



2016 Annual Report

iCAD[®]

Dear Shareholder:

In 2016, we made significant progress in advancing our key product lines and enhancing our market presence. This led to the strengthening of our competitive position, and presents us with expanded and new opportunities for revenue growth in the years ahead. On both the cancer detection and therapy sides of our business, our team is moving forward with key initiatives in clinical research, product and pipeline development and new market development, all aimed at building commercial opportunities around the world.

Delivering Leading-Edge Technology in Cancer Detection

We continued to deliver innovative software and launched a revolutionary new workflow and cancer detection solution built on artificial intelligence and deep learning, which enhances 3D tomosynthesis breast exams. Our PowerLook® Tomo Detection software was CE marked in Europe in April 2016, and we received PMA approval from the FDA in March of 2017. This is the first product of its kind in the breast health market, and we are extremely excited about its potential. While delivering considerable advantages to patients and clinicians, Powerlook Tomo Detection is a proven-effective technology and presents us with a major new substantial opportunity for global growth.

Our cancer detection software now has a platform of over 5,000 existing installed customers. This large installed base positions us well to rapidly leverage the advantages of our tomosynthesis cancer detection software, a landmark workflow tool with the potential to transform breast cancer detection capabilities for radiologists. The installation of our PowerLook software in existing 3D tomosynthesis platforms and potential conversion of 2D platforms represents a significant market opportunity for iCAD of over \$250 million, as well as ongoing software maintenance fees.

In addition to our direct sales efforts, the PowerLook Tomo Detection software is being offered to customers through a partnership with the GE Healthcare. Together, we are marketing the PowerLook Tomo Detection software to both current and potential new customers. Strong initial interest in the product reflects the need for interpretive tools to support radiologists in reading data-intensive exams in an accurate and efficient manner. iCAD's U.S. clinical reader study demonstrated that radiologists could improve throughput by reducing their average reading time by approximately 30% without compromising detection accuracy

Focus on Growing Opportunities in Cancer Treatment

2016 also brought increased awareness of our Xoft® Electronic Brachytherapy (eBx®) System® in the treatment of nonmelanoma skin cancer (NMSC) and early-stage breast cancer. This technology platform, with the ability to target radiation therapy directly to a tumor site, is supported by a growing body of clinical data, consistently demonstrating eBx to be as safe and effective as a traditional radiation treatment for appropriate selected patients.

With a growing incidence rate of NMSC and our ability to treat lesions in a painless, non-invasive manner, we believe that our skin eBx system represents a significant market opportunity for us. In 2016, our revenues in skin eBx were negatively impacted by the disruption initially caused in 2015 related to the uncertainty of reimbursement codes and payment rates for the treatment of NMSC. In January 2016, new skin-specific level III reimbursement codes for skin eBx were established in the U.S. As 2016 progressed, dermatologists became aware of the new reimbursement levels, and we experienced growth in new sites and procedure volumes which continued into the first half of 2017. Supporting this growth, we have completed targeted investments to improve our onboarding process for new customers and selectively added marketing resources to support dermatologists in attracting new patients to their practice.

As part of our long-term strategy to secure national reimbursement for our skin cancer treatment, we continued to make strategic investments in clinical trials. In 2016, we completed one such key study, which compared patients treated with electronic brachytherapy to those with similar lesions treated with Mohs surgery. This important and encouraging data, published in a peer-reviewed medical journal, indicated that the Xoft skin eBx system delivered a cancer recurrence rate similar to Mohs surgery at 3 years of patient follow-up.



In our Intra-Operative Radiation Therapy (IORT) business for breast and gynecological applications, we now have over 60 sites treating, with over half of the sites located outside of United States. Physician adoption continues to grow, as measured by our disposable balloon applicator sales, which increased by 19% globally. To support this growth, we are investing in, and are intently focused on, achieving regulatory approvals in key international markets, such as China, India, Egypt, and Saudi Arabia. Our long-term strategy is to expand our applicator line to allow physicians to treat additional cancers in more body locations. Building on this momentum, iCAD is currently conducting one of the largest breast IORT clinical studies to date, with approximately 1,000 patients enrolled, using the Xofig System. We remain committed to expanding the body of literature demonstrating the proven efficacy and safety of this important treatment for women with early-stage breast cancer.

A Continuing Commitment to Research and Innovation

With our business focus in cancer detection and treatment, we are targeting two of the largest areas of unmet need in global health. Our success will continue to be driven by our investments in research, product development and innovation, combined with marketing and education programs for patients and clinicians.

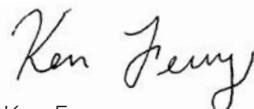
As noted above, we are investing in clinical trials, which have already reported important clinical data, or expect them to in the near future. We expect these trials to enhance clinical understanding and adoption of each of our key product lines including 3D tomosynthesis detection software, skin eBx and breast and gynecological IORT treatments.

We believe our most compelling opportunity is with our 3D PowerLook Tomo Detection system. This innovative technology is an excellent example of iCAD's capabilities in the emerging fields of Artificial Intelligence (AI) and machine learning software platforms. This proprietary software is one of the first implementations of AI and machine learning in healthcare, and is already generating meaningful revenues as a PMA-approved platform. The launch of the PowerLook Tomo Detection software demonstrates our core expertise in this field. We are in the process of developing a roadmap to broaden our AI product offerings beyond breast cancer detection to other diagnostic applications. We have a robust platform and significant development experience in this area, and we look forward to expanding our portfolio of solutions in the coming years.

Looking Forward to Maximizing Our Opportunities

As we work to take steps to maximize our opportunities for growth in cancer detection and therapy, we once again thank our shareholders, team members, customers, and industry partners for your support. Looking forward, we will continue to focus on effective execution in order to achieve new levels of success, while remaining dedicated to our core mission of making a positive difference in the lives of people affected by cancer.

Sincerely,



Ken Ferry
Chief Executive Officer

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2016
OR

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

For the transition period from _____ to _____

Commission file number 1-9341

iCAD, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	02-0377419 (I.R.S. Employer Identification No.)
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98 Spit Brook Road, Suite 100, Nashua, New Hampshire (Address of principal executive offices)	03062 (Zip Code)
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Registrant's telephone number, including area code: **(603) 882-5200**

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

Title of Class Common Stock, \$.01 par value	Name of each exchange on which registered The Nasdaq Stock Market LLC
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Securities registered pursuant to Section 12 (g) of the Act: **None**

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirement for the past 90 days. Yes No ___

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 during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No ___

Indicate by check mark 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.

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

Large Accelerated filer ___	Accelerated filer ___
Non-accelerated filer ___ (do not check if a smaller reporting company)	Smaller reporting company <input checked="" type="checkbox"/>

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

The aggregate market value of the voting stock held by non-affiliates of the registrant, based upon the closing price for the registrant's Common Stock on June 30, 2016 was \$70,242,336. Shares of voting stock held by each officer and director and by each person who, as of June 30, 2016, may be deemed to have beneficially owned more than 10% of the outstanding voting stock have been excluded. This determination of affiliate status is not necessarily a conclusive determination of affiliate status for any other purpose.

As of March 21, 2017, the registrant had 16,157,466 shares of Common Stock outstanding.

Documents Incorporated by Reference: Certain portions of the registrant's definitive Proxy Statement for its 2017 Annual Meeting of Stockholders are incorporated by reference into Items 11, 12, 13 and 14 of Part III of this Annual Report on Form 10-K.

“Safe Harbor” Statement under the Private Securities Litigation Reform Act of 1995:

Certain information included in this annual report on Form 10-K that are not historical facts contain forward looking statements that involve a number of known and unknown risks, uncertainties and other factors that could cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievement expressed or implied by such forward looking statements. These risks and uncertainties include, but are not limited to, the Company’s ability to defend itself in litigation matters, to achieve business and strategic objectives, the risks of uncertainty of patent protection, the impact of supply and manufacturing constraints or difficulties, uncertainty of future sales levels, protection of patents and other proprietary rights, the impact of supply and manufacturing constraints or difficulties, product market acceptance, possible technological obsolescence of products, increased competition, litigation and/or government regulation, changes in Medicare reimbursement policies, risks relating to our existing and future debt obligations, competitive factors, the effects of a decline in the economy or markets served by the Company and other risks detailed in this report and in the Company’s other filings with the United States Securities and Exchange Commission (“SEC”). The words “believe”, “demonstrate”, “intend”, “expect”, “estimate”, “anticipate”, “likely”, “seek”, “would”, “could”, “may”, “consider”, “confident” and similar expressions identify forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date the statement was made. Unless the context otherwise requires, the terms “iCAD”, “Company”, “we”, “our”, “registrant”, and “us” means iCAD, Inc. and any consolidated subsidiaries.

PART I

Item 1. Business.

General

iCAD, Inc. is an industry-leading provider of advanced image analysis, workflow solutions and radiation therapy for the early identification and treatment of cancer. The Company reports in two operating segments: Cancer Detection (“Detection”) and Cancer Therapy (“Therapy”). The Company was incorporated in 1984 as Howtek, Inc. under the laws of the state of Delaware. In 2002 the Company changed its name to iCAD, Inc. and changed its ticker symbol to ICAD.

The iCAD website is www.cadmed.com. On this website the following documents are available at no charge: annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (“Exchange Act”), as soon as reasonably practicable after the Company electronically files such material with, or furnishes it to, the SEC. Our SEC filings are also available on the SEC’s website at <http://www.ecg.gov>. Alternatively, you may access any document we have filed by visiting the SEC’s Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330. The information on the website listed above, is not and should not be considered part of this annual report on Form 10-K and is not incorporated by reference in this document.

The Company’s headquarters are located in Nashua, New Hampshire, with manufacturing facilities in Nashua, New Hampshire and, an operations, research, development, manufacturing and warehousing facility in San Jose, California.

Company Overview and Strategy

iCAD continues to evolve from a business focused on image analysis for the early detection of cancers to a broader player in the oncology market. The Company’s strategy is to provide customers with a broad portfolio of oncology solutions that address four key stages of the cancer care cycle: detection, diagnosis, treatment and monitoring. The Company believes that early detection, together with earlier targeted intervention, provides patients and healthcare providers with the best tools available to achieve better clinical outcomes resulting in market demand that will drive adoption of iCAD’s solutions.

Cancer Therapy:

Radiation therapy is the medical use of ionizing radiation, generally as part of cancer treatment to control or kill malignant cells. Radiation therapy may be curative in a number of types of cancer if the cancer cells are localized to one area of the body. It may also be used as part of curative therapy to prevent tumor recurrence after surgery to remove a primary malignant tumor (for example, early stages of breast cancer). The clinical goal in radiation oncology is to deliver the highest radiation dose possible directly to the tumor to kill the cancer cells while minimizing radiation exposure to healthy tissue surrounding the tumor in order to limit complications and side effects. Global incidence

rates of new cancer cases are rising, primarily due to aging populations and changing lifestyle habits. However, survival rates are also improving as a result of earlier detection and enhanced treatment options.

The three main types of radiation therapy are external beam radiation therapy (“EBRT”), brachytherapy or sealed source radiation therapy, and systemic radioisotope therapy or unsealed source radiotherapy. One of the differences relates to the position of the radiation source; external is outside the body, brachytherapy uses sealed radioactive sources placed precisely in the treatment area, and systemic radioisotopes are given by infusion or oral ingestion. Brachytherapy uses temporary or permanent placement of radioactive sources. Conventional EBRT typically involves multiple treatments of a tumor in up to 50 radiation sessions (fractions). In the case of brachytherapy, radiation of healthy tissues further away from the sources is reduced. In addition, if the patient moves or if there is any tumor movement within the body during treatment, the radiation source(s) retain their correct position in relation to the tumor. These aspects of brachytherapy offer advantages over EBRT in that brachytherapy is able to direct high doses of radiation to the size and shape of the cancerous area while sparing healthy tissue and organs.

Brachytherapy is commonly used as an effective treatment for endometrial, cervical, prostate, breast, and skin cancer, and can also be used to treat tumors in many other body sites. Electronic Brachytherapy (eBx) is a type of radiotherapy that utilizes a miniaturized high dose rate X-ray source to apply radiation directly to the cancerous site. The Xofigo® Axxent® Electronic Brachytherapy (eBx®) System® (“Xofigo System”) is a proprietary electronic brachytherapy platform designed to deliver isotope-free (non-radioactive) radiation treatment in virtually any clinical setting without the limitations of radionuclides.

The process for delivering radiation therapy typically includes a radiation oncologist, a medical physicist responsible for planning the treatment and performing appropriate quality assurance procedures and, in certain instances, other specialty physicians depending upon the type of cancer e.g. a breast surgeon for breast cancer, a dermatologist for skin cancer, a gynecologist for endometrial or cervical cancer.

The Company’s Xofigo System is a disruptive radiation oncology treatment solution with significant cost, mobility, and treatment time advantages over its competitors or other standards of care. While the primary applications of this system currently are localized breast cancer treatment using a ten to fifteen minute breast Intraoperative Radiation Therapy (“IORT”) protocol and the treatment of non-melanoma skin cancers (“NMSC”), the Xofigo System platform can also be used to treat a wide and growing array of additional cancers, including gynecological and other non-breast IORT clinical indications.

There are approximately 300,000 new cases of breast cancer in the United States each year. The Company believes that the Xofigo System is uniquely well positioned to offer a differentiated treatment alternative for the approximately 111,000 of these 300,000 annual new cases of early stage breast cancer in the U.S. where patients fit the clinical criteria to make this treatment a viable alternative to conventional radiation treatments. The Xofigo System does not require a shielded environment and is relatively small in size, which means that it can easily be transported for use in virtually any clinical setting (including the operating room where IORT is delivered) under radiation oncology supervision. The Xofigo System may also be used for Accelerated Partial Breast Irradiation (“APBI”), which can be delivered twice daily for five days. There is a growing body of clinical evidence in support of breast IORT and Category I Current Procedural Terminology (“CPT”) codes have been in place for several years, providing reimbursement for the hospital, radiation oncologist, and surgeon for performing the IORT treatment.

Basal and Squamous Cell Carcinoma are two of the most prevalent types of NMSC in the U.S., with more than 3.5 million cases being diagnosed annually. The Xofigo System enables radiation oncologists and dermatologists to collaborate in offering their patients a non-surgical treatment option that is particularly appropriate for certain challenging lesion locations on the ear, face, scalp, neck and extremities. Xofigo provides comprehensive skin cancer treatment solutions to the dermatology market including all the necessary components to enable dermatologists and radiation oncologists to develop, launch and expand their electronic brachytherapy programs for the treatment of NMSC. Xofigo also offers physics support, billing support, assistance with radiation oncology provider selection, as well as the Axxent Hub web based software platform that enables centers to improve patient safety, conduct treatment planning, enhance and monitor workflow, and improve communication between clinical specialties.

In May 2015 the Company announced that one of the regional Medicare Administrative Contractors instructed physicians to report CPT code (17999) rather than the established CPT code (0182T) for electronic brachytherapy for treatment of NMSC. This announcement resulted in a significant disruption in the Therapy segment as a result of the reimbursement uncertainty. Revenues for the years ended December 31, 2015 and December 31, 2016 were negatively impacted as a result of the uncertainty. In January 2016 a new CPT code (0394T) for the treatment on non-melanoma skin cancer utilizing electronic brachytherapy went into effect. Despite the new codes, the Company believes that potential customers were still cautious in starting treatments under this code during 2016.

As the Company has noted in the risk factors disclosed in this annual report the Company's business can be affected by coverage policies adopted by federal and state governmental authorities, such as Medicare and Medicaid, as well as private payers, which often follow the coverage policies of these public programs. Such policies may affect which products customers purchase and the prices customers are willing to pay for those products in a particular jurisdiction. The change in CPT codes for the Company's electronic brachytherapy treatment of NMSC had a negative impact on the Company's revenues for the fiscal years ended December 31, 2015 and December 31, 2016.

In connection with the preparation of the financial statements for the second quarter ended June 30, 2015, the Company evaluated the Therapy reporting unit for both long-lived asset and goodwill impairment. As a result of this assessment, the Company recorded material impairment charges in the Therapy reporting unit (see Note h and Note i to the consolidated financial statements included herein for additional discussion).

The Company views additional Xofigo System platform indications as important opportunities in both the U.S. and international markets. The Xofigo System is also marketed for gynecological cancers including endometrial and cervical cancer. In 2013 the Company received FDA clearance for an application for the treatment of cervical cancer and launched a new applicator to treat cervical cancer in 2015. Vaginal cancer is the fourth most common cancer affecting women worldwide and cervical cancer incidence rates outside of the U.S. are very high due to inadequate penetration of screening modalities. The Company believes an additional strategic growth opportunity exists in the application of the Xofigo System for the treatment of other cancers beyond NMSC and breast cancer in the IORT setting including integration with minimally invasive surgical techniques and systems.

Cancer Detection:

Approximately 40 million mammograms were performed in the U.S. in 2016. Although mammography is the most effective method for early detection of breast cancer, studies have shown that an estimated 20% or more of all breast cancers go undetected in the screening stage. More than half of the cancers missed are due to observational errors. CAD, when used in conjunction with mammography, has been proven to help reduce the risk of these observational errors by as much as 20%. Earlier cancer detection typically leads to more effective, less invasive, and less costly treatment options which ultimately should translate into improved patient survival rates.

The Company intends to address the detection and diagnosis stages of the cancer care cycle through continued extension of its image analysis and clinical decision support solutions for mammography, breast tomosynthesis, and CT imaging. iCAD believes that advances in digital imaging techniques should bolster its efforts to develop additional commercially viable CAD and breast density assessment advanced image analysis and workflow products. CAD and density assessment for breast tomosynthesis is a growth area which the Company believes will provide additional benefits for early breast cancer detection. The Company believes that CAD and breast density assessment for tomosynthesis has the potential to help radiologists better detect cancer and manage the workflow efficiency issues created by large 3D datasets. The Company completed development of a tomosynthesis CAD and workflow tool in 2015 and launched the product in the European market in April 2016 and in Canada in June 2016. Pending FDA clearance, the Company expects to begin marketing the product in the U.S. in conjunction with GE Healthcare in the first half of 2017. The Company also developed a breast density assessment product for tomosynthesis that assesses breast density using 2D synthetic images that are generated from 3D tomosynthesis datasets. The Company's tomosynthesis breast density solution is currently pending FDA clearance.

The Company believes that the CAD and breast density assessment solutions for breast tomosynthesis may represent a significant growth opportunity over the next three to five years. With over 12,000 installation opportunities for tomosynthesis systems in the U.S., there is a significant future opportunity for CAD and density assessment solutions for tomosynthesis. The Company anticipates that CAD for tomosynthesis will become the standard of care in the near future, similar to what CAD for 2D mammography is today in the U.S.

In the U.S., approximately 8,747 facilities (with approximately 16,959 full field digital mammography ("FFDM") and tomosynthesis mammography systems) were Mammography Quality Standards Act (MQSA) certified to provide mammography screening in 2016. The majority of these centers are using 2D digital mammography FFDM systems and we believe approximately 25% of the market has converted to 3D mammography or tomosynthesis.

With several European countries currently exploring the advantages of radiologists reading digital mammograms with CAD, the Company believes there is growth opportunity for mammography CAD in the international markets both from the analog to digital conversion and as more countries accept the use of radiologists using CAD, rather than two radiologists having to read each case. Based on the report published by the European Commission in April 2012, breast cancer is one of the most prevalent forms of cancer and it is also responsible for the most cancer-related deaths among women in the European Union ("EU"). The number of expected breast cancer cases based on the 2012 report was expected to continue to rise as the incidence of cancer increases steeply with age and life expectancy. On average

one out of every 10 women in the EU is expected to develop breast cancer at some point in her life. As a result, most countries in Western Europe have or are planning to implement mammography screening programs resulting in an expected increase in the number of mammograms performed in the coming years.

Although sales of CAD with 2D mammography in Europe have been historically lower than in the U.S., the Company believes sales of its CAD for tomosynthesis will be adopted with a higher attachment rate in Europe than previously due to workflow improvements and reading time reduction that we believe the solution will offer.

Revenue:

The table below presents the revenue and percentage of revenue attributable to the Company's products and services, in 2016, 2015 and 2014 (in thousands):

	For the year ended December 31,					
	2016	%	2015	%	2014	%
Detection:						
Digital & MRI CAD revenue	\$ 8,682	33.0%	\$ 11,216	27.0%	\$ 9,765	22.2%
Film based revenue	-	0.0%	10	0.0%	317	0.7%
Service	8,451	32.1%	8,017	19.3%	8,522	19.4%
Detection revenue	17,133	65.1%	19,243	46.3%	18,604	42.4%
Therapy:						
Product	1,789	6.8%	2,972	7.2%	8,601	19.6%
Service	7,416	28.2%	19,339	46.5%	16,719	38.1%
Therapy revenue	9,205	34.9%	22,311	53.7%	25,320	57.6%
Total revenue	\$ 26,338	100.0%	\$ 41,554	100.0%	\$ 43,924	100.0%

Cancer Therapy Segment Overview and Products

The Xofig System utilizes a miniaturized high dose rate very low energy X-ray source to apply radiation directly to the cancerous site. The goal is to direct the radiation dose to the size and shape of the cancerous area while sparing healthy tissue and organs. The Xofig System delivers clinical dose rates similar to traditional radioactive systems. However, because of the electronic nature of the Xofig technology, the dose fall off is much faster, thus lowering the radiation exposure outside of the prescribed area. Given this rapid dose fall off, there is no need for a lead vault as compared to traditional isotope based radiation therapy, enabling the Xofig System to be transported to different locations within the same facility or between multiple facilities.

IORT Electronic Brachytherapy can be delivered during an operative procedure, in as little as eight minutes, and may be used as a primary or secondary modality over a course of days. This technology enables radiation oncology departments in hospitals, clinics and physician offices to perform traditional radiotherapy treatments and offer advanced treatments such as IORT. Current customers of the Xofig System include university research and community hospitals, private and governmental institutions, doctors' offices, cancer care clinics, veterinary facilities, and strategic partnerships with radiation oncology service providers that enable the supervised delivery of the technology in dermatologist offices.

Of the approximately 300,000 women who are diagnosed with breast cancer every year in the U.S., the majority, or 60% are diagnosed with early stage breast cancer. About 60% of early stage breast cancers qualify as candidates for treatment with eBx. Currently, a majority of early stage breast cancer patients who are treated with radiation therapy follow a five to seven week daily protocol of traditional external beam radiation while a small portion are treated with a five-day protocol using brachytherapy.

Breast cancer is a relatively common disease and is often treatable by surgery, followed by radiotherapy with an additional therapy such as chemotherapy and/or hormonal therapy. Early detection has led to earlier diagnosis with small, early stage diseases that can be removed by local excision rather than a complete mastectomy. Microscopic cancerous cells can be present and easily managed with the application of radiotherapy. The protocol for many years for most women included a day procedure for a lumpectomy and five to seven weeks of daily radiation. IORT allows the physician to treat the remaining breast tissue in the operating room while the patient is still under anesthesia, eliminating the need for five to seven weeks

of daily traditional radiation therapy. In the last few years, in Europe and in the U.S., shorter treatment protocols of external beam radiation therapy hypo-fractionated to as few as three weeks have emerged as alternatives.

In a scientific paper presented at the 2010 ASCO Meeting, Dr. Jayant Vaidya of the University College London, UK, concluded that in the 2,200 patient multinational clinical trial (TARGIT-A trial) IORT, generated with 50 kV electronic brachytherapy, is equivalent to conventional external beam radiotherapy. In December 2012, Dr. Vaidya presented five-year follow up data on the TARGIT-A trial at a forum in conjunction with the San Antonio Breast Cancer Symposium. Following this presentation, in November 2013 the Lancet online published the five-year update results of the TARGIT-A trial. The updated results of the trial demonstrated that local recurrence rates in the TARGIT (IORT) group were within the non-inferiority boundary when compared to the results in the group who received external beam radiation therapy and that mortality rates from causes other than breast cancer were lower in the TARGIT (IORT) group. In addition, the data revealed that at five years, the local recurrence rate in patients who were treated with IORT “concurrent” with lumpectomy was 2.3% compared with the recurrence rate for patients who received traditional external beam radiation therapy which was 1.3%. Given the study had a non-inferiority boundary of 2.5%, the study revealed that IORT is a non-inferior treatment relative to external beam radiation therapy for patients who meet the established clinical criteria.

Additionally, in 2016, Melinda Epstein, PhD, et al. of Hoag Memorial Hospital Presbyterian in Newport Beach, CA published two clinical papers on their experience with the Xofig System for the treatment of early stage breast cancer with IORT. In June, the Annals of Surgical Oncology published data on 702 patients treated from June 2010 to January 2016, demonstrating a 1.7% recurrence rate. Further, less than 5% of patients had significant complications, concluding that IORT safely delivers radiation and allows some women who cannot (or decline to) undergo whole breast radiation to consider breast-conserving therapy rather than mastectomy. In August, The Breast Journal published 20-month mean follow-up data on 146 patients with pure ductal carcinoma in situ (DCIS) treated with IORT. The data showed a 2.1% recurrence rate with relatively few complications and again concluded that x-ray based IORT is a promising treatment modality that greatly simplifies the delivery of post-excision radiation therapy.

The reimbursement for IORT has improved from 2011 when the American Medical Association (AMA) established Category I CPT codes for IORT based on clinical evidence. These codes and payment values became effective beginning January 2013. In 2014, CMS raised the payment value for the IORT treatment delivery code by 27% and overall IORT reimbursement increased. Current IORT payment values have remained consistent with the values established in 2014.

NMSC is considered an epidemic in the U.S. with over 3.5 million cases diagnosed annually. Of those cases, approximately 20%-30% have specific diagnoses and lesion characteristics that make such patients potential candidates for electronic brachytherapy treatment. The Xofig System is a viable alternative treatment option for patients with lesions in cosmetically challenging locations (ear, nose, scalp, neck), locations that experience difficulties in healing (lower legs, upper chest, fragile skin), patients on anticoagulants, and patients who are anxious about surgery. The Xofig System has been used to treat more than 10,000 NMSC lesions. Additionally, the Xofig System is the only electronic brachytherapy system with peer-reviewed published clinical data. Recent clinical data demonstrates promising local control and supports eBr as a convenient, effective, nonsurgical treatment option offering minimal toxicity and excellent cosmesis for eligible NMSC patients.

In 2016, electronic brachytherapy for the treatment for NMSC was reimbursed under a new skin-specific Category III CPT code. Reimbursement is provided through a Category III electronic brachytherapy treatment delivery CPT code along with other Category I medical physics and treatment-planning CPT codes as determined by medical necessity. In 2015, new Category III reimbursement CPT codes for multi-fraction electronic brachytherapy applications for skin, breast and gynecological cancers were approved by the American Medical Association (AMA) and became active as of January 2016. Coverage policies and payment values associated with CPT codes are determined by the regional U.S. Medicare Administrative Contractors.

Gynecological cancers are also appropriate for treatment with electronic brachytherapy. There are approximately 50,000 new cases of endometrial cancer each year in the U.S. and nearly 300,000 new cases worldwide. Additionally, electronic brachytherapy is appropriate for use in other IORT clinical settings where surgical resection is unable to completely eliminate all cancer cells. In the U.S. and international settings, IORT for prostate, pelvic, gastrointestinal, abdominal, spinal, and soft tissue sarcoma applications remains a potential market given the minimal shielding requirements associated with this treatment modality.

Electronic Brachytherapy products:

Electronic Brachytherapy (eBx®) Treatment for Breast Cancer Axxent® eBx®

The portable Axxent eBx system uses isotope-free miniaturized X-ray tube technology to deliver therapy directly to cancer sites with minimal radiation exposure to surrounding healthy tissue. The Axxent eBx system is FDA-cleared for the treatment of early stage breast cancer, endometrial cancer, cervical cancer, and skin cancer, as well as for the treatment of other cancers or conditions where radiation therapy is indicated, including IORT. The Company offers FDA-cleared applicators for the utilization of the Axxent eBx system including breast applicators for IORT and APBI in the treatment of breast cancer, vaginal applicators for the treatment of endometrial cancer, cervical applicators for the treatment of cervical cancer, and skin applicators for the treatment of non-melanoma skin cancers. The single-use breast IORT and APBI applicators are offered in a variety of sizes based on clinical need. The endometrial, cervical and skin applicators are reusable and are manufactured in various sizes based on the anatomical requirements of the patient or the size of the lesion. The Company also provides the 50kV isotope-free energy source, a comprehensive service warranty program, and various accessories such as the Axxent eBx Rigid Shield for internal IORT shielding. The 50kV energy source is typically sold as an annual contract customized to individual customer volume/usage requirements.

The Company has made several enhancements to the Axxent eBx system controller including a new software interface enabling enhanced system functionality and an upgraded high voltage connection improving system performance. In 2014, the Company developed and launched a new Axxent SPX Controller which includes an optimized skin treatment arm customized for compatibility in confined patient treatment rooms in physician office-based facilities. This controller complements the Axxent MPX Controller which is designed for multi-application use. In 2016, the Company unveiled a new Streamlined Module for Advanced Radiation Therapy (SMART) solution for its Xofig System and Axxent Hub cloud-based oncology collaboration software solution. Comprising a new Wi-Fi enabled Xofig System and enhanced Axxent Hub cloud software, the SMART solution improves workflow efficiency and the flexibility and security of skin eBx treatments while also improving clinical collaboration and supervision.

In early 2013, the Company received FDA clearance for a new applicator for use in the treatment of cervical cancer and launched this product in the U.S and international markets in 2015. This new applicator further expands the Company's product portfolio in the gynecological cancer market and enables customers to offer comprehensive electronic brachytherapy solutions to their patients in need of gynecological radiation therapy. Current customers of the Xofig System include university research and community hospitals, private and governmental institutions, doctors' offices, cancer care clinics, and veterinary facilities in the United States, the EU and Asia.

Cancer Detection Segment Overview and Products

Mammography CAD systems use sophisticated algorithms to analyze image data and mark suspicious areas in the image that may indicate cancer. The locations of the abnormalities are marked in a manner that allows the reader of the image to reference the same areas in the original mammogram for further review. The use of CAD aids in the detection of potential abnormalities for the radiologist to review. After initially reviewing the case films or digital images, a radiologist reviews the CAD results and subsequently re-examines suspicious areas that warrant a second look before making a final interpretation of the study. The radiologist determines if a clinically significant abnormality exists and whether further diagnostic evaluation is warranted. As a medical imaging tool, CAD is most prevalent as an adjunct to mammography given the documented success of CAD for detecting breast cancer.

Digital Mammography CAD products:

Advanced Image Analysis and Workflow Solutions in Breast Imaging (Mammography)

iCAD develops and markets a comprehensive range of high-performance CAD solutions for digital mammography systems. iCAD's PowerLook Mammo Detection is based on sophisticated patented algorithms that analyze the data, automatically identifying and marking suspicious regions in 2D mammography images. The solution provides the radiologist with a "second look" which helps the radiologist detect actionable missed cancers earlier than screening mammography alone. PowerLook Mammo Detection detects and identifies suspicious masses and micro-calcifications utilizing image processing, pattern recognition and artificial intelligence techniques. Information from thousands of mammography images are incorporated into these algorithms enabling the product to distinguish between characteristics of cancerous and normal tissue. The result is earlier detection of hard-to-find cancers, improved workflow for radiologists, and higher quality patient care.

In June 2012, iCAD introduced its next generation PowerLook Advanced Mammography Platform® (AMP). The technology expands on iCAD's legacy SecondLook Digital platform and is the mammography platform upon which

all future breast imaging offerings from iCAD will be built. PowerLook AMP is the first product of its kind to integrate CAD and breast density assessment software, which aids radiologists by standardizing their approach to breast density assessment and categorization. The Company acquired the breast density assessment solution from VuComp in April 2015 and subsequently released it to market under the product name iReveal. Twenty-six states now mandate reporting of a breast density score to patients as part of the annual mammogram, iReveal provides a consistent and standardized reporting tool to assist with this process.

Included with PowerLook is a multi-vendor CAD and density assessment server that allows hospitals and imaging facilities to connect up to four mammography acquisition devices regardless of vendor. This reduces the need for separate CAD servers while lowering hardware and service costs. iCAD's PowerLook also provides a powerful flexible DICOM connectivity solution enabling universal compatibility with leading PACS and Review Workstations. Additional modules are expected to be released and integrated into PowerLook AMP in the future.

PowerLook Advanced Mammography Platform

PowerLook AMP is designed to function with leading digital mammography systems (digital breast tomosynthesis, FFDM and computed radiography) – including systems sold by GE Healthcare, Siemens Medical Systems, Fuji Medical Systems, Hologic, Inc., Sectra Medical Systems, Philips, Carestream, IMS Giotto, Agfa Corporation, and Planmed. The algorithms in PowerLook AMP products have been optimized for each digital imaging provider based upon characteristics of their unique detectors.

PowerLook AMP is a computer server residing on a customer's network that receives patient studies from the imaging modality, performs CAD and density assessment analysis and sends the results to PACS and/or review workstations. Workflow and efficiency are critical in digital imaging environments therefore iCAD has developed flexible, powerful DICOM integration capabilities that enable PowerLook AMP to integrate with leading picture archiving and communication systems ("PACS") archives and review workstations from multiple providers. iCAD has worked with its OEM partners to ensure CAD and density assessment results are integrated and easily viewed using each review workstation's graphical user interface. To further improve efficiency and clinical efficacy, the most urgent or important patient studies can be prioritized and analyzed with CAD and density assessment software first.

Magnetic Resonance Imaging ("MRI")

In July 2012, iCAD entered into a strategic partnership agreement with Invivo Corp., a subsidiary of Philips Healthcare. With this agreement, iCAD began developing the DynaCAD product software for breast and prostate MR image analysis workstations to help radiologists find cancer earlier and more efficiently. Invivo sells the DynaCAD product both directly and through the Philips global distribution network. In August, 2015, Invivo exercised a contractual right to a perpetual paid up license in exchange for a payment of approximately \$2.0 million. In January 2017, the MRI products and related assets were sold to Invivo Corp. for \$3.2 million. Prior to the January 2017 sale of the MRI products and related assets, the paid up license fee was being amortized over the remaining life of the agreement.

Breast Tomosynthesis

Breast Tomosynthesis was introduced in the United States in 2010 by Hologic, Inc.. GE received FDA approval for their tomosynthesis system in August 2014, Siemens approval followed in April 2015, and Fuji was approved in early 2017. Tomosynthesis has been demonstrated to have multiple advantages over traditional 2D mammography. It has improved tissue visualization and detection and results in lower recall rates for patients. Tomosynthesis improves the sensitivity and specificity of cancer diagnosis when compared to mammography. Clinical studies indicate that digital breast tomosynthesis improves the ability to distinguish malignant from benign tumors and can detect early signs of cancer hidden by overlapping tissues. This helps reduce the overall number of biopsies performed and the call back rates. Initial studies have indicated that tomosynthesis has the ability to detect 41% more invasive cancers than conventional mammography, and it also reduces false-positives by up to 40%.

CAD technology can play an important role in improving the accuracy and efficiency of reading breast tomosynthesis cases by automatically identifying breast masses and micro-calcifications. In 2015, the Company completed development of its CAD solution for tomosynthesis to aid radiologists in their review of breast tomosynthesis as a means of improving lesion detection and reducing the time to read the large tomosynthesis datasets. The initial solution is developed for use with GE Healthcare's digital breast tomosynthesis for the detection of soft tissue densities (masses, architectural distortions and asymmetries). In January 2017, the Company submitted an amendment to its original PMA application for its 3D tomosynthesis product, the Company is waiting for final approval from the FDA on the application. The Company is continuing to develop a multi-vendor tomosynthesis CAD solution that will also detect micro-calcifications.

Computed Tomography Applications and Colonic Polyp Detection

CT is a well-established and widely used imaging technology that is used to image cross-sectional “slices” of various parts of the human body. When combined, these “slices” provide detailed volumetric representations of the imaged areas. With recent image quality improvements and greatly increased imaging speeds, CT imaging use has expanded in both the number of procedures performed as well as the applications for which it is utilized. While the increased image quality and number of cross sectional slices per scan provides valuable diagnostic information, it adds to the challenge of managing and interpreting the large volume of data generated. The Company believes that the challenges in CT imaging present it with opportunities to provide automated image analysis and clinical decision support solutions.

CTC is a less invasive technique than traditional colonoscopy for imaging the colon. However, the process of reading a CTC exam can be lengthy and tedious as the interpreting physician is often required to traverse the entire length of the colon multiple times. CAD technology can play an important role in improving the accuracy and efficiency of reading CTC cases by automatically identifying potential polyps. CAD technology has been developed to aid radiologists in their review of CTC images as a means of improving polyp detection. The Company believes that CAD could become an important adjunct to CTC.

Advanced Image Analysis and Workflow Solutions in CT Colonography

VeraLook™

iCAD introduced a CAD solution, VeraLook, in August 2010 following FDA clearance of the product. This solution is designed to support detection of colonic polyps in conjunction with CTC. iCAD believes that CAD for CTC is a natural extension of iCAD’s core competencies in image analysis and image processing. The system works in conjunction with third party display workstations and PACS vendors. Field testing of the product was initiated in 2008 and iCAD conducted a multi-reader clinical study of iCAD’s CT Colon CAD product, for use with CTC. Results of the Company’s clinical study, “*Impact of Computer-Aided Detection for CT Colonography in a Multireader, Multicase Trial*” demonstrated that reader sensitivity improved 5.5% for patients with both small and large polyps with use of CAD. Use of CAD reduced specificity of readers by 2.5%. The clinical relevance of this CAD program was improved reader performance while maintaining high reader specificity. Throughout 2016, iCAD distributed the VeraLook product with advanced visualization reading workstations manufactured by Vital Images, a Toshiba Medical System Group Company. In Q4 2014, iCAD received CFDA (China Food and Drug Administration) approval to sell VeraLook in China.

Sales and Marketing

iCAD, through its Xoft subsidiary, markets the eBx system in the United States and select countries worldwide. The Company has expanded its installed base of eBx systems in the U.S. and has established initial installations in a number of countries located in Europe and Asia. Xoft has signed distribution agreements in Spain, The Netherlands, Turkey, Italy, Switzerland, Portugal, Bulgaria, Russia, France, Mexico, Canada, China, Australia / New Zealand, Taiwan, Germany, Egypt / Saudi Arabia, India, Iran, South Korea, UK and Ireland and is actively exploring market entry in South and Central America.

Xoft’s direct U.S. sales force sells the system on the basis of its clinical effectiveness as a platform high dose rate, low energy radiation therapy solution for hospitals, ambulatory care centers and free standing radiation oncology facilities and other office-based uses, e.g. dermatology clinical practices. The Xoft System offers a distinct competitive advantage in that it is a highly mobile unit with minimal shielding requirements that can easily be moved from room to room within a single healthcare institution or transported from facility to facility given its relatively compact form factor.

Breast IORT is a strategic focus of the Company due to the significant clinical /lifestyle benefits to the patient and economic advantages to the facility. NMSC is an additional strategic priority given the high incidence rate of the disease and the benefits of the Xoft System in this clinical indication. Based on the additional clinical applications including gynecological cancers, other IORT applications (in addition to breast IORT), as well as its potential to scale in the future to address other indications for use, the Company believes the Xoft System offers unique flexibility and opportunities for growth.

Core to the Company’s eBx market development strategy is a comprehensive medical education program. Xoft actively participates in several key industry scientific conferences in the United States and Europe including but not limited to Miami Breast, ASBS, ABS, SSO, AAPM, ESTRO, Milan Breast, and ASTRO on an annual basis. More recently, Xoft has participated in key dermatology conferences in the U.S. including AAD, Fall and Winter Dermatology Conferences, ASDS, and ACMS. At select industry conferences and at independent venues, the Company provides specific additional

eBx professional education programs and product demonstrations in the form of live symposia in U.S. markets. The Company expanded its medical education program in 2015 to include breast IORT and NMSC educational webinars in both CME and non-CME formats to broaden physician awareness of the Xoft System and eBx technology in the U.S. The Company also maintains a scientific advisory board composed of leading clinician experts who share a commitment to raising awareness of the unique benefits the Xoft eBx system offers to providers and patients alike.

The Company further supports breast IORT through its ongoing ExBRT Clinical Trial— a post-market clinical trial designed to enroll 1,000 patients at up to 50 sites. The study enables facilities interested in treating early stage breast cancer patients with the Xoft System to participate in a common clinical protocol and follow enrolled patients for up to ten years. The Company believes that the ExBRT study is led by brachytherapy and breast care physicians including breast surgeons, radiation oncologists, pathologists, and medical physicists from leading U.S. breast cancer care institutions. From its inception in 2012 through February 2017, the ExBRT study has enrolled more than 800 patients at more than 20 facilities in the U.S. and Europe. Initial clinical results from the ExBRT study are expected to be presented at key breast cancer medical conferences in 2017.

iCAD's mammography products are sold through its direct regional sales organization in the U.S. as well as through its OEM partners, including GE Healthcare, Fuji Medical Systems, Siemens Medical, Philips Healthcare, Agfa Corporation, Sectra Medical Systems, Planmed, Fuji Medical Systems, IMS Giotto, and Carestream Health, Inc. The VeraLook CTC CAD product is primarily distributed by Vital Images.

The Company's cancer detection products are marketed on the basis of their clinical superiority and their ability to help radiologists detect more cancers earlier, while seamlessly integrating into the clinical workflow of the radiologist. As part of its sales and marketing efforts, iCAD has developed and executed a variety of public relations and local outreach programs with numerous iCAD customers. Additional investments are being made in cultivating relationships with the leaders in breast and colon solutions at national trade shows, where industry leaders discuss the future of image analysis solutions in these clinical disciplines.

Competition

The Company's existing eBx products face competition in breast IORT primarily from one company: Carl Zeiss Meditec, Inc., ("Zeiss") a multinational company, where eBx products are only one of that company's many products. Zeiss manufactures and sells eBx products for the delivery of IORT. Zeiss has expanded their product portfolio to include additional anatomical areas beyond breast IORT. Zeiss now offers a range of radiation therapy applicators for use in various applications including spine, the gastrointestinal tract, skin, and endometrial cancers. Zeiss has an established base of breast IORT installations in Europe where the majority of the TARGIT-A trial clinical sites are located. IntraOp Medical is an additional competitor in the high dose rate ("HDR") radiation therapy market.

The Company's NMSC products face numerous competitors utilizing a variety of technologies. Surface Radiation Therapy (SRT) systems, including Sensus Healthcare, directly compete with the Xoft System in this market in which Dermatologists and Radiation Oncologists seek mobile, efficient, non-surgical treatment options. In late 2013, Elekta received clearance for its electronic brachytherapy system "Esteya" for use in the treatment of NMSC. This system utilizes a low energy 69.5 kV source and a range of surface applicators in a small footprint system profile. Other competitors in the NMSC market include surgery (excision, Mohs surgery, and destruction). Mohs surgery remains the primary treatment option for dermatologists in the majority of NMSC cases. Traditional radiation therapy including external beam radiation therapy is also a treatment modality used to treat NMSC patients.

New market opportunities including expansion of the gynecological product portfolio and other IORT applications beyond breast IORT will bring new competitive dynamics to the Company's efforts. Larger, more diversified radiation therapy companies offering a wide variety of clinical solutions for HDR brachytherapy including Varian Medical Systems and Elekta compete in these areas. These multi-national firms offer broad product portfolios including a full range of HDR brachytherapy afterloaders and applicators as well as traditional radiation therapy solutions including linear accelerators, treatment planning solutions, and workflow management capabilities.

The Company currently faces direct competition in its cancer detection and density assessment business from Hologic, Inc., Volpara, Parascript, and StatLife. The Company believes that its market leadership in mammography CAD and density assessment and strong relationships with its strategic partners will provide it with a competitive advantage in the mammography CAD and density assessment market.

The Company's CT Colon solution faces competition from the traditional imaging CT equipment manufacturers and emerging CAD companies. Siemens Medical, GE Healthcare, and Philips Medical Systems currently offer polyp detection products outside the U.S. Siemens Medical received FDA clearance for CT Polyp CAD in 2014. The Company expects that CT manufacturers will offer a colonic polyp detection solution as an added feature of

their image management and display products typically sold with their CT equipment. The Company believes that current regulatory requirements present a significant barrier to entry into this market and that its market leadership in mammography CAD provides it with a competitive advantage within the CT Colonography community.

iCAD operates in highly competitive and rapidly changing markets with competitive products available from nationally and internationally recognized companies. Many of these competitors have significantly greater financial, technical and human resources than iCAD and these competitors are well established in the healthcare market. In addition, some companies have developed or may develop technologies or products that could compete with the products the Company manufactures and distributes or that would render our products obsolete or noncompetitive. Moreover, competitors may achieve patent protection, regulatory approval, or product commercialization before we do, which would limit our ability to compete with them. These and other competitive pressures could have a material adverse effect on the Company's business.

Manufacturing and Professional Services

The Company's CAD products are manufactured and assembled by the Company. In addition, the Company conducts purchasing and supply chain management, planning/scheduling, manufacturing engineering, service repairs, quality assurance, inventory management, and warehousing. Once the product has shipped, it is usually installed by one of the Company's OEM partners at the customer site. When a product sale is made directly to the end customer by iCAD, the product is generally installed by iCAD personnel at the customer site.

iCAD's professional services staff is composed of a team of trained and specialized individuals providing comprehensive product support on a pre-sales and post-sales basis. This includes pre-sale product demonstrations, product installations, applications training, and call center management (or technical support). The support center is the single point of contact for the customer, providing remote diagnostics, troubleshooting, training, and service dispatch. Service repair efforts are generally performed at the customer site by third party service organizations or in the Company's repair depot by the Company's repair technicians.

Xoft's portable Axxent® Controller is manufactured and assembled for Xoft by contract manufacturers. Xoft's electronic brachytherapy miniaturized X-ray source, which is used to deliver radiation directly to the cancerous site, is manufactured in the Company's San Jose, CA facility. Xoft operations consist of manufacturing, engineering, administration, purchasing, planning and scheduling, service repairs, quality assurance, inventory management, and warehousing. Once the product has shipped, it is typically installed by Xoft personnel at the customer site.

Xoft's field service and customer service staff is composed of a team of trained and specialized individuals providing comprehensive product support, physics support, radiation therapists and billing support on a pre-sales and post-sales basis. The field service staff also provides product installations, maintenance, training and service repair efforts generally performed at the customer site. The customer service staff provides pre-sale product demonstrations, customer support, troubleshooting, service dispatch and call center management.

Government Regulation

The Company's systems are medical devices subject to extensive regulation by the FDA under the Federal Food, Drug, and Cosmetic Act with potentially significant costs for compliance. The FDA's regulations govern, among other things, product development, product testing, product labeling, product storage, pre-market clearance or approval, advertising and promotion, and sales and distribution. The Company's devices are also subject to FDA clearance or approval before they can be marketed in the U.S. and may be subject to additional regulatory approvals before they can be marketed outside the U.S. There is no guarantee that future products or product modifications will receive the necessary approvals.

The FDA's Quality System Regulations require that the Company's operations follow extensive design, testing, control, documentation and other quality assurance procedures during the manufacturing process. The Company is subject to FDA regulations covering labeling regulations and adverse event reporting including the FDA's general prohibition of promoting products for unapproved or off-label uses.

The Company's manufacturing facilities are subject to periodic inspections by the FDA and corresponding state agencies. Compliance with extensive international regulatory requirements is also required. Failure to fully comply with applicable regulations could result in the Company receiving warning letters, non-approvals, suspensions of existing approvals, civil penalties and criminal fines, product seizures and recalls, operating restrictions, injunctions, and criminal prosecution.

We are also subject to a variety of federal, state and foreign laws which broadly relate to our interactions with healthcare practitioners and other participants in the healthcare system, including, among others, the following:

- anti-kickback false claims, physician self-referral, and anti-bribery laws, such as the Foreign Corrupt Practices Act, or FCPA, the UK's Bribery Act 2010, or the UK Anti-Bribery Act;
- state law and regulation regarding fee splitting and other relationships between health care providers and non-professional entities, including companies providing management and reimbursement services;
- laws regulating the privacy and security of personally identifiable information, such as the Health Insurance Portability and Accountability Act of 1996, or HIPAA, and the Health Information Technology for Economic and Clinical Health Act, or HITECH Act; and
- healthcare reform laws, such as the Patient Protection and Affordable Care Act and the Health Care and Education Affordability Reconciliation Act of 2010, which we refer to together as PPACA, which include new regulatory mandates and other measures designed to constrain medical costs, as well as stringent new reporting requirements of financial relationships between device manufacturers and physicians and teaching hospitals.

In addition, we are subject to numerous federal, state, foreign and local laws relating to safe working conditions, manufacturing practices, environmental protection, fire hazard control and disposal of hazardous or potentially hazardous substances, among others. We may be required to incur significant costs to comply with these laws and regulations in the future, and complying with these laws may result in a material adverse effect upon our business, financial condition and results of operations.

Additionally, in order to market and sell our products in certain countries outside of the U.S., we must obtain and maintain regulatory approvals and comply with the regulations of each specific country. These regulations, including the requirements for approvals, and the time required for regulatory review vary by country.

Federal, state, and foreign regulations regarding the manufacture and sale of medical devices and management services and software are subject to future change. We cannot predict what impact, if any, such changes might have on our business.

Reimbursement

The federal and state governments of the United States establish guidelines and pay reimbursements to hospitals and free-standing clinics for diagnostic examinations and therapeutic procedures under Medicare at the federal level and Medicaid at the state level. Private insurers often establish payment levels and policies based on reimbursement rates and guidelines established by the government.

The federal government reviews and adjusts coverage policies and reimbursement levels periodically and also consider various Medicare and other healthcare reform proposals that could significantly affect both private and public reimbursement for healthcare services in hospitals and free-standing clinics. State government reimbursement for services is determined pursuant to each state's Medicaid plan, which is established by state law and regulations, subject to requirements of federal law and regulations.

Market acceptance of our medical products in the U.S. and other countries is dependent upon the purchasing and procurement practices of our customers, patient demand for our products and procedures, and the reimbursement of patients' medical expenses by government healthcare programs, private insurers or other healthcare payors.

The provisions of the Affordable Care Act went into effect in 2012. We are continuing to evaluate the Affordable Care Act and its impact on our business. We believe that elements of the program including the shift to value-based healthcare and increased focus on patient satisfaction will benefit the Company in the future. Other elements of this legislation, including comparative effectiveness research, an independent payment advisory board, payment system reforms (including shared savings pilots) and other provisions, could meaningfully change the way healthcare is developed and delivered, and may materially impact numerous aspects of our business, including the demand and availability of our products, the reimbursement available for our products from governmental and third-party payors, and reduced medical procedure volumes. Additionally, we are now evaluating the possible effect of the repeal or replacement of the Affordable Care Act.

In May 2015, the Company announced that one of the regional Medicare Administrative Contractors instructed physicians to report CPT code (17999) rather than the established CPT code (0182T) for electronic brachytherapy for treatment of NMSC. This announcement resulted in a significant disruption in the Therapy segment as a result of the reimbursement uncertainty. Revenues for the year ended December 31, 2015 and December 31, 2016 were negatively impacted as a result of the uncertainty. In January 2016 a new CPT code (0394T) for the treatment of non-melanoma skin cancer utilizing electronic brachytherapy went into effect.

Intellectual Property

The Company primarily relies on a combination of patents, trade secrets and copyright law, third-party and employee confidentiality agreements, and other protective measures to protect its intellectual property rights pertaining to our products and technologies.

The Company has many patents covering its CAD and eBx technologies expiring between 2018 and 2028. These patents help the Company maintain a proprietary position in its markets. Additionally, the Company has a number of patent applications pending domestically, some of which have been also filed internationally, and the Company plans to file additional domestic and foreign patent applications when it believes such protection will benefit the Company. These patents and patent applications relate to current and future uses of iCAD's CAD and digitizer technologies and products, including CAD for tomosynthesis, CAD for CT colonography and lung and CAD for MRI breast and prostate, as well as Xoft's current and future eBx technologies and products. The Company has also secured a non-exclusive patent license from the National Institute of Health which relates broadly to CAD in colonography, a non-exclusive patent license from Cytosorb/Hologic which relates to balloon applicators for breast brachytherapy, and a non-exclusive license from Zeiss which relates to brachytherapy. The Company believes it has all the necessary licenses from third parties for software and other technologies in its products; however, we do not know if current or future patent applications will issue with the full scope of the claims sought, if at all, or whether any patents issued will be challenged or invalidated.

Sources and Availability of Materials

The Company depends upon a limited number of suppliers and manufacturers for its products, and certain components in its products may be available from a sole or limited number of suppliers. The Company's products are generally either manufactured and assembled for it by a sole manufacturer, by a limited number of manufacturers or assembled by it from supplies it obtains from a limited number of suppliers. Critical components required to manufacture these products, whether by outside manufacturers or directly, may be available from a sole or limited number of component suppliers. The Company generally does not have long-term arrangements with any of its manufacturers or suppliers. The loss of a sole or key manufacturer or supplier would impair the Company's ability to deliver products to customers in a timely manner and would adversely affect its sales and operating results. The Company's business would be harmed if any of its manufacturers or suppliers could not meet its quality and performance specifications and quantity and delivery requirements.

Major Customers

The Company operates in two segments: Cancer Detection ("Detection") and Cancer Therapy ("Therapy"). The Company markets its products for digital mammography and cancer therapy systems through its direct regional sales organization. Cancer detection products are also sold through OEM partners, including GE Healthcare, Fuji Medical Systems, Siemens Medical and Invivo. OEM partners generated approximately 47% of detection revenues and 30% of revenue overall. GE Healthcare was the largest single customer with approximately \$3.9 million in 2016, \$4.1 million in 2015, and \$4.1 million in 2014 or 15%, 10%, and 9% of total revenues, respectively.

Engineering and Product Development

The Company spent \$10.3 million, \$9.8 million, and \$8.8 million on research and development activities including depreciation and amortization, during the years ended December 31, 2016, 2015 and 2014, respectively. Research and development expenses are primarily attributed to personnel, consulting, subcontract, licensing and data collection expenses relating to the Company's new product development and clinical testing.

Employees

As of February 2017, the Company had 118 employees, of whom 116 are full time employees, with 30 involved in sales and marketing, 24 in research and development, 52 in service, manufacturing, technical support and operations functions, and 12 in administrative functions. None of the Company's employees is represented by a labor organization. The Company considers its relations with employees to be good.

Environmental Protection

Compliance with federal, state and local provisions which have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, has not had a material effect upon the capital expenditures, earnings (losses) or competitive position of the Company.

Financial Geographic Information

The Company's primary market is in the United States through its direct sales force and OEM partners. Export sales are typically through OEM and channel partners. Total export sales represented approximately \$2.3 million or 9% of revenue in 2016 as compared to \$2.3 million or 6% of revenue in 2015 and \$1.8 million or 4% of total revenue in 2014. Export sales by region are as follows (in thousands):

Region	Percent of Export sales		
	2016	2015	2014
Europe	36%	63%	40%
China	21%	2%	-
Taiwan	19%	15%	19%
Canada	15%	11%	34%
Other	8%	9%	7%
Total	100%	100%	100%
Total Export sales	\$2,323	\$2,278	\$1,772

Significant export sales in Europe are as follows:

Region	Percent of Export sales		
	2016	2015	2014
France	15%	21%	17%
Spain	7%	5%	3%
Bulgaria	3%	26%	-
United Kingdom	3%	9%	13%

Foreign Regulations

International sales of the Company's products are subject to foreign government regulation, the requirements of which vary substantially from country to country. The time required to obtain approval by a foreign country may be longer or shorter than that required for FDA approval, and the requirements may differ. Obtaining and maintaining foreign regulatory approvals is an expensive and time consuming process. The Company cannot be certain that it will be able to obtain the necessary regulatory approvals timely or at all in any foreign country in which it plans to market its CAD products and the Axxent eBx system, and if it fails to receive and maintain such approvals, its ability to generate revenue may be significantly diminished.

Product Liability Insurance

The Company believes that it maintains appropriate product liability insurance with respect to its products. The Company cannot be certain that with respect to its current or future products, such insurance coverage will continue to be available on terms acceptable to the Company or that such coverage will be adequate for liabilities that may actually be incurred.

Item A. Risk Factors.

We operate in a changing environment that involves numerous known and unknown risks and uncertainties that could materially adversely affect our operations. The following highlights some of the factors that have affected, and/or in the future could affect, our operations.

We have incurred significant losses from inception through 2016 and there can be no assurance that we will be able to achieve and sustain future profitability.

We have incurred significant losses since our inception. We incurred a net loss of \$10.1 million in fiscal 2016 and have an accumulated deficit of \$187.6 million at December 31, 2016. We may not be able to achieve profitability.

We rely on intellectual property and proprietary rights to maintain our competitive position and may not be able to protect these rights.

We rely heavily on proprietary technology that we protect primarily through licensing arrangements, patents, trade secrets, proprietary know-how and non-disclosure agreements. There can be no assurance that any pending or future patent applications will be granted or that any current or future patents, regardless of whether we are an owner or a licensee of the patent, will not be challenged, rendered unenforceable, invalidated, or circumvented or that the rights will provide a competitive advantage to us. There can also be no assurance that our trade secrets or non-disclosure agreements will provide meaningful protection of our proprietary information. Further, we cannot assure you that others will not independently develop similar technologies or duplicate any technology developed by us or that our technology will not infringe upon patents or other rights owned by others. There is a risk that our patent applications will not result in granted patents or that granted patents will not provide significant protection for our products and technology. Unauthorized third parties may infringe our intellectual property rights, or copy or reverse engineer portions of our technology. Our competitors may independently develop similar technology that our patents do not cover. In addition, because patent applications in the U.S. are not generally publicly disclosed until eighteen months after the application is filed, applications may have been filed by third parties that relate to our technology. Moreover, there is a risk that foreign intellectual property laws will not protect our intellectual property rights to the same extent as intellectual property laws in the U.S. The rights provided by a patent are finite in time. Over the coming years, certain patents relating to current products will expire in the U.S. and abroad thus allowing third parties to utilize certain of our technologies. In the absence of significant patent protection, we may be vulnerable to competitors who attempt to copy our products, processes or technology.

In addition, in the future, we may be required to assert infringement claims against third parties, and there can be no assurance that one or more parties will not assert infringement claims against us. Any resulting litigation or proceeding could result in significant expense to us and divert the efforts of our management personnel, whether or not such litigation or proceeding is determined in our favor. In addition, to the extent that any of our intellectual property and proprietary rights was ever deemed to violate the proprietary rights of others in any litigation or proceeding or as a result of any claim, we may be prevented from using them, which could cause a termination of our ability to sell our products. Litigation could also result in a judgment or monetary damages being levied against us.

Unfavorable results of legal proceedings could materially adversely affect our financial results

From time to time, we are a party to or otherwise involved in legal proceedings, claims and government inspections or investigations and other legal matters, both inside and outside the United States, arising in the ordinary course of our business or otherwise. Legal proceedings are often lengthy, taking place over a period of years with interim motions or judgments subject to multiple levels of review (such as appeals or rehearings) before the outcome is final. Litigation is subject to significant uncertainty and may be expensive, time-consuming, and disruptive to our operations. For these and other reasons, we may choose to settle legal proceedings and claims, regardless of their actual merit.

If a legal proceeding were finally resolved against us, it could result in significant compensatory damages, and in certain circumstances punitive or trebled damages, disgorgement of revenue or profits, remedial corporate measures or injunctive relief imposed on us. If our existing insurance does not cover the amount or types of damages awarded, or if other resolution or actions taken as a result of the legal proceeding were to restrain our ability to market one or more of our material products or services, our consolidated financial position, results of operations or cash flows could be materially adversely affected. In addition, legal proceedings, and any adverse resolution thereof, can result in adverse publicity and damage to our reputation, which could adversely impact our business.

We may be exposed to significant product liability for which we may not have sufficient insurance coverage or be able to procure sufficient insurance coverage.

Our product and general liability insurance coverage may be inadequate with respect to potential claims and adequate insurance coverage may not be available in sufficient amounts or at a reasonable cost in the future. If available at all, product liability insurance for the medical device industry generally is expensive. Future product liability claims could be costly to defend and/or costly to resolve and could harm our reputation and business.

Sales and market acceptance of our products is dependent upon the coverage and reimbursement decisions made by third-party payors. The failure of third-party payors to provide appropriate levels of coverage and reimbursement for the use of our products and treatments facilitated by our products could harm our business and prospects.

Sales and market acceptance of our medical products and the treatments facilitated by our products in the United States and other countries is dependent upon the coverage decisions and reimbursement policies established by government healthcare programs and private health insurers. Market acceptance of our products and treatments has and will

continue to depend upon our customers' ability to obtain an appropriate level of coverage for, and reimbursement from third-party payors for, these products and treatments. In the U.S., CMS establishes coverage and reimbursement policies for healthcare providers treating Medicare and Medicaid beneficiaries. Under current CMS policies, varying reimbursement levels have been established for our products and treatments. Coverage policies for Medicare patients may vary by regional Medicare carriers in the absence of a national coverage determination and reimbursement rates for treatments may vary based on the geographic price index. Coverage and reimbursement policies and rates applicable to patients with private insurance are dependent upon individual private payer decisions which may not follow the policies and rates established by CMS. The use of our products and treatments outside the United States is similarly affected by coverage and reimbursement policies adopted by foreign governments and private insurance carriers. We cannot provide assurance that government or private third-party payors will continue to reimburse for our products or services using the existing codes, nor can we provide assurance that the payment rates will be adequate. If providers and physicians are unable to obtain reimbursement for our products or services at cost-effective levels, this could have a material adverse effect on our business and operations. In addition, in the event that the current coding and/or payment methodology for these products or services changes, this could have a material adverse effect on our business and business operations.

Our business is dependent upon future market growth of full field digital mammography systems, digital computer aided detection products, and tomosynthesis as well as advanced image analysis and workflow solutions for use with MRI and CT and the market growth of electronic brachytherapy: this growth may not occur or may occur too slowly to benefit us.

Our future business is substantially dependent on the continued growth in the market for electronic brachytherapy, full field digital mammography systems, digital computer aided detection products and tomosynthesis as well as advanced image analysis and workflow solutions for use with MRI and CT. The market for these products may not continue to develop or may develop at a slower rate than we anticipate due to a variety of factors, including, general economic conditions, delays in hospital spending for capital equipment, the significant cost associated with the procurement of full field digital mammography systems and CAD products and MRI and CT systems and the reliance on third party insurance reimbursement. In addition we may not be able to successfully develop or obtain FDA clearance for our proposed products.

A limited number of customers account for a significant portion of our total revenue. The loss of a principal customer could seriously hurt our business.

Our principal sales distribution channel for our digital products is through our OEM partners which accounted for 30% of our total revenue in 2016, with one major customer, GE Healthcare at 15% of our revenue. In addition six customers accounted for 33% of our total revenue, which includes both OEM partners and direct customers. A limited number of major customers have in the past and may continue in the future to account for a significant portion of our revenue. The loss of our relationships with principal customers or a decline in sales to principal customers could materially adversely affect our business and operating results.

The markets for our newly developed products and treatments and newly introduced enhancements to our existing products and treatments may not develop as expected.

The successful commercialization of our newly developed products and treatments and newly introduced enhancements to our existing products and treatments are subject to numerous risks, both known and unknown, including:

- uncertainty of the development of a market for such product or treatment;
- trends relating to, or the introduction or existence of, competing products, technologies or alternative treatments or therapies that may be more effective, safer or easier to use than our products, technologies, treatments or therapies;
- the perceptions of our products or treatments as compared to other products and treatments;
- recommendation and support for the use of our products or treatments by influential customers, such as hospitals, radiological practices, breast surgeons and radiation oncologists and treatment centers;
- the availability and extent of data demonstrating the clinical efficacy of our products or treatments;
- competition, including the presence of competing products sold by companies with longer operating histories, more recognizable names and more established distribution networks; and
- other technological developments.

Often, the development of a significant market for a product or treatment will depend upon the establishment of a reimbursement code or an appropriate reimbursement level for use of the product or treatment. Moreover, even if addressed, such reimbursement codes or levels frequently are not established until after a product or treatment is developed and commercially introduced, which can delay the successful commercialization of a product or treatment.

If we are unable to successfully commercialize and create a significant market for our newly developed products and treatments and newly introduced enhancements to our existing products and treatments, our business and prospects could be harmed.

If goodwill and/or other intangible assets that we have recorded in connection with our acquisitions become impaired, we could have to take significant charges against earnings.

In connection with the accounting for our acquisitions, we have recorded a significant amount of goodwill and other intangible assets. In September 2011, we recorded an impairment of \$26.8 million on our goodwill, and in June 2015, we recorded an additional impairment of \$14.0 million on our goodwill. Under current accounting guidelines, we must assess, at least annually and potentially more frequently, whether the value of our goodwill of \$14.1 million at December 31, 2016 and our other intangible assets has been impaired. Any reduction or impairment of the value of goodwill or other intangible assets will result in a charge against earnings which could materially adversely affect our reported results of operations in future periods.

The healthcare industry is highly regulated, and government authorities may determine that we have failed to comply with applicable laws, rules or regulations.

The healthcare industry is subject to extensive and complex federal, state and local laws, rules and regulations, compliance with which imposes substantial costs on us. Such laws and regulations include those that are directed at payment for services and the conduct of operations, preventing fraud and abuse, and prohibiting general business corporations, such as ours, from engaging in practices that may influence professional decision-making, such as splitting fees with physicians. Many healthcare laws are complex, and their application to specific services and relationships may not be clear. Further, healthcare laws differ from state to state and it is difficult to ensure our business complies with evolving laws in all states. In addition, we believe that our business will continue to be subject to increasing regulation, the scope and effect of which we cannot predict. Federal and state legislatures and agencies periodically consider proposals to revise or create additional statutory and regulatory requirements. Such proposals, if implemented, could impact our operations, the use of our services, and our ability to market new services, or could create unexpected liabilities for us.

We may in the future become the subject of regulatory or other investigations or proceedings, and our interpretations of applicable laws, rules and regulations may be challenged. For example, regulatory authorities or other parties may assert that our arrangements with the physician practices to which we lease equipment and provide management services violate anti-kickback, fee splitting, or self-referral laws and regulations and could require us to restructure these arrangements, which could have a material adverse effect on our business, financial condition, results of operations, cash flows and the trading price of our common stock. Such investigations, proceedings and challenges could also result in substantial defense costs to us and a diversion of management's time and attention. In addition, violations of these laws are punishable by monetary fines, civil and criminal penalties, exclusion from participation in government-sponsored healthcare programs, and forfeiture of amounts collected in violation of such laws and regulations, any of which could have a material adverse effect on our business, financial condition, results of operations, cash flows and the trading price of our common stock.

We may incur substantial costs defending our interpretations of federal and state government regulations and if we lose, the government could force us to restructure our operations and subject us to fines, monetary penalties and possibly exclude us from participation in government-sponsored health care programs such as Medicare and Medicaid.

Our operations, including our arrangements with healthcare providers, are subject to extensive federal and state government regulation and are subject to audits, inquiries and investigations from government agencies from time to time. Those laws may have related rules and regulations that are subject to interpretation and may not provide definitive guidance as to their application to our operations, including our arrangements with physicians and professional corporations.

We believe we are in substantial compliance with these laws, rules and regulations based upon what we believe are reasonable and defensible interpretations of these laws, rules and regulations. However, federal and state laws are broadly worded and may be interpreted or applied by prosecutorial, regulatory or judicial authorities in ways that we cannot predict. Accordingly, our arrangements and business practices may be the subject of government scrutiny or be found to violate applicable laws. If federal or state government officials challenge our operations or arrangements with third parties that we have structured based upon our interpretation of these laws, rules and regulations, the challenge could potentially disrupt our business operations and we may incur substantial defense costs, even if we successfully defend our interpretation of these laws, rules and regulations. In addition, if the government successfully challenges our interpretation as to the applicability of these laws, rules and regulations as they relate to our operations and arrangements with third parties, it may have a material adverse effect on our business, financial condition and results of operations.

In the event regulatory action were to limit or prohibit us from carrying on our business as we presently conduct it or from expanding our operations into certain jurisdictions, we may need to make structural, operational and organizational modifications to our Company or our contractual arrangements with physicians and professional corporations. Our operating costs could increase significantly as a result. We could also lose contracts or our revenues could decrease under existing contracts. Any restructuring would also negatively impact our operations because our management's time and attention would be diverted from running our business in the ordinary course.

Regulations related to "conflict minerals" may cause us to incur additional expenses and could limit the supply and increase the cost of certain metals used in manufacturing our products.

In August 2012, the SEC adopted a rule requiring disclosures of specified minerals, known as conflict minerals, that are necessary to the functionality or production of products manufactured or contracted to be manufactured by public companies. The conflict minerals rule requires companies annually to diligence, disclose and report whether or not such minerals originate from the Democratic Republic of Congo and other specified countries. The rule could affect sourcing at competitive prices and availability in sufficient quantities of certain minerals used in the manufacture of our products, including tungsten. The number of suppliers who provide conflict-free minerals may be limited. In addition, there may be material costs associated with complying with the disclosure requirements, such as costs related to determining the source of certain minerals used in our products, as well as costs of possible charges to products, processes or sources of supply as a consequence of such verification activities. Since our supply chain is complex, we may not be able to sufficiently verify the origins of the relevant minerals used in our products through the due diligence procedures that we implement, which may harm our reputation. In addition, we may encounter challenges to satisfy those customers who require that all of the components of our products be certified conflict-free, which could place us at a competitive disadvantage if we are unable to do so.

Compliance with the many laws and regulations governing the healthcare industry could restrict our sales and marketing practices, and exclusion from such programs as a result of a violation of these laws could have a material adverse effect on our business.

Once our products are sold, we must comply with various U.S. federal and state laws, rules and regulations pertaining to healthcare fraud and abuse, including false claims laws, anti-kickback laws and physician self-referral laws, rules and regulations. Violations of the fraud and abuse laws are punishable by criminal and civil sanctions, including, in some instances, exclusion from participation in federal and state healthcare programs, including Medicare, Medicaid, Veterans Administration health programs, workers' compensation programs and TRICARE. Compliance with these laws could restrict our sales and marketing practices, and exclusion from such programs as a result of a violation of these laws could have a material adverse effect on our business.

Anti-Kickback Statutes

The federal Anti-Kickback Statute prohibits persons from knowingly or willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in exchange for or to induce:

- the referral of an individual for a service or product for which payment may be made by Medicare, Medicaid or other government-sponsored healthcare program; or
- purchasing, ordering, arranging for, or recommending the ordering of, any service or product for which payment may be made by a government-sponsored healthcare program.

The Anti-Kickback Statute is broad and prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. The statutory penalties for violating the Anti-Kickback Statute include imprisonment for up to five years and criminal fines of up to \$25,000 per violation. In addition, through application of other laws, conduct that violates the Anti-Kickback Statute can also give rise to False Claims Act lawsuits, civil monetary penalties and possible exclusion from Medicare and Medicaid and other federal healthcare programs. In addition to the Federal Anti-Kickback Statute, many states have their own anti-kickback laws. Often, these laws closely follow the language of the federal law, although they do not always have the same scope, exceptions, safe harbors or sanctions. In some states, these anti-kickback laws apply not only to payment made by a government health care program but also with respect to other payers, including commercial insurance companies.

Government officials have focused recent kickback enforcement efforts on, among other things, the sales and marketing activities of healthcare companies, including medical device manufacturers, and recently have brought cases against individuals or entities with personnel who allegedly offered unlawful inducements to potential or existing customers in an attempt to procure their business. This trend is expected to continue. Settlements of these cases by healthcare companies have involved significant fines and/or penalties and in some instances criminal plea or deferred prosecution agreements.

Our relationships with healthcare providers and our marketing practices are subject to the federal Anti-Kickback Statute and similar state laws.

We are subject to the federal Anti-Kickback Statute, which prohibits the knowing and willful offer, payment, solicitation or receipt of any form of “remuneration” in return for, or to induce, the referral of business or ordering of services paid for by Medicare or other federal programs. “Remuneration” has been broadly interpreted to mean anything of value, including, for example, gifts, discounts, credit arrangements, and in-kind goods or services, as well as cash. Certain federal courts have held that the Anti-Kickback Statute can be violated if “one purpose” of a payment is to induce referrals. The Anti-Kickback Statute is broad and prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. Violations of the Anti-Kickback Statute can result in imprisonment, civil or criminal fines or exclusion from Medicare and other governmental programs. Many states have adopted laws similar to the federal Anti-Kickback Statute. Some of these state prohibitions apply to referral of patients for healthcare items or services reimbursed by any payor, not only the Medicare and Medicaid programs. Additionally, we could be subject to private actions brought pursuant to the False Claims Act’s “whistleblower” or “qui tam” provisions which, among other things, allege that our practices or relationships violate the Anti-Kickback Statute. The False Claims Act imposes liability on any person or entity who, among other things, knowingly presents, or causes to be presented, a false or fraudulent claim for payment by a federal healthcare program. The qui tam provisions of the False Claims Act allow a private individual to bring actions on behalf of the federal government alleging that the defendant has submitted a false claim to the federal government, and to share in any monetary recovery. In recent years, the number of suits brought by private individuals has increased dramatically. In addition, various states have enacted false claim laws analogous to the False Claims Act. Many of these state laws apply where a claim is submitted to any third party payor and not merely a federal healthcare program.

Although we have attempted to structure our marketing initiatives and business relationships to comply with the Anti-Kickback Statute, we cannot assure you that we will not have to defend against alleged violations from private or public entities or that the Office of Inspector General or other authorities will not find that our marketing practices and relationships violate the statute. If we are found to have violated the Anti-Kickback Statute or a similar state statute, we may be subject to civil and criminal penalties, including exclusion from the Medicare or Medicaid programs, or may be required to enter into settlement agreements with the government to avoid such sanctions. Typically, such settlement agreements require substantial payments to the government in exchange for the government to release its claims, and may also require us to enter into a Corporate Integrity Agreement.

Physician Self-Referral Laws

The federal ban on physician self-referrals, commonly known as the “Stark Law,” prohibits, subject to certain exceptions, physician referrals of Medicare and Medicaid patients to an entity providing certain “designated health services” if the physician or an immediate family member of the physician has any financial relationship with the entity. The Stark Law also prohibits the entity receiving the referral from billing for any good or service furnished pursuant to an unlawful referral, and any person collecting any amounts in connection with an unlawful referral is obligated to refund these amounts. A person who engages in a scheme to circumvent the Stark Law’s referral prohibition may be fined up to \$100,000 for each such arrangement or scheme. The penalties for violating the Stark Law also include civil monetary penalties of up to \$15,000 per service, could result in denial of payment, disgorgements of reimbursement received under a non-compliant agreement, and possible exclusion from Medicare, Medicaid or other federal healthcare programs. In addition to the Stark Law, many states have their own self-referral laws. Often, these laws closely follow the language of the federal law, although they do not always have the same scope, exceptions, safe harbors or sanctions. In some states these self-referral laws apply not only to payment made by a federal health care program but also with respect to other payers, including commercial insurance companies. In addition, some state laws require physicians to disclose any financial interest they may have with a healthcare provider to their patients when referring patients to that provider even if the referral itself is not prohibited.

If we fail to comply with federal and state physician self-referral laws and regulations as they are currently interpreted or may be interpreted in the future, or if other legislative restrictions are issued, we could incur a significant loss of revenue and be subject to significant monetary penalties, which could have a material adverse effect on our business, financial condition and results of operations.

We are subject to federal and state laws and regulations that limit the circumstances under which physicians who have a financial relationship with entities that furnish certain specified healthcare services may refer to such entities for the provision of such services, including clinical laboratory services, radiology and other imaging services and certain other diagnostic services. These laws and regulations also prohibit such entities from billing for services provided in violation of the laws and regulations.

We have financial relationships with physicians in the form of equipment leases and services arrangements. While we believe our arrangements with physicians are in material compliance with applicable laws and regulations, govern

authorities might take a contrary position or prohibited referrals may occur. Further, because we cannot be certain that we will have knowledge of all physicians who may hold an indirect ownership interest, referrals from any such physicians may cause us to violate these laws and regulations.

Violation of these laws and regulations may result in the prohibition of payment for services rendered, significant fines and penalties, and exclusion from Medicare, Medicaid and other federal and state healthcare programs, any of which could have a material adverse effect on our business, financial condition and results of operations. In addition, expansion of our operations to new jurisdictions, new interpretations of laws in our existing jurisdictions, or new physician self-referral laws could require structural and organizational modifications of our relationships with physicians to comply with those jurisdictions' laws. Such structural and organizational modifications could result in lower profitability and failure to achieve our growth objectives.

False Claims Laws

The federal False Claims Act, or FCA, prohibits any person from knowingly presenting, or causing to be presented, a false claim or knowingly making, or causing to be made, a false statement to obtain payment from the federal government. Those found in violation of the FCA can be subject to fines and penalties of three times the damages sustained by the government, plus mandatory civil penalties of between \$5,000 and \$10,000 (adjusted for inflation) for each separate false claim. Actions filed under the FCA can be brought by any individual on behalf of the government, a "qui tam" action, and this individual, known as a "relator" or, more commonly, as a "whistleblower," may share in any amounts paid by the entity to the government in damages and penalties or by way of settlement. In addition, certain states have enacted laws modeled after the FCA, and this legislative activity is expected to increase. Qui tam actions have increased significantly in recent years, causing greater numbers of healthcare companies, including medical device manufacturers, to defend false claim actions, pay damages and penalties or be excluded from Medicare, Medicaid or other federal or state healthcare programs as a result of investigations arising out of such actions.

Increased Regulatory Scrutiny of Relationships with Healthcare Providers

Certain state governments and the federal government have enacted legislation, including the Physician Payments Sunshine Act provisions under the Federal Patient Protection and Affordable Care Act, aimed at increasing transparency of our interactions with healthcare providers. As a result, we are required by law to disclose payments, gifts, and other transfers of value to certain healthcare providers in certain states and to the federal government. Any failure to comply with these legal and regulatory requirements could result in a range of fines, penalties, and/or sanctions, and could affect our business. In addition, we have devoted and will continue to devote substantial time and financial resources to develop and implement enhanced structure, policies, systems and processes to comply with these enhanced legal and regulatory requirements, which may also impact our business.

Third-Party Reimbursement

Because we expect to receive payment for our products directly from our customers, we do not anticipate relying directly on payment for any of our products from third-party payors, such as Medicare, Medicaid, commercial health insurers and managed care companies. However, our business will be affected by coverage policies adopted by federal and state governmental authorities, such as Medicare and Medicaid, as well as private payors, which often follow the coverage policies of these public programs. Such policies may affect which products customers purchase and the prices they are willing to pay for those products in a particular jurisdiction. For example, our business will be indirectly impacted by the ability of a hospital or medical facility to obtain coverage and third-party reimbursement for procedures performed using our products. These third-party payors may deny coverage if they determine that a device used in a procedure was not medically necessary, was not used in accordance with cost-effective treatment methods, as determined by the third-party payer, or was used for an unapproved indication. They may also pay an inadequate amount for the procedure which could cause healthcare providers to use a lower cost competitor's device or perform a medical procedure without our device.

Reimbursement decisions by particular third-party payors depend upon a number of factors, including each third-party payer's determination that use of a product is:

- a covered benefit under its health plan;
- appropriate and medically necessary for the specific indication;
- cost effective; and
- neither experimental nor investigational.

Many third-party payors use coverage decisions and payment amounts determined by the Centers for Medicare and Medicaid Services, or CMS, which administers the U.S. Medicare program, as guidelines in setting their coverage

and reimbursement policies. Medicare periodically reviews its reimbursement practices for various products. As a result, there is no certainty as to the future Medicare reimbursement rate for our products. In addition, those third-party payers that do not follow the CMS guidelines may adopt different coverage and reimbursement policies for our current and future products. It is possible that some third-party payers will not offer any coverage for our current or future products.

In May 2015, the Company announced that one of the regional Medicare Administrative Contractors instructed physicians to report CPT code (17999) rather than the established CPT code (0182T) for electronic brachytherapy for treatment of NMSC. This announcement resulted in a significant disruption in our Therapy segment as a result of the reimbursement uncertainty. Revenues for the years ended December 31, 2015 and December 31, 2016 were negatively impacted as a result of the uncertainty. For a further discussion, please see Management's Discussion and Analysis of Financial Condition and Results of Operations.

Furthermore, the healthcare industry in the United States is increasingly focused on cost containment as government and private insurers seek to control healthcare costs by imposing lower payment rates and negotiating reduced contract rates with third-party payers. If third-party payers deny coverage or reduce their current levels of payment, or if our production costs increase faster than increases in reimbursement levels, we may be unable to sell our products on a profitable basis.

Healthcare reform legislation in the United States may adversely affect our business and/or results of operations.

In March 2010, significant reforms to the U.S. healthcare system were adopted in the form of the Patient Protection and Affordable Care Act (the "PPACA"). The PPACA includes provisions that, among other things, reduce and/or limit Medicare reimbursement, require all individuals to have health insurance (with limited exceptions) and impose new and/or increased taxes. Specifically, beginning in 2013, the medical device industry was required to subsidize healthcare reform in the form of a 2.3% excise tax on United States sales of most medical devices. In December 2015, as part of the Omnibus Appropriations Act, collection of the medical device excise tax was suspended for 2016 and 2017. We are unable to predict whether the postponement will be continued beyond 2017. While the PPACA is intended to expand health insurance coverage to uninsured persons in the United States, other elements of this legislation, such as Medicare provisions aimed at improving quality and decreasing costs, comparative effectiveness research, an independent payment advisory board, and pilot programs to evaluate alternative payment methodologies, make it difficult to determine the overall impact on sales of, and reimbursement for, our products. We are unable to predict what additional legislation or regulation relating to the health care industry or third-party coverage and reimbursement may be enacted in the future or what effect such legislation or regulation would have on our business. Any cost containment measures or other health care system reforms that are adopted could have a material and adverse effect on our ability to commercialize our existing and future products successfully.

Healthcare industry consolidation could impose pressure on our prices, reduce potential customer base and reduce demands for our systems.

Many hospitals and imaging centers have consolidated to create larger healthcare enterprises with greater market and purchasing power. If this consolidation trend continues, it could reduce the size of our potential customer base and give the resulting enterprises greater bargaining or purchasing power, which may lead to erosion of the prices for our systems or decreased margins for our systems. In addition, when hospitals and imaging centers combine, they often consolidate infrastructure, and consolidation of our customers could result in fewer overall customers.

Our products and manufacturing facilities are subject to extensive regulation with potentially significant costs for compliance.

Our CAD systems for the computer aided detection of cancer and Axxent eBx systems are medical devices subject to extensive regulation by the FDA under the Federal Food, Drug, and Cosmetic Act. In addition, our manufacturing operations are subject to FDA regulation and we are also subject to FDA regulations covering labeling, adverse event reporting, and the FDA's general prohibition against promoting products for unapproved or off-label uses.

Our failure to fully comply with applicable regulations could result in the issuance of warning letters, non-approvals, suspensions of existing approvals, civil penalties and criminal fines, product seizures and recalls, operating restrictions, injunctions, and criminal prosecution. Moreover, unanticipated changes in existing regulatory requirements or adoption of new requirements could increase our application, operating and compliance burdens and adversely affect our business, financial condition and results of operations.

Sales of our products in certain countries outside of the U.S. are also subject to extensive regulatory approvals. Obtaining and maintaining foreign regulatory approvals is an expensive and time consuming process. We cannot be certain that we will be able to obtain the necessary regulatory approvals timely or at all in any foreign country in which

we plan to market our CAD products and Axxent eBx systems, and if we fail to receive such approvals, our ability to generate revenue may be significantly diminished.

We may not be able to obtain regulatory approval for any of the other products that we may consider developing

We have received FDA approvals for our currently offered products. Before we are able to commercialize any new product, we must obtain regulatory approvals for each indicated use for that product. The process for satisfying these regulatory requirements is lengthy and costly and will require us to comply with complex standards for research and development, clinical trials, testing, manufacturing, quality control, labeling, and promotion of products.

Our products may be recalled even after we have received FDA or other governmental approval or clearance.

If the safety or efficacy of any of our products is called into question, the FDA and similar governmental authorities in other countries may require us to recall our products, even if our product received approval or clearance by the FDA or a similar governmental body. Such a recall would divert the focus of our management and our financial resources and could materially and adversely affect our reputation with customers and our financial condition and results of operations.

We may be subject to criminal or civil sanctions if we fail to comply with privacy regulations regarding the use and disclosure of sensitive personally identifiable information.

Numerous state and federal laws and regulations govern the collection, dissemination, use, privacy, confidentiality, security, availability and integrity of personally identifiable information personally identifiable information, including The Health Insurance Portability and Accountability Act of 1996, as amended, and the regulations that have been issued thereunder (“HIPAA”). In the provision of services to our customers, we and our third party vendors may collect, use, maintain and transmit patient health information in ways that are subject to many of these laws and regulations.

Our customers are covered entities, and we are a business associate of our customers under HIPAA as a result of our contractual obligations to perform certain functions on behalf of and provide certain services to those customers. If we or any of our subcontractors experience a breach of the privacy or security of patient information, the breach reporting requirements and the liability for business associates under HIPAA could result in substantial financial liability and reputational harm.

Federal and state consumer laws are being applied increasingly by the Federal Trade Commission (FTC) and state attorney general to regulate the collection, use and disclosure of personal or patient health information, through web sites or otherwise, and to regulate the presentation of web site content. Numerous other federal and state laws protect the confidentiality, privacy, availability, integrity and security of personally identifiable information. These laws in many cases are more restrictive than, and not preempted by, HIPAA and may be subject to varying interpretations by courts and government agencies, creating complex compliance issues for us and our customers and potentially exposing us to additional expense, adverse publicity and liability. We may not remain in compliance with the diverse privacy requirements in all of the jurisdictions in which we do business.

HIPAA and federal and state laws and regulations may require users of personally identifiable information to implement specified security measures. Evolving laws and regulations in this area could require us to incur significant additional costs to re-design our products in a timely manner to reflect these legal requirements, which could have an adverse impact on our results of operations.

New personally identifiable information standards, whether implemented pursuant to HIPAA, congressional action or otherwise, could have a significant effect on the manner in which we must handle healthcare related data, and the cost of complying with standards could be significant. If we do not properly comply with existing or new laws and regulations related to patient health information, we could be subject to criminal or civil sanctions.

If our security measures are breached or fail and unauthorized access is obtained to a customer’s data, our service may be perceived as insecure, the attractiveness of our services to current or potential customers may be reduced, and we may incur significant liabilities.

Our services involve the storage and transmission of customers’ proprietary information and patient information, including health, financial, payment and other personal or confidential information. We rely on proprietary and commercially available systems, software, tools and monitoring, as well as other processes, to provide security for processing, transmission and storage of such information. Because of the sensitivity of this information and due to requirements under applicable laws and regulations, the effectiveness of such security efforts is very important. If our security measures are breached or fail as a result of third-party action, employee error, malfeasance or otherwise, someone may be able to obtain unauthorized access to customer or patient data. Improper activities by third-parties, advances in computer and software capabilities and encryption technology, new tools and discoveries and other events

or developments may facilitate or result in a compromise or breach of our computer systems. Techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until launched against a target, and we may be unable to anticipate these techniques or fail to implement adequate preventive measures. Our security measures may not be effective in preventing such unauthorized access. If a breach of our security occurs, we could face damages for contract breach, penalties for violation of applicable laws or regulations, possible lawsuits by individuals affected by the breach and significant remediation costs and efforts to prevent future occurrences. In addition, whether there is an actual or a perceived breach of our security, the market perception of the effectiveness of our security measures could be harmed and we could lose current or potential customers.

Our effective tax rate may fluctuate and we may incur obligations in tax jurisdictions in excess of amounts that have been accrued.

As a global company, we are subject to taxation in numerous countries, states and other jurisdictions. In preparing our financial statements, we record the amount of tax payable in each of the countries, states and other jurisdictions in which we operate. Our future effective tax rate, however, may be lower or higher than prior years due to numerous factors, including a change in our geographic earnings mix, changes in the measurement of our deferred taxes, and recently enacted and future tax law changes in jurisdictions in which we operate. We are also subject to ongoing tax audits in various jurisdictions, and tax authorities may disagree with certain positions we have taken and assess additional taxes. Any of these factors could cause us to experience an effective tax rate significantly different from previous periods or our current expectations, which could adversely affect our business, results of operations and cash flows.

Changes in interpretation or application of Generally Accepted Accounting Principles may adversely affect our operating results

We prepare our financial statements to conform to GAAP. These principles are subject to interpretation by the Financial Accounting Standards Board (“FASB”), American Institute of Certified Public Accountants, the SEC and various other regulatory or accounting bodies. A change in interpretations of, or our application of, these principles can have a significant effect on our reported results and may even affect our reporting of transactions completed before a change is announced. In addition, when we are required to adopt new accounting standards, our methods of accounting for certain items may change, which could cause our results of operations to fluctuate from period to period and make it more difficult to compare our financial results to prior periods.

As our operations evolve over time, we may introduce new products or new technologies that require us to apply different accounting principles, including ones regarding revenue recognition, than we have applied in past periods. The application of different types of accounting principles and related potential changes may make it more difficult to compare our financial results from quarter to quarter, and the trading price of our common stock could suffer or become more volatile as a result.

Our recent acquisitions involve risks.

We have recently completed acquisitions and we may make acquisitions in the future. Such transactions involve numerous risks, including possible adverse effects on our operating results or the market price of our common stock. Some of the potential risks involved with acquisitions are the following:

- difficulty in realizing anticipated financial or strategic benefits of such acquisition;
- diversion of capital and potential dilution of stockholder ownership;
- the risks related to increased indebtedness, as well as the risk such financing will not be available on satisfactory terms or at all;
- diversion of management’s attention and other resources from current operations, including potential strain on financial and managerial controls and reporting systems and procedures;
- management of employee relations across facilities;
- difficulties in the assimilation of different corporate cultures and practices, as well as in the assimilation and retention of broad and geographically dispersed personnel and operations;
- difficulties and unanticipated expenses related to the integration of departments, systems (including accounting systems), technologies, books and records, procedures and controls (including internal accounting controls, procedures and policies), as well as in maintaining uniform standards, including environmental management systems;
- assumption of known and unknown liabilities, some of which may be difficult or impossible to quantify;
- inability to realize cost savings, sales increases or other benefits that we anticipate from such acquisitions, either as to amount or in the expected time frame;
- non-cash impairment charges or other accounting charges relating to the acquired assets; and
- maintaining strong relationships with our and our acquired companies’ customers after the acquisitions.

If our integration efforts are not successful, we may not be able to maintain the levels of revenues, earnings or operating efficiency that we and the acquired companies achieved or might achieve separately.

Our acquisitions may not result in the benefits and revenue growth we expect.

We integrate companies that we acquire and including the operations, services, products and personnel of each company within our management policies, procedures and strategies. We cannot be sure that we will achieve the benefits of revenue growth that we expect from these acquisitions or that we will not incur unforeseen additional costs or expenses in connection with these acquisitions. To effectively manage our expected future growth, we must continue to successfully manage our integration of these companies and continue to improve our operational systems, internal procedures, working capital management, and financial and operational controls. If we fail in any of these areas, our business could be adversely affected.

Our quarterly and annual operating and financial results and our gross margins are likely to fluctuate significantly in future periods.

Our quarterly and annual operating and financial results are difficult to predict and may fluctuate significantly from period to period. Our revenue and results of operations may fluctuate as a result of a variety of factors that are outside of our control including, but not limited to, general economic conditions, the timing of orders from our OEM partners, our OEM partners ability to manufacture and ship their digital mammography systems, our timely receipt by the FDA for the clearance to market our products, our ability to timely engage other OEM partners for the sale of our products, the timing of product enhancements and new product introductions by us or our competitors, the pricing of our products, changes in customers' budgets, competitive conditions and the possible deferral of revenue under our revenue recognition policies.

The markets for many of our products are subject to changing technology.

The markets for many products we sell are subject to changing technology, new product introductions and product enhancements, and evolving industry standards. The introduction or enhancement of products embodying new technology or the emergence of new industry standards could render our existing products obsolete or result in short product life cycles or our inability to sell our products without offering a significant discount. Accordingly, our ability to compete is in part dependent on our ability to continually offer enhanced and improved products.

If we are unable to successfully introduce new technology solutions or services or fail to keep pace with advances in technology, our business, financial condition and results of operations will be adversely affected.

Our business depends on our ability to adapt to evolving technologies and industry standards and introduce new technology solutions and services accordingly. If we cannot adapt to changing technologies, our technology solutions and services may become obsolete, and our business would suffer. Because the healthcare information technology market is constantly evolving, our existing Radion technology may become obsolete and fail to meet the requirements of current and potential customers. Our success will depend, in part, on our ability to continue to enhance our existing technology solutions and services, develop new technology that addresses the increasingly sophisticated and varied needs of our customers, and respond to technological advances and emerging industry standards and practices on a timely and cost-effective basis. The development of our proprietary technology entails significant technical and business risks. We may not be successful in developing, using, marketing, selling, or maintaining new technologies effectively or adapting our proprietary Radion technology to evolving customer requirements or emerging industry standards, and, as a result, our business and reputation could suffer. We may not be able to introduce new technology solutions on schedule, or at all, or such solutions may not achieve market acceptance. Moreover, competitors may develop competitive products that could adversely affect our results of operations. A failure by us to introduce new products or to introduce these products on schedule could have an adverse effect on our business, financial condition and results of operations.

We depend upon a limited number of suppliers and manufacturers for our products, and certain components in our products may be available from a sole or limited number of suppliers.

Our products are generally either manufactured and assembled for us by a sole manufacturer, by a limited number of manufacturers or assembled by us from supplies we obtain from a limited number of suppliers. Critical components required to manufacture our products, whether by outside manufacturers or directly by us, may be available from a sole or limited number of component suppliers. We generally do not have long-term arrangements with any of our manufacturers or suppliers. The loss of a sole or key manufacturer or supplier could materially impair our ability to deliver products to our customers in a timely manner and would adversely affect our sales and operating results. Our business would be harmed if any of our manufacturers or suppliers could not meet our quality and performance specifications and quantity and delivery requirements.

We distribute our products in highly competitive markets and our sales may suffer as a result.

We operate in highly competitive and rapidly changing markets that contain competitive products available from nationally and internationally recognized companies. Many of these competitors have significantly greater financial, technical and human resources than us and are well established. In addition, some companies have developed or may develop technologies or products that could compete with the products we manufacture and distribute or that would render our products obsolete or noncompetitive. In addition, our competitors may achieve patent protection, regulatory approval, or product commercialization that would limit our ability to compete with them. These and other competitive pressures could have a material adverse effect on our business.

Disruptions in service or damage to our third-party providers' data centers could adversely affect our business.

We rely on third-parties who provide access to data centers. Our information technologies and systems are vulnerable to damage or interruption from various causes, including (i) acts of God and other natural disasters, war and acts of terrorism and (ii) power losses, computer systems failures, internet and telecommunications or data network failures, operator error, losses of and corruption of data and similar events. We conduct business continuity planning according and work with our third-party providers to protect against fires, floods, other natural disasters and general business interruptions to mitigate the adverse effects of a disruption, relocation or change in operating environment at the data centers we utilize. In addition, the occurrence of any of these events could result in interruptions, delays or cessations in service to our customers. Any of these events could impair or prohibit our ability to provide our services, reduce the attractiveness of our services to current or potential customers and adversely impact our financial condition and results of operations.

In addition, despite the implementation of security measures, our infrastructure, data centers, or systems that we interface with, including the Internet and related systems, may be vulnerable to physical break-ins, hackers, improper employee or contractor access, computer viruses, programming errors, denial-of-service attacks or other attacks by third-parties seeking to disrupt operations or misappropriate information or similar physical or electronic breaches of security. Any of these can cause system failure, including network software or hardware failure, which can result in service disruptions. As a result, we may be required to expend significant capital and other resources to protect against security breaches and hackers or to alleviate problems caused by such breaches.

If our products fail to perform properly due to errors or similar problems, our business could suffer.

Complex software, such as our Radion software, may contain defects or errors, some of which may remain undetected for a period of time. It is possible that such errors may be found after the introduction of new software or enhancements to existing software. We continually introduce new solutions and enhancements to our solutions, and, despite testing by us, it is possible that errors may occur in our software. If we detect any errors before we introduce a solution, we might have to delay deployment for an extended period of time while we address the problem. If we do not discover software errors that affect our new or current solutions or enhancements until after they are deployed, we would need to provide enhancements to correct such errors. Errors in our software could result in:

- harm to our reputation;
- lost sales;
- delay in commercial releases;
- product liability claims;
- delay in or loss of market acceptance of our solutions;
- license terminations or renegotiations;
- unexpected expenses and diversion of resources to remedy errors; and
- privacy and security vulnerabilities.

Furthermore, our customers might use our software together with products from other companies or those that they have developed internally. As a result, when problems occur, it might be difficult to identify the source of the problem. Even when our software does not cause these problems, the existence of these errors might cause us to incur significant costs, divert the attention of our technical personnel from our solution development efforts; impact our reputation and cause significant customer relations problems.

We cannot be certain of the future effectiveness of our internal controls over financial reporting or the impact of the same on our operations or the market price for our common stock.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we are required to include in our Annual Report on Form 10-K our assessment of the effectiveness of our internal controls over financial reporting. We have dedicated a significant amount of time and resources to ensure compliance with this legislation for the year ended December 31,

2016 and will continue to do so for future fiscal periods. Although we believe that we currently have adequate internal control procedures in place, we cannot be certain that future material changes to our internal controls over financial reporting will be effective. If we cannot adequately maintain the effectiveness of our internal controls over financial reporting, we might be subject to sanctions or investigation by regulatory authorities, such as the SEC. Any such action could adversely affect our financial results and the market price of our common stock.

An inability to meet the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 could adversely affect investor confidence and, as a result, our stock price.

We are required to comply with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 (“Section 404”). Although we implemented procedures to comply with the requirements of Section 404, there is no assurance that we will continue to meet the requirements. Failure to meet the ongoing requirements of Section 404, our inability to comply with Section 404’s requirements, and the costs of ongoing compliance could have a material adverse effect on investor confidence and our stock price.

Our future prospects depend on our ability to retain current key employees and attract additional qualified personnel.

Our success depends in large part on the continued service of our executive officers and other key employees. We may not be able to retain the services of our executive officers and other key employees. The loss of executive officers or other key personnel could have a material adverse effect on us.

In addition, in order to support our continued growth, we will be required to effectively recruit, develop and retain additional qualified personnel. If we are unable to attract and retain additional necessary personnel, it could delay or hinder our plans for growth. Competition for such personnel is intense, and there can be no assurance that we will be able to successfully attract, assimilate or retain sufficiently qualified personnel. The failure to retain and attract necessary personnel could have a material adverse effect on our business, financial condition and results of operations.

Our international operations expose us to various risks, any number of which could harm our business.

Our revenue from sales outside of the United States represented approximately 9% of our revenue for 2016. We are subject to the risk inherent in conducting business across national boundaries, any one of which could adversely impact our business. In addition to currency fluctuations, these risks include, among other things: economic downturns; changes in or interpretations of local law, governmental policy or regulation; restrictions on the transfer of funds into or out of the country; varying tax systems; and government protectionism. One or more of the foregoing factors could impair our current or future operations and, as a result, harm our overall business.

The market price of our common stock has been, and may continue to be, volatile which could reduce the market price of our common stock.

The publicly traded shares of our common stock have experienced, and may experience in the future, significant price and volume fluctuations. This market volatility could reduce the market price of our common stock without regard to our operating performance. In addition, the trading price of our common stock could change significantly in response to actual or anticipated variations in our quarterly operating results, announcements by us or our competitors, factors affecting the medical imaging industry generally, changes in national or regional economic conditions, changes in securities analysts’ estimates for us or our competitors’ or industry’s future performance or general market conditions, making it more difficult for shares of our common stock to be sold at a favorable price or at all. The market price of our common stock could also be reduced by general market price declines or market volatility in the future or future declines or volatility in the prices of stock for companies in our industry.

A substantial number of shares of our common stock are eligible for future sale, and the sale of shares of common stock into the market, or the perception that such sales may occur, may depress our stock price.

Sales of substantial additional shares of our common stock in the public market, or the perception that these sales may occur, may significantly lower the market price of our common stock. We are unable to estimate the amount, timing or nature of future sales of shares of our common stock. We have previously issued a substantial number of shares of common stock, which are eligible for resale under Rule 144 of the Securities Act of 1933, as amended, or the Securities Act, and may become freely tradable. We have also registered shares that are issuable upon the exercise of options and warrants. If holders of options or warrants choose to exercise their securities and sell shares of common stock issued upon the exercise in the public market, or if holders of currently restricted common stock choose to sell such shares of common stock in the public market under Rule 144 or otherwise, or attempt to publicly sell such shares all at once or in a short time period, the prevailing market price for our common stock may decline.

Future issuances of shares of our common stock may cause significant dilution of equity interests of existing holders of common stock and decrease the market price of shares of our common stock.

We have previously issued options that are exercisable into a significant number of shares of our common stock. Should existing holders of options exercise their securities into shares of our common stock, it may cause significant dilution of equity interests of existing holders of our common stock and reduce the market price of shares of our common stock.

Provisions in our corporate charter and in Delaware law could make it more difficult for a third party to acquire us, discourage a takeover and adversely affect existing stockholders.

Our certificate of incorporation authorizes the Board of Directors to issue up to 1,000,000 shares of preferred stock. The preferred stock may be issued in one or more series, the terms of which may be determined at the time of issuance by our Board of Directors, without further action by stockholders, and may include, among other things, voting rights (including the right to vote as a series on particular matters), preferences as to dividends and liquidation, conversion and redemption rights, and sinking fund provisions. Although there are currently no shares of preferred stock outstanding, future holders of preferred stock may have rights superior to our common stock and such rights could also be used to restrict our ability to merge with, or sell our assets to a third party.

We are also subject to the provisions of Section 203 of the Delaware General Corporation Law, which could prevent us from engaging in a "business combination" with a 15% or greater stockholder for a period of three years from the date such person acquired that status unless appropriate board or stockholder approvals are obtained.

These provisions could deter unsolicited takeovers or delay or prevent changes in our control or management, including transactions in which stockholders might otherwise receive a premium for their shares over the then current market price. These provisions may also limit the ability of stockholders to approve transactions that they may deem to be in their best interests.

Item B . Unresolved Staff Comments.

Not applicable

Item 2. Properties.

The Company's executive offices are leased pursuant to a five-year lease (the "Lease") that commenced on December 15, 2006, with renewals in January, 2012, and August 2016 consisting of approximately 11,000 square feet of office space located at 98 Spit Brook Road, Suite 100 in Nashua, New Hampshire (the "Premises"). The August 2016 Lease renewal provides for an annual base rent of \$184,518 for the period from March 2017 to February 2020. Additionally, the Company is required to pay its proportionate share of the building and real estate tax expenses and obtain insurance for the Premises.

The Company leases a facility consisting of approximately 24,350 square feet of office, manufacturing and warehousing space located at 101 Nicholson Lane, San Jose, CA. The operating lease commenced September 2012 with a current annual payment of \$295,140 through September 2017, with all amounts payable in equal monthly installments. In September 2016, the Company extended this lease for the period from October 2017 to March 2020 with annual payments of \$540,588 from October 2017 to September 2018, \$558,120 from October 2018 to September 2019 and \$286,368 for the period from October 2019 to March 2020, with all amounts payable in equal monthly installments. Additionally, the Company is required to pay its proportionate share of the building and real estate tax expenses and obtain insurance for the facility.

In addition to the foregoing leases relating to its principal properties, the Company also has a lease for an additional facility in Nashua, New Hampshire used for product repairs, manufacturing and warehousing.

If the Company is required to seek additional or replacement facilities, it believes there are adequate facilities available at commercially reasonable rates.

Item 3 Legal Proceedings .

The Company may be a party to various legal proceedings and claims arising out of the ordinary course of its business. Although the final results of all such matters and claims cannot be predicted with certainty, the Company currently believes that there are no current proceedings or claims pending against it of which the ultimate resolution would have a material adverse effect on its financial condition or results of operations. However, should we fail to prevail in any legal matter or should several legal matters be resolved against us in the same reporting period, such matters could have a material adverse effect on our operating results and cash flows for that particular period. In all cases, at each

reporting period, the Company evaluates whether or not a potential loss amount or a potential range of loss is probable and reasonably estimable under ASC 450, Contingencies. Legal costs are expensed as incurred.

Item 4. Mine Safety and Health disclosures.

Not applicable.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

The Company’s common stock is traded on the NASDAQ Capital Market under the symbol “ICAD”. The following table sets forth the range of high and low sale prices for each quarterly period during 2016 and 2015.

Fiscal year ended	<u>High</u>	<u>Low</u>
<u>December 31, 2016</u>		
First Quarter	\$ 5.24	\$ 3.60
Second Quarter	6.23	4.60
Third Quarter	6.49	4.51
Fourth Quarter	5.49	2.82
Fiscal year ended		
<u>December 31, 2015</u>		
First Quarter	\$ 11.14	\$ 7.61
Second Quarter	10.86	3.22
Third Quarter	4.69	2.95
Fourth Quarter	5.41	2.96

As of February 21, 2017, there were 280 holders of record of the Company’s common stock. In addition, the Company believes that there are in excess of 3,700 holders of its common stock whose shares are held in “street name”.

The Company has not paid any cash dividends on its common stock to date, and the Company does not expect to pay cash dividends in the foreseeable future. Future dividend policy will depend on the Company’s earnings, capital requirements, financial condition, and other factors considered relevant by the Company’s Board of Directors. There are no non-statutory restrictions on the Company’s present ability to pay dividends.

See Item 12 of this Form 10-K for certain information with respect to the Company’s equity compensation plans in effect at December 31, 2016.

Issuer’s Purchases of Equity Securities. For the majority of restricted stock units granted, the number of shares issued on the date that the restricted stock units vest is net of the minimum statutory tax withholding requirements that we pay in cash to the appropriate taxing authorities on behalf of our employees. The Company had the following repurchases of securities in the quarter ended December 31, 2016:

Month of purchase	Total number of shares purchased (1)	Average price paid per share	Total number of shares purchased as part of publicly announced plans or programs	Maximum dollar value of shares that may yet be purchased under the plans or programs
October 1 - October 31, 2016	13,016	\$ 3.77	\$ -	\$ -
November 1 - November 30, 2016	110	\$ 3.70	\$ -	\$ -
December 1 - December 31, 2016	-	\$ -	\$ -	\$ -
Total	13,126	\$ 3.77	\$ -	\$ -

(1) Represents shares of common stock surrendered by employees to the Company to pay employee withholding taxes due upon the vesting of restricted stock. These transactions are exempt under Section (4)(a)(2) of the Securities Act.

Item 6. Selected Financial Data.

The following selected consolidated financial data is not necessarily indicative of the results of future operations and should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K (amounts in thousands).

Selected Statement of Operations Data

	Year Ended December 31,				
	2016	2015	2014	2013	2012
Total Revenue	\$ 26,338	\$ 41,554	\$ 43,924	\$ 33,067	\$ 28,275
Gross margin	18,518	29,350	31,227	23,085	20,031
Gross margin %	70.3%	70.6%	71.1%	69.8%	70.8%
Total operating expenses	28,488	59,429	30,412	24,861	25,443
Income (loss) from operations	(9,970)	(30,079)	815	(1,776)	(5,412)
Other (expense) income, net	(53)	(2,352)	(1,671)	(5,706)	(3,919)
Net loss	\$ (10,099)	\$ (32,447)	\$ (1,009)	\$ (7,608)	\$ (9,374)
Net income (loss) per share					
Basic	\$ (0.63)	\$ (2.07)	\$ (0.07)	\$ (0.70)	\$ (0.87)
Diluted	\$ (0.63)	\$ (2.07)	\$ (0.07)	\$ (0.70)	\$ (0.87)
Weighted average shares outstanding					
Basic	15,932	15,686	14,096	10,842	10,796
Diluted	15,932	15,686	14,096	10,842	10,796

Selected Balance Sheet Data

	As of December 31,				
	2016	2015	2014	2013	2012
Cash and cash equivalents	\$ 8,585	\$ 15,280	\$ 32,220	\$ 11,880	\$ 13,948
Total current assets	19,933	27,767	44,616	22,043	21,533
Total assets	38,651	48,640	93,770	58,916	59,993
Total current liabilities	12,855	14,279	22,049	22,452	14,639
Long term deferred revenue	668	1,079	1,525	1,726	1,502
Notes and lease payable, long term	-	86	6,622	12,005	14,846
Stockholders' equity	\$ 25,038	\$ 32,746	\$ 62,779	\$ 21,377	\$ 27,665

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

Results of Operations

Overview

iCAD, Inc. is an industry-leading provider of advanced image analysis, workflow solutions and radiation therapy for the early identification and treatment of cancer. The Company reports in two segments – Cancer Detection (“Detection”) and Cancer Therapy (“Therapy”).

The Company has grown primarily through acquisitions to become a broad player in the oncology market.

In the Detection segment, the Company’s solutions include advanced image analysis and workflow solutions that enable healthcare professionals to better serve patients by identifying pathologies and pinpointing the most prevalent cancers earlier, a comprehensive range of high-performance, upgradeable Computer-Aided Detection (CAD) systems and workflow solutions for mammography, Magnetic Resonance Imaging (MRI) and Computed Tomography (CT).

The Company intends to continue the extension of its superior image analysis and clinical decision support solutions for mammography, MRI and CT imaging. iCAD believes that advances in digital imaging techniques should bolster its efforts to develop additional commercially viable CAD/advanced image analysis and workflow products.

In the Therapy segment the Company offers an isotope-free cancer treatment platform technology. The Xoft Electronic Brachytherapy System (“Xoft System”) can be used for the treatment of early-stage breast cancer, endometrial cancer, cervical cancer and skin cancer. We believe the Xoft System platform indications represent strategic opportunities in the United States and International markets to offer differentiated treatment alternatives. In addition, the Xoft System generates additional recurring revenue for the sale of consumables and related accessories which will continue to drive growth in this segment.

In May 2015 the Company announced that one of the regional Medicare Administrative Contractors instructed physicians to report CPT code (17999) rather than the established CPT code (0182T) for electronic brachytherapy for treatment of NMSC. This announcement resulted in a significant disruption in the Therapy segment as a result of the reimbursement uncertainty.

As the Company has noted in its risk factors, the Company’s business can be affected by coverage policies adopted by federal and state governmental authorities, such as Medicare and Medicaid, as well as private payers, which often follow the coverage policies of these public programs. Such policies may affect which products customers purchase and the prices customers are willing to pay for those products in a particular jurisdiction. The change in CPT codes for the Company’s electronic brachytherapy treatment of NMSC had a negative impact on the Company’s revenues for the fiscal years ended December 31, 2015 and December 31, 2016

In connection with the preparation of the financial statements for the second quarter ended June 30, 2015, the Company evaluated the Therapy reporting unit for both long-lived asset and goodwill impairment. As a result of this assessment, the Company recorded material impairment charges in the Therapy reporting unit (see Note h and Note i to the condensed consolidated financial statements for additional discussion).

On April 29, 2015, pursuant to the terms of the Asset Purchase Agreement with VuComp, the Company purchased VuComp’s M-Vu Breast Density product for \$1,700,000 in cash.

In January 2016, the Company acquired the VuCOMP cancer detection portfolio, including the M-Vu® computer aided detection (CAD) technology platform.

On December 16, 2016 the Company agreed to sell certain intellectual property relating to the VersaVue Software and the DynaCAD product and related assets to Invivo for \$3,200,000 in cash with a holdback reserve of \$350,000. On January 30, 2017, the Company closed this transaction.

The Company’s headquarters are located in Nashua, New Hampshire, with manufacturing facilities in Nashua, New Hampshire and, an operations, research, development, manufacturing and warehousing facility in San Jose, California.

Critical Accounting Policies

The Company’s discussion and analysis of its financial condition, results of operations, and cash flows are based on its consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, the Company evaluates these estimates, including those related to revenue recognition, allowance for doubtful accounts, inventory valuation and obsolescence, intangible assets, goodwill, warrants, income taxes, contingencies and litigation. Additionally, the Company uses assumptions and estimates in calculations to determine stock based compensation and the value of warrants. The Company bases its estimates on historical experience and on various other assumptions that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

The Company’s critical accounting policies include:

- Revenue recognition;
- Allowance for doubtful accounts;
- Inventory;
- Valuation of long-lived and intangible assets;
- Goodwill;
- Stock based compensation; and
- Income taxes.

Revenue Recognition

The Company recognizes revenue primarily from the sale of products and from the sale of services and supplies. Revenue is recognized when delivery has occurred, persuasive evidence of an arrangement exists, fees are fixed or determinable and collectability of the related receivable is probable. For product revenue, delivery has occurred upon shipment provided title and risk of loss have passed to the customer. Services and supplies revenue are considered to be delivered as the services are performed or over the estimated life of the supply agreement.

The Company recognizes revenue from the sale of its digital, film-based CAD and cancer therapy products and services in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Update No. 2009-13, "Multiple-Deliverable Revenue Arrangements" ("ASU 2009-13") and ASC Update No. 2009-14, "Certain Arrangements That Contain Software Elements" ("ASU 2009-14") and ASC 985-605, "Software" ("ASC 985-605"). Revenue from the sale of certain CAD products is recognized in accordance with ASC 840 "Leases" ("ASC 840"). For multiple element arrangements, revenue is allocated to all deliverables based on their relative selling prices. In such circumstances, a hierarchy is used to determine the selling price to be used for allocating revenue to deliverables as follows: (i) vendor-specific objective evidence of fair value ("VSOE"), (ii) third-party evidence of selling price ("TPE") and (iii) best estimate of the selling price ("BESP"). VSOE generally exists only when the deliverable is sold separately and is the price actually charged for that deliverable. The process for determining BESP for deliverables without VSOE or TPE considers multiple factors including relative selling prices; competitive prices in the marketplace, and management judgment; however, these may vary depending upon the unique facts and circumstances related to each deliverable.

The Company uses customer purchase orders that are subject to the Company's terms and conditions or, in the case of an Original Equipment Manufacturer ("OEM") are governed by distribution agreements. In accordance with the Company's distribution agreements, the OEM does not have a right of return, and title and risk of loss passes to the OEM upon shipment. The Company generally ships Free On Board shipping point and uses shipping documents and third-party proof of delivery to verify delivery and transfer of title. In addition, the Company assesses whether collection is probable by considering a number of factors, including past transaction history with the customer and the creditworthiness of the customer, as obtained from third party credit references.

If the terms of the sale include customer acceptance provisions and compliance with those provisions cannot be demonstrated, all revenue is deferred and not recognized until such acceptance occurs. The Company considers all relevant facts and circumstances in determining when to recognize revenue, including contractual obligations to the customer, the customer's post-delivery acceptance provisions, if any, and the installation process.

The Company has determined that iCAD's digital and film based sales generally follow the guidance of FASB ASC Topic 605 "Revenue Recognition" ("ASC 605") as the software has been considered essential to the functionality of the product per the guidance of ASU 2009-14. Typically, the responsibility for the installation process lies with the OEM partner. On occasion, when iCAD is responsible for product installation, the installation element is considered a separate unit of accounting because the delivered product has stand-alone value to the customer. In these instances, the Company allocates revenue to the deliverables based on the framework established within ASU 2009-13. Therefore, the installation and training revenue is recognized as the services are performed according to the BESP of the element. Revenue from the digital and film based equipment, when there is installation, is recognized based on the relative selling price allocation of the BESP, when delivered.

Revenue from certain CAD products is recognized in accordance with ASC 985-605. Sales of this product include training, and the Company has established VSOE for this element. Product revenue is determined based on the residual value in the arrangement and is recognized when delivered. Revenue for training is deferred and recognized when the training has been completed.

The Company recognizes post contract customer support revenue together with the initial licensing fee for certain MRI products in accordance with ASC 985-605-25-71.

Sales of the Company's Therapy segment products typically include a controller, accessories, source agreements and services. The Company allocates revenue to the deliverables in the arrangement based on the BESP in accordance with ASU 2009-13. Product revenue is generally recognized when the product has been delivered and service and source revenue is typically recognized over the life of the service and source agreement. The Company includes the following in service and supplies revenue: the sale of physics and management services, the lease of electronic brachytherapy equipment, development fees, supplies and the right to use the Company's AxxentHub software. Physics and management services revenue and development fees are considered to be delivered as the services are performed or over the estimated life of the agreement. The Company typically bills items monthly over the life of the agreement except for development fees, which are generally billed in advance or over a 12 month period and the fee for treatment supplies which is generally billed in advance.

The Company defers revenue from the sale of certain service contracts and recognizes the related revenue on a straight-line basis in accordance with ASC Topic 605-20, "Services". The Company provides for estimated warranty costs on original product warranties at the time of sale.

Allowance for Doubtful Accounts

The Company's policy is to maintain allowances for estimated losses from the inability of its customers to make required payments. Credit limits are established through a process of reviewing the financial results, stability and payment history of each customer. Where appropriate, the Company obtains credit rating reports and financial statements of customers when determining or modifying credit limits. The Company's senior management reviews accounts receivable on a periodic basis to determine if any receivables may potentially be uncollectible. The Company includes any accounts receivable balances that it determines may likely be uncollectible, along with a general reserve for estimated probable losses based on historical experience, in its overall allowance for doubtful accounts. An amount would be written off against the allowance after all attempts to collect the receivable had failed. Based on the information available to the Company, it believes the allowance for doubtful accounts as of December 31, 2016 is adequate.

Inventory

Inventory is valued at the lower of cost or market value, with cost determined by the first-in, first-out method. The Company regularly reviews inventory quantities on hand and records a provision for excess and/or obsolete inventory primarily based upon historical usage of its inventories as well as other factors.

Long Lived Assets

In accordance with FASB ASC Topic 360, "Property, Plant and Equipment", ("ASC 360"), the Company assesses long-lived assets for impairment if events and circumstances indicate it is more likely than not that the fair value of the asset group is less than the carrying amount of the asset group.

ASC 360-10-35 uses "events and circumstances" criteria to determine when, if at all, an asset (or asset group) is evaluated for recoverability. Thus, there is no set interval or frequency for recoverability evaluation. In accordance with ASC 360-10-35-21 the following factors are examples of events or changes in circumstances that indicate the carrying amount of an asset (asset group) may not be recoverable and thus is to be evaluated for recoverability.

- A significant decrease in the market price of a long-lived asset (asset group);
- A significant adverse change in the extent or manner in which a long-lived asset (asset group) is being used or in its physical condition;
- A significant adverse change in legal factors or in the business climate that could affect the value of a long-lived asset (asset group), including an adverse action or assessment by a regulator;
- An accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of a long-lived asset (asset group);
- A current period operating or cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset (asset group).

The Company did not have any triggering events which would require an evaluation for recoverability, and accordingly did not consider any assets to be impaired in 2016.

As a result of external factors and general uncertainty related to reimbursement for the treatment of NMSC, the Company evaluated the long-lived assets of the Therapy segment and reviewed them for impairment in 2015. The Company determined the "Asset Group" to be the assets of the Therapy segment, which the Company considered to be the lowest level for which the identifiable cash flows were largely independent of the cash flows of other assets and liabilities.

In accordance with ASC 360-10-35-17, if the carrying amount of an asset or asset group (in use or under development) is evaluated and found not to be fully recoverable (the carrying amount exceeds the estimated gross, undiscounted cash flows from use and disposition), then an impairment loss must be recognized. The impairment loss is measured as the excess of the carrying amount over the assets (or asset group's) fair value.

In connection with the preparation of the financial statements for the second quarter ended June 30, 2015, the Company completed its analysis pursuant to ASC 360-10-35-17 and determined that the carrying value of the Asset Group was approximately \$36.8 million, which exceeded the undiscounted cash flows by approximately \$2.8 million. Accordingly the Company completed the Step 2 analysis to determine the fair value of the Asset Group. The Company recorded long-lived asset impairment charges of approximately \$13.4 million in the second quarter ended June 30, 2015 and as a result the long lived assets in the Asset Group were recorded at their current fair values.

A considerable amount of judgment and assumptions are required in performing the impairment tests, principally in determining the fair value of the Asset Group and the reporting unit. While the Company believes the judgments and assumptions are reasonable, different assumptions could change the estimated fair values and, therefore additional impairment charges could be required. Significant negative industry or economic trends, disruptions to the Company's business, loss of significant customers, inability to effectively integrate acquired businesses, unexpected significant changes or planned changes in use of the assets may adversely impact the assumptions used in the fair value estimates and ultimately result in future impairment charges.

Intangible assets subject to amortization consist primarily of patents, technology intangibles, trade names, customer relationships and distribution agreements purchased in the Company's previous acquisitions. These assets are amortized on a straight-line basis or the pattern of economic benefit over their estimated useful lives of 5 to 10 years.

Goodwill

In accordance with FASB ASC Topic 350-20, "Intangibles - Goodwill and Other", ("ASC 350-20"), the Company tests goodwill for impairment on an annual basis and between annual tests if events and circumstances indicate it is more likely than not that the fair value of the Company is less than the carrying amount of the Company.

Factors the Company considers important, which could trigger an impairment of such asset, include the following:

- significant underperformance relative to historical or projected future operating results;
- significant changes in the manner or use of the assets or the strategy for the Company's overall business;
- significant negative industry or economic trends;
- significant decline in the Company's stock price for a sustained period; and
- a decline in the Company's market capitalization below net book value.

The Company's Chief Operating Decision Maker ("CODM") is the Chief Executive Officer ("CEO"). The Company determined that it has two reporting units and two reportable segments based on the information that is provided to the CODM. The two segments and reporting units are Cancer Detection ("Detection") and Cancer Therapy ("Therapy"). Each reportable segment generates revenue from the sale of medical equipment and related services and/or sale of supplies. Upon initial adoption, goodwill was allocated to the reporting units based on the relative fair value of the reporting units.

The Company would record an impairment charge if such an assessment were to indicate that the fair value of a reporting unit was less than the carrying value. When the Company evaluates potential impairments outside of its annual measurement date, judgment is required in determining whether an event has occurred that may impair the value of goodwill or intangible assets. The Company utilizes either discounted cash flow models or other valuation models, such as comparative transactions and market multiples, to determine the fair value of its reporting units. The Company makes assumptions about future cash flows, future operating plans, discount rates, comparable companies, market multiples, purchase price premiums and other factors in those models. Different assumptions and judgment determinations could yield different conclusions that would result in an impairment charge to income in the period that such change or determination was made.

As a result of external factors and general uncertainty related to reimbursement for non-melanoma skin cancer and in conjunction with the long-lived asset impairment testing, the Company performed an impairment assessment of the Therapy reporting unit as of June 30, 2015. As a result the Company recorded a goodwill impairment charge of \$14.0 million during the quarter ended June 30, 2015.

The implied fair value of the Therapy reporting unit was determined in the same manner as the manner in which the amount of goodwill recognized in a business combination is determined. The excess of the fair value of the reporting unit over the amounts assigned to its assets and liabilities is the implied amount of goodwill. The Company identified the intangible assets that were valued during this process, including technology, customer relationships, trade-names, and the Company's workforce. The allocation process was performed only for purposes of testing goodwill for impairment.

The Company determined the fair value of the Therapy reporting unit based on the present value of estimated future cash flows, discounted at an appropriate risk adjusted rate. This approach was selected as it measures the income producing assets, primarily technology and customer relationships. This method estimates the fair value based upon the ability to generate future cash flows, which is particularly applicable when future profit margins and growth are expected to vary significantly from historical operating results.

The Company uses internal forecasts to estimate future cash flows and includes an estimate of long-term future growth rates based on the most recent views of the long-term forecast for the reporting unit. Accordingly, actual results can

differ from those assumed in the forecasts. The discount rate of approximately 17% is derived from a capital asset pricing model and analyzing published rates for industries relevant to the reporting unit to estimate the cost of equity financing. The Company uses discount rates that are commensurate with the risks and uncertainty inherent in the respective businesses and in the internally developed forecasts.

Other significant assumptions include terminal value margin rates, future capital expenditures, and changes in future working capital requirements. While there are inherent uncertainties related to the assumptions used and to the application of these assumptions to this analysis, the income approach provides a reasonable estimate of the fair value of the Therapy reporting unit.

The Step 2 test resulted in an approximate fair value of goodwill of \$5.7 million which resulted in a goodwill impairment loss of \$14.0 million for the quarter ended June 30, 2015.

The Company performed the annual impairment assessment at October 1, 2016 and compared the fair value of each of reporting unit to its carrying value as of this date. Fair value was approximately 816% of the carrying value for the Detection reporting unit and 126% of the carrying value of the Therapy reporting unit. The carrying values of the reporting units were determined based on an allocation of our assets and liabilities through specific allocation of certain assets and liabilities, to the reporting units and an apportionment of the remaining net assets based on the relative size of the reporting units' revenues and operating expenses compared to the Company as a whole. The determination of reporting units also requires management judgment.

The Company determined the fair values for each reporting unit using a weighting of the income approach and the market approach. For purposes of the income approach, fair value is determined based on the present value of estimated future cash flows, discounted at an appropriate risk adjusted rate. The Company uses internal forecasts to estimate future cash flows and includes estimates of long-term future growth rates based on our most recent views of the long-term forecast for each segment. Accordingly, actual results can differ from those assumed in our forecasts. The discount rate of approximately 15% is derived from a capital asset pricing model and analyzing published rates for industries relevant to our reporting units to estimate the cost of equity financing. The Company uses discount rates that are commensurate with the risk and uncertainty inherent in the respective businesses and in our internally developed forecasts.

In the market approach, the Company uses a valuation technique in which values are derived based on market prices of publicly traded companies with similar operating characteristics and industries. A market approach allows for comparison to actual market transactions and multiples. It can be somewhat limited in its application because the population of potential comparable publicly traded companies can be limited due to differing characteristics of the comparative business and ours, as well as the fact that market data may not be available for divisions within larger conglomerates or non-public subsidiaries that could otherwise qualify as comparable, and the specific circumstances surrounding a market transaction (e.g., synergies between the parties, terms and conditions of the transaction, etc.) may be different or irrelevant with respect to our business.

The Company corroborated the total fair values of the reporting units using a market capitalization approach; however, this approach cannot be used to determine the fair value of each reporting unit value. The blend of the income approach and market approach is more closely aligned to our business profile, including markets served and products available. In addition, required rates of return, along with uncertainties inherent in the forecast of future cash flows, are reflected in the selection of the discount rate. Equally important, under the blended approach, reasonably likely scenarios and associated sensitivities can be developed for alternative future states that may not be reflected in an observable market price. The Company assesses each valuation methodology based upon the relevance and availability of the data at the time the valuation is performed and weight the methodologies appropriately.

Stock-Based Compensation

The Company maintains stock based incentive plans, under which it provides stock incentives to employees, directors and contractors. The Company grants to employees, directors and contractors, options to purchase common stock at an exercise price equal to the market value of the stock at the date of grant. The Company may grant restricted stock to employees and directors. The underlying shares of the restricted stock grant are not issued until the shares vest, and compensation expense is based on the stock price of the shares at the time of grant. The Company follows ASC 718, "Compensation – Stock Compensation", ("ASC 718"), for all stock-based compensation.

The Company uses the Black-Scholes option pricing model to value stock options which requires extensive use of accounting judgment and financial estimates, including estimates of the expected term participants will retain their vested stock options before exercising them, the estimated volatility of its common stock price over the expected term, and the number of options that will be forfeited prior to the completion of their vesting requirements. Fair value of

restricted stock is determined based on the stock price of the underlying option on the date of the grant. Application of alternative assumptions could produce significantly different estimates of the fair value of stock-based compensation and consequently, the related amounts recognized in the Consolidated Statements of Operations.

Income Taxes

The Company follows the liability method under ASC 740, "Income Taxes" ("ASC 740"). The primary objectives of accounting for taxes under ASC 740 are to (a) recognize the amount of tax payable for the current year and (b) recognize the amount of deferred tax liability or asset for the future tax consequences of events that have been reflected in the Company's financial statements or tax returns. The Company has provided a full valuation allowance against its deferred tax assets at December 31, 2016 and 2015 as it is more likely than not that the deferred tax asset will not be realized.

ASC 740-10 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements and prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. ASC 740-10 also provides guidance on de-recognition, classification, interest and penalties, disclosure and transition.

In addition, uncertain tax positions and tax related valuation allowances assumed in connection with a business combination are initially estimated as of the acquisition date and the Company reevaluates these items quarterly, with any adjustments to preliminary estimates being recorded to goodwill, provided that the Company is within the measurement period (which may be up to one year from the acquisition date) and continues to collect information in order to determine their estimated values. Subsequent to the measurement period or final determination of the tax allowance's or contingency's estimated value, changes to these uncertain tax positions and tax related valuation allowances may affect the provision for income taxes presented in the Company's statement of operations.

Year Ended December 31, 2016 compared to Year Ended December 31, 2015

Revenue. Revenue for the year ended December 31, 2016 was \$26.3 million compared with revenue of \$41.6 million for the year ended December 31, 2015, a decrease of \$15.2 million or 36.6%. Therapy revenue decreased \$13.1 million and Detection revenue decreased \$2.1 million.

The table below presents the components of revenue for 2016 and 2015 (in thousands):

	For the year ended December 31,			
	2016	2015	Change	% Change
Detection revenue				
Product revenue	\$ 8,682	\$ 11,226	\$ (2,544)	(22.7)%
Service and supplies revenue	8,451	8,017	434	5.4%
Subtotal	17,133	19,243	(2,110)	(11.0)%
Therapy revenue				
Product revenue	1,789	2,972	(1,183)	(39.8)%
Service and supplies revenue	7,416	19,339	(11,923)	(61.7)%
Subtotal	9,205	22,311	(13,106)	(58.7)%
Total revenue	\$ 26,338	\$ 41,554	\$ (15,216)	(36.6)%

Detection revenues decreased 11.0% or \$2.1 million from \$19.2 million for the year ended December 31, 2015 to \$17.1 million for the year ended December 31, 2016. Detection product revenue decreased by \$2.5 million and Detection service revenue increased \$0.4 million. The decrease in Detection product revenue is primarily due to a \$0.4 million decrease in digital CAD systems and a \$2.1 million decrease in MRI products. The decrease in digital CAD and MRI products are driven by decreases in demand primarily from our OEM customers. Detection service and supplies revenue increased \$0.4 million primarily due to increases in our installed base for Powerlook AMP.

Therapy revenue decreased 58.7% or \$13.1 million to \$9.2 million for the year ended December 31, 2016 from \$22.3 million in the year ended December 31, 2015. The decrease in Therapy revenue was driven by a decrease in Therapy product revenue of \$1.2 million and a decrease in Therapy service and supplies revenue of \$11.9 million.

The decrease in Therapy product and service revenue for the year ended December 31, 2016 is primarily due to the negative impact of customer reaction to the uncertainty of reimbursement rates for NSMC in the United States. Product revenue from the sale of our Axxent eBx systems can vary significantly due to an increase or decrease in the number of units sold which can cause a significant fluctuation in product revenue in the period.

Gross Profit. Gross profit was \$18.5 million for the year ended December 31, 2016 compared to \$29.4 million for the year ended December 31, 2015, a decrease of \$10.8 million, Therapy gross profit decreased \$9.9 million from \$13.3 million in the year ended December 31, 2015 to \$3.4 million in the year ended December 31, 2016. Detection gross profit decreased \$0.9 million from \$16.0 million in the year ended December 31, 2015 to \$15.1 million in the year ended December 31, 2016. The decrease in Therapy gross profit was due primarily to the decrease in Therapy revenue. Detection gross profit decreased due primarily to the decrease in Detection product sales, which have higher gross profits than Detection service revenues.

Gross profit percent was 70.3% for the year ended December 31, 2016 compared to 70.6% for the year ended December 31, 2015. Included in cost of revenue for the year ended December 31, 2016 is a credit of \$491,000 related to a refund of the Medical Device Excise Tax (“MDET”). Gross profit will fluctuate due to the costs related to manufacturing, amortization and the impact of product mix in each segment. Cost of revenue and gross profit for 2016 and 2015 were as follows (in thousands):

	For the year ended December 31,			
	2016	2015	Change	% Change
Products	\$ 918	\$ 3,130	\$ (2,212)	(70.7%)
Service and supplies	5,713	7,357	(1,644)	(22.3%)
Amortization and depreciation	1,189	1,717	(528)	(30.8%)
Total cost of revenue	<u>7,820</u>	<u>12,204</u>	<u>(4,384)</u>	<u>(35.9%)</u>
Gross profit	<u>\$ 18,518</u>	<u>\$ 29,350</u>	<u>\$ (10,832)</u>	<u>(36.9%)</u>
Gross profit %	70.3%	70.6%	(0.3%)	

	For the year ended December 31,			
	2016	2015	Change	% Change
Detection gross profit	\$ 15,113	\$ 16,019	\$ (906)	(5.7%)
Therapy gross profit	3,405	13,331	(9,926)	(74.5%)
Gross profit	<u>\$ 18,518</u>	<u>\$ 29,350</u>	<u>\$ (10,832)</u>	<u>(36.9%)</u>

Operating Expenses:

Operating expenses for 2016 and 2015 are as follows (in thousands):

	For the year ended December 31,			
	2016	2015	Change	% Change
Operating expenses:				
Engineering and product development	\$ 9,518	\$ 9,163	\$ 355	3.9%
Marketing and sales	10,179	12,404	(2,225)	(17.9%)
General and administrative	7,675	8,788	(1,113)	(12.7%)
Amortization and depreciation	1,116	1,631	(515)	(31.6%)
Goodwill and long-lived asset impairment	-	27,443	(27,443)	-
Total operating expenses	<u>\$ 28,488</u>	<u>\$ 59,429</u>	<u>\$ (30,941)</u>	<u>(52.1%)</u>

Engineering and Product Development. Engineering and product development costs for the year ended December 31, 2016 increased by \$0.3 million or 3.9%, from \$9.2 million in 2015 to \$9.5 million in 2016. Therapy engineering and product development costs decreased by approximately \$0.3 million and Detection engineering and product development costs increased by \$0.6 million. The decrease in the Therapy segment is due primarily to a decrease in personnel expenses. The increase in the Detection segment is due primarily to an increase in personnel expenses of \$0.8 million offset by a decrease in clinical trial expenses of \$0.2 million. The Company continues to invest in ongoing clinical trials, and research expenses in support of new products and reimbursement codes.

Marketing and Sales. Marketing and sales expense for the year ended December 31, 2016 decreased by \$2.2 million or 17.9%, from \$12.4 million in 2015 to \$10.2 million in 2016. Therapy marketing and sales expenses decreased approximately \$2.1 million and Detection marketing and sales expenses decreased \$0.1 million. The decrease in Therapy marketing and sales expense was due primarily to a decrease in personnel expenses and commissions.

General and Administrative. General and administrative expenses for the year ended December 31, 2015 decreased by \$1.1 million or 12.7%, from \$8.8 million in 2015 to \$7.7 million in 2016. The decrease in general and administrative expenses was due primarily to decreases in personnel costs of \$0.5 million, bad debt expense of \$0.2 million and a gain on litigation settlement in 2016 of \$0.2 million and other costs of approximately \$0.2 million.

Amortization and Depreciation. Amortization and depreciation decreased by \$0.5 million from \$1.6 million to \$1.1 million. The primary decrease is due to revised values of assets due to an impairment of intangible assets of the Therapy reporting unit in June 2015 which was offset by an increase in amortization due to the acquisition of VuComp assets in January 2016.

Goodwill and long-lived asset impairment. In connection with the preparation of the financial statements for the second quarter ended June 30, 2015, the Company evaluated the Therapy reporting unit for both long-lived asset and goodwill impairment and recorded an impairment charge of \$14.0 million related to goodwill and an impairment charge of \$13.4 million related to long-lived assets for a total of \$27.4 million. There was no impairment charge in 2016.

Other Income and Expense (in thousands)

	For the year ended December 31,			
	2016	2015	Change	Change %
Interest expense	\$ (63)	\$ (650)	587	(90.3)%
Loss from extinguishment of debt	-	(1,723)	1,723	(100.0)%
Interest income	10	21	(11)	(52.4)%
	<u>\$ (53)</u>	<u>\$ (2,352)</u>	<u>\$ 2,299</u>	<u>(97.7)%</u>
Income tax expense	\$ 76	\$ 16	60	375.0 %

Interest Expense. The Company recorded \$63,000 of interest expense in 2016 as compared with \$650,000 of interest expense during the year ended December 31, 2015. The reduction in interest expense is due primarily to the reduction in interest related to the Deerfield facility agreement that was terminated on March 31, 2015.

Loss from extinguishment of debt. The loss of \$1.7 million for the year ended December 31, 2015 represents the loss associated with the payoff of the Deerfield facility agreement, which was terminated on March 31, 2015. The Company paid \$11.25 million which represented the entire obligation. The loss on extinguishment represents the unamortized discount on the Facility agreement, and the write-off of the deferred debt costs. The Facility Agreement was to mature on December 29, 2016 and was able to be repaid at the Company's option without penalty or premium.

Interest income. Interest income of \$10,000 and \$21,000 for the years ended December 31, 2016, and 2015, respectively, reflects income earned from our money market accounts.

Tax benefit (expense). The Company recorded tax expense of \$76,000 and \$16,000 for the years ended December 31, 2016, and 2015, respectively. For the year ended December 31, 2015, the Company recorded a net tax expense of \$16,000. This resulted from a tax benefit due primarily to the reversal of a deferred tax liability of approximately \$79,000 offset by tax expense of approximately \$95,000. The deferred tax liability was the result of tax amortizable goodwill that was recognized due to the impairment of goodwill. Tax expense in 2016 and 2015 relates primarily to state non-income and franchise based taxes.

Year Ended December 31, 2015 compared to Year Ended December 31, 2014

Revenue. Revenue for the year ended December 31, 2015 was \$41.6 million compared with revenue of \$43.9 million for the year ended December 31, 2014, a decrease of \$2.4 million or 5.4%. Therapy revenue decreased \$3.0 million and Detection revenue increased \$0.6 million.

The table below presents the components of revenue for 2015 and 2014 (in thousands):

	For the year ended December 31,			
	2015	2014	Change	% Change
Detection revenue				
Product revenue	\$ 11,226	\$ 10,082	\$ 1,144	11.3 %
Service and supplies revenue	8,017	8,522	(505)	(5.9)%
Subtotal	19,243	18,604	639	3.4 %
Therapy revenue				
Product revenue	2,972	8,601	(5,629)	(65.4)%
Service and supplies revenue	19,339	16,719	2,620	15.7 %
Subtotal	22,311	25,320	(3,009)	(11.9)%
Total revenue	\$ 41,554	\$ 43,924	\$ (2,370)	(5.4)%

Detection revenues increased by \$0.6 million from \$18.6 million for the year ended December 31, 2014 to \$19.2 million for the year ended December 31, 2015. Detection product revenue increased by \$1.1 million and Detection service revenue decreased \$0.5 million. The increase in Detection product revenue is primarily due to a \$0.7 million increase in digital CAD systems and a \$0.7 million increase in MRI products, offset by a \$0.3 million decrease in film based products. The increase in digital CAD and MRI products are driven by increases in demand primarily from our OEM customers. The decline in revenue from film-based products and accessories was the result of the decreasing market for film based products as most customers have transitioned to digital technologies. Detection service and supplies revenue decreased \$0.5 million primarily due to the decline in customers with analog and digital service contracts.

Therapy revenue decreased 11.9% or \$3.0 million to \$22.3 million for the year ended December 31, 2015 from \$25.3 million in the year ended December 31, 2014. The decrease in Therapy revenue was driven by a decrease in Therapy product revenue of \$5.6 million offset by an increase in Therapy service and supplies revenue of \$2.6 million.

The decrease in Therapy product revenue for the year ended December 31, 2015 is primarily due to the negative impact of customer reaction to the uncertainty of reimbursement rates for NSMC in the United States. Product revenue from the sale of our Axxent eBx systems can vary significantly due to an increase or decrease in the number of units sold which can cause a significant fluctuation in product revenue in the period.

The increase in Therapy service and supplies revenue of \$2.6 million for the year ended December 31, 2015 is due primarily to the impact of the acquisition of the assets of Radion and DermEbx, which contributed \$7.8 million of revenue from the acquisition date through December 31, 2014. Therapy service revenue in the first six months of 2015 was approximately \$13.4 million as compared to \$4.6 million in the first six months of 2014. The Company acquired DermEbx and Radion in July 2014, and the growth in revenue from the acquisition is reflected in the first six months of 2015. Therapy service revenue in the last six months of 2015 was \$5.9 million as compared to \$12.2 million for the last six months of 2014. The decrease in Therapy service and supplies revenue in 2015 is due primarily to a decrease in the services related to electronic brachytherapy the treatment of NMSC as a result of the reimbursement uncertainty for this procedure in the United States.

Gross Profit. Gross profit was \$29.4 million for the year ended December 31, 2015 compared to \$31.2 million for the year ended December 31, 2014, a decrease of \$1.9 million, Therapy gross profit decreased \$2.6 million from \$16.0 million in the year ended December 31, 2014 to \$13.3 million in the year ended December 31, 2015. Detection gross profit increased \$0.7 million from \$15.3 million in the year ended December 31, 2014 to \$16.0 million in the year ended December 31, 2015. The decrease in Therapy gross profit was due primarily to the decrease in Therapy revenue. Detection gross profit increased due primarily to the increase in Detection product sales, which have higher gross profits than Detection service revenues.

Gross profit percent was 70.6% for the year ended December 31, 2015 compared to 71.1% for the year ended December 31, 2014. Gross profit percent decreased slightly by 0.5%, due primarily to the decrease in Therapy product margins. Gross profit will fluctuate due to the costs related to manufacturing, amortization and the impact of product mix in each segment. Cost of revenue and gross profit for 2015 and 2014 were as follows (in thousands):

	For the year ended December 31,			
	2015	2014	Change	% Change
Products	\$ 3,130	\$ 4,912	\$ (1,782)	(36.3%)
Service and supplies	7,357	6,000	1,357	22.6%
Amortization and depreciation	1,717	1,785	(68)	(3.8%)
Total cost of revenue	<u>12,204</u>	<u>12,697</u>	<u>(493)</u>	<u>(3.9%)</u>
Gross profit	<u>\$ 29,350</u>	<u>\$ 31,227</u>	<u>\$ (1,877)</u>	<u>(6.0%)</u>
Gross profit %	70.6%	71.1%	(0.5%)	

	For the year ended December 31,			
	2015	2014	Change	% Change
Detection gross profit	\$ 16,019	\$ 15,276	\$ 743	4.9%
Therapy gross profit	13,331	15,951	(2,620)	(16.4%)
Gross profit	<u>\$ 29,350</u>	<u>\$ 31,227</u>	<u>\$ (1,877)</u>	<u>(6.0%)</u>

Operating Expenses:

Operating expenses for 2015 and 2014 are as follows (in thousands):

	For the year ended December 31,			
	2015	2014	Change	% Change
Operating expenses:				
Engineering and product development	\$ 9,163	\$ 8,159	\$ 1,004	12.3%
Marketing and sales	12,404	12,468	(64)	(0.5%)
General and administrative	8,788	8,044	744	9.2%
Amortization and depreciation	1,631	1,741	(110)	(6.3%)
Goodwill and long-lived asset impairment	27,443	-	27,443	-
Total operating expenses	<u>\$ 59,429</u>	<u>\$ 30,412</u>	<u>\$ 29,017</u>	<u>95.4%</u>

Engineering and Product Development. Engineering and product development costs for the year ended December 31, 2015 increased by \$1.0 million or 12.3%, from \$8.2 million in 2014 to \$9.2 million in 2015. Therapy engineering and product development costs increased by approximately \$0.6 million and Detection increased by \$0.4 million. Ongoing clinical trial, consulting and research expenses in the Therapy segment increased by approximately \$0.4 million, and personnel expenses increased approximately \$0.2 million. The primary increase in the Detection segment is clinical trial expenses of approximately \$0.7 million offset by decreases in legal and other expenses of approximately \$0.3 million. The Company continues to invest in research and development to develop clinical evidence for the Therapy segment and ongoing development to support tomosynthesis in the Detection segment.

Marketing and Sales. Marketing and sales expense for the year ended December 31, 2015 decreased by \$64,000 or 0.5%, from \$12.5 million in 2014 to \$12.4 million in 2015. Therapy marketing and sales expenses decreased approximately \$0.3 million offset by an increase of \$0.2 million in the Detection segment. The decrease in Therapy marketing and sales expense was due primarily to a decrease in personnel expenses. The increase in the Detection segment is primarily due to increases in personnel expense.

General and Administrative. General and administrative expenses for the year ended December 31, 2015 increased by \$0.7 million or 9.2%, from \$8.0 million in 2014 to \$8.8 million in 2015. The increase in general and administrative expenses was primarily due to increases in stock compensation costs, insurance costs and bad debt expense.

Amortization and Depreciation. Amortization and depreciation decreased by \$0.1 million from \$1.7 million to \$1.6

million. In June 2015, the Company impaired intangible assets of the Therapy reporting unit and recorded amortization expense based on the revised values of the assets; as a result amortization and depreciation for the intangibles decreased.

Goodwill and long-lived asset impairment. In connection with the preparation of the financial statements for the second quarter ended June 30, 2015, the Company evaluated the Therapy reporting unit for both long-lived asset and goodwill impairment and recorded an impairment charge of \$14.0 million related to goodwill and an impairment charge of \$13.4 million related to long-lived assets for a total of \$27.4 million.

Other Income and Expense (in thousands)

	For the year ended December 31			
	2015	2014	Change	Change %
Interest expense	\$ (650)	\$ (2,640)	1,990	(75.4)%
Gain (loss) from change in fair value of warrant liability	-	1,835	(1,835)	(100.0)%
Loss from extinguishment of debt	(1,723)	(903)	(820)	90.8 %
Interest income	21	37	(16)	(43.2)%
	<u>\$ (2,352)</u>	<u>\$ (1,671)</u>	<u>\$ (681)</u>	<u>40.8 %</u>
Income tax expense	\$ 16	\$ 153	(137)	(89.5)%

Interest Expense The Company recorded \$0.7 million of interest expense in 2015 as compared with \$2.6 million of interest expense during the year ended December 31, 2014. The reduction in interest expense is due primarily to the reduction in interest related to the Deerfield facility agreement that was terminated on March 31, 2015.

Gain from change in fair value of warrants The gain from the change in the fair value of the warrant in 2014 was due primarily to the decrease in the Company's stock price when the fair value of the warrant was calculated in April 2014. In April 2014, Deerfield exercised the warrants and paid the Company \$1.6 million.

Loss from extinguishment of debt. The loss of \$1.7 million for the year ended December 31, 2015 represents the loss associated with the payoff of the Deerfield facility agreement, which was terminated on March 31, 2015. The Company paid \$11.25 million which represented the entire obligation. The loss on extinguishment represents the unamortized discount on the Facility agreement, and the write-off of the deferred debt costs. The Facility Agreement was to mature on December 29, 2016 and was able to be repaid at the Company's option without penalty or premium. The loss of \$0.9 million from the extinguishment of debt for the year ended December 31, 2014 represents the loss associated with the payoff of the Deerfield revenue purchase agreement, which was terminated in April 2014.

Interest income. Interest income of \$21,000 and \$37,000 for the years ended December 31, 2015, and 2014, respectively, reflects income earned from our money market accounts.

Tax benefit (expense). The Company recorded tax expense of \$16,000 as compared to \$153,000 for the years ended December 31, 2015, and 2014, respectively. For the year ended December 31, 2015, the Company recorded a tax benefit due primarily to a deferred tax liability of approximately \$79,000, offset by tax expense of approximately \$95,000. The deferred tax liability was the result of tax amortizable goodwill that was recognized due to the impairment of goodwill. Tax expense in 2015 and 2014 relates primarily to state non-income and franchise based taxes.

Segment Analysis

The Company operates in and reports results for two segments: Cancer Detection and Cancer Therapy. Segment operating income (loss) includes Cost of Sales, Engineering and Product Development and Marketing and Sales and depreciation and amortization for the respective segment. Adjusted EBITDA is a Non-GAAP measure and excludes Stock Compensation, Depreciation and Amortization expense in the department of the respective segment. The Company does not allocate General and Administrative and depreciation and amortization expense included in General and Administrative expenses, as well as Other Income and Expense to a segment, and accordingly those are included as reconciling items to the Loss before income tax. These non-GAAP metrics may be inconsistent with similar measures presented by other companies and should only be used in conjunction with our results reported according to U.S. GAAP. Any financial measure other than those prepared in accordance with U.S. GAAP should not be considered a substitute for, or superior to, measures of financial performance prepared in accordance with U.S. GAAP. Management considers these non-GAAP financial measures to be an important indicator of the Company's operational strength and performance of its business and a good measure of its historical operating trends, in particular the extent to which ongoing operations impact the Company's overall financial performance. A summary of Segment

revenues, segment operating income (loss) and segment adjusted EBITDA for the fiscal years ended December 31, 2016, 2015, and 2014 are below (in thousands):

	Year Ended December 31,		
	2016	2015	2014
Segment revenues:			
Detection	\$ 17,133	\$ 19,243	\$ 18,604
Therapy	9,205	22,311	25,320
Total Revenue	<u>\$ 26,338</u>	<u>\$ 41,554</u>	<u>\$ 43,924</u>
Segment gross profit:			
Detection	\$ 15,113	\$ 16,019	\$ 15,276
Therapy	3,405	13,331	15,951
Segment gross profit	<u>\$ 18,518</u>	<u>\$ 29,350</u>	<u>\$ 31,227</u>
Segment operating income (loss):			
Detection	\$ 5,694	\$ 7,233	\$ 7,231
Therapy	(7,752)	(28,405)	1,868
Segment operating income (loss)	<u>\$ (2,058)</u>	<u>\$ (21,172)</u>	<u>\$ 9,099</u>
General, administrative, depreciation and amortization expense	\$ (7,912)	\$ (8,907)	\$ (8,284)
Interest expense	(63)	(650)	(2,640)
Gain (loss) on fair value of warrant	-	-	1,835
Other income	10	21	37
Loss on debt extinguishment	-	(1,723)	(903)
Loss before income tax	<u>\$ (10,023)</u>	<u>\$ (32,431)</u>	<u>\$ (856)</u>
Segment adjusted EBITDA:			
Detection segment operating income	\$ 5,694	\$ 7,233	\$ 7,231
Stock compensation	493	430	352
Depreciation	223	220	188
Amortization	696	532	515
Restructuring	-	182	-
Detection adjusted EBITDA	<u>\$ 7,106</u>	<u>\$ 8,597</u>	<u>\$ 8,286</u>
Therapy segment operating income (loss)	\$ (7,752)	\$ (28,405)	\$ 1,868
Stock compensation	518	465	178
Depreciation	970	1,142	844
Amortization	252	1,213	1,739
Restructuring	-	405	-
Goodwill and long-lived asset impairment	-	27,443	-
Therapy adjusted EBITDA	<u>\$ (6,012)</u>	<u>\$ 2,263</u>	<u>\$ 4,629</u>

Detection gross profit decreased to approximately \$15.1 million or 88% of revenue for the year ended December 31, 2016 from \$16.0 million or 83% of revenue for the year ended December 31, 2015, which is the result of changes in both revenue and product mix. Detection segment operating income for the year ended December 31, 2016 decreased by \$1.5 million to \$5.7 million from \$7.2 million for the year ended December 31, 2015. The decrease in segment operating income for the year ended December 31, 2016 as compared to the year ended December 31, 2015 was due primarily to the decrease in revenue for the year ended December 31, 2016 as compared to the year ended December 31, 2015. Detection operating expenses increased by \$0.6 million to \$9.4 million for the year ended December 31, 2016 as compared to \$8.8 million for the year ended December 31, 2015, reflecting additional investments in research and development, primarily to support new product development.

Detection gross profit increased to approximately \$16.0 million or 83% of revenue for the year ended December 31, 2015 from \$15.3 million or 82% of revenue for the year ended December 31, 2014. Detection segment operating income remained flat at \$7.2 million for the years ended December 31, 2015 and 2014. Although revenue increased, Detection operating expenses increased by \$0.8 million to \$8.8 million for the year ended December 31, 2015 as compared to \$8.0 million for the year ended December 31, 2014, reflecting additional investments in research and development, primarily for reader studies related to the development of new products.

Therapy gross profit decreased by approximately \$9.9 million to \$3.4 million or 37% of revenue for the year ended December 31, 2016 from approximately \$13.3 million or 60% of revenue which reflects the decline in revenue from \$22.3 million to \$9.2 million for the same periods. The decline in gross profit percent is due primarily to the fixed manufacturing expenses in cost of sales. Therapy operating expenses for the year ended December 31, 2016 were approximately \$11.2 million as compared to \$14.2 million for the year ended December 31, 2015. The decrease in operating expenses is due primarily to the cost reduction efforts initiated in 2015 due to reimbursement uncertainty. Therapy segment operating loss improved to a loss of \$7.8 million for the year ended December 31, 2016 from a loss of \$28.4 million for the period ended December 31, 2015. The operating loss of \$28.4 million for the year ended December 31, 2015 is due primarily to the impairment loss of \$27.4 million.

Therapy gross profit decreased to \$13.3 million or 60% of revenue for the year ended December 31, 2015 from approximately \$15.9 million or 63% of revenue for the year ended December 31, 2014. The decrease in gross profit for the year ended December 31, 2015 as compared to the year ended December 31, 2014 is due primarily to the decrease in revenue. Therapy segment operating loss increased to \$28.4 million for the year ended December 31, 2015 from income of \$1.9 million for the period ended December 31, 2014. The operating loss of \$28.4 million for the year ended December 31, 2015 is due primarily to the impairment loss of \$27.4 million. Therapy operating expenses were \$41.7 million for the year ended December 31, 2015 as compared to \$14.1 million for the period ended December 31, 2014.

Liquidity and Capital Resources

The Company believes that its cash and cash equivalents balance of \$8.6 million as of December 31, 2016, and projected cash balances are sufficient to sustain operations through at least the next 12 months. The Company's ability to generate cash adequate to meet its future capital requirements will depend primarily on operating cash flow. If sales or cash collections are reduced from current expectations, or if expenses and cash requirements are increased, the Company may require additional financing, although there are no guarantees that the Company will be able to obtain the financing if necessary. The Company will continue to closely monitor its liquidity and the capital and credit markets.

The Company had working capital of \$7.1 million at December 31, 2016. The ratio of current assets to current liabilities at December 31, 2016 and 2015 was 1.55 and 1.94, respectively. The decrease in working capital is due primarily to the decrease in cash due to operating losses in the current year. In April 2015, the Company paid \$11.25 million to repay borrowings under the Deerfield facility agreement in full.

Net cash used for operating activities for the year ended December 31, 2016 was \$5.5 million as compared \$1.9 million for 2015. The increase in cash used for operating activities during the year ended December 31, 2016 was due primarily to the net loss in 2016, less the non-cash adjustments. The net change in operating assets and liabilities for 2016 was approximately \$5,000 as compared to cash due to changes in operating assets and liabilities of approximately \$5.1 million in 2015. We expect that changes in operating assets and liabilities will continue to be a significant driver of changes in cash used in or provided for operations.

The net cash used for investing activities for the year ended December 31, 2016 was \$0.4 million. The cash used for investing activities in 2016 was due primarily to purchases of fixed assets.

Net cash used for financing activities for the year ended December 31, 2016 was \$0.9 million, which was due primarily to cash repayments of lease obligations. In January 2017, the Company closed the Asset Purchase agreement for \$3.2 million with Invivo and received \$2.9 million in cash, which was net of a \$350,000 holdback in escrow.

The following table summarizes as of December 31, 2016, for the periods presented, the Company's future estimated cash payments under existing contractual obligations, and the financing obligations as noted below (in thousands).

Contractual Obligations	Payments due by period				
	Total	Less than 1	1-3 years	3-5 years	5+ years
		year			
Operating Lease Obligations	\$ 2,237	\$ 579	\$ 1,484	\$ 174	\$ -
Capital Lease Obligations	86	86	-	-	-
Royalty Obligations	1,025	1,025	-	-	-
Other Commitments	333	333	-	-	-
Total Contractual Obligations	\$ 3,681	\$ 2,023	\$ 1,484	\$ 174	\$ -

Lease Obligations:

As of December 31, 2016, the Company had three lease obligations related to its facilities.

The Company's executive offices are leased pursuant to a five-year lease (the "Lease") that commenced on December 15, 2006, with renewals in January, 2012, and August 2016 consisting of approximately 11,000 square feet of office space located at 98 Spit Brook Road, Suite 100 in Nashua, New Hampshire (the "Premises"). The August 2016 Lease renewal provides for an annual base rent of \$184,518 for the period from March 2017 to February 2020. Additionally, the Company is required to pay its proportionate share of the building and real estate tax expenses and obtain insurance for the Premises.

The Company leases a facility consisting of approximately 24,350 square feet of office, manufacturing and warehousing space located at 101 Nicholson Lane, San Jose, CA. The operating lease commenced September 2012 with a current annual payment of \$295,140 through September 2017, with all amounts payable in equal monthly installments. In September 2016, the Company extended this lease for the period from October 2017 to March 2020 with annual payments of \$540,588 from October 2017 to September 2018, \$558,120 from October 2018 to September 2019 and \$286,368 for the period from October 2019 to March 2020, with all amounts payable in equal monthly installments. Additionally, the Company is required to pay its proportionate share of the building and real estate tax expenses and obtain insurance for the facility.

In addition to the foregoing leases relating to its principal properties, the Company also has a lease for an additional facility in Nashua, New Hampshire used for product repairs, manufacturing and warehousing.

Royalty Obligations:

As a result of the acquisition of Xoft, the Company recorded a royalty obligation pursuant to a settlement agreement entered into between Xoft and Hologic, in August 2007. Xoft received a nonexclusive, irrevocable, perpetual, worldwide license, including the right to sublicense certain Hologic patents, and a non-compete covenant as well as an agreement not to seek further damages with respect to the alleged patent violations. In return the Company has a remaining obligation to pay a minimum annual royalty payment of \$250,000 payable through 2016. In addition to the minimum annual royalty payments, the litigation settlement agreement with Hologic also provided for payment of royalties based upon a specified percentage of future net sales on any products that practice the licensed rights. The estimated fair value of the patent license and non-compete covenant is \$100,000 and is being amortized over the estimated remaining useful life of approximately four years. In addition, a liability has been recorded within accrued expenses and accounts payable for minimum royalty obligations totaling \$0.4 million.

In December, 2011, the Company settled patent litigation with Zeiss. The Company determined that this settlement should be recorded as a measurement period adjustment and accordingly recorded the present value of the litigation to the opening balance sheet of Xoft. The present value of the liability is approximately \$0.5 million as of December 31, 2016. The Company has a remaining obligation to pay \$0.5 million in June 2017.

Notes Payable:

In December, 2011, the Company entered into several agreements pursuant to which Deerfield agreed to provide \$15

million of debt. During October 2014, the Company elected to prepay the first principal payment of \$3.75 million which was originally due on the third anniversary of the date of the facility agreement in December 2014. The Company paid the remaining outstanding obligation of \$11.25 million on March 31, 2015.

Capital Lease Obligations:

In connection with the acquisition of DermEbx and Radion, the Company assumed two separate equipment lease obligations with payments totaling approximately \$2.6 million thru May, 2017. The leases were determined to be capital leases and accordingly the equipment was capitalized and a liability of \$2.5 million was recorded. As of December 31, 2016, the outstanding liability for the acquired equipment leases was approximately \$0.1 million.

Other Commitments:

Other Commitments include non-cancelable purchase orders with three key suppliers executed in the normal course of business.

Effect of New Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), or ASU 2014-09, which supersedes nearly all existing revenue recognition guidance under U.S. GAAP. Since then, the FASB has also issued ASU 2016-08, Revenue from Contracts with Customers (Topic 606), Principals versus Agent Considerations and ASU 2016-10, Revenue from Contracts with Customers (Topic 606), Identifying Performance Obligations and Licensing, which further elaborate on the original ASU No. 2014-09. The core principle of these updates is to recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration to which the entity expects to be entitled for those goods or services. ASU 2014-09 defines a five step process to achieve this core principle and, in doing so, more judgments and estimates may be required within the revenue recognition process than are required under existing U.S. GAAP. In July 2015, the FASB approved a one-year deferral of the effective date to January 1, 2018, with early adoption to be permitted as of the original effective date of January 1, 2017. Once this standard becomes effective, companies may use either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each reporting period with the option to elect certain practical expedients, or (ii) a retrospective approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption (which includes additional footnote disclosures). We have performed an initial assessment of ASU 2014-09, and expect that our revenue recognition will not be materially impacted by this new guidance. We are currently calculating the impact of all expected changes from this guidance, and expect to have these calculations complete during the second half of fiscal 2017. After completing these calculations, we will then determine the transition method to be applied upon adoption.

In February 2016, the FASB issued ASU No. 2016-02, "Leases". The standard establishes a right-of-use ("ROU") model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. We are currently evaluating the impact of our pending adoption of the new standard on our consolidated financial statements, however the adoption of the standard is expected to increase both assets and liabilities for leases that would previously have been off-balance sheet operating leases.

In March 2016, the FASB issued ASU 2016-09, "Improvements to Employee Share-Based Payment Accounting." This update was issued as part of a simplification effort for the accounting of share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, increases the amount of employee's shares repurchased for tax withholding purposes without triggering liability accounting, an accounting policy election to account for forfeitures as they occur, and clarifies that all cash payments made on an employee's behalf for withheld shares should be presented as a financing activity on the statement of cash flows. The amendment is effective for annual periods beginning after December 15, 2016, and interim periods thereafter. Early adoption is permitted. The Company expects the adoption of ASU 2016-09 to impact net operating losses, however the Company currently has a full valuation allowance against the net operating losses.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230)", a consensus of the FASB's Emerging Issues Task Force. This update is intended to reduce diversity in practice in how certain transactions are classified in the statement of cash flows. The update requires cash payments for debt prepayment or debt extinguishment costs to be classified as cash outflows for financing activities. It also requires cash payments made soon after an

acquisition's consummation date (approximately three months or less) to be classified as cash outflows for investing activities. Payments made thereafter should be classified as cash outflows for financing activities up to the amount of the original contingent consideration liability. Payments made in excess of the amount of the original contingent consideration liability should be classified as cash outflows for operating activities. The amendment is effective for annual periods beginning after December 15, 2017, and interim periods thereafter. Early adoption is permitted. The Company does not expect the adoption of this amendment will have a material impact on our consolidated financial statements.

Item 7. Quantitative and Qualitative Disclosures about Market Risk.

We believe we are not subject to material foreign currency exchange rate fluctuations, as most of our sales and expenses are domestic and therefore are denominated in the U.S. dollar. We do not hold derivative securities and have not entered into contracts embedded with derivative instruments, such as foreign currency and interest rate swaps, options, forwards, futures, collars, and warrants, either to hedge existing risk or for speculative purposes.

Item 8. Financial Statements and Supplementary Data.

See Financial Statements and Schedule attached hereto.

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

Not Applicable.

Item 9. Controls and Procedures.

(a) Evaluation of Disclosure Controls and Procedures.

The Company, under the supervision and with the participation of its management, including its principal executive officer and principal financial officer, evaluated the effectiveness of the design and operation of its disclosure controls and procedures as of the end of the period covered by this annual report on Form 10-K. Based on this evaluation, the principal executive officer and principal financial officer concluded that the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act) were effective as of December 31, 2016.

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. The Company conducts periodic evaluations to enhance, where necessary, its procedures and controls.

(b) Management's Annual Report on Internal Control Over Financial Reporting

The Company, under the supervision and with the participation of its management, including its principal executive officer and principal financial officer, is responsible for the preparation and integrity of the Company's Consolidated Financial Statements, establishing and maintaining adequate internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f)) for the Company and all related information appearing in this Annual Report on Form 10-K.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2016, using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control - Integrated Framework (2013). Based on its assessment, our Chief Executive Officer and our Chief Financial Officer concluded that our internal control over financial reporting was effective as of December 31, 2016.

(c) Changes in Internal Control Over Financial Reporting.

The Company's principal executive officer and principal financial officer conducted an evaluation of the Company's

internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f)) to determine whether any changes in internal control over financial reporting occurred during the quarter ended December 31, 2016, that have materially affected or which are reasonably likely to materially affect internal control over financial reporting. Based on that evaluation there has been no such change during such period.

Item 9. Other Information.

Not applicable

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The following information includes information each director and executive officer has given us about his or her age, all positions he or she holds, his or her principal occupation and business experience for the past five years, and the names of other publicly held companies of which he or she currently serves as a director or has served as a director during the past five years. In addition to the information presented below regarding each director’s specific experience, qualifications, attributes and skills that led our Board to the conclusion that he or she should serve as a director, we also believe that all of our directors have a reputation for integrity, honesty and adherence to high ethical standards. They each have demonstrated business acumen and an ability to exercise sound judgment, as well as a commitment of service to iCAD and our Board.

There are no family relationships among any of the directors or executive officers of iCAD.

<u>Name</u>	<u>Age</u>	<u>Position with iCAD</u>	<u>Director/Officer Since</u>
Dr. Lawrence Howard	64	Chairman of the Board, and Director	2006
Rachel Brem, MD	58	Director	2004
Anthony Ecock	55	Director	2008
Robert Goodman, MD	76	Director	2014
Steven Rappaport	68	Director	2006
Andy Sassine	53	Director	2015
Somu Subramaniam	63	Director	2010
Elliot Sussman, MD	65	Director	2002
Kenneth Ferry	63	Chief Executive Officer, and Director	2006
Richard Christopher	47	Executive Vice President, Chief Financial Officer, Treasurer and Secretary	2016
Stacey Stevens	48	Executive Vice President of Marketing and Strategy	2006

The Company’s Certificate of Incorporation provides for the annual election of all of its directors. The Board elects officers on an annual basis and our officers generally serve until their successors are duly elected and qualified.

Upon the recommendation of the Company’s Nominating and Corporate Governance Committee, the Board of Directors fixed the size of the Company’s Board at nine directors.

Dr. Lawrence Howard was appointed Chairman of the Board in 2007 and has been a director of the Company since November 2006. Dr. Howard has been, since March 1997, a general partner of Hudson Ventures, L.P. (formerly known as Hudson Partners, L.P.), a limited partnership that is the general partner of Hudson Venture Partners, L.P. (“HVP”), a limited partnership that is qualified as a small business investment company. Since March 1997, Dr. Howard has also been a managing member of Hudson Management Associates LLC, a limited liability company that provides management services to HVP. Since November 2000, Dr. Howard has been a General Partner of Hudson Venture Partners II, and a limited partner of Hudson Venture II, L.P. We believe Dr. Howard’s qualifications to serve on our Board of Directors include his financial expertise and his understanding of our products and market.

Dr. Rachel Brem is currently the Professor and Vice Chairman in the Department of Radiology at The George Washington University Medical Center and Associate Director of the George Washington Cancer Institute. Dr. Brem has been at the George Washington University since 2000. From 1991 to 1999 Dr. Brem was at the Johns Hopkins Medical Institution where she introduced image guided minimally invasive surgery and previously was the Director of

Breast Imaging. Dr. Brem is a nationally and internationally recognized expert in new technologies for the improved diagnosis of breast cancer and has published over 80 manuscripts. We believe Dr. Brem's qualifications to serve on our Board of Directors include her expertise in the medical field specifically the diagnosis of breast cancer as well as her understanding of our products and market.

Anthony Ecock is a General Partner with the private equity investment firm of Welsh, Carson, Anderson & Stowe ("WCAS"), which he joined in 2007. He has over 25 years of experience in the healthcare field with eight years in senior management positions at leading healthcare technology companies. At WCAS, Mr. Ecock leads the Resources Group, a team responsible for helping its 30 portfolio companies identify and implement initiatives to increase growth, earnings and cash flow. Before joining WCAS, he served as Vice President and General Manager of GE Healthcare's Enterprise Sales organization from 2003 to 2007. From 1999 to 2003, he served as Senior Vice President and Global General Manager of Hewlett Packard's, then Agilent's and finally Philips' Patient Monitoring divisions. Mr. Ecock spent his early career at the consulting firm of Bain & Company, where he was a Partner in the healthcare and technology practices and Program Director for Consultant Training. We believe Mr. Ecock's qualifications to serve on our Board of Directors include his financial expertise and his years of experience in the healthcare and technology markets.

Dr. Robert Goodman is a radiation oncologist who oversees all aspects of care at Jersey City Radiation Oncology. Dr. Goodman has served with Jersey City Radiation Oncology since 2001. Prior to joining Jersey City Radiation Oncology, from 1998-2011, Dr. Goodman served as the chair of Radiation Oncology at St. Barnabas Medical Center. From 1977 to 1990, Dr. Goodman served as the Pancoast Professor and Chair of the Department of Radiation Oncology at the University of Pennsylvania. Dr. Goodman also has served as Acting Executive Director of the Hospital of the University of Pennsylvania. He has published extensively in the oncology literature in highly respected peer-reviewed journals and has co-authored a textbook on breast cancer. We believe Dr. Goodman's qualifications to serve on our Board of Directors include his extensive clinical background and his business leadership experience.

Steven Rappaport has been a partner of RZ Capital, LLC since July 2002, a private investment firm that also provides administrative services for a limited number of clients. From March 1995 to July 2002, Mr. Rappaport was Director, President and Principal of Loanet, Inc., an online real-time accounting service used by brokers and institutions to support domestic and international securities borrowing and lending activities. Loanet, Inc. was acquired by SunGard Data Systems in May 2001. From March 1992 to December 1994, Mr. Rappaport was Executive Vice President of Metallurg, Inc. ("Metallurg"), a producer and seller of high quality specialty metals and alloys, and President of Metallurg's subsidiary, Shieldalloy Corporation. He served as Director of Metallurg from 1985 to 1998. From March 1987 to March 1992, Mr. Rappaport was Director, Executive Vice President and Secretary of Telerate, Inc. ("Telerate"), an electronic distributor of financial information. Telerate was acquired by Dow Jones over a number of years commencing in 1985 and culminating in January 1990, when it became a wholly-owned subsidiary. Mr. Rappaport practiced corporate and tax law at the New York law firm of Hartman & Craven from August 1974 to March 1987. He became a partner in the firm in 1979. Mr. Rappaport is currently serving as an independent director of a number of open and closed end American Stock Exchange funds of which Credit Suisse serves as the investment adviser and a number of open and closed end mutual funds of which Aberdeen Investment Trust serves as the adviser. In addition, Mr. Rappaport serves as a director of several privately owned businesses and a few not for profit organizations. We believe Mr. Rappaport's qualifications to serve on our Board of Directors include his extensive financial and legal expertise combined with his experience as an executive officer, partner and director.

Andy Sassine has served on the board of directors of three private companies: Gemphire Therapeutics, Inc., an early-stage cardiovascular drug company formed by a licensing agreement with Pfizer Inc., Freedom Meditech, Inc., a medical device company focused on the development and commercialization of first-to-market non-invasive ophthalmic medical devices that can screen for diabetes up to six years prior to the onset of the disease; and ComHear Inc., a digital audio software and device company, where he is also the chairman of the board. Mr. Sassine previously served on the board of Acorn Energy, Inc. Mr. Sassine has served on the Fidelity Investments Board of Directors since February 25, 2013. Mr. Sassine served in various positions at Fidelity Investments from 1999 to 2012, including, most recently as Portfolio Manager. Between 2004 and 2011, he managed the Fidelity Small Cap Stock Fund, the Fidelity International Small Cap Opportunities Fund and the Fidelity Advisor International Small Cap Opportunities Fund. Mr. Sassine joined Fidelity as a high yield research analyst covering the Telecommunications, Satellite, Technology, Defense and Aerospace, and Restaurant Industries and in 2001, joined the international group as a research analyst covering small and mid-cap international stocks. Prior to joining Fidelity, he served as a vice president in the Acquisition Finance Group at Fleet National Bank. Mr. Sassine has been a member of the Henry B. Tippie College of Business, University of Iowa Board of Advisors since 2009 and served on the Board of Trustees at the Clarke Schools for Hearing and Speech between 2009 and 2014. Mr. Sassine earned a Bachelor of Arts degree at the University of Iowa in 1987 and an MBA from the Wharton School at the University of Pennsylvania in 1993. We believe Mr. Sassine's extensive knowledge and experience as a fund manager and board member of other companies of a similar size to our company qualifies him to serve as a member of our Board of Directors.

Somu Subramaniam is currently a Managing Partner and co-founder of New Science Ventures, a New York-based venture capital firm that invests in both early and late stage companies, using novel scientific approaches to address significant unmet needs and create order of magnitude improvements in performance. Mr. Subramaniam serves on several Boards of companies managed in New Science Venture's portfolio, including Achronix Semiconductor Corporation, RF Arrays, Inc., Lightwire, Inc., Silicon Storage Technology, Inc., MagSil Corporation, Trellis BioScience, Inc., and BioScale, Inc. Prior to starting New Science Ventures in 2004, Mr. Subramaniam was a Director at McKinsey & Co. and at various times led their Strategy Practice, Technology Practice and Healthcare Practice. While at McKinsey, he advised leading multinational companies in the pharmaceuticals, medical devices, biotechnology, photonics, software and semiconductor industries. He was also a member of McKinsey's Investment Committee. We believe Mr. Subramaniam's qualifications to serve on our Board include his extensive financial and legal expertise combined with his experience as an executive officer, partner and director.

Dr. Elliot Sussman is currently a Chairman of The Villages Health and Professor of Medicine at the University of South Florida College of Medicine. From 1993 to 2010, Dr. Sussman served as President and Chief Executive Officer of Lehigh Valley Health Network. Dr. Sussman served as a Fellow in General Medicine and a Robert Wood Johnson Clinical Scholar at the University of Pennsylvania, and trained as a resident at the Hospital of the University of Pennsylvania. Dr. Sussman is a director and the Chairperson of the compensation committee of the Board of Directors of Universal Health Realty Income Trust, a public company involved in real estate investment trust primarily engaged in investing in healthcare and human service-related facilities. We believe Dr. Sussman's qualifications to serve on our Board include his experience as a Chief Executive Officer of a leading healthcare network, combined with his medical background and his understanding of our products and market.

Kenneth Ferry has served as the Company's Chief Executive Officer since May 2006. He has over 25 years of experience in the healthcare technology field, with more than 10 years' experience in senior management positions. Prior to joining the Company, from October 2003 to May 2006, Mr. Ferry was Senior Vice President and General Manager for the Global Patient Monitoring business for Philips Medical Systems, a leader in the medical imaging and patient monitoring systems business. In this role he was responsible for Research & Development, Marketing, Business Development, Supply Chain and Manufacturing, Quality and Regulatory, Finance and Human Resources. From September 2001 to October 2003, Mr. Ferry served as a Senior Vice President in the North America Field Organization of Philips Medical Systems. From 1983 to 2001, Mr. Ferry served in a number of management positions with Hewlett Packard Company, a global provider of products, technologies, software solutions and services to individual consumers and businesses and Agilent Technologies, Inc., a provider of core bio-analytical and electronic measurement solutions to the communications, electronics, life sciences and chemical analysis industries. We believe Mr. Ferry's qualifications to serve on our Board of Directors include his global executive leadership skills and significant experience as an executive in the healthcare industry.

Richard Christopher is the Company's Executive Vice President and Chief Financial Officer. Previously, Mr. Christopher served as Chief Financial and Operating Officer of Caliber Imaging & Diagnostics, Inc., a medical technologies company that designs, develops and markets microscopes and other proprietary software. From March 2014 to October 2015, Mr. Christopher served as Chief Financial Officer of Caliber Imaging & Diagnostics, Inc. From December 2000 to April 2013, Mr. Christopher worked for DUSA Pharmaceuticals, Inc., a vertically integrated specialty dermatology company. During his time at DUSA Pharmaceuticals, Inc., Mr. Christopher served as Vice President, Financial Planning and Business Analysis, Vice President, Finance and Chief Financial Officer and Director of Financial Planning and Business Analysis. Mr. Christopher graduated from Suffolk University with a Masters of Science Degree in Accounting and from Bentley College with a Bachelors of Science Degree in Finance.

Stacey Stevens is now the Company's Executive Vice President, Marketing and Strategy. Ms. Stevens previously served as the Company's Senior Vice President of Marketing and Strategy from June 2006 to February 2016. Prior to joining iCAD, Ms. Stevens' experience included a variety of sales, business development, and marketing management positions with Philips Medical Systems, Agilent Technologies, Inc. and Hewlett Packard's Healthcare Solutions Group (which was acquired in 2001 by Philips Medical Systems). From February 2005 until joining the Company she was Vice President, Marketing Planning at Philips Medical Systems, where she was responsible for the leadership of all global marketing planning functions for Philips' Healthcare Business. From 2003 to January 2005, she was Vice President of Marketing for the Cardiac and Monitoring Systems Business Unit of Philips where she was responsible for all marketing and certain direct sales activities for the America's Field Operation. Prior to that, Ms. Stevens held several key marketing management positions in the Ultrasound Business Unit of Hewlett-Packard/Agilent and Philips Medical Systems. Ms. Stevens earned a Bachelor of Arts Degree in Political Science from the University of New Hampshire, and an MBA from Boston University's Graduate School of Management.

Audit Committee and Audit Committee Financial Expert

Our Board of Directors maintains an Audit Committee which is composed of Mr. Rappaport (Chair), Mr. Ecock and Dr. Sussman. Our Board has determined that each member of the Audit Committee meets the definition of an “Independent Director” under applicable NASDAQ Marketplace Rules. In addition, the Board has determined that each member of the Audit Committee meets the independence requirements of applicable SEC rules and that Mr. Rappaport qualifies as an “audit committee financial expert” under applicable SEC rules.

Section 16(a) Beneficial Ownership Reporting Compliance

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

Based solely on our review of copies of such forms received by us, we believe that during the year ended December 31, 2016; all filing requirements applicable to all of our officers, directors, and greater than 10% beneficial stockholders were timely complied with.

Code of Ethics

We have developed and adopted a comprehensive Code of Business Conduct and Ethics to cover all of our employees. Copies of the Code of Business Conduct and Ethics can be obtained, without charge, upon written request, addressed to:

iCAD, Inc.
98 Spit Brook Road, Suite 100
Nashua, NH 03062
Attention: Corporate Secretary

Item 11. Executive Compensation.

The Company will furnish to the Securities and Exchange Commission a definitive proxy statement not later than 120 days after the end of the fiscal year ended December 31, 2016. The response to this item will be contained in our proxy statement for our 2016 annual meeting of stockholders under the captions “Executive Compensation,” “Compensation of Directors,” “Compensation Committee Interlocks and Insider Participation,” and “Compensation Committee Report,” and is incorporated herein by reference.

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

The response to this item will be contained in our proxy statement for our 2017 annual meeting of stockholders in part under the caption “Stock Ownership of Certain Beneficial Owners and Management” and in part below.

Equity Compensation Plans

The following table provides certain information with respect to all of our equity compensation plans in effect as of December 31, 2016.

Plan Category:	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders:	1,425,348	\$5.05	1,482,496
Equity compensation plans not approved by security holders (1):	0	\$0.00	-0-
Total	1,425,348	\$5.05	1,482,496

(1) Represents the aggregate number of shares of common stock issuable upon exercise of individual arrangements with non-plan option holders. See Note 6 of Notes to our consolidated financial statements for a description of our Stock Option and Stock Incentive Plans and certain information regarding the terms of the non-plan options.

Item 3 . Certain Relationships and Related Transactions, and Director Independence.

The response to this item is contained in our proxy statement for our 2017 annual meeting of stockholders under the captions “Certain Relationships and Related Transactions,” “Corporate Governance Matters — Director Independence” and “Compensation Committee Report, and is incorporated herein by reference.

Item 4 . Principal Accounting Fees and Services.

The response to this item is contained in our proxy statement for our 2017 annual meeting of stockholders under the caption “Ratification of Appointment of Independent Registered Public Accounting Firm,” and is incorporated herein by reference.

PART IV

Item 5 . Exhibits, Financial Statement Schedules.

a) The following documents are filed as part of this Annual Report on Form 10-K:

- i. Financial Statements - See Index on page XX.
- ii. Financial Statement Schedule - See Index on page XX. All other schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions or are not applicable and, therefore, have been omitted.
- iii. Exhibits - the following documents are filed as exhibits to this Annual Report on Form 10-K:
 - 2(a) Plan and Agreement of Merger dated February 15, 2002, by and among the Registrant, ISSI Acquisition Corp. and Intelligent Systems Software, Inc., Maha Sallam, Kevin Woods and W. Kip Speyer. [incorporated by reference to Annex A of the Company’s proxy statement/prospectus dated May 24, 2002 contained in the Registrant’s Registration Statement on Form S-4, File No. 333-86454].
 - 2(b) Amended and Restated Plan and Agreement of Merger dated as of December 15, 2003 among the Registrant, Qualia Computing, Inc., Qualia Acquisition Corp., Steven K. Rogers, Thomas E. Shoup and James Corbett [incorporated by reference to Exhibit 2(a) to the Registrant’s Current Report on Form 8-K for the event dated December 31, 2003].

- 2(c) Asset Purchase Agreement as of dated June 20, 2008 between the Registrant and 3TP LLC dba CAD Sciences [incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K for the event dated July 18, 2008]. **
- 2(d) Agreement and Plan of Merger dated December 15, 2010 by and among the Registrant, XAC, Inc., Xoft, Inc. and Jeffrey Bird as representative of the Xoft, Inc.'s stockholders [incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K for the event dated December 30, 2010]. **
- 2(e) Asset Purchase Agreement by and between iCAD, Inc. and Radion, Inc., dated as of July 15, 2014. [incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K for the event dated July 15, 2014]. **
- 2(f) Asset Purchase Agreement by and between iCAD, Inc. and DermEbx, a series of Radion Capital Partners, LLC, dated as of July 15, 2014. [incorporated by reference to Exhibit 2.2 to the Registrant's Current Report on Form 8-K for the event dated July 15, 2014]. **
- 2(g) Asset Purchase Agreement by and between iCAD, Inc. and Invivo Corporation. [incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K for the event dated December 22, 2016]. **
- 3 (a) Certificate of Incorporation of the Registrant as amended through June 16, 2015 [incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed on August 6, 2015].
- 3(b) Amended and Restated By-laws of the Registrant [incorporated by reference to Exhibit 3 (b) to the Registrant's Report on Form 10-K for the year ended December 31, 2007].
- 4.1(a) Form of Warrant issued on January 9, 2012 [incorporated by reference to Exhibit 4.1 of the Registrant's report on Form 8-K filed with the SEC on January 3, 2012].
- 4.2(b) Form of B Warrant issued on January 9, 2012 [incorporated by reference to Exhibit 4.2 of the Registrant's report on Form 8-K filed with the SEC on January 3, 2012].
- 4.3(c) Registration Rights Agreement, dated as of December 29, 2011 [incorporated by reference to Exhibit 4.3 of the Registrant's report on Form 8-K filed with the SEC on January 3, 2012].
- 10(a) 2002 Stock Option Plan [incorporated by reference to Annex F to the Registrant's Registration Statement on Form S-4 (File No. 333-86454)].*
- 10(b) 2004 Stock Incentive Plan [incorporated by reference to Exhibit B to the Registrant's definitive proxy statement on Schedule 14A filed with the SEC on May 28, 2004].*
- 10(c) Form of Option Agreement under the Registrant's 2002 Stock Option Plan [incorporated by reference to Exhibit 10.2 to the Registrant's quarterly report on Form 10-Q for the quarter ended September 30, 2004].*
- 10(d) Form of Option Agreement under the Registrant's 2004 Stock Incentive Plan [incorporated by reference to Exhibit 10.3 to the Registrant's quarterly report on Form 10-Q for the quarter ended September 30, 2004].*
- 10(e) 2005 Stock Incentive Plan [incorporated by reference to Exhibit 10.1 to the Registrant's report on Form 8-K filed with the SEC on June 28, 2005].*
- 10(f) Form of Option Agreement under the Registrant's 2005 Stock Incentive Plan [incorporated by reference to Exhibit 10.2 to the Registrant's report on Form 8-K filed with the SEC on June 28, 2005].*

- 10(g) 2016 Stock Incentive Plan [incorporated by reference to Exhibit 10.1 to the Registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2016].
- 10(h) Form of Indemnification Agreement with each of the Registrant's directors and officers [incorporated by reference to Exhibit 10.6 of Registrant's Quarterly report on Form 10-Q for the quarter ended June 30, 2006].
- 10(i) Form of Indemnification Agreement with each of the Registrant's directors and officers [incorporated by reference to Exhibit 10.1 of Registrant's Quarterly report on Form 10-Q for the quarter ended September 30, 2014].
- 10(ji) Lease Agreement dated December 6, 2006 between the Registrant and Gregory D. Stoye and John J. Flatley, Trustees of the 1993 Flatley Family Trust, of Nashua, NH [incorporated by reference to Exhibit 10(mm) to the Registrant's Report on Form 10-K for the year ended December 31, 2006].
- 10(kj) 2007 Stock Incentive Plan, as amended [incorporated by reference to Appendix A to the Company's definitive proxy statement on Schedule 14A filed with the SEC on June 16, 2009]. *
- 10(l) Form of Option Agreement under the Registrant's 2007 Stock Incentive Plan. [incorporated by reference to Exhibit 10(vv) to the Registrant's Report on Form 10-K for the year ended December 31, 2009]*
- 10(m) Form of Restricted Stock Agreement under the Registrant's 2007 Stock Incentive Plan. [incorporated by reference to Exhibit 10(vv) to the Registrant's Report on Form 10-K for the year ended December 31, 2009].*
- 10(n) Employment Agreement entered into as of September 25, 2012 between the Registrant and Kenneth Ferry [incorporated by reference to Exhibit 10.1 of the Registrant's report on Form 8-K filed with the SEC on September 26, 2012] *
- 10(o) Employment Agreement entered into as of June 1, 2008 between the Registrant and Stacey Stevens [incorporated by reference to Exhibit 10.8 of the Registrant's report on Form 10-Q filed with the SEC on August 8, 2008]. *
- 10(p) Employment Agreement dated as of June 1, 2008 between the Registrant and Jonathan Go [incorporated by reference to Exhibit 10.9 of the Registrant's report on Form 10-Q filed with the SEC on August 8, 2008]. *
- 10(q) Employment Agreement dated April 26, 2011 between the Registrant and Kevin C. Burns [incorporated by reference to Exhibit 10.2 of the Registrant's report on Form 8-K filed with the SEC on April 27, 2011].
- 10(r) Option Agreement dated April 26, 2011 between the Registrant and Kevin C. Burns [incorporated by reference to Exhibit 10.3 of the Registrant's report on Form 8-K filed with the SEC on April 27, 2011].*
- 10(s) Facility Agreement including form of Promissory note, dated as of December 29, 2011, by and among the Company, Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., Deerfield Special Situations Fund, L.P., and Deerfield Special Situations Fund International Limited [incorporated by reference to Exhibit 10.1 of the Registrant's report on Form 8-K filed with the SEC on January 3, 2012].
- 10(t) Form of Security Agreement by and among the Company, Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., Deerfield Special Situations Fund, L.P., and Deerfield Special Situations Fund International Limited [incorporated by reference to Exhibit 10.2 of the Registrant's report on Form 8-K filed with the SEC on January 3, 2012].

- 10(u) Form of Security Agreement by and among Xoft, Inc., Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., Deerfield Special Situations Fund, L.P., and Deerfield Special Situations Fund International Limited [incorporated by reference to Exhibit 10.3 of the Registrant's report on Form 8-K filed with the SEC on January 3, 2012].
- 10(v) Revenue Purchase Agreement, dated as of December 29, 2011, by and among the Company, Deerfield Private Design Fund II, L.P., Deerfield Special Situations Fund, L.P. and Horizon Sante TTNP SARL [incorporated by reference to Exhibit 10.4 of the Registrant's report on Form 8-K filed with the SEC on January 3, 2012].
- 10(w) Revenue Purchase Termination and Amendment of Facility Agreement, dated as of April 28, 2014, by and among the Company, Deerfield Private Design Fund II, L.P., Deerfield Special Situations Fund, L.P. and Horizon Sante TTNP SARL [incorporated by reference to Exhibit 10.1 of the Registrant's report on Form 10-Q filed with the SEC on May 14, 2014].
- 10(x) Settlement Agreement, dated as of December 22, 2011, by and among the Company, Carl Zeiss Meditec, AG and Carl Zeiss Meditec, Inc. [incorporated by reference to Exhibit 10(y) to the Registrant's Report on Form 10-K for the year ended December 31, 2012]
- 10(y) Amendment No. 1 to the Employment Agreement dated April 26, 2011 between the Registrant and Kevin C. Burns [incorporated by reference to Exhibit 10.1 of the Registrant's report on Form 8-K filed with the SEC on November 25, 2013].*
- 10(z) Amendment No. 2 to the Employment Agreement dated April 26, 2011 between the Registrant and Kevin C. Burns [incorporated by reference to the Registrant's report on Form 8-K filed with the SEC on February 11, 2015].*
- 10(aa) Change in Control Bonus Agreement dated October 29, 2015 between the Registrant and Ken Ferry [incorporated by reference to Exhibit 10.1 of the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 4, 2015].*
- 10(bb) Change in Control Bonus Agreement dated October 29, 2015 between the Registrant and Kevin Burns [incorporated by reference to Exhibit 10.2 of the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 4, 2015].*
- 10(cc) Change in Control Bonus Agreement dated October 29, 2015 between the Registrant and Stacey Stevens [incorporated by reference to Exhibit 10.3 of the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 4, 2015].*
- 10(dd) Asset Purchase Agreement dated December 16, 2016 between the Registrant and Invivo Corporation [incorporated by reference to Exhibit 10.1 of the Registrant's report on Form 8-K filed with the SEC on December 22, 2016].
- 10(ee) Employment Agreement dated November 4, 2016 between the Registrant and Richard Christopher [incorporated by reference to Exhibit 10.1 of the Registrant's report on Form 8-K filed with the SEC on November 10, 2016].
- 10(ff) First Amendment to Lease dated September 19, 2016 between the Registrant and The Irvine Company [incorporated by reference to Exhibit 10.1 of the Registrant's report on Form 8-K filed with the SEC on September 21, 2016].
- 10(gg) Employment Agreement dated December 22, 2016 between the Registrant and Kenneth Ferry [incorporated by reference to Exhibit 10.1 of the Registrant's report on Form 8-K filed with the SEC on December 28, 2016].

- 10(hh) Amendment No. 1 to Employment Agreement dated as of June 1, 2008 between the Registrant and Stacey M. Stevens [incorporated by reference to Exhibit 10.2 of the Registrant's report on Form 8-K filed with the SEC on December 28, 2016].
- 21 Subsidiaries
- 23.1 Consent of BDO USA, LLP, Independent Registered Public Accounting Firm.
- 31.1 Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.2 Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 32.1 Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 32.2 Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 101 The following materials formatted in XBRL (eXtensible Business Reporting Language); (i) Consolidated Balance Sheets as of December 31, 2016 and December 31, 2015, (ii) Consolidated Statements of Operations for the twelve months ended December 31, 2016 and 2015 and 2014, (iii) Consolidated Statements of Cash Flows for the twelve months ended December 31, 2016 and 2015 and 2014, and (iv) Notes to Consolidated Financial Statements.

* Denotes a management compensation plan or arrangement.

** The Registrant has omitted certain schedules and exhibits pursuant to Item 601(b)(2) of Regulation S-K and shall furnish supplementally to the SEC copies any of the omitted schedules and exhibits upon request by the SEC.

(b) Exhibits - See (a) iii above.

(c) Financial Statement Schedule - See (a) ii above.

Item 16.

None

Summary.

SIGNATURES

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

Date: March , 2017

By: /s/ Kenneth Ferry
Kenneth Ferry
Chief Executive Officer, Director

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Lawrence Howard</u> Dr. Lawrence Howard	Chairman of the Board, Director	March, 2017
<u>/s/ Kenneth Ferry</u> Kenneth Ferry	Chief Executive Officer Director (Principal Executive Officer)	March, 2017
<u>/s/ Richard Christopher</u> Richard Christopher	Executive Vice President, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	March, 2017
<u>/s/ Rachel Brem</u> Rachel Brem, M.D.	Director	March, 2017
<u>/s/ Anthony Ecock</u> Anthony Ecock	Director	March, 2017
<u>/s/ Robert Goodman</u> Robert Goodman, M.D.	Director	March, 2017
<u>/s/ Steven Rappaport</u> Steven Rappaport	Director	March, 2017
<u>/s/ Andy Sassine</u> Andy Sassine	Director	March, 2017
<u>/s/ Somu Subramaniam</u> Somu Subramaniam	Director	March, 2017
<u>/s/ Elliot Sussman</u> Elliot Sussman, M.D.	Director	March, 2017

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of iCAD, Inc.,
Nashua, New Hampshire

We have audited the accompanying consolidated balance sheets of iCAD, Inc. and subsidiaries (the “Company”) as of December 31, 2016 and 2015, and the related consolidated statements of operations, stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the 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 its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion. An audit 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 iCAD, Inc. and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

/s/ BDO USA, LLP

Boston, Massachusetts
March, 2017

iCAD, INC. AND SUBSIDIARIES

Consolidated Balance Sheets

<u>Assets</u>	<u>December 31,</u> <u>2016</u>	<u>December 31,</u> <u>2015</u>
	(in thousands except shares and per share data)	
Current assets:		
Cash and cash equivalents	\$ 8,585	\$ 15,280
Trade accounts receivable, net of allowance for doubtful accounts of \$172 in 2016 and \$236 in 2015	5,189	7,488
Inventory, net	3,727	4,315
Prepaid expenses and other current assets	1,128	684
Assets held for sale	1,304	-
Total current assets	19,933	27,767
Property and equipment:		
Equipment	7,180	7,049
Leasehold improvements	62	62
Furniture and fixtures	305	295
Marketing assets	376	376
	7,923	7,782
Less accumulated depreciation and amortization	6,538	5,475
Net property and equipment	1,385	2,307
Other assets:		
Other assets	53	94
Intangible assets, net of accumulated amortization of \$7,518 in 2016 and \$10,896 in 2015	3,183	4,274
Goodwill	14,097	14,198
Total other assets	17,333	18,566
Total assets	\$ 38,651	\$ 48,640
	<u>Liabilities and Stockholders' Equity</u>	
Current liabilities:		
Accounts payable	\$ 1,577	\$ 1,593
Accrued expenses	4,988	4,220
Capital lease payable, short-term portion	86	969
Deferred revenue	5,372	7,497
Liabilities held for sale	832	-
Total current liabilities	12,855	14,279
Other long-term liabilities	83	29
Deferred revenue, long-term portion	668	1,079
Settlement costs, long-term portion	-	421
Capital lease - long-term portion	-	86
Deferred tax	7	-
Total liabilities	13,613	15,894
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Preferred stock, \$.01 par value: authorized 1,000,000 shares; none issued.	-	-
Common stock, \$.01 par value: authorized 30,000,000 shares; issued 16,260,663 in 2016 and 15,923,349 in 2015; outstanding 16,074,832 in 2016 and 15,737,518 in 2015	163	159
Additional paid-in capital	213,899	211,512
Accumulated deficit	(187,609)	(177,510)
Treasury stock at cost, 185,831 shares in 2016 and 2015	(1,415)	(1,415)
Total stockholders' equity	25,038	32,746
Total liabilities and stockholders' equity	\$ 38,651	\$ 48,640

See accompanying notes to consolidated financial statements.

iCAD, INC. AND SUBSIDIARIES

Consolidated Statements of Operations

	For the Years Ended December 31,		
	2016	2015	2014
	(in thousands except per share data)		
Revenue:			
Products	\$ 10,471	\$ 14,198	\$ 18,683
Service and supplies	15,867	27,356	25,241
Total revenue	26,338	41,554	43,924
Cost of Revenue:			
Products	918	3,130	4,912
Service and supplies	5,713	7,357	6,000
Amortization and depreciation	1,189	1,717	1,785
Total cost of revenue	7,820	12,204	12,697
Gross profit	18,518	29,350	31,227
Operating expenses:			
Engineering and product development	9,518	9,163	8,159
Marketing and sales	10,179	12,404	12,468
General and administrative	7,675	8,788	8,044
Amortization and depreciation	1,116	1,631	1,741
Goodwill and long-lived asset impairment	-	27,443	-
Total operating expenses	28,488	59,429	30,412
Income (loss) from operations	(9,970)	(30,079)	815
Other (expense) income:			
Interest expense	(63)	(650)	(2,640)
Gain from change in fair value of warrant liability	-	-	1,835
Loss from extinguishment of debt	-	(1,723)	(903)
Interest income	10	21	37
Other expense, net	(53)	(2,352)	(1,671)
Loss before income tax expense	(10,023)	(32,431)	(856)
Income tax expense	76	16	153
Net loss and comprehensive loss	\$ (10,099)	\$ (32,447)	\$ (1,009)
Net loss per share:			
Basic	\$ (0.63)	\$ (2.07)	\$ (0.07)
Diluted	\$ (0.63)	\$ (2.07)	\$ (0.07)
Weighted average number of shares used in computing loss per share:			
Basic	15,932	15,686	14,096
Diluted	15,932	15,686	14,096

See accompanying notes to consolidated financial statements.

iCAD, INC. AND SUBSIDIARIES

Consolidated Statements of Stockholders' Equity
(in thousands except shares)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Treasury Stock	Stockholders' Equity
	Number of Shares Issued	Par Value				
Balance at December 31, 2013	11,084,119	111	166,735	(144,054)	(1,415)	21,377
Issuance of common stock relative to vesting of restricted stock, net of 9,904 shares forfeited for tax obligations	75,530	1	(112)	-	-	(111)
Issuance of common stock for warrants exercised	450,000	4	3,722	-	-	3,726
Issuance of stock for acquisitions	1,200,000	12	8,544	-	-	8,556
Issuance of common stock pursuant to stock option plans	162,528	1	707	-	-	708
Sale of common stock	2,760,000	28	28,186	-	-	28,214
Stock-based compensation	-	-	1,318	-	-	1,318
Net loss	-	-	-	(1,009)	-	(1,009)
Balance at December 31, 2014	15,732,177	\$ 157	\$ 209,100	\$ (145,063)	\$ (1,415)	\$ 62,779
Issuance of common stock relative to vesting of restricted stock, net of 13,058 shares forfeited for tax obligations	111,700	1	(88)	-	-	(87)
Issuance of common stock pursuant to stock option plans	79,472	1	365	-	-	366
Stock-based compensation	-	-	2,135	-	-	2,135
Net loss	-	-	-	(32,447)	-	(32,447)
Balance at December 31, 2015	15,923,349	\$ 159	\$ 211,512	\$ (177,510)	\$ (1,415)	\$ 32,746
Issuance of common stock relative to vesting of restricted stock, net of 27,299 shares forfeited for tax obligations	261,731	3	(117)	-	-	(114)
Issuance of common stock pursuant to stock option plans	75,583	1	197	-	-	198
Stock-based compensation	-	-	2,307	-	-	2,307
Net loss	-	-	-	(10,099)	-	(10,099)
Balance at December 31, 2016	16,260,663	\$ 163	\$ 213,899	\$ (187,609)	\$ (1,415)	\$ 25,038

See accompanying notes to consolidated financial statements.

iCAD, INC. AND SUBSIDIARIES

Consolidated Statements of Cash Flows

	For the Years Ended December 31,		
	2016	2015	2014
	(in thousands)		
Cash flow from operating activities:			
Net loss	\$ (10,099)	\$ (32,447)	\$ (1,009)
Adjustments to reconcile net loss to net cash provided by (used for) operating activities:			
Amortization	983	1,768	2,270
Depreciation	1,322	1,580	1,256
Bad debt provision	177	383	167
Stock-based compensation expense	2,307	2,135	1,318
Amortization of debt discount and debt costs	(23)	341	1,246
Gain from acquisition settlement	(249)	-	-
Goodwill and long-lived asset impairment	-	27,443	-
Interest on settlement obligations	82	146	206
Deferred tax liability	7	-	-
Loss (gain) from change in fair value of warrant liability	-	-	(1,835)
Loss on disposal of assets	10	125	-
Loss on extinguishment of debt	-	1,723	903
Changes in operating assets and liabilities, net of acquisition:			
Accounts receivable	2,201	1,772	(840)
Inventory	596	(1,987)	(323)
Prepaid and other assets	(504)	(197)	11
Accounts payable	(16)	(557)	150
Accrued expenses	309	(2,060)	296
Deferred revenue	(2,581)	(2,068)	(612)
Total adjustments	4,621	30,547	4,213
Net cash (used for) provided by operating activities	(5,478)	(1,900)	3,204
Cash flow from investing activities:			
Additions to patents, technology and other	(12)	(40)	(50)
Additions to property and equipment	(337)	(932)	(1,214)
Acquisition of VuComp M-Vu CAD	(6)	-	-
Acquisition of VuComp M-Vu Breast Density	-	(1,700)	-
Acquisition of Radion Inc, and DermEbx	-	-	(3,482)
Net cash used for investing activities	(355)	(2,672)	(4,746)
Cash flow from financing activities:			
Issuance of common stock for cash, net	-	-	28,214
Stock option exercises	198	366	708
Warrant exercise	-	-	1,575
Taxes paid related to restricted stock issuance	(114)	(87)	(110)
Principal payments of capital lease obligations	(946)	(1,397)	(655)
Principal repayment of debt financing, net	-	(11,250)	(7,850)
Net cash (used for) provided by financing activities	(862)	(12,368)	21,882
Increase (decrease) in cash and equivalents	(6,695)	(16,940)	20,340
Cash and equivalents, beginning of year	15,280	32,220	11,880
Cash and equivalents, end of year	\$ 8,585	\$ 15,280	\$ 32,220
Supplemental disclosure of cash flow information:			
Interest paid	\$ 70	\$ 558	\$ 1,637
Taxes paid	\$ 67	\$ 128	\$ 157
Non-cash items from investing and financing activities:			
Settlement of warrant liability with purchase of common stock	\$ -	\$ -	2,151
Issuance of common stock related to acquisition of Radion, Inc and DermEbx	\$ -	\$ -	8,556

See accompanying notes to consolidated financial statements.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(1) Summary of Significant Accounting Policies

(a) Nature of Operations and Use of Estimates

iCAD, Inc. and subsidiaries (the “Company” or “iCAD”) is a provider of advanced image analysis, workflow solutions and radiation therapy for the early identification and treatment of cancer.

The Company has grown primarily through acquisitions to become a broad player in the oncology market. Its solutions include advanced image analysis and workflow solutions that enable healthcare professionals to better serve patients by identifying pathologies and pinpointing the most prevalent cancers earlier, a comprehensive range of high-performance, upgradeable Computer-Aided Detection (CAD) systems and workflow solutions for mammography, MRI and CT, and the Xoft System which is an isotope-free cancer treatment platform technology. CAD is reimbursable in the U.S. under federal and most third-party insurance programs.

The Company intends to continue the extension of its image analysis and clinical decision support solutions for mammography, MRI and CT imaging. iCAD believes that advances in digital imaging techniques should bolster its efforts to develop additional commercially viable CAD/advanced image analysis and workflow products. The Company’s management believes that early detection in combination with earlier targeted intervention will provide patients and care providers with the best tools available to achieve better clinical outcomes resulting in a market demand that will drive top line growth.

The Company’s headquarters are located in Nashua, New Hampshire, with manufacturing and contract manufacturing facilities in New Hampshire and Massachusetts, and an operations, research, development, manufacturing and warehousing facility in San Jose, California.

The Company operates in two segments: Cancer Detection (“Detection”) and Cancer Therapy (“Therapy”). The Detection segment consists of advanced image analysis and workflow products, and the Therapy segment consists of radiation therapy products. The Company sells its products throughout the world through its direct sales organization as well as through various OEM partners, distributors and resellers. See Note 8 for segment, major customer and geographical information.

The preparation of financial statements in conformity with generally accepted accounting principles 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 revenue and expenses during the reporting period. Actual results could differ from those estimates. It is reasonably possible that changes may occur in the near term that would affect management’s estimates with respect to assets and liabilities.

(b) Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries: Xoft, Inc. and Xoft Solutions, LLC. All material inter-company transactions and balances have been eliminated in consolidation.

(c) Cash and cash equivalents

The Company defines cash and cash equivalents as all bank accounts, money market funds, deposits and other money market instruments with original maturities of 90 days or less, which are unrestricted as to withdrawal. Cash and cash equivalents are maintained at financial institutions and, at times, balances may exceed federally insured limits. The Company has never experienced any losses related to these balances. Insurance coverage is \$250,000 per depositor at each financial institution, and the Company’s non-interest bearing cash balances exceed federally insured limits. Interest-bearing amounts on deposit in excess of federally insured limits at December 31, 2016 approximated \$7.8 million.

(d) Financial instruments

Financial instruments consist of cash and cash equivalents, accounts receivable, accounts payable, and notes

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(1) Summary of Significant Accounting Policies (continued)

(d) Financial instruments (continued)

payable. Due to their short term nature and market rates of interest, the carrying amounts of the financial instruments approximated fair value as of December 31, 2016 and 2015.

(e) Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are customer obligations due under normal trade terms. Credit limits are established through a process of reviewing the financial history and stability of each customer. The Company performs continuing credit evaluations of its customers' financial condition and generally does not require collateral.

The Company's policy is to maintain allowances for estimated losses from the inability of its customers to make required payments. The Company's senior management reviews accounts receivable on a periodic basis to determine if any receivables may potentially be uncollectible. The Company includes any accounts receivable allowances that it determines may likely be uncollectible, along with a general reserve for estimated probable losses based on historical experience, in its overall allowance for doubtful accounts. An amount would be written off against the allowance after all attempts to collect the receivable had failed. Based on the information available, the Company believes the allowance for doubtful accounts as of December 31, 2016 and 2015 is adequate.

The following table summarizes the allowance for doubtful accounts for the three years ended December 31, 2016 (in thousands):

	2016	2015	2014
Balance at beginning of period	\$ 236	\$ 203	\$ 73
Additions charged to costs and expenses	177	383	167
Reductions	(241)	(350)	(37)
Balance at end of period	\$ 172	\$ 236	\$ 203

(f) Inventory

Inventory is valued at the lower of cost or market value, with cost determined by the first-in, first-out method. The Company regularly reviews inventory quantities on hand and records an allowance for excess and/or obsolete inventory primarily based upon the estimated usage of its inventory as well as other factors. At December 31, 2016 and 2015, inventories consisted of the following (in thousands):

	As of December 31,	
	2016	2015
Raw materials	\$ 2,503	\$ 2,900
Work in process	75	154
Finished Goods	1,149	1,261
Inventory	\$ 3,727	\$ 4,315

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(1) Summary of Significant Accounting Policies (continued)

(g) Property and Equipment

Property and equipment are stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets or the remaining lease term, if shorter, for leasehold improvements (see below).

	Estimated life
Equipment	3-5 years
Leasehold improvements	3-5 years
Furniture and fixtures	3-5 years
Marketing assets	3-5 years

(h) Long-lived Assets

In accordance with FASB ASC Topic 360, "Property, Plant and Equipment", ("ASC 360"), the Company assesses long-lived assets for impairment if events and circumstances indicate it is more likely than not that the fair value of the asset group is less than the carrying amount of the asset group.

ASC 360-10-35 uses "events and circumstances" criteria to determine when, if at all, an asset (or asset group) is evaluated for recoverability. Thus, there is no set interval or frequency for recoverability evaluation. In accordance with ASC 360-10-35-21, the following factors are examples of events or changes in circumstances that indicate the carrying amount of an asset (asset group) may not be recoverable and thus is to be evaluated for recoverability.

- A significant decrease in the market price of a long-lived asset (asset group);
- A significant adverse change in the extent or manner in which a long-lived asset (asset group) is being used or in its physical condition;
- A significant adverse change in legal factors or in the business climate that could affect the value of a long-lived asset (asset group), including an adverse action or assessment by a regulator;
- An accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of a long-lived asset (asset group);
- A current period operating or cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset (asset group).

As a result of external factors and general uncertainty related to reimbursement for the treatment of non-melanoma skin cancer, the Company evaluated the long-lived assets of the Therapy segment and reviewed them for potential impairment. The Company determined the "Asset Group" to be the assets of the Therapy segment, which the Company considered to be the lowest level for which the identifiable cash flows were largely independent of the cash flows of other assets and liabilities.

In accordance with ASC 360-10-35-17, if the carrying amount of an asset or asset group (in use or under development) is evaluated and found not to be fully recoverable (the carrying amount exceeds the estimated gross, undiscounted cash flows from use and disposition), then an impairment loss must be recognized. The impairment loss is measured as the excess of the carrying amount over the asset's (or asset group's) fair value.

In connection with the preparation of the financial statements for the second quarter ended June 30, 2015, the Company completed its analysis pursuant to ASC 360-10-35-17 and determined that the carrying value of the Asset Group was approximately \$36.8 million, which exceeded the undiscounted cash flows by approximately \$2.8 million. Accordingly the Company completed the Step 2 analysis to determine the fair value of the asset group. The Company recorded long-lived asset impairment charges of approximately \$13.4 million in the second quarter ended June 30, 2015 and as a result the long lived assets in the Asset Group were recorded at their current fair values. The Company did not record any impairment charges for the year ended December 31, 2016.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(1) Summary of Significant Accounting Policies (continued)

(h) Long-lived Assets (continued)

A considerable amount of judgment and assumptions are required in performing the impairment tests, principally in determining the fair value of the Asset Group. While the Company believes the judgments and assumptions are reasonable, different assumptions could change the estimated fair values, and, therefore additional impairment charges could be required. Significant negative industry or economic trends, disruptions to the Company's business, loss of significant customers, inability to effectively integrate acquired businesses, unexpected significant changes or planned changes in use of the assets may adversely impact the assumptions used in the fair value estimates and ultimately result in future impairment charges.

Intangible assets subject to amortization consist primarily of patents, technology, customer relationships and trade names purchased in the Company's previous acquisitions. These assets, which include assets from the acquisition of the assets of VuComp, DermEbx and Radion and the acquisition of Xoft, Inc., are amortized on a straight-line basis consistent with the pattern of economic benefit over their estimated useful lives of 5 to 15 years. A summary of intangible assets for 2016 and 2015 are as follows (in thousands):

	2016	2015	Weighted average useful life
Gross Carrying Amount			
Patents and licenses	\$ 583	\$ 579	5 years
Technology	9,567	14,075	10 years
Customer relationships	292	268	7 years
Tradename	259	248	10 years
Total amortizable intangible assets	10,701	15,170	
Accumulated Amortization			
Patents and licenses	\$ 477	\$ 451	
Technology	6,754	9,996	
Customer relationships	28	201	
Tradename	259	248	
Total accumulated amortization	7,518	10,896	
Total amortizable intangible assets, net	\$ 3,183	\$ 4,274	

Amortization expense related to intangible assets was approximately \$983,000, \$1,768,000 and \$2,270,000 for the years ended December 31, 2016, 2015, and 2014, respectively. Estimated remaining amortization of the Company's intangible assets is as follows (in thousands):

For the years ended December 31:	Estimated amortization expense
2017	\$ 574
2018	511
2019	499
2020	370
2021	311
Thereafter	918
	\$ 3,183

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(1) Summary of Significant Accounting Policies (continued)

(i) Goodwill

In accordance with FASB Accounting Standards Codification (“ASC”) Topic 350-20, “*Intangibles - Goodwill and Other*”, (“ASC 350-20”), the Company tests goodwill for impairment on an annual basis and between annual tests if events and circumstances indicate it is more likely than not that the fair value of the reporting unit is less than the carrying value of the reporting unit.

Factors the Company considers important, which could trigger an impairment of such asset, include the following:

- significant underperformance relative to historical or projected future operating results;
- significant changes in the manner or use of the assets or the strategy for the Company’s overall business;
- significant negative industry or economic trends;
- significant decline in the Company’s stock price for a sustained period; and
- a decline in the Company’s market capitalization below net book value.

The Company would record an impairment charge if such an assessment were to indicate that the fair value of a reporting unit was less than the carrying value. In evaluating potential impairments outside of the annual measurement date, judgment is required in determining whether an event has occurred that may impair the value of goodwill or intangible assets. The Company utilizes either discounted cash flow models or other valuation models, such as comparative transactions and market multiples, to determine the fair value of reporting units. The Company makes assumptions about future cash flows, future operating plans, discount rates, comparable companies, market multiples, purchase price premiums and other factors in those models. Different assumptions and judgment determinations could yield different conclusions that would result in an impairment charge to income in the period that such change or determination was made.

As a result of external factors and general uncertainty related to reimbursement for non-melanoma skin cancer and in conjunction with the long-lived asset impairment testing, the Company performed an impairment assessment of the Therapy reporting unit as of June 30, 2015. As a result the Company recorded a goodwill impairment charge of \$14.0 million during the quarter ended June 30, 2015.

The implied fair value of the Therapy reporting unit was determined in the same manner as the manner in which the amount of goodwill recognized in a business combination is determined. The excess of the fair value of the reporting unit over the amounts assigned to its assets and liabilities is the implied amount of goodwill. The Company identified the intangible assets that were valued during this process, including technology, customer relationships and trade-names. The allocation process was performed only for purposes of testing goodwill for impairment.

The Company determined the fair value of the Therapy reporting unit based on the present value of estimated future cash flows, discounted at an appropriate risk adjusted rate. This approach was selected as it measures the income producing assets, primarily technology and customer relationships. This method estimates the fair value based upon the ability to generate future cash flows, which is particularly applicable when future profit margins and growth are expected to vary significantly from historical operating results.

The Company uses internal forecasts to estimate future cash flows and includes an estimate of long-term future growth rates based on the most recent views of the long-term forecast for the reporting unit. Accordingly, actual results can differ from those assumed in the forecasts. The discount rate of approximately 17% is derived from a capital asset pricing model and analyzing published rates for industries relevant to the reporting unit to estimate the cost of equity financing. The Company uses discount rates that are commensurate with the risk and uncertainty inherent in the respective businesses and in the internally developed forecasts.

Other significant assumptions include terminal value margin rates, future capital expenditures, and changes in future working capital requirements. While there are inherent uncertainties related to the assumptions used and to the application of these assumptions to this analysis, the income approach provides a reasonable estimate of the fair value of the Therapy reporting unit.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(1) Summary of Significant Accounting Policies (continued)

(i) Goodwill (continued)

The Step 2 test resulted in an approximate fair value of goodwill of \$5.7 million which resulted in a goodwill impairment loss of \$14.0 million for the quarter ended June 30, 2015.

The Company performed an annual impairment assessment at October 1, 2016 and compared the fair value of each reporting unit to its carrying value as of this date. Fair value was approximately 816% of carrying value for the Detection reporting unit and 126% of carrying value for the Therapy reporting unit. The carrying values of the reporting units were determined based on an allocation of our assets and liabilities through specific allocation of certain assets and liabilities to the reporting units and an apportionment of the remaining net assets based on the relative size of the reporting units' revenues and operating expenses compared to the Company as a whole. The determination of reporting units also requires management judgment.

The Company determined the fair values for each reporting unit using a weighting of the income approach and the market approach. For purposes of the income approach, fair value is determined based on the present value of estimated future cash flows, discounted at an appropriate risk adjusted rate. The Company used internal forecasts to estimate future cash flows and includes an estimate of long-term future growth rates based on the most recent views of the long-term forecast for each segment. Accordingly, actual results can differ from those assumed in the forecasts. The discount rate of approximately 15% is derived from a capital asset pricing model and analyzing published rates for industries relevant to the reporting units to estimate the cost of equity financing. The Company uses discount rates that are commensurate with the risks and uncertainty inherent in the respective businesses and in the internally developed forecasts.

In the market approach, the Company uses a valuation technique in which values are derived based on market prices of publicly traded companies with similar operating characteristics and industries. A market approach allows for comparison to actual market transactions and multiples. It can be somewhat limited in its application because the population of potential comparable publicly traded companies can be limited due to differing characteristics of the comparative business and ours, as well as market data may not be available for divisions within larger conglomerates or non-public subsidiaries that could otherwise qualify as comparable, and the specific circumstances surrounding a market transaction (e.g., synergies between the parties, terms and conditions of the transaction, etc.) may be different or irrelevant with respect to the business.

The Company corroborated the total fair values of the reporting units using a market capitalization approach; however, this approach cannot be used to determine the fair value of each reporting unit value. The blend of the income approach and market approach is more closely aligned to the business profile of the Company, including markets served and products available. In addition, required rates of return, along with uncertainties inherent in the forecast of future cash flows, are reflected in the selection of the discount rate. In addition, under the blended approach, reasonably likely scenarios and associated sensitivities can be developed for alternative future states that may not be reflected in an observable market price. The Company will assess each valuation methodology based upon the relevance and availability of the data at the time the valuation is performed and weight the methodologies appropriately.

In April 2015, the Company acquired VuComp's M-Vu® Breast Density product for \$1.7 million. The product has been integrated into the Company's Powerlook AMP system, which is a component of the Detection reporting unit. The Company determined that the acquisition was a business combination and accordingly recorded goodwill of \$0.8 million.

In January 2016, the Company completed the acquisition of VuComp's M-Vu CAD and other assets for \$6,000. The customers, related technology and clinical data acquired are being used for the Company's Cancer Detection products and the Company recorded goodwill of \$293,000 to the Detection segment.

In December, 2016, the Company entered into an Asset Purchase Agreement with Invivo Corporation. The Company will sell and convey to Buyer all right, title and interest to certain intellectual property relating to the VersaVue Software and the DynaCAD product and related assets. As a result of the agreement, the Company determined that it had assets held for sale as of December 31, 2016 and the sale constituted the sale of a business. As of December 31, 2016, the Company allocated \$394,000 of goodwill to assets held for

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(1) Summary of Significant Accounting Policies (continued)

(i) Goodwill (continued)

sale. The allocation was based on the fair value of the assets sold relative to the fair value of the Detection reporting unit as of the date of the agreement.

A rollforward of goodwill activity by reportable segment is as follows (in thousands):

	Detection	Therapy	Total
Accumulated Goodwill	\$ -	\$ -	\$ 47,937
Accumulated impairment	-	-	(26,828)
Fair value allocation	7,663	13,446	-
Acquisition of DermEbx and Radion	-	6,154	6,154
Balance at December 31, 2014	<u>7,663</u>	<u>19,600</u>	<u>27,263</u>
Acquisition measurement period adjustments	-	116	116
Acquisition of VuComp	800	-	800
Impairment	-	(13,981)	(13,981)
Balance at December 31, 2015	<u>8,463</u>	<u>5,735</u>	<u>14,198</u>
Acquisition of VuComp	293	-	293
Sale of MRI assets	(394)	-	(394)
Balance at December 31, 2016	<u>\$ 8,362</u>	<u>\$ 5,735</u>	<u>\$ 14,097</u>
Accumulated Goodwill	699	6,270	54,906
Fair value allocation	7,663	13,446	-
Accumulated impairment	-	(13,981)	(40,809)
Balance at December 31, 2016	<u>\$ 8,362</u>	<u>\$ 5,735</u>	<u>\$ 14,097</u>

(j) Revenue Recognition

The Company recognizes revenue primarily from the sale of products, services and supplies. Revenue is recognized when delivery has occurred, persuasive evidence of an arrangement exists, fees are fixed or determinable and collectability of the related receivable is probable. For product revenue, delivery has occurred upon shipment provided title and risk of loss have passed to the customer. Services and supplies revenue are considered to be delivered as the services are performed or over the estimated life of the supply agreement.

The Company recognizes revenue from the sale of its digital, film-based CAD and cancer therapy products and services in accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Update No. 2009-13, “Multiple-Deliverable Revenue Arrangements” (“ASU 2009-13”) and ASC Update No. 2009-14, “Certain Arrangements That Contain Software Elements” (“ASU 2009-14”) and ASC 985-605, “Software” (“ASC 985-605”). Revenue from the sale of certain CAD products is recognized in accordance with ASC 840 “Leases” (“ASC 840”). For multiple element arrangements, revenue is allocated to all deliverables based on their relative selling prices. In such circumstances, a hierarchy is used to determine the selling price to be used for allocating revenue to deliverables as follows: (i) vendor-specific objective evidence of fair value (“VSOE”), (ii) third-party evidence of selling price (“TPE”), and (iii) best estimate of the selling price (“BESP”). VSOE generally exists only when the deliverable is sold separately and is the price actually charged for that deliverable. The process for determining BESP for deliverables without VSOE or TPE considers multiple factors including relative selling prices; competitive prices in the

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(1) Summary of Significant Accounting Policies (continued)

(j) Revenue Recognition (continued)

marketplace, and management judgment, however, these may vary depending upon the unique facts and circumstances related to each deliverable.

The Company uses customer purchase orders that are subject to the Company's terms and conditions or, in the case of an Original Equipment Manufacturer ("OEM") are governed by distribution agreements. In accordance with the Company's distribution agreements, the OEM does not have a right of return, and title and risk of loss passes to the OEM upon shipment. The Company generally ships Free On Board shipping point and uses shipping documents and third-party proof of delivery to verify delivery and transfer of title. In addition, the Company assesses whether collection is probable considering a number of factors, including past transaction history with the customer and the creditworthiness of the customer, as obtained from third party credit references.

If the terms of the sale include customer acceptance provisions and compliance with those provisions cannot be demonstrated, all revenue is deferred and not recognized until such acceptance occurs. The Company considers all relevant facts and circumstances in determining when to recognize revenue, including contractual obligations to the customer, the customer's post-delivery acceptance provisions, if any, and the installation process.

The Company has determined that iCAD's digital and film based sales generally follow the guidance of FASB ASC Topic 605 "Revenue Recognition" ("ASC 605") as the software has been considered essential to the functionality of the product per the guidance of ASU 2009-14. Typically, the responsibility for the installation process lies with the OEM partner. On occasion, when iCAD is responsible for product installation, the installation element is considered a separate unit of accounting because the delivered product has stand-alone value to the customer. In these instances, the Company allocates the revenue to the deliverables based on the framework established within ASU 2009-13. Therefore, the installation and training revenue is recognized as the services are performed according to the BESP of the element. Revenue from the digital and film based equipment when there is installation, is recognized based on the relative selling price allocation of the BESP, when delivered.

Revenue from certain CAD products is recognized in accordance with ASC 985-605. Sales of this product include training, and the Company has established VSOE for this element. Product revenue is determined based on the residual value in the arrangement and is recognized when delivered. Revenue for training is deferred and recognized when the training has been completed.

The Company recognizes post contract customer support revenue together with the initial licensing fee for certain MRI products in accordance with 985-605-25-71.

Sales of the Company's Therapy segment products typically include a controller, accessories, source agreements and services. The Company allocates revenue to the deliverables in the arrangement based on the BESP in accordance with ASU 2009-13. Product revenue is generally recognized when the product has been delivered and service and/or supplies revenue is typically recognized over the life of the service and/or supplies agreement. The Company includes in service and supplies revenue the following: the sale of physics and management services, the lease of electronic brachytherapy equipment, development fees, supplies and the right to use the Company's AxxentHub software. Physics and management services revenue and development fees are considered to be delivered as the services are performed or over the estimated life of the agreement. The Company typically bills items monthly over the life of the agreement except for development fees, which are generally billed in advance or over a 12 month period and the fee for treatment supplies which is generally billed in advance.

The Company defers revenue from the sale of certain service contracts and recognizes the related revenue on a straight-line basis in accordance with ASC Topic 605-20, "Services". The Company provides for estimated warranty costs on original product warranties at the time of sale.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(1) Summary of Significant Accounting Policies (continued)

(k) Cost of Revenue

Cost of revenue consists of the costs of products purchased for resale, cost relating to service including costs of service contracts to maintain equipment after the warranty period, inbound freight and duty, manufacturing, warehousing, material movement, inspection, scrap, rework depreciation and in-house product warranty repairs, amortization of acquired technology and medical device tax. Included in cost of revenue for the twelve months ended December 31, 2016 is a credit of \$491,000 related to a refund of the Medical Device Excise Tax ("MDET"). The MDET refund of \$491,000 for the year ended December 31, 2016 related to refunds of the MDET for the periods from April 2013 to December 2015. The MDET refund was not material to any prior period or the current period; accordingly, prior periods have not been restated.

(l) Warranty Costs

The Company provides for the estimated cost of standard product warranty against defects in material and workmanship based on historical warranty trends, including the cost of product returns during the warranty period. Warranty provisions and claims for the years ended December 31, 2016, 2015 and 2014, were as follows (in thousands):

	2016	2015	2014
Beginning accrual balance	\$ 19	\$ 14	\$ 25
Warranty provision	47	54	58
Usage	(55)	(49)	(69)
Ending accrual balance	<u>\$ 11</u>	<u>\$ 19</u>	<u>\$ 14</u>

The warranty accrual above includes long-term warranty obligations of \$0, \$2,000 and \$5,000 for the years ended December 31, 2016, 2015 and 2014 respectively.

(m) Engineering and Product Development Costs

Engineering and product development costs relate to research and development efforts including Company sponsored clinical trials which are expensed as incurred.

(n) Advertising Costs

The Company expenses advertising costs as incurred. Advertising expense for the years ended December 31, 2016, 2015 and 2014 was approximately \$955,000, \$950,000 and \$882,000 respectively.

(o) Net Loss per Common Share

The Company follows FASB ASC 260-10, "Earnings per Share", which requires the presentation of both basic and diluted earnings per share on the face of the statements of operations. The Company's basic net loss per share is computed by dividing net loss by the weighted average number of shares of common stock outstanding for the period and, if there are dilutive securities, diluted income per share is computed by including common stock equivalents which includes shares issuable upon the exercise of stock options, net of shares assumed to have been purchased with the proceeds, using the treasury stock method.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(1) Summary of Significant Accounting Policies (continued)

(o) Net Loss per Common Share (continued)

A summary of the Company's calculation of net loss per share is as follows (in thousands, except per share amounts):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Net loss available to common shareholders	\$ (10,099)	\$ (32,447)	\$ (1,009)
Basic shares used in the calculation of earnings per share	15,932	15,686	14,096
Effect of dilutive securities:			
Stock options	-	-	-
Restricted stock	-	-	-
Diluted shares used in the calculation of earnings per share	15,932	15,686	14,096
Net loss per share :			
Basic	\$ (0.63)	\$ (2.07)	\$ (0.07)
Diluted	\$ (0.63)	\$ (2.07)	\$ (0.07)

The following table summarizes the number of shares of common stock for securities, warrants and restricted stock that were not included in the calculation of diluted net loss per share because such shares are antidilutive:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Common stock options	1,425,348	1,571,998	1,417,887
Restricted Stock	511,398	516,396	309,317
	<u>1,936,746</u>	<u>2,088,394</u>	<u>1,727,204</u>

Restricted common stock can be issued to directors, executives or employees of the Company and are subject to time-based vesting. These potential shares were excluded from the computation of basic loss per share as these shares are not considered outstanding until vested.

(p) Income Taxes

The Company follows the liability method under ASC Topic 740, "Income Taxes", ("ASC 740"). The primary objectives of accounting for taxes under ASC 740 are to (a) recognize the amount of tax payable for the current year and (b) recognize the amount of deferred tax liability or asset for the future tax consequences of events that have been reflected in the Company's financial statements or tax returns. The Company has provided a full valuation allowance against its deferred tax assets at December 31, 2016 and 2015, as it is more likely than not that the deferred tax asset will not be realized. Any subsequent changes in the valuation allowance will be recorded through operations in the provision (benefit) for income taxes.

ASC 740-10 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements and prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. ASC 740-10 also provides guidance on de-recognition, classification, interest and penalties, disclosure and transition.

(q) Stock-Based Compensation

The Company maintains stock based incentive plans, under which it provides stock incentives to employees, directors and contractors. The Company may grant to employees, directors and contractors, options to purchase common stock at an exercise price equal to the market value of the stock at the date of grant. The

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(1) Summary of Significant Accounting Policies (continued)

(q) Stock-Based Compensation (continued)

Company may grant restricted stock to employees and directors. The underlying shares of the restricted stock grant are not issued until the shares vest, and compensation expense is based on the stock price of the shares at the time of grant. The Company follows FASB ASC Topic 718, "Compensation – Stock Compensation" ("ASC 718"), for all stock-based compensation. Under this application, the Company is required to record compensation expense over the vesting period for all awards granted.

The Company uses the Black-Scholes option pricing model to value stock options which requires extensive use of accounting judgment and financial estimates, including estimates of the expected term participants will retain their vested stock options before exercising them, the estimated volatility of its common stock price over the expected term, the risk free rate, expected dividend yield, and the number of options that will be forfeited prior to the completion of their vesting requirements.

The fair value of restricted stock is determined based on the stock price of the underlying option on the date of the grant. The Company granted performance based restricted stock during 2016 based on achievement of certain revenue targets. Compensation cost for performance based restricted stock requires significant judgment regarding probability of the performance objectives and compensation cost is re-measured at every reporting period. As a result compensation cost could vary significantly during the performance measurement period.

Application of alternative assumptions could produce significantly different estimates of the fair value of stock-based compensation and consequently, the related amounts recognized in the Consolidated Statements of Operations.

(r) Fair Value Measurements

The Company follows the provisions of FASB ASC Topic 820, "Fair Value Measurement and Disclosures" ("ASC 820"). This topic defines fair value, establishes a framework for measuring fair value under generally accepted accounting principles and enhances disclosures about fair value measurements. Fair value is defined under ASC 820 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value under ASC 820 must maximize the use of observable inputs and minimize the use of unobservable inputs. The standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value which are the following:

- Level 1 - Quoted prices in active markets for identical assets or liabilities.
- Level 2 - Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

The Company's assets that are measured at fair value on a recurring basis relate to the Company's money market accounts.

The money market funds are included in cash and cash equivalents in the accompanying balance sheet, and are considered a level 1 investment as they are valued at quoted market prices in active markets.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(1) Summary of Significant Accounting Policies (continued)

(r) Fair Value Measurements (continued)

The following table sets forth Company's assets which are measured at fair value on a recurring basis by level within the fair value hierarchy.

Fair value measurements using: (000's) as of December 31, 2016				
	Level 1	Level 2	Level 3	Total
Assets				
Money market accounts	\$ 6,622	\$ -	\$ -	\$ 6,622
Total Assets	\$ 6,622	\$ -	\$ -	\$ 6,622

Fair value measurements using: (000's) as of December 31, 2015				
	Level 1	Level 2	Level 3	Total
Assets				
Money market accounts	\$ 13,577	\$ -	\$ -	\$ 13,577
Total Assets	\$ 13,577	\$ -	\$ -	\$ 13,577

Items Measured at Fair Value on a Nonrecurring Basis

Certain assets, including long-lived assets and goodwill, are measured at fair value on a nonrecurring basis. These assets are recognized at fair value when they are deemed to be impaired. In 2015 the Company recorded a \$27.4 million impairment consisting of \$14.0 million related to goodwill and \$13.4 million related to long-lived assets as discussed in Note (h) and Note (i) and re-measured long-lived assets and goodwill of the Therapy reporting unit at fair value as of the impairment date as noted in the following table. The fair values of long-lived assets and goodwill were measured using Level 3 inputs.

(s) Recently Issued Accounting Standards

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), or ASU 2014-09, which supersedes nearly all existing revenue recognition guidance under U.S. GAAP. Since then, the FASB has also issued ASU 2016-08, Revenue from Contracts with Customers (Topic 606), Principals versus Agent Considerations and ASU 2016-10, Revenue from Contracts with Customers (Topic 606), Identifying Performance Obligations and Licensing, which further elaborate on the original ASU No. 2014-09. The core principle of these updates is to recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration to which the entity expects to be entitled for those goods or services. ASU 2014-09 defines a five step process to achieve this core principle and, in doing so, more judgments and estimates may be required within the revenue recognition process than are required under existing U.S. GAAP. In July 2015, the FASB approved a one-year deferral of the effective date to January 1, 2018, with early adoption to be permitted as of the original effective date of January 1, 2017. Once this standard becomes effective, companies may use either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each reporting period with the option to elect certain practical expedients, or (ii) a retrospective approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption (which includes additional footnote disclosures). We have performed an initial assessment of ASU 2014-09, and expect that our revenue recognition will not be materially impacted by this new guidance. We are currently calculating the impact of all expected changes from this guidance, and expect to have these calculations complete during the second half of fiscal 2017. After completing these calculations, we will then determine the transition method to be applied upon adoption.

In February 2016, the FASB issued ASU No. 2016-02, "Leases". The standard establishes a right-of-use ("ROU") model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(1) Summary of Significant Accounting Policies (continued)

(s) Recently Issued Accounting Standards (continued)

classification affecting the pattern of expense recognition in the income statement. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. We are currently evaluating the impact of our pending adoption of the new standard on our consolidated financial statements, however the adoption of the standard is expected to increase both assets and liabilities for leases that would previously have been off-balance sheet operating leases.

In March 2016, the FASB issued ASU 2016-09, "Improvements to Employee Share-Based Payment Accounting." This update was issued as part of a simplification effort for the accounting of share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, increases the amount of employee's shares repurchased for tax withholding purposes without triggering liability accounting, an accounting policy election to account for forfeitures as they occur, and clarifies that all cash payments made on an employee's behalf for withheld shares should be presented as a financing activity on the statement of cash flows. The amendment is effective for annual periods beginning after December 15, 2016, and interim periods thereafter. Early adoption is permitted. The Company expects the adoption of ASU 2016-09 to impact net operating losses, however the Company currently has a full valuation allowance against the net operating losses.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230)", a consensus of the FASB's Emerging Issues Task Force. This update is intended to reduce diversity in practice in how certain transactions are classified in the statement of cash flows. The update requires cash payments for debt prepayment or debt extinguishment costs to be classified as cash outflows for financing activities. It also requires cash payments made soon after an acquisition's consummation date (approximately three months or less) to be classified as cash outflows for investing activities. Payments made thereafter should be classified as cash outflows for financing activities up to the amount of the original contingent consideration liability. Payments made in excess of the amount of the original contingent consideration liability should be classified as cash outflows for operating activities. The amendment is effective for annual periods beginning after December 15, 2017, and interim periods thereafter. Early adoption is permitted. The Company does not expect the adoption of this amendment will have a material impact on our consolidated financial statements.

(2) Acquisitions

Acquisition of VuComp Cancer detection portfolio

On January 13, 2016, the Company completed the acquisition of the VuCOMP cancer detection portfolio, including the M-Vu computer aided detection (CAD) technology platform. The acquisition includes an extensive library of related clinical data, VuCOMP's key personnel and the customer base that existed at closing of the transaction. The acquisition of the key personnel and clinical data is expected to contribute to the ongoing development of the Company's CAD technology which will be used for future cancer detection research and patents. As the Company considered this to be a business combination, the assets were valued in accordance with ASC Topic 805, "Business Combinations" ("ASC 805").

As noted below, the Company acquired VuComp's M-Vu Breast Density product in April 2015. In connection with the diligence of the January 2016 acquisition, VuComp disclosed that it had previously entered into a license agreement pursuant to which it issued an irrevocable, royalty free worldwide license to a third party. On December 24, 2015, iCAD notified VuComp of a claim under the April 2015 asset purchase agreement based on the disclosure of the third party license agreement, which iCAD believed constituted a breach of VuComp's representation as to its exclusive ownership of its intellectual property at the time of the April 2015 transaction. In connection with the purchase of the VuComp cancer detection portfolio, the Company provided a release of the aforementioned claim. The Company determined that this claim was a component of the purchase price. The Company determined the value of litigation settlement as the excess of the fair value of the business acquired over the cash consideration paid. As a result the Company recorded a gain on

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(2) Acquisitions (continued)

litigation settlement of \$249,000 in the first quarter of 2016, which is a component of the purchase price as noted below:

	Amount (000's)
Cash	\$ 6
Acquisition litigation settlement	249
Purchase price	\$ 255

The amount allocated to the acquired assets was estimated primarily through the use of discounted cash flow valuation techniques. Appraisal assumptions utilized under this method include a forecast of estimated future net cash flows, as well as discounting the future net cash flows to their present value. The following is a summary of the allocation of the total purchase price based on the estimated fair values as of the date of the acquisition and the amortizable life:

	Amount (000's)	Estimated amortizable life
Current assets	\$ 84	
Property and equipment	65	3 Years
Identifiable intangible assets	699	1-10 Years
Goodwill	293	
Current liabilities	(280)	
Long-term liabilities	(606)	
Purchase price	\$ 255	

The assets obtained in the acquisition of VuComp's M-Vu Cancer detection portfolio (including the M-Vu breast density product) and the anticipated future revenues are included in the Detection segment and, accordingly, the goodwill resulting from the purchase price allocation is included in goodwill of the Detection segment. The Company has tax basis in the goodwill that resulted from the VuComp acquisition of \$293,000 which is amortized over a 15 year period. Included in revenue of the Detection segment for the year ended December 31, 2016 is approximately \$0.2 million as a result of this acquisition. Pro forma results of operations have not been presented because the effect of the business combination was not material to our consolidated financial results.

Acquisition of VuComp M-Vu Breast Density Assets:

On April 29, 2015, pursuant to the terms of the Asset Purchase Agreement with VuComp, the Company purchased VuComp's M-Vu Breast Density asset for \$1,700,000 in cash. The Company considered the acquisition to be an acquisition of a business as the Company acquired the Breast Density product and certain customer liabilities which were considered to be an integrated set of activities at acquisition. Under the terms of the agreement, the Company acquired the breast density intellectual property product, which has been integrated with the Company's PowerLook Advanced Mammography Platform (AMP). PowerLook AMP is a modular solution designed to provide advanced tools for breast disease detection and analysis, including CAD for tomosynthesis. As the Company considered this to be a business combination, the assets were valued in accordance with ASC Topic 805, "Business Combinations" ("ASC 805").

The amount allocated to the acquired assets was estimated primarily through the use of discounted cash flow valuation techniques. Appraisal assumptions utilized under this method include a forecast of estimated future net cash flows, as well as discounting the future net cash flows to their present value. The acquired technology

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(2) Acquisitions (continued)

is being amortized over the estimated useful life of approximately eight years and nine months from the closing of the transaction. The following is a summary of the allocation of the total purchase price based on the estimated fair values as of the date of the acquisition and the amortizable life (in thousands):

	Amount	Estimated Amortizable Life
Developed Technology	\$ 900	8 years 9 months
Goodwill	800	
Purchase price	\$ 1,700	

The assets obtained in the acquisition of VuComp's M-Vu Breast Density product and the anticipated future revenues are included in the Detection segment and, accordingly, the goodwill resulting from the purchase price allocation is included in goodwill of the Detection segment. The goodwill is deductible for income tax purposes.

(3) Assets and Liabilities Held for Sale

In December, 2016, the Company entered into an Asset Purchase Agreement with Invivo Corporation. In accordance with the agreement, the Company sold to Invivo all right, title and interest to certain intellectual property relating to the Company's VersaVue Software and DynaCAD product and related assets for \$3.2 million. The Company closed the transaction in January 2017 less a holdback reserve of \$350,000 for a net of approximately \$2.9 million.

In accordance with ASC 360-10-35-43, the Company determined that it had assets held for sale as of December 31, 2016. The Company performed an evaluation to determine if the sale constituted discontinued operations and concluded that the sale did not represent a major strategic shift, and accordingly it is not presented as discontinued operations.

In addition the Company determined the sale constituted the sale of a business in accordance with ASC 805. In connection with the transaction, the Company allocated \$394,000 of goodwill to assets held for sale. The allocation was based on the fair value of the assets sold relative to the fair value of the Detection reporting unit as of the date of the agreement, based on the guidance from ASC 350-20-40-3.

Assets and liabilities held for sale at December 31, 2016 are as follows (in thousands):

Assets Held for Sale	
Accounts Receivable	\$ 98
Inventory	2
Intangible assets	810
Allocated Goodwill	394
Total	1,304
Liabilities Held for Sale	
Deferred Revenue	\$ 832
Total	\$ 832

The Company expects to record an approximate gain of \$2.5 million as of the closing date.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

4 Financing Arrangements

In December, 2011, the Company entered into several agreements with entities affiliated with Deerfield Management, a healthcare investment fund (“Deerfield”), pursuant to which Deerfield agreed to provide \$15 million in funding to the Company. The agreements consisted of a Facility Agreement (the “Facility Agreement”), a Revenue Purchase Agreement (the “Revenue Purchase Agreement”) and the issuance of warrants to purchase up to 550,000 shares of the Company’s common stock at an exercise price of \$3.50 (the “Warrants”).

On April 30, 2014, the Company agreed to pay Deerfield \$4.1 million to terminate the Revenue Purchase Agreement, which eliminated the ability to extend the last debt payment for an additional year and eliminated the payment obligation for 2017 under the Revenue Purchase Agreement. The Company recorded a loss of \$0.9 million in connection with termination of the Revenue Purchase Agreement. In addition, Deerfield exercised their Warrants, for an aggregate purchase price of \$1,575,000, and the Company issued 450,000 shares of common stock to Deerfield, pursuant to the terms of the Warrants. The Warrants to purchase an additional 100,000 shares of common stock were cancelled, since these Warrants were exercisable only in the event the Company extended the last debt payment for an additional year.

On March 31, 2015, the Company repaid in full the aggregate amount outstanding under the Deerfield Facility Agreement. The Facility Agreement was to mature on December 29, 2016 and was able to be repaid prior to the maturity date at the Company’s option without penalty or premium. The Company used cash on hand to pay the \$11.25 million outstanding principal amount due under the Facility Agreement and approximately \$162,000 in accrued and unpaid interest on such principal amount.

The Company recorded a loss on the extinguishment of debt of approximately \$17 million at the termination date in the quarter ended March 31, 2015.

The following amounts are included in interest expense in our consolidated statement of operations for the years ended December 31, 2016 and 2015 (in thousands):

	December 31, 2016	December 31, 2015
Cash interest expense	\$ -	\$ 163
Non-cash amortization of debt discount	-	254
Amortization of debt costs	-	13
Amortization of settlement obligations	82	146
Interest expense capital lease	70	220
Capital lease - fair value amortization	(89)	(146)
Total interest expense	\$ 63	\$ 650

Cash interest expense represents the amount of interest paid in cash under the agreements, which represents the interest of 5.75% on the Facility Agreement that was terminated in March 2015. Non-cash amortization is the amortization of the discount on the Facility Agreement. The amortization of debt costs represents the costs incurred with the financing, which is primarily the facility fee and the finder’s fee which had been capitalized and was expensed using the effective interest method. The facility fee and finders fee were written off with the termination of the Facility Agreement and were included in the loss on extinguishment of debt. The amortization of the settlement obligations represent the interest associated with the settlement agreements for both Zeiss and Hologic, Inc. (“Hologic”), see Note 9(f) to our Consolidated Financial Statements.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(5) Accrued Expenses

Accrued expenses consist of the following at December 31 (in thousands):

	2016	2015
Accrued salary and related expenses	\$ 1,878	\$ 1,765
Accrued accounts payable	2,269	1,518
Accrued professional fees	316	425
Accrued short term settlement costs	474	418
Other accrued expenses	48	52
Deferred rent	3	42
	<u>\$ 4,988</u>	<u>\$ 4,220</u>

(6) Stockholders' Equity

(a) Stock Options

The Company has five stock option or stock incentive plans, which are described as follows:

The 2002 Stock Option Plan (the "2002 Plan").

The 2002 Plan was adopted by the Company's stockholders in June 2002. The 2002 Plan provides for the granting of non-qualifying and incentive stock options to employees and other persons to purchase up to an aggregate of 100,000 shares of the Company's common stock. The purchase price of each share for which an option is granted is determined by the Board of Directors or the Committee appointed by the Board of Directors provided that the purchase price of each share for which an incentive option is granted cannot be less than the fair market value of the Company's common stock on the date of grant, except for options granted to 10% stockholders for whom the exercise price cannot be less than 110% of the market price. Incentive options granted to date under the 2002 Plan vest 100% over periods extending from six months to five years from the date of grant and expire no later than ten years after the date of grant, except for 10% holders whose options expire not later than five years after the date of grant. Non-qualifying options granted under the 2002 Plan are generally exercisable over a ten year period, vesting 1/3 each on the first, second, and third anniversaries of the date of grant. At December 31, 2016, there are no further options available for grant under the 2002 Plan.

The 2004 Stock Incentive Plan (the "2004 Plan").

The 2004 Plan was adopted by the Company's stockholders in June 2004. The 2004 Plan provides for the grant of any or all of the following types of awards: (a) stock options, (b) restricted stock, (c) deferred stock and (d) other stock-based awards. The 2004 Plan provides for the granting of non-qualifying and incentive stock options to employees and other persons to purchase up to an aggregate of 200,000 shares of the Company's common stock. The purchase price of each share for which an option is granted is determined by the Board of Directors or the Committee appointed by the Board of Directors provided that the purchase price of each share for which an option is granted cannot be less than the fair market value of the Company's common stock on the date of grant, except for incentive options granted to 10% stockholders for whom the exercise price cannot be less than 110% of the market price. Incentive options granted under the 2004 Plan generally vest 100% over periods extending from the date of grant to five years from the date of grant and expire not later than ten years after the date of grant, except for 10% holders whose options expire not later than five years after the date of grant. Non-qualifying options granted under the 2004 Plan are generally exercisable over a ten year period, vesting 1/3 each on the first, second, and third anniversaries of the date of grant. At December 31, 2016, there are no further shares available for grant under the 2004 Plan.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(6) Stockholders' Equity (continued)

(a) Stock Options (continued)

The 2005 Stock Incentive Plan (the "2005 Plan").

The 2005 Plan was adopted by the Company's stockholders in June 2005. The 2005 Plan provides for the grant of any or all of the following types of awards: (a) stock options, (b) restricted stock, (c) deferred stock and (d) other stock-based awards. The 2005 Plan provides for the granting of non-qualifying and incentive stock options to employees and other persons to purchase up to an aggregate of 120,000 shares of the Company's common stock. The purchase price of each share for which an option is granted is determined by the Board of Directors or the Committee appointed by the Board of Directors provided that the purchase price of each share for which an option is granted cannot be less than the fair market value of the Company's common stock on the date of grant, except for incentive options granted to 10% stockholders for whom the exercise price cannot be less than 110% of the market price. Incentive options granted under the 2005 Plan generally vest 100% over periods extending from the date of grant to three years from the date of grant and expire not later than five years after the date of grant, except for 10% stockholders whose options expire not later than five years after the date of grant. Non-qualifying options granted under the 2005 Plan are generally exercisable over a ten year period, vesting 1/3 each on the first, second, and third anniversaries of the date of grant. At December 31, 2016, there are no further options available for grant under the 2005 Plan.

The 2007 Stock Incentive Plan (the "2007 Plan").

The 2007 Plan was adopted by the Company's stockholders in July 2007 and amended in June 2009. The 2007 Plan provides for the grant of any or all of the following types of awards: (a) stock options, (b) restricted stock, (c) deferred stock and (d) other stock-based awards. Awards may be granted singly, in combination, or in tandem. Subject to anti-dilution adjustments as provided in the 2007 Plan, (i) the 2007 Plan provides for a total of 1,050,000 shares of the Company's common stock to be available for distribution pursuant to the 2007 Plan, and (ii) the maximum number of shares of the Company's common stock with respect to which stock options, restricted stock, deferred stock or other stock-based awards may be granted to any participant under the 2007 Plan during any calendar year or part of a year may not exceed 160,000 shares.

The 2007 Plan provides that it will be administered by the Company's Board of Directors ("Board") or a committee of two or more members of the Board appointed by the Board. The administrator will generally have the authority to administer the 2007 Plan, determine participants who will be granted awards under the 2007 Plan, the size and types of awards, the terms and conditions of awards and the form and content of the award agreements representing awards. Awards under the 2007 Plan may be granted to employees, directors, consultants and advisors of the Company and its subsidiaries. However, only employees of the Company and its subsidiaries will be eligible to receive options that are designated as incentive stock options.

With respect to options granted under the 2007 Plan, the exercise price must be at least 100% (110% in the case of an incentive stock option granted to a 10% stockholder) of the fair market value of the common stock subject to the award, determined as of the date of grant. Restricted stock awards are shares of common stock that are awarded subject to the satisfaction of the terms and conditions established by the administrator. In general, awards that do not require exercise may be made in exchange for such lawful consideration, including services, as determined by the administrator. At December 31, 2016, there were 57,260 shares available for issuance under the 2007 Plan.

The 2012 Stock Incentive Plan (the "2012 Plan").

The 2012 Plan was adopted by the Company's stockholders in May 2012 and amended in May 2014. The 2012 Plan, as amended, provides for the grant of any or all of the following types of awards: (a) stock options, (b) restricted stock, (c) deferred stock and (d) other stock-based awards. Awards may be granted singly, in combination, or in tandem. Subject to anti-dilution adjustments as provided in the amended 2012 Plan, (i) the amended 2012 Plan provides for a total of 1,600,000 shares of the Company's common stock to be available for distribution pursuant to the amended 2012 Plan, and (ii) the maximum number of shares of the Company's common stock with respect to which stock options, restricted stock, deferred stock or other stock-based awards may be granted to any participant under the amended 2012 Plan during any calendar year or part of a year may not exceed 250,000 shares.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(6) Stockholders' Equity (continued)

(a) Stock Options (continued)

The 2012 Plan provides that it will be administered by the Company's Board of Directors ("Board") or a committee of two or more members of the Board appointed by the Board. The administrator will generally have the authority to administer the 2012 Plan, determine participants who will be granted awards under the 2012 Plan, the size and types of awards, the terms and conditions of awards and the form and content of the award agreements representing awards. Awards under the 2012 Plan may be granted to employees, directors, consultants and advisors of the Company and its subsidiaries. However, only employees of the Company and its subsidiaries will be eligible to receive options that are designated as incentive stock options.

With respect to options granted under the 2012 Plan, the exercise price must be at least 100% (110% in the case of an incentive stock option granted to a 10% stockholder) of the fair market value of the common stock subject to the award, determined as of the date of grant. Restricted stock awards are shares of common stock that are awarded subject to the satisfaction of the terms and conditions established by the administrator. In general, awards that do not require exercise may be made in exchange for such lawful consideration, including services, as determined by the administrator. At December 31, 2016, there were 155,964 shares available for issuance under the 2012 Plan.

The 2016 Stock Incentive Plan (the "2016 Plan").

The 2016 Plan was adopted by the Company's stockholders in May 2016. The 2016 Plan provides for the grant of any or all of the following types of awards: (a) non-qualified stock options and incentive stock options, (b) stock appreciation rights, (c) restricted stock awards and restricted stock units, (d) unrestricted stock awards, (e) cash-based awards, (f) performance share awards and (g) dividend equivalent rights.

Subject to anti-dilution adjustments as provided in the 2016 Plan, (i) the 2016 Plan provides for a total of 1,700,000 shares of the Company's common stock to be available for distribution pursuant to the 2016 Plan, and (ii) the maximum number of shares of the Company's common stock with respect to which stock options or stock appreciation rights may be granted to any one individual under the 2016 Plan during any one calendar year period may not exceed 1,000,000 shares. No more than 1,000,000 shares of common stock may be issued in the form of incentive stock options and no more than 50,000 shares of stock may be issued pursuant to awards to non-employee directors.

The 2016 Plan provides that it will be administered by the Company's Compensation Committee. The Compensation Committee has the authority to administer the 2016 Plan, determine participants, from among the individuals eligible for awards, who will be granted awards under the 2016 Plan, make any combination of awards to participants and determine the specific terms and conditions of awards subject to the 2016 Plan. Awards under the 2016 Plan may be granted to full or part-time officers, employees, non-employee directors and other key persons (including consultants) of the Company and its subsidiaries.

With respect to stock options granted under the 2016 Plan, the exercise price will be determined by the Compensation Committee but may not be less than 100% of the fair market value of the common stock subject to the award, determined as of the date of grant. Regarding incentive stock options, including that the aggregate grant date fair market value of the shares of stock with respect to which incentive stock options granted under the 2016 Plan and any other plan of the Company or its parent and subsidiary corporations become exercisable for the first time by an optionee during any calendar year shall not exceed \$100,000. To the extent that any incentive stock option exceeds this limit, it shall constitute a non-qualified stock option. Restricted stock awards are shares of common stock that are awarded subject to the satisfaction of the terms and conditions established by the Compensation Committee. In general, awards that do not require exercise may be made in exchange for such lawful consideration, including services, as determined by the Compensation Committee. At December 31, 2016, there were 1,269,722 shares available for issuance under the 2016 Plan.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(6) Stockholders' Equity (continued)

(a) Stock Options (continued)

A summary of stock option activity for all stock option plans is as follows:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Outstanding, January 1, 2014	1,334,955	\$4.75	
Granted	281,043	\$8.08	
Exercised	(162,528)	\$4.36	
Forfeited	(35,583)	\$13.62	
Outstanding, December 31, 2014	1,417,887	\$4.34	
Granted	363,239	\$6.58	
Exercised	(79,472)	\$4.60	
Forfeited	(129,656)	\$7.38	
Outstanding, December 31, 2015	1,571,998	\$5.05	
Granted	127,500	\$5.46	
Exercised	(75,583)	\$2.62	
Forfeited	(198,567)	\$6.19	
Outstanding, December 31, 2016	1,425,348	\$5.05	6.1 years
Exercisable at December 31, 2014	955,210	\$4.43	
Exercisable at December 31, 2015	1,087,725	\$4.33	
Exercisable at December 31, 2016	1,054,211	\$4.71	5.2 years

Available for future grants at December 31, 2016 from all plans: 1,482,947

The Company's stock based compensation expense, including options and restricted stock category is as follows (amounts in thousands):

	Years Ended December 31,		
	2016	2015	2014
Cost of revenue	\$ 6	\$ 14	\$ 13
Engineering and product development	329	223	165
Marketing and sales	677	659	353
General and administrative expense	1,295	1,239	787
	\$ 2,307	\$ 2,135	\$ 1,318

As of December 31, 2016, there was \$3.8 million of total unrecognized compensation costs related to unvested options and restricted stock. That cost is expected to be recognized over a weighted average period of 11 years.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(6) Stockholders' Equity (continued)

(a) Stock Options (continued)

Options granted under the stock incentive plans were valued utilizing the Black-Scholes model using the following assumptions and had the following fair values:

	Years Ended December 31,		
	2016	2015	2014
Average risk-free interest rate	0.98%	0.97%	0.85%
Expected dividend yield	None	None	None
Expected life	3.5 years	3.5 years	3.5 years
Expected volatility	68.5% to 75.3%	60.5% to 75.2%	64.2% to 69.4%
Weighted average exercise price	\$5.46	\$6.58	\$8.09
Weighted average fair value	\$2.66	\$3.17	\$3.84

The Company's 2016, 2015 and 2014, average expected volatility and average expected life is based on the average of the Company's historical information. The risk-free rate is based on the rate of U.S. Treasury zero-coupon issues with a remaining term equal to the expected life of option grants. The Company has paid no dividends on its common stock in the past and does not anticipate paying any dividends in the future.

Intrinsic values of options (in thousands) and the closing market price used to determine the intrinsic values are as follows:

	Years Ended December 31,		
	2016	2015	2014
Outstanding	\$ 409	\$ 1,910	\$ 6,343
Exercisable	409	1,610	4,624
Exercised	201	317	1,081
stock price at 12/31	\$ 3.24	\$ 5.17	\$ 9.17

(b) Restricted Stock

The Company's restricted stock awards typically vest in either one year or three equal annual installments with the first installment vesting one year from grant date. The Company granted a total of 162,500 shares of performance based restricted stock during 2016 with performance measured on meeting a revenue target based on growth for fiscal year 2017 and vesting in three equal installments with the first installment vesting upon measurement of the goal. In addition, a maximum of 108,333 additional shares are available to be earned based on exceeding the revenue goal. Assumptions used to determine the value of performance based grants of restricted stock include the probability of achievement of the specified revenue targets. Compensation cost for performance based restricted stock requires significant judgment regarding probability of achieving the performance objectives and compensation cost is re-measured at every reporting period. As a result compensation cost could vary significantly during the performance measurement period.

A summary of restricted stock activity for all equity incentive plans is as follows:

	Years Ended December 31,		
	2016	2015	2014
Beginning outstanding balance	516,396	309,317	216,250
Granted	345,778	352,666	180,500
Vested	(289,030)	(124,758)	(85,434)
Forfeited	(61,746)	(20,829)	(1,999)
Ending outstanding balance	<u>511,398</u>	<u>516,396</u>	<u>309,317</u>

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(6) Stockholders' Equity (continued)

(b) Restricted Stock (continued)

Intrinsic values of restricted stock (in thousands) and the closing market price used to determine the intrinsic values are as follows:

	Years Ended December 31,		
	2016	2015	2014
Outstanding	\$ 1,657	\$ 2,670	\$ 2,836
Vested	936	645	783
stock price at 12/31	\$ 3.24	\$ 5.17	\$ 9.17

(7) Income Taxes

The components of income tax expense for the years ended December 31, 2016, 2015 and 2014 are as follows (in thousands):

	2016	2015	2014
Current provision (benefit):			
Federal	\$ -	\$ -	\$ (44)
State	69	95	118
	\$ 69	\$ 95	\$ 74
Deferred provision:			
Federal	\$ 6	\$ (65)	\$ 65
State	1	(14)	14
	\$ 7	\$ (79)	\$ 79
Total	\$ 76	\$ 16	\$ 153

A summary of the differences between the Company's effective income tax rate and the Federal statutory income tax rate for the years ended December 31, 2016, 2015 and 2014 is as follows:

	2016	2015	2014
Federal statutory rate	34.0%	34.0%	34.0%
State income taxes, net of federal benefit	2.8%	2.5%	5.5%
Net state impact of deferred rate change	0.2%	(0.1%)	13.0%
Stock compensation expense	(3.2%)	(10.7%)	(9.6%)
Tax amortization on goodwill	(0.1%)	0.2%	(9.0%)
Loss on warrant	0.0%	0.0%	71.6%
Other permanent differences	(0.4%)	(0.1%)	(1.1%)
Change in valuation allowance	(37.3%)	(26.6%)	(222.6%)
Tax credits	3.2%	0.9%	100.8%
Effective income tax	(0.8%)	0.1%	(17.4%)

Deferred tax assets and liabilities are recognized for the expected future tax consequences of net operating loss carryforwards, tax credit carryforwards and temporary differences between the financial statement carrying amounts and the income tax basis of assets and liabilities. A valuation allowance is applied against any net deferred tax asset if, based on the available evidence, it is more likely than not that the deferred tax assets will not be realized.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(7) Income Taxes (continued)

Deferred income taxes reflect the impact of “temporary differences” between the amount of assets and liabilities for financial reporting purposes and such amounts as measured by tax laws and regulations. The Company has fully reserved the net deferred tax assets, as it is more likely than not that the deferred tax assets will not be utilized. Deferred tax assets (liabilities) are composed of the following at December 31 (in thousands):

	2016	2015
Inventory (Section 263A)	\$ 418	\$ 588
Inventory reserves	105	106
Receivable reserves	65	159
Other accruals	434	591
Deferred revenue	215	367
Accumulated depreciation/amortization	477	417
Stock options	2,558	2,529
Developed technology	3,594	3,554
Tax credits	3,090	2,765
NOL carryforward	40,865	36,706
Net deferred tax assets	51,821	47,782
Valuation allowance	(51,821)	(47,782)
Goodwill tax amortization	(7)	
Deferred tax liability	\$ (7)	\$ -

The increase in net deferred tax assets and corresponding valuation allowance is primarily attributed to additional net operating losses, additional research and development credits, and differences in amortization periods on the Company’s intangible assets. The Company completed an asset acquisition in January 2016 which resulted in \$293,307 of goodwill. For book purposes, the goodwill was classified as an indefinite lived asset and tested for impairment each year. For tax, the Company is allowed amortization expense over a 15 year life. Due to the indefinite life of the asset for book purposes, the Company could not assume there would be a deferred tax asset available to offset the liability in future years. This created a tax expense in 2016 equal to the tax effected amount of tax amortization, or \$6,844 in 2016.

As of December 31, 2016, the Company has net operating loss carryforwards totaling approximately \$111.7 million expiring between 2019 and 2036. A portion of the total net operating loss carryforwards amounting to approximately \$35.3 million relate to the acquisition of Xoft, Inc. As of December 31, 2016, the Company has provided a valuation allowance for its net operating loss carryforwards due to the uncertainty of the Company’s ability to generate sufficient taxable income in future years to obtain the benefit from the utilization of the net operating loss carryforwards. In the event of a deemed change in control, an annual limitation imposed on the utilization of the net operating losses may result in the expiration of all or a portion of the net operating loss carryforwards. There were no net operating losses utilized for the years ended December 31, 2016 or 2015.

The Company currently has approximately \$13.8 million (including approximately \$9.5 million that relate to Xoft, Inc.) in net operating losses that are subject to limitations, of which approximately \$2.0 million (including approximately \$473,000 that relates to Xoft, Inc.) can be used annually through 2035. The Company has available tax credit carryforwards (adjusted to reflect provisions of the Tax Reform Act of 1986) to offset future income tax liabilities totaling approximately \$3.1 million. The tax credits related to Xoft have been fully reserved for and as a result no deferred tax asset has been recorded. The credits expire in various years through 2036.

ASC 740-10 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return and also provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(7) Income Taxes (continued)

As of December 31, 2016 and 2015, the Company had no unrecognized tax benefits and no adjustments to liabilities or operations were required under ASC 740-10. The Company's practice is to recognize interest and penalty expenses related to uncertain tax positions in income tax expense, which was zero for the years ended December 31, 2016, 2015 and 2014. The Company files United States federal and various state income tax returns. Generally, the Company's three preceding tax years remain subject to examination by federal and state taxing authorities. The Company completed an examination by the Internal Revenue Service with respect to the 2008 tax year in January 2011, which resulted in no changes to the tax return originally filed. The Company is not under examination in any other federal or state jurisdiction for any tax year.

The Company does not anticipate that it is reasonably possible that unrecognized tax benefits as of December 31, 2016 will significantly change within the next 12 months.

(8) Segment Reporting, Geographical Information and Major Customers

(a) Segment Reporting

In accordance with FASB Topic ASC 280, "Segments", operating segments are defined as components of an enterprise that engage in business activities for which discrete financial information is available and regularly reviewed by the chief operating decision maker ("CODM") in deciding how to allocate resources and assess performance.

The Company's CODM is the Chief Executive Officer ("CEO"). Each reportable segment generates revenue from the sale of medical equipment and related services and/or sale of supplies. The Company has determined there are two segments: Cancer Detection and Cancer Therapy.

The Detection segment consists of our advanced image analysis and workflow products, and the Therapy segment consists of our radiation therapy ("Axxent") products, and related services. The primary factors used by our CODM to allocate resources are based on revenues, gross profit, operating income or loss, and earnings or loss before interest, taxes, depreciation, amortization, and other specific and non-recurring items ("Adjusted EBITDA") of each segment. Included in segment operating income are stock compensation, amortization of technology and depreciation expense. There are no intersegment revenues.

We do not track our assets by operating segment and our CODM does not use asset information by segment to allocate resources or make operating decisions.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(8) Segment Reporting, Geographical Information and Major Customers (continued)

(a) Segment Reporting (continued)

Segment revenues, gross profit, segment operating income or loss, and a reconciliation of segment operating income or loss to GAAP loss before income tax is as follows (in thousands, including prior periods which have been presented for consistency):

	Year Ended December 31,		
	2016	2015	2014
Segment revenues:			
Detection	\$ 17,133	\$ 19,243	\$ 18,604
Therapy	9,205	22,311	25,320
Total Revenue	\$ 26,338	\$ 41,554	\$ 43,924
Segment gross profit:			
Detection	\$ 15,113	\$ 16,019	\$ 15,276
Therapy	3,405	13,331	15,951
Segment gross profit	\$ 18,518	\$ 29,350	\$ 31,227
Segment operating income (loss):			
Detection	\$ 5,694	\$ 7,233	\$ 7,231
Therapy	(7,752)	(28,405)	1,868
Segment operating income (loss)	\$ (2,058)	\$ (21,172)	\$ 9,099
General, administrative, depreciation and amortization expense	\$ (7,912)	\$ (8,907)	\$ (8,284)
Interest expense	(63)	(650)	(2,640)
Gain (loss) on fair value of warrant	-	-	1,835
Other income	10	21	37
Loss on debt extinguishment	-	(1,723)	(903)
Loss before income tax	\$ (10,023)	\$ (32,431)	\$ (856)

Segment depreciation and amortization included in segment operating income (loss) is as follows (in thousands):

Detection depreciation and amortization			
Depreciation	\$ 223	\$ 220	\$ 188
Amortization	696	532	515
Therapy depreciation and amortization			
Depreciation	\$ 970	\$ 1,142	\$ 844
Amortization	252	1,213	1,739

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(8) Segment Reporting, Geographical Information and Major Customers (continued)

(b) Geographic Information

The Company's sales are made to customers, distributors and dealers of mammography, electronic brachytherapy equipment and other medical equipment, and to foreign distributors of mammography and electronic brachytherapy equipment. Export sales to a single country did not exceed 10% of total revenue in any year. Total export sales were approximately \$2.3 million or 9% of total revenue in 2016, \$2.3 million or 6% of total revenue in 2015 and \$1.8 million or 4% of total revenue in 2014.

As of December 31, 2016 and 2015, the Company had outstanding receivables of \$0.3 million and \$0.5 million, respectively, from distributors and customers of its products who are located outside of the U.S.

(c) Major Customers

The Company had one major customer, GE Healthcare, with revenues of approximately \$3.9 million in 2016, \$4.1 million in 2015, and \$4.1 million in 2014 or 15%, 10%, and 9% of total revenue, respectively. Cancer detection products are also sold through OEM partners, including GE Healthcare, Fuji Medical Systems, Siemens Medical, Vital Images and Invivo. For the year ended December 31, 2016, these five OEM partners composed approximately 47% of Detection revenues and 30% of revenue overall. OEM partners composed 53% of Detection revenues and 25% of revenue overall for the year ended December 31, 2015 and 53% of Detection revenues and 22% of revenue overall for the year ended December 31, 2014.

OEM partners represented \$1.5 million or 28% of outstanding receivables as of December 31, 2016, with GE Healthcare accounting for \$1.3 million or 23% of this amount. The two largest Cancer Therapy customers composed \$0.6 million or 12% of outstanding receivables as of December 31, 2016. These six customers in total represented \$2.1 million or 40% of outstanding receivables as of December 31, 2016.

(9) Commitments and Contingencies

(a) Lease Obligations

As of December 31, 2016, the Company had three lease obligations related to its facilities. The Company's executive offices are leased pursuant to a five-year lease (the "Lease") that commenced on December 15, 2006, with renewals in January, 2012 and August 2016 consisting of approximately 11,000 square feet of office space located at 98 Spit Brook Road, Suite 100 in Nashua, New Hampshire (the "Premises"). The August 2016 Lease renewal provides for an annual base rent of \$184,518 for the period from March 2017 to February 2020. Additionally, the Company is required to pay its proportionate share of the building and real estate tax expenses and obtain insurance for the Premises.

The Company leases a facility in San Jose California under a non-cancelable operating lease which commenced in September, 2012. The facility has approximately 24,250 square feet of office, manufacturing and warehousing space. The operating lease commenced September 2012 with a current annual payment of \$295,140 through September 2017, with all amounts payable in equal monthly installments. In September 2016, the Company extended this lease for the period from October 2017 to March 2020 with annual payments of \$540,588 from October 2017 to September 2018, \$558,120 from October 2018 to September 2019 and \$286,368 for the period from October 2019 to March 2020, with all amounts payable in equal monthly installments. Additionally, the Company is required to pay its proportionate share of the building and real estate tax expenses and obtain insurance for the facility.

In addition to the foregoing leases relating to its principal properties, the Company also has a lease for an additional facility in Nashua, New Hampshire used for product repairs, manufacturing and warehousing.

Rent expense for all leases for the years ended December 31, 2016, 2015 and 2014 was \$745,000, \$663,000 and \$643,000, respectively.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

9 Commitments and Contingencies (continued)

(a) Lease Obligations (continued)

Future minimum rental payments due under these agreements as of December 31, 2016 are as follows (in thousands):

Fiscal Year	Operating Leases
2017	\$ 579
2018	738
2019	746
2020	174
Total	\$ 2,237

(b) Capital lease obligations

In connection with the acquisition of the assets of DermEbx and Radion in 2014, the Company assumed two separate equipment lease obligations with payments totaling approximately \$2.6 million through May, 2017. The leases were determined to be capital leases and accordingly the equipment was capitalized and a liability of \$2.5 million was recorded. As of December 31, 2016, the outstanding liability for the acquired equipment leases was approximately \$0.1 million.

Future minimum lease payments under all outstanding capital leases are as follows (in thousands):

Fiscal Year	Capital Leases
2017	\$ 89
subtotal minimum lease obligation	89
less interest	(3)
Total, net	86
less current portion	(86)
Long term portion	\$ -

Related Party Lease:

Kamal Gogineni is an employee of one of the Company's subsidiaries and a shareholder of the Company's common stock. Additionally, Mr. Gogineni is a shareholder of Radion Capital Partners ("RCP"). RCP was the lessor under a lease between RCP and DermEbx (the "Lease"). In connection with the Company's acquisition of assets of Radion and DermEbx that closed in July 2014, one of the assets and obligations that the Company acquired was the Lease. Pursuant to the Lease, the Company is obligated to pay a total of \$0.1 million and the liability is included in the minimum lease payments above, with remaining annual payments of \$76,000 in 2017.

(c) Other Commitments

The Company has non-cancelable purchase orders with three key suppliers executed in the normal course of business that total approximately \$0.3 million. In connection with our employee savings plans, our matching contribution for 2016 was approximately \$0.4 million in cash. Our matching contribution for 2017 is estimated to be approximately \$0.5 million in cash.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(9) Commitments and Contingencies (continued)

(d) Employment Agreements

The Company has entered into employment agreements with certain key executives. The employment agreements provide for minimum annual salaries and performance-based annual bonus compensation as defined in their respective agreements. In addition, the employment agreements provide that if employment is terminated without cause, the executive will receive an amount equal to their respective base salary then in effect for the greater of the remainder of the original term of employment or, for Mr. Ferry, a period of two years from the date of termination, for Mr. Christopher and Ms. Stevens, a period of eighteen months from the date of termination, in each case, plus the pro rata portion of any annual bonus earned in any employment year through the date of termination.

(e) Foreign Tax Claim

In July 2007, a dissolved former Canadian subsidiary of the Company, CADx Medical Systems Inc. (“CADx Medical”), received a tax re-assessment of approximately \$6,800,000 from the Canada Revenue Agency (“CRA”) resulting from CRA’s audit of CADx Medical’s Canadian federal tax return for the year ended December 31, 2002. In February 2010, the CRA reviewed the matter and reduced the tax re-assessment to approximately \$703,000, excluding interest and penalties. The CRA has the right to pursue the matter until July 2017. The Company believes that it is not liable for the re-assessment against CADx Medical and continues to defend this position. As the Company believes that a probability of a loss is remote, no accrual was recorded as of December 31, 2016.

(f) Royalty Obligations

In connection with prior litigation, the Company received a nonexclusive, irrevocable, perpetual, worldwide license, including the right to sublicense certain Hologic patents, and a non-compete covenant as well as an agreement not to seek further damages with respect to the alleged patent violations. In return the Company had a remaining obligation to pay a minimum annual royalty payment of \$250,000 payable through 2016. In addition to the minimum annual royalty payments, the litigation settlement agreement with Hologic also provides for payment of royalties if such royalties exceed the minimum payment based upon a specified percentage of future net sales on any products that practice the licensed rights. The estimated fair value of the patent license and non-compete covenant is \$100,000 and is being amortized over the estimated remaining useful life of approximately four years. In addition, a liability has been recorded within accrued expenses and accounts payable for future payment and for minimum royalty obligations totaling \$0.4 million.

During December, 2011, the Company settled litigation with Zeiss and as of December 31, 2016, has a remaining obligation to pay \$0.5 million in June 2017. The present value of the liability is estimated at approximately \$0.4 million as of December 31, 2016.

(g) Litigation

The Company may be a party to various legal proceedings and claims arising out of the ordinary course of its business. Although the final results of all such matters and claims cannot be predicted with certainty, the Company currently believes that there are no current proceedings or claims pending against it of which the ultimate resolution would have a material adverse effect on its financial condition or results of operations. However, should we fail to prevail in any legal matter or should several legal matters be resolved against us in the same reporting period, such matters could have a material adverse effect on our operating results and cash flows for that particular period. In all cases, at each reporting period, the Company evaluates whether or not a potential loss amount or a potential range of loss is probable and reasonably estimable under ASC 450, Contingencies. Legal costs are expensed as incurred.

iCAD, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements (continued)

(10) Quarterly Financial Data (in thousands, except per share data, and unaudited)

	Net sales	Gross profit	Net loss	Income (loss) per share	Weighted average number of shares outstanding
<u>2016</u>					
First quarter	\$ 6,038	\$ 4,186	\$ (2,533)	(\$0.16)	15,826
Second quarter	7,369	5,702	\$ (1,575)	(\$0.10)	15,904
Third quarter	6,003	4,101	\$ (2,675)	(\$0.17)	15,957
Fourth quarter	6,928	4,529	\$ (3,316)	(\$0.20)	16,214
<u>2015</u>					
First quarter	\$ 13,220	\$ 9,362	\$ (1,857)	(\$0.12)	15,605
Second quarter	11,143	7,878	\$ (27,786) *	(\$1.77)	15,679
Third quarter	9,582	6,821	\$ (402)	(\$0.03)	15,725
Fourth quarter	7,609	5,289	\$ (2,402)	(\$0.15)	15,733

(*) - includes goodwill and long-lived asset impairment of \$27.4 million

EXHIBIT 21

Subsidiaries of iCAD, Inc.

Name	Jurisdiction of Incorporation/Organization
Xoft, Inc.	Delaware
Xoft Solutions, LLC	Delaware

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference into the Registration Statements of iCAD, Inc. and subsidiaries on Forms S-8, (No. 333-201874, 333-187660, 33-72534, No. 333-99973, No. 333-119509, No. 333-139023, No. 333-144671 No. 333-161959 and No. 333-211656), and on Forms S-3, (No. 333-169716, 333-176777 and 333-178952), of our report dated March xx, 2017, relating to the consolidated financial statements of iCAD, Inc. and subsidiaries as of December 31, 2016, which appears in this Annual Report on Form10-K.

/s/ BDO USA, LLP

Boston, Massachusetts
March, 2017

EXHIBIT 3

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

I, Kenneth Ferry, certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2016 of iCAD, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: March, 2017

/s/ Kenneth Ferry
Kenneth Ferry
Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

I, Richard Christopher, certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2016 of iCAD, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: March, 2017

/s/ Richard Christopher
Richard Christopher
Chief Financial Officer, and Treasurer

EXHIBIT 32.1

iCAD, Inc.

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

In connection with the Annual Report of iCAD, Inc. (the “Company”) on Form 10-K for the fiscal year ended December 31, 2016 (the “Report”), I, Kenneth Ferry, the Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Kenneth Ferry
Kenneth Ferry
Chief Executive Officer

Date: March, 2017

EXHIBIT 32.2

iCAD, Inc.

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

In connection with the Annual Report of iCAD, Inc. (the “Company”) on Form 10-K for the fiscal year ended December 31, 2016 (the “Report”), I, Richard Christopher, the Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Richard Christopher
Richard Christopher
Chief Financial Officer and Treasurer

Date: March, 2017

Board of Directors

Dr. Lawrence Howard ⁽²⁾

Chairman of the Board, General Partner, Hudson Ventures, LP

Ken Ferry

Chief Executive Officer, iCAD, Inc.

Rachel Brem, M.D. ^{(2), (3)}

Director of Breast Imaging and Intervention Center

Professor & Vice Chair, Department of Radiology

The George Washington University Medical Center

Anthony F. Ecock ^{(1), (3)}

Managing Director,

The Carlyle Group

Steven Rappaport ⁽¹⁾

Partner, RZ Capital, LLC

Somu Subramaniam ^{(2), (3)}

Managing Partner and Co-founder of New Science Ventures

Robert Goodman, M.D.

University of Pennsylvania School of Medicine

Elliot Sussman, M.D. ^{(1), (2)}

Chairman of The Villages Health and Professor of Medicine
at the University of South Florida College of Medicine

Andrew H. Sassine

Director

Executive Officers

Ken Ferry

Chief Executive Officer

Richard Christopher

Executive Vice President, Chief Financial Officer

Stacey Stevens

Executive Vice President, Chief Strategy and Commercial Officer

(1) Audit Committee Member

(2) Compensation Committee Member

(3) Nominating & Corporate Governance Committee Member

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Stock Information

NASDAQ Ticker Symbol:

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Transfer & Trust Company

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Independent Auditors

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Boston, MA

Legal Counsel

Blank Rome, LLP

New York, NY

