant to Section 382 of the Internal Revenue Code. The Company has not completed a study to determine if there have been one or more ownership changes due to the costs associated with such study.

The Company does not believe that there are unrecognized income tax benefits for December 31, 2014 or 2013, and expects no significant changes in 2015.

(10) SALE AND LEASEBACK OF PROPERTY

On September 6, 2007, the Company closed the sale and leaseback of its headquarters and manufacturing facility (the “Property”). Net proceeds from the sale were $2,791,529 of which $928,872 was used to retire the related outstanding mortgage debt. The gain of $1,346,373 realized on the sale has been deferred and is being recognized in operations as a reduction in rent expense over the term of the lease. The lease has an initial term of ten years, expiring on September 6, 2017, and an option for two additional five-year periods. The lease provides for an annual base rent in years one

through five of $244,800 and $268,800 in years six through ten. The Company recognizes rent expense on a straight-line basis over the ten years. Under the lease, the Company is responsible for the costs of utilities, insurance, taxes, and maintenance expenses. Further, the Company is required to maintain at least $600,000 in cash and cash equivalents (increasing at 3% per annum) and net current assets of not less than $3,600,000.

In addition, the Company has a right of first offer to lease any additional space or building built by the lessor on the Property, subject to certain restrictions. The Company also has the right to require the lessor to build an addition or additional building ("Expansion Premises"), subject to certain restrictions. Upon the delivery of any Expansion Premises, the term of the Lease would extend for a ten-year term. The base rent for the Expansion Premises would be the greater of the then prevailing market rent or an amount equal to a return on actual costs of construction of the greater of 250 basis points over the rate on ten-year U.S. Treasury Notes, or 8%. Upon delivery of the Expansion Premises, the lessor would assume obligations under the Company's existing lease of its adjacent property in exchange for a payment equal to three months of rent and certain unamortized costs incurred with respect to this facility.

(11) COMMITMENTS AND CONTINGENCIES

Litigation

The manufacture and sale of our products exposes us to product liability claims and product recalls, including those which may arise from misuse or malfunction of, or design flaws in, our products or use of our products with components or systems not manufactured or sold by us. Product liability claims or product recalls, regardless of their ultimate outcome, could require us to spend significant time and money in litigation or to pay significant damages. Currently, there are no product liability claims pending against the Company.

Operating Leases

The Company currently leases two separate operating facilities and certain equipment under non-cancellable operating leases. Rent expense under these leases was $446,000 in 2014 and $496,000 in 2013. Future annual minimum rental payments as of December 31, 2014, to the expiration of the leases follow:

2015	$ 363,000
2016	306,000
2017	211,000
2018	31,000
2019	3,000
Total	$ 914,000

(12) SUBSEQUENT EVENT

On February 17, 2015, the Company completed a public offering (the “Offering”) underwritten by Craig-Hallum Capital Group, LLC (“Craig-Hallum”) of 7,130,000 shares of its common stock at $1.30 per share, resulting in gross proceeds of $9,269,000. The Offering included an option exercised by Craig-Hallum to purchase up to 930,000 shares. Pursuant to the underwriting agreement, Craig-Hallum purchased the shares of common stock from the Company at a price of $1.222 per share. Net proceeds to the Company from the transaction, after fees and expenses, were approximately $8,521,000. Proceeds from the transaction are intended to be used for general corporate purposes.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in the Company's Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure based on the definition of “disclosure controls and procedures" in Rule 13a-15(e) of the Exchange Act. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

The Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and the Company's Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures as of December 31, 2014. Based upon the foregoing evaluation, the Chief Executive Officer and the Chief Financial Officer have concluded that the Company’s disclosure controls and procedures were effective as of that date.

There have been no changes in the Company’s internal control over financial reporting during the quarter ended December 31, 2014, that have materially affected, or are reasonably likely to materially affect the Company’s internal control over financial reporting.

Management’s Annual Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f) and 15(d)-15(f). Under the supervision and with the participation of the Company’s management, including its Chief Executive Officer and Chief Financial Officer, an evaluation was conducted to determine the effectiveness of internal control over financial reporting based on the framework in 2013 Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). Based on the Company’s evaluation, management concluded that its internal control over financial reporting was effective as of December 31, 2014.

Reference is made to the Certifications of the Chief Executive Officer and the Chief Financial Officer about these and other matters attached as Exhibits 31.1, 31.2 and 32.1 to this report.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Reference is made to the disclosure required by Items 401, 405, 406 and 407(c)(3), (d)(4) and (d)(5) of Regulation S-K to be contained in the Registrant's definitive proxy statement to be mailed to stockholders on or about April 28, 2015, and to be filed with the Securities and Exchange Commission.

Item 11. Executive Compensation

Reference is made to the disclosure required by Items 402 and 407(e)(4) and (e)(5) of Regulation S-K to be contained in the Registrant's definitive proxy statement to be mailed to stockholders on or about April 28, 2015, and to be filed with the Securities and Exchange Commission.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Reference is made to the disclosure required by Item 403 of Regulation S-K to be contained in the Registrant's definitive proxy statement to be mailed to stockholders on or about April 28, 2015, and to be filed with the Securities Exchange Commission.

The following table provides information regarding the Company's equity compensation plans as of December 31, 2014:

Plan Category	Number of securities to be issued upon exercise of outstanding options and warrants	Weighted-average exercise price of outstanding options and warrants	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved by security holders	2,606,000	$ 1.98	765,036
Equity compensation plans not approved by security holders	1,217,204	1.62	—
Total	3,823,204	$ 1.87	765,036

Securities remaining available for issuance under equity compensation plans approved by security holders are from the CAS Medical Systems, Inc. 2011 Equity Incentive Plan, as amended. The equity compensation plans not approved by security holders consist of warrants to purchase 439,401 shares granted to former directors of the Company as compensation for services rendered which have no expiration date, warrants to purchase 277,803 shares granted to the

Company's current and former bank lenders, and 500,000 shares under inducement stock options granted to certain officers of the Company commensurate with their employment with the Company. See Note 7 "Share-Based Payment Plans" to the Company's Financial Statements.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Reference is made to the disclosure required by Items 404 and 407(a) of Regulation S-K to be contained in the Registrant's definitive proxy statement to be mailed to stockholders on or about April 28, 2015, and to be filed with the Securities and Exchange Commission.

Item 14. Principal Accountant Fees and Services

Reference is made to the proposal regarding the approval of the Registrant's independent registered public accounting firm to be contained in the Registrant's definitive proxy statement to be mailed to stockholders on or about April 28, 2015, and to be filed with the Securities and Exchange Commission.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) (1) Financial Statements

The Company's financial statements are included in response to Item 8 of this report.

Report of Independent Registered Public Accounting Firm

Financial Statements
Consolidated Balance Sheets as of December 31, 2014 and 2013
Consolidated Statements of Operations for the Years Ended December 31, 2014 and 2013
Consolidated Statements of Changes in Stockholders' Equity for the Years Ended December 31, 2014 and 2013
Consolidated Statements of Cash Flows for the Years Ended December 31, 2014 and 2013
Notes to Consolidated Financial Statements

(2) Financial Statement Schedules

Not applicable.

(3) Exhibits

The Exhibits to this report are as set forth in the "Exhibit Index" beginning on Page 31 of this report. Management contracts or compensatory plans or arrangements filed as an exhibit to this report are identified in the "Index to Exhibits" with an asterisk after the exhibit number.

EXHIBIT INDEX

1.1 Form of Purchase Agreement, dated July 16, 2013, by and between CAS Medical Systems, Inc. and Northland Securities (21)
1.2 Form of Purchase Agreement, dated February 11, 2015, by and between CAS Medical Systems, Inc. and Craig-Hallum Capital Group LLC (24)
2.1 Stock Purchase Agreement dated May 15, 2005 among CAS Medical Systems, Inc., Statcorp, Inc., and the Stockholders of Statcorp, Inc. (1)
3.1 Certificate of Incorporation of Registrant (2)
3.2 Amended and Restated Bylaws of Registrant (9)
10.1* 1994 Employees' Incentive Stock Option Plan (4)
10.2* CAS Medical Systems, Inc. Employee Stock Purchase Plan (5)
10.3* CAS Medical Systems, Inc. 2003 Equity Incentive Plan (6)
10.4* Form of Option Agreement (3)
10.5 Purchase and Sale Agreement between CAS Medical Systems, Inc. and Davis Marcus Partners, Inc. dated June 18, 2007 (7)
10.6 Lease Agreement between CAS Medical Systems, Inc. and DMP New Branford, LLC dated September 6, 2007 (7)
10.7 Subscription Agreement dated May 9, 2008 with jVen Capital, LLC (10)
10.8 Amendment to the CAS Medical Systems, Inc. 2003 Equity Incentive Plan (11)
10.9* Employment Agreement with Jeffery A. Baird dated August 10, 2009 (12)
10.10 Subscription Agreement dated June 16, 2010 with several Subscribers (13)
10.11* Employment Agreement between CAS Medical Systems, Inc. and Thomas M. Patton dated August 27, 2010 (14)
10.12* Inducement Non-Qualified Stock Option Agreement with Thomas M. Patton dated August 27, 2010 (14)
10.13* Inducement Restricted Stock Agreement between CAS Medical Systems, Inc. and Thomas M. Patton dated August 27, 2010 (14)
10.14* Inducement Restricted Stock Agreement between CAS Medical Systems, Inc. and Thomas M. Patton dated August 27, 2010 (14)
10.15 Asset Purchase Agreement dated November 5, 2010 by and among CAS Medical Systems, Inc., Statcorp, Inc. and OSI Optoelectronics, Inc. (15)
10.16* Employment Agreement with Matthew J. Herwig dated January 7, 2011 (16)
10.17* Inducement Non-Qualified Stock Option Agreement with Matthew J. Herwig dated January 7, 2011 (16)
10.18* Inducement Restricted Stock Agreement with Matthew J. Herwig dated January 7, 2011 (16)
10.19 Investment Agreement, dated June 8, 2011, among CAS Medical Systems, Inc. and several Purchasers named therein (17)
10.20 Registration Rights Agreement, dated June 9, 2011, among CAS Medical Systems, Inc. and the several Purchasers named therein (17)
10.21 Form of Indemnification Agreement, dated June 9, 2011, between CAS Medical Systems, Inc. and the individual members of the Board of Directors of CAS Medical Systems, Inc. (17)
10.22* CAS Medical Systems, Inc. 2011 Equity Incentive Plan, as amended (18)
10.23 Loan and Security Agreement, dated July 31, 2012, by and between the Company and East West Bank (19)
10.24 Warrant to Purchase Stock, dated July 31, 2012, issued by the Company to East West Bank (19)
10.25 Second Amendment to Loan and Security Agreement dated May 10, 2013 between the Company and East West Bank (20)
10.26 Warrant to Purchase Stock dated May 10, 2013 issued to East West Bank (20)
10.27* Employment Agreement with John K. Gamelin dated August 5, 2013 (22)
10.28* Employment Agreement with Paul Benni dated May 1, 2008 (22)
10.29* Employment Agreement with Brian J. Wagner dated October 2, 2013 (25)
10.30

	Third Amendment to Loan and Security Agreement dated March 17, 2014, between the Company and East West Bank (25)
10.31	Loan and Security Agreement dated June 27, 2014 by and between the Company and General Electric Capital Corporation (23)
10.32	Warrant to Purchase Stock, dated June 27, 2014, issued by the Company to GE Capital Equity Investments, Inc. (23)
21.1	Subsidiaries of the Registrant
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of CEO Pursuant to Rule 13a-14
31.2	Certification of CFO Pursuant to Rule 13a-14
32.1	Certification of CEO and CFO Pursuant to 18 U.S.C. 1350
101	Interactive data files pursuant to Rule 405 of Regulation S-T

(1)	Incorporated by reference to the Company's Form 8-K/A filed July 29, 2005
(2)	Incorporated by reference to the Company's Form 10-Q filed August 12, 2011
(3)	Incorporated by reference to the Company's Form 10-KSB filed March 31, 2005
(4)	Incorporated by reference to the Company's Form S-8 filed October 4, 2000
(5)	Incorporated by reference to the Company's Form S-8 filed June 10, 2004, (333-116348)
(6)	Incorporated by reference to the Company's Form S-8 filed June 10, 2004, (333-116349)
(7)	Incorporated by reference to the Company's Form 8-K filed September 10, 2007
(8)	Incorporated by reference to the Company's Form 8-K filed November 30, 2007
(9)	Incorporated by reference to the Company's Form 8-K filed February 14, 2008
(10)	Incorporated by reference to the Company's Form 8-K filed May 14, 2008
(11)	Incorporated by reference to the Company's Form 8-K filed December 31, 2008
(12)	Incorporated by reference to the Company's Form 10-Q filed August 12, 2009
(13)	Incorporated by reference to the Company's Form 8-K filed June 16, 2010
(14)	Incorporated by reference to the Company's Form 8-K filed August 27, 2010
(15)	Incorporated by reference to the Company's Form 10-Q filed November 10, 2010
(16)	Incorporated by reference to the Company's Form 8-K filed January 10, 2011
(17)	Incorporated by reference to the Company's Form 8-K filed June 13, 2011
(18)	Incorporated by reference to the Company's Proxy Statement filed April 29, 2014
(19)	Incorporated by reference to the Company's Form 8-K filed August 2, 2012
(20)	Incorporated by reference to the Company's Form 8-K filed May 13, 2013
(21)	Incorporated by reference to the Company's Form 8-K filed July 17, 2013
(22)	Incorporated by reference to the Company's Form 10-Q filed August 7, 2013
(23)	Incorporated by reference to the Company's Form 8-K filed June 30, 2014
(24)	Incorporated by reference to the Company's Form 8-K filed February 11, 2015
(25)	Incorporated by reference to the Company's Form 10-K filed March 19, 2014

SIGNATURES

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

CAS MEDICAL SYSTEMS, INC.
(Registrant)

/s/ Thomas M. Patton — Date: March 18, 2015
By: Thomas M. Patton
President and Chief Executive Officer

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

/s/ Paul A. Molloy — Date: March 18, 2015
Paul A. Molloy, Director

/s/ Gregory P. Rainey — Date: March 18, 2015
Gregory P. Rainey, Director

/s/ James E. Thomas — Date: March 18, 2015
James E. Thomas, Director

/s/ Kathleen A. Tune — Date: March 18, 2015
Kathleen A. Tune, Director

/s/ Kenneth R. Weisshaar — Date: March 18, 2015
Kenneth R. Weisshaar, Director

/s/ Thomas M. Patton — Date: March 18, 2015
Thomas M. Patton, President, Chief Executive Officer and Director

/s/ Jeffery A. Baird — Date: March 18, 2015
Jeffery A. Baird, Chief Financial Officer
(Principal Financial and Accounting Officer)